BBVA
Creating Opportunities

PRUDENTIAL RELEVANCE REPORT
Pillar 3 2022

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Executive Summary

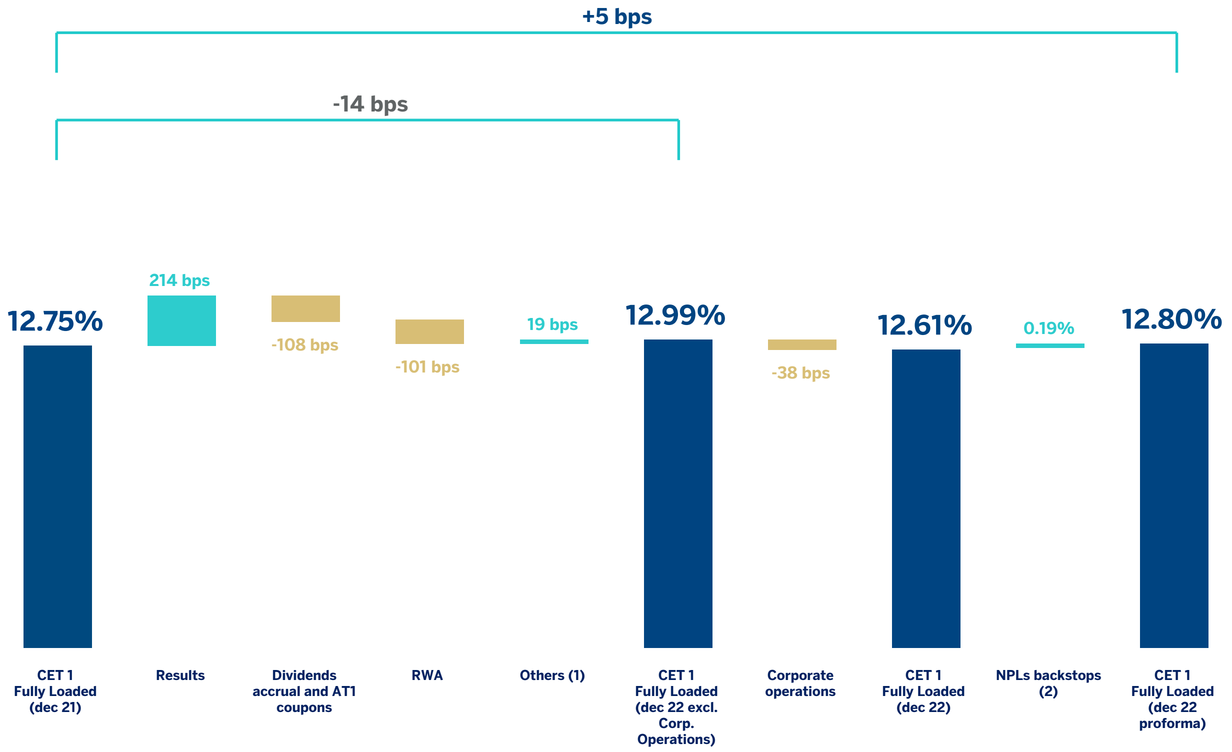
The strength of the BBVA Group's earnings has contributed to achieving a consolidated fully loaded CET1 ratio of 12.61% as of December 31, 2022, which allows it to maintain a large management buffer over the Group's CET1 requirement (8.63%), which is also above the Group's target management range of 11.5-12.0% CET1.

The Group's CET1 incorporates the effects of the corporate transactions carried out during the year, which had a combined impact of -38 basis points. Excluding these elements, the fully loaded CET1 ratio increased by 24 basis points, mainly explained by the generation of earnings in the year (+214 basis points) which, net of shareholder remuneration and payment of convertible contingent instrument coupons (CoCos), generated a positive contribution of +106 basis points. Meanwhile, the growth in risk-weighted assets (RWAs) derived from the organic growth of the business in constant terms has drained 101 basis points. Finally, the other elements that make up CET 1 had a positive contribution of +19 basis points; these include the effects of market evolution, the calculation of minority interests, regulatory impacts as well as the compensation in equity of the negative effect on results due to the loss in value of the net monetary position in hyperinflationary economies.

Following the latest SREP (Supervisory Review and Evaluation Process) decision, the ECB has informed the Group that, effective January 1, 2023, it must maintain at consolidated level a total capital ratio of 13.00% and a CET1 capital ratio of 8.75%, including a Pillar 2 requirement at consolidated level of 1.71% (a minimum of 0.96% must be satisfied with CET1), of which 0.21% (0.12% to be met by CET1) is determined on the basis of the ECB's prudential provisioning expectations, which as of January 1, 2023 will no longer be treated as a deduction from CET 1 with a positive effect of 19 basis points on fully-loaded CET1 at the end of December 2022, which would be equivalent to a pro-forma ratio of 12.80%.

The evolution of the CET1 fully-loaded ratio through 2022 is presented below:

Chart 1. Annual evolution of the CET1 fully loaded ratio



(1) Includes, among others, minority interests, market related impacts, regulatory impacts and the credit in OCIs that offsets the debit in P&L due to the hyperinflation accounting.

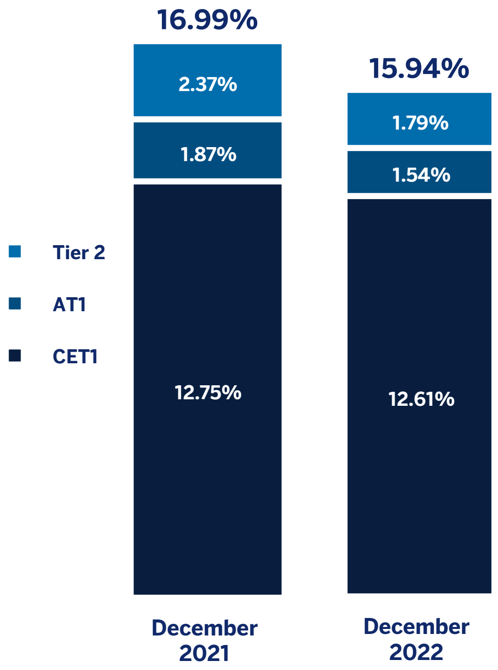
(2) Includes the reversal of the NPL backstop deduction (+19 bps) in January 2023. From that time the SREP Requirement is 8.75% for BBVA Group.

Consolidated fully loaded Additional Tier 1 (AT1) capital fully loaded stood at 1.54% at December 31, 2022, 34 basis points lower than in 2021, mainly due to the early redemption of an issue of AT1 instruments for 500 million dating back to 2017.

The Tier 2 fully loaded ratio stood at 1.79% which represents a reduction of -58 basis points compared to 2021, mainly explained by the effect of increased RWAs during the year and the lower computability of internal credit model provisions.

The composition of the fully loaded total capital ratio as of December 31, 2021 and December 31, 2022 is shown below:

Chart 2. Composition of the fully loaded total capital ratio



With respect to phased-in ratios, the main difference with respect to fully loaded ratios is due to the impact associated with the transitional adjustments associated with IFRS9.

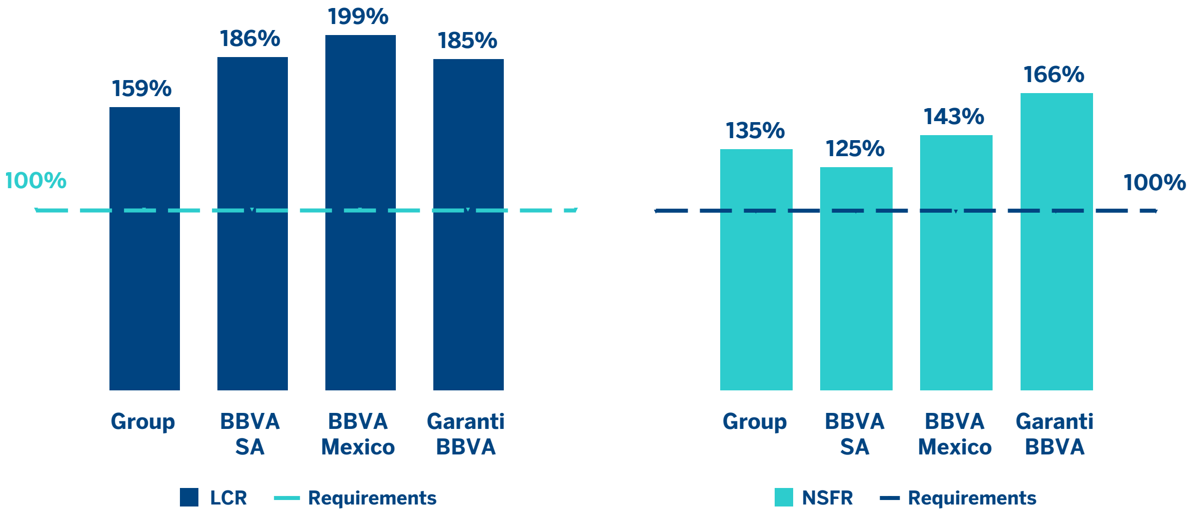
The BBVA Group maintains a solid liquidity position in every geographical area in which it operates, with ratios well above the minimum required:

- The BBVA Group's liquidity coverage ratio (LCR) remained comfortably above 100% throughout the year 2022, and stood at 159% as of December 31, 2022. For the calculation of this ratio, it is assumed that there is no transfer of liquidity among subsidiaries; i.e. no type of excess liquidity levels in foreign subsidiaries is being considered in the calculation of the consolidated ratio. When considering these excess liquidity levels, the BBVA Group's LCR would stand at 201%.

- The net stable funding ratio (NSFR), defined as the result between the amount of stable funding available and the amount of stable funding required, demands banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. This ratio should be at least 100% at all times. The BBVA Group's NSFR ratio, stood at 135% as of December 31, 2022.

The breakdown of these ratios in the main geographical areas in which the Group operates is shown below:

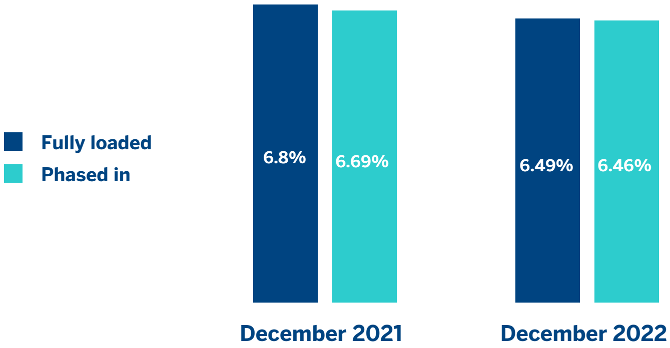
Chart 3. Liquidity ratios by LMUs



As for the leverage ratio, as of December 31, 2022, the fully loaded ratio stood at 6.46 % (phased in at 6.49 %), above the minimum required ratio of 3.00 %.

The fully loaded and phased in ratios as of December 31, 2021 and December 31, 2022 are shown below:

Chart 4. Fully loaded and phased-in leverage ratio



The following table shows the main regulatory metrics in accordance with Article 447 of the CRR:

Table 1. EU KM1 - Key metrics (Million Euros)

	12-31-2022	9-30-2022	6-30-2022	3-31-2022	12-31-2021
Available own funds (amounts)					
Common Equity Tier 1 (CET1) capital	42,738	42,876	41,563	40,537	39,949
Tier 1 capital	47,931	48,281	46,828	46,364	45,686
Total capital	53,861	54,895	53,647	53,203	53,069
Risk-weighted exposure amounts					
Total risk-weighted exposure amount	337,066	341,678	330,871	316,361	307,795
Capital ratios (as a percentage of risk-weighted exposure amount)					
Common Equity Tier 1 ratio (%)	12.68 %	12.55 %	12.56 %	12.81 %	12.98 %
Tier 1 ratio (%)	14.22 %	14.13 %	14.15 %	14.66 %	14.84 %
Total capital ratio (%)	15.98 %	16.07 %	16.21 %	16.82 %	17.24 %
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)					
Additional own funds requirements to address risks other than the risk of excessive leverage (%)	1.50 %	1.50 %	1.50 %	1.50 %	1.50 %
of which: to be made up of CET1 capital (percentage points)	0.84 %	0.84 %	0.84 %	0.84 %	0.84 %
of which: to be made up of Tier 1 capital (percentage points)	1.13 %	1.13 %	1.13 %	1.13 %	1.13 %
Total SREP own funds requirements (%)	9.50 %	9.50 %	9.50 %	9.50 %	9.50 %
Combined buffer requirement (as a percentage of risk-weighted exposure amount)					
Capital conservation buffer (%)	2.50 %	2.50 %	2.50 %	2.50 %	2.50 %
Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	—	—	—	—	—
Institution specific countercyclical capital buffer (%)	0.04 %	0.01 %	0.01 %	0.01 %	0.01 %
Systemic risk buffer (%)	—	—	—	—	—
Global Systemically Important Institution buffer (%)	—	—	—	—	—
Other Systemically Important Institution buffer	0.75 %	0.75 %	0.75 %	0.75 %	0.75 %
Combined buffer requirement (%)	3.29 %	3.26 %	3.26 %	3.26 %	3.26 %
Overall capital requirements (%)	12.79 %	12.76 %	12.76 %	12.76 %	12.76 %
CET1 available after meeting the total SREP own funds requirements (%)	6.48 %	6.57 %	7.22 %	7.47 %	7.64 %
Leverage ratio					
Total exposure measure	737,990	765,452	752,016	687,992	671,789
Leverage ratio (%)	6.49 %	6.31 %	6.23 %	6.74 %	6.80 %
Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)					
Additional own funds requirements to address the risk of excessive leverage (%)	—	—	—	—	—
of which: to be made up of CET1 capital (percentage points)	—	—	—	—	—
Total SREP leverage ratio requirements (%)	3.00 %	3.00 %	3.00 %	3.06 %	3.06 %
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)					
Leverage ratio buffer requirement (%)	—	—	—	—	—
Overall leverage ratio requirements (%)	3.00 %	3.00 %	3.00 %	3.06 %	3.06 %
Liquidity Coverage Ratio (1)					
Total high-quality liquid assets (HQLA) (Weighted value)	108,648	105,293	104,585	106,449	110,132
Cash outflows - Total weighted value	97,796	93,032	89,833	89,459	91,541
Cash inflows - Total weighted value	31,352	29,211	26,999	26,169	24,709
Total net cash outflows (adjusted value)	66,443	63,822	62,833	63,289	66,833
Liquidity coverage ratio (%)	163.70 %	165.30 %	166.80 %	168.60 %	165.80 %
Net Stable Funding Ratio					
Total available stable funding	425,240	435,473	431,382	432,723	430,759
Total required stable funding	315,094	324,694	321,719	320,367	319,017
NSFR ratio (%)	134.96 %	134.12 %	134.09 %	135.07 %	135.03 %

(1) The EBA "mapping tool" links the LCR information to the regulatory models C72, C73, C74 and C76, which show end-of-quarter point-in-time values. However, article 447(f) of Regulation 575/2013 (CRR) establishes that the information related to the LCR and its components should be disclosed as the average of the preceding 12 months' values and not as point-in-time. As a consequence, this information is not based on the EBA "mapping tool" but on table 78 (EU LIQ1)

The following sections detail matters relating to the Group's solvency. These are supplemented by information included in the Group's Consolidated Financial Statements and Management Report as of year 2022, which also contain the Group's main activity and profitability indicators.

1. Introduction

1.1. Applicable regulatory framework

As a Spanish credit institution, BBVA is subject to Directive 2013/36/EU of the European Parliament and of the Council dated June 26, 2013, on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (the "CRD IV Directive”) which main amendment is Directive 2019/878/EU (the “CRD V Directive)”.

The major regulation governing the solvency of credit institutions is (EU) Regulation No. 575/2013 of the European Parliament and of the Council of June 26, 2013, on the prudential requirements for credit institutions and investment firms amending (EU) Regulation No 648/2012 ("CRR" and in conjunction with Directive CRD IV and any implementing measures of CRD IV, "CRD IV"), which is complemented by several binding Regulatory Technical Standards that are directly applicable to all EU member states, without the need to implement national measures. This Regulation was mainly amended by Regulation 2019/876/EU (“CRR2”) and Regulation 2020/873/EU (“Quick Fix”).

The CRD IV Directive was transposed to Spanish national law by means of the Royal Decree-Law 14/2013, of November 29 (“RD-L 14/2013”), Law 10/2014 of June 26, Royal Decree 84/2015, of February 13 (“RD 84/2015”), Bank of Spain Circular 2/2014 of January 31 and Circular 2/2016 of February 2 (“Bank of Spain Circular 2/2016”), which has been amended by Circular 3/2022 of March, 30.

During 2021, Directive 2019/878 was transposed into the Spanish legal system through the publication of Royal Decree-Law 7/2021, of April 27 (amending Law 10/2014), Royal Decree 970/2021, of November 8 (which modifies RDL 84/2015) and Circular 5/2021, of September 22 (which modifies Circular 2/2016).

In the Macroprudential field, Royal Decree 102/2019 was published in March 2019, establishing the Macroprudential Authority of the Financial Stability Board, establishing its legal regime. The aforementioned Royal Decree also develops certain aspects related to the macroprudential tools contained in Royal Decree-Law 22/2018. Among them, it provides that the Bank of Spain may adopt measures such as the countercyclical buffer for a given sector, sectoral limits on the concentration of exposures or the establishment of limits and conditions on the granting of loans and other operations. These measures are developed in Bank of Spain Circular 5/2021, of September 22.

Section 1.3 of this chapter includes the specific regulations governing the information requirements of the Prudential Relevance Report (Pillar 3).

1.2. Regulatory developments in 2022

During 2022, the regulatory environment for the financial industry has been shaped by a new geopolitical framework caused by the war between Russia and Ukraine and its repercussions. This has shaken up the markets and the financial system and has materialized in a range of economic sanctions imposed on Russia, which have, in turn, prompted a focus on issues related to money laundering and terrorist financing, and the role of cryptoassets.

All this took place alongside the implementation of work plans already stipulated by the regulatory bodies, which focused on three lines of action:

(I) climate change;

(II) strengthen the prudential framework of the financial system;

(III) digitalization of the banking sector.

Another highlight of 2022 were the new data regulations and agreements and the intensification of the global regulatory debate around cryptoassets. Solutions are being sought that address the regulation, supervision and oversight of cryptoassets with a focus on financial stability.

ESG

In 2022, ESG regulatory activity for the European banking system became firmly established and regulation in the United States took off.

At the global level, the BCBS published a statement of principles for effective management and monitoring of climate change-related risks. The principles are designed to be adaptable to different banking systems, in a proportionate manner, depending on the size, complexity and risk profile of the sector. The document lays down 18 principles: 12 for banks (covering corporate governance, internal control, risk management and reporting) and 6 for supervisors (who must ensure that they have adequate resources and capabilities to assess the management of banks).

There are other initiatives driven by global institutions that are advancing swiftly. These include the new International Sustainability Standards Board (ISSB), created in November 2021 by the International Financial Reporting Standards Foundation (IFRS), which in 2022 published two climate and general issues papers for comment, and draft sector-specific standards. The ISSB relied on the Task Force on Climate-related Financial Disclosures (TCFD) and the sector-specific standards of the Sustainability Accounting Standards Board (SASB). The ISSB aims to be a comprehensive global standard-setter. It is therefore partnering with other international organizations and jurisdictions to ensure the development of a robust, internationally applicable framework that will form the basis for the requirements of the various jurisdictions. In addition to the frameworks mentioned so far, we especially highlight the initiatives of the Global Reporting Initiative (GRI), the Value Reporting Foundation, and the WEF (IBC's stakeholder capitalism metrics), with which the ISSB actively collaborates to achieve a global metrics model.

The EU has continued to integrate ESG concepts into prudential regulation, supervision and reporting requirements. In prudential regulation, discussions continued in the legislative negotiation of the CRR III and CRD VI, which introduce the definitions of the different types of ESG risks. In terms of reporting, the European Commission published the Regulatory Technical Standards (RTS), which supplement the Sustainable Finance Disclosure Regulation (SFDR). For its part, the EC has adopted the Implementing Technical Standards (ITS) on Pillar 3 reporting of ESG risks with the aim of integrating all relevant reporting requirements. The ITS provide the tables, templates and instructions that banks should use to disclose relevant qualitative information on ESG risks and quantitative data on climate change-related risks, including transitional and physical risks and mitigation measures. Banks must make the first disclosure in March 2023, releasing data as of December 2022. The first disclosure will be annual and thereafter will be six-monthly.

Regarding taxonomy, the complementary delegated act on climate (mitigation and adaptation) was approved through Delegated Regulation 2021/2139 of June 4, 2021, in order to accelerate decarbonization, and was subsequently modified by Delegated Regulation (EU) 2022/1214 of the Commission of March 9, 2022, which introduces specific information requirements that companies must comply with in relation to their activities in the gas and nuclear energy sectors.

In addition, the European Commission has published a proposal for a Directive on Corporate Sustainability Due Diligence. During 2022, this proposal was under negotiation in the Parliament and the Council. The Directive aims to ensure that companies operating in the internal market contribute to the transition to sustainability through the identification, prevention and mitigation, cessation and minimization of potential or actual adverse human rights and environmental impacts related to the company's own activity or the activities of its subsidiaries or of its value chain. Once adopted, Member States will have two years to transpose the Directive into their national legislation.

Europe has continued to integrate ESG concepts into prudential regulation, supervision, and reporting requirements. Several sustainability reporting standards have been created: one in Europe, following the enactment of the Corporate Sustainability Reporting

Directive (CSRD), for the implementation of which the first set of 'European Sustainability Reporting Standards,' prepared by the European Financial Reporting Advisory Group (EFRAG) to the European Commission; and another in the United States, after the Securities and Exchange Commission (SEC) published in March 2022 the paper 'The Enhancement and Standardization of Climate-Related Disclosures for Investors.'

Reflecting the rising importance of ESG issues in supervision, the ECB has launched the first bottom-up stress test exercise for climate change risk supervision to identify vulnerabilities, best practices and challenges faced by banks in managing climate change risk. The results will feed into the Supervisory Review and Evaluation Process (SREP) from a qualitative standpoint only.

Prudential developments

In the global prudential arena, the Basel Committee on Banking Supervision (BCBS) has addressed new issues. Among other forward steps, the BCBS has adopted a set of principles for the effective management and supervision of financial climate change risks and has advanced the implementation of the prudential treatment of cryptoassets with the publication of its final standard. Moreover, the BCBS has agreed on a roadmap to reflect the development of the European banking union based on the assessment method for global systemically important banks (hereinafter G-SIBs). The Committee has continued to assess risks and vulnerabilities in the global banking system, including those arising from the conflict in Ukraine. The body also addressed the post-crisis regulatory framework, with a focus on the effectiveness of the Basel III reforms, on which a report was published in December 2022.

In the European prudential field, intense negotiations have taken place in the Council and Parliament on the implementation in EU law of the international capital adequacy rules known as Basel III. The proposal presented at the end of 2021 by the European Commission, the "2021 Banking Package", seeks to make EU banks more resilient to potential future economic crises, while contributing to Europe's recovery from the COVID-19 pandemic and the transition to climate neutrality. The package comprises three proposals: (I) the proposed capital requirements directive (CRD VI, amending the previous CRD V); (II) the proposed capital requirements regulation (CRR III, amending CRR II); and (III) a separate legislative proposal around bank resolution (the "Daisy Chain proposal"), which also amends CRR V. The entry into force of the changes will be gradual and is expected to come into effect from 2025.

Furthermore, the European Banking Authority (EBA) has published final draft Regulatory Technical Standards (RTS) for the probability of default (PD) and loss given default (LGD) risk model for banks using the new internal models-based approach under the Fundamental Review of the Trading Book (FRTB). Regarding non-performing loans (NPLs), the EBA has published several consultation papers on the reporting templates that banks must file. The European Commission has 3 months to adopt the EBA's ITS or propose amendments. The result is expected to be published in the first half of 2023, and has published the standard on the information required for the sale of NPL loans.

Regarding securitizations, the EBA has published its final draft of the RTS. The standards specify requirements for originators, sponsors and originating lenders in relation to risk retention. In Spain, on July 8, 2022, the new law on bonds came into force, which implements the European directive and affects both existing bonds and future issues.

In Spain, the Bank of Spain (Spanish 'BdE') published Circular 1/2022 on liquidity, prudential rules and reporting obligations for financial institutions, which amends Circular 1/2009 and Circular 3/2019. The document sets out the liquidity regulations applicable to financial credit institutions and adapts the reporting obligations of credit institutions regarding solvency and shareholder structure to the activity, business model, size and relative importance of each institution. Circular 3/2022, of March 30 opens in new window, of the Bank of Spain, amending Circular 2/2016, of February 2, to credit institutions, on supervision and solvency, which completes the adaptation of the Spanish legal system to Directive 2013/36/EU and Regulation (EU) n.o 575/2013. Moreover, in the context of global economic uncertainty, Royal Decree-Law 6/2022, on urgent measures in response to the economic and social consequences of the war in Ukraine, was adopted to address the economic and social consequences of the war, with short-term measures and steps to accelerate medium- and long-term action on the energy transition. Finally, we highlight the enactment of Law 18/2022, on company formation and growth. The statute includes measures ranging from regulatory streamlining to reduction of the minimum share capital to form private limited companies. It also includes the promotion of collective investment and venture capital, and improved access to finance.

In 2022, the regulatory debate continued on the macroprudential framework and capital buffers. The European Central Bank (ECB) confirmed that it will not extend the loosening of Pillar 2 capital requirements and capital conservation buffer allowed during the COVID pandemic. As of January 1, 2023, banks will return to operating at pre-crisis levels.

Furthermore, the consultation launched by the European Commission in November 2021 on the review of the macroprudential framework, including the design and functioning of capital buffers, was completed. The EBA, the ECB and the European Systemic Risk Board (ESRB) published their respective opinions. The Commission's legislative proposal is expected during the first quarter of 2023.

A relevant novelty is the recognition of the progress of the Banking Union in the method of identification of G-SIBs. In May 2022, the BCBS allowed the calculation of parallel scoring for G-SIBs where 66% of cross-border exposures within the Banking Union for European G-SIBs can be characterized as domestic. This parallel scoring will allow, according to the expert judgment of the national authorities (NCAs), an adjustment of the assignment of the banks to the different levels of required capital (the 'buckets').

Environmental, Social and Governance (ESG) or sustainability criteria are also included in the macroprudential framework, as they were one of the topics addressed in the EuropeanCommission's consultation, which asked whether they should be accorded specific treatment. In July 2022, the ECB and the ESRB published a joint report, "The Macroprudential Challenge of Climate Change," which discusses the adequacy of macroprudential tools to address climate-related risks. The Financial Stability Board (FSB) also commented on this possibility in its final report on supervisory and regulatory approaches to climate-related risks, assessing the pros and cons.

Regarding shadow banking, the EBA has published its final draft of the Regulatory Technical Standards (RTS). The standards set out the criteria for identifying shadow banking entities for large exposure reporting purposes. Entities that conduct banking activities or services authorized and supervised in accordance with the EU prudential framework will not be considered to be shadow banks.

In terms of transparency, and, in the field of remuneration of the Identified Staff, in 2022 the EBA has published the Guidelines on the benchmarking exercises on remuneration practices, the gender pay gap and approved higher ratios under Directive 2013/36/EU (EBA/GL/2022/06), which include additional specifications regarding the presentation, in the Pillar 3 Report, of the standardised remuneration disclosure templates.

Stability and Resolution

In the field of resolution, the Daisy Chain-related changes, which came into effect on November 14, 2022, are a raft of reforms related to the bank resolution framework, with special impact on Multiple Point of Entry ("MPE") banks, where capital and liquidity are managed separately in each subsidiary.

Furthermore, at the Eurogroup meeting, the Eurogroup President's proposal to unblock progress on the Banking Union by setting up a European Deposit Insurance Scheme (EDIS) was rejected. The consensus reached was that certain aspects of the bank crisis management and guarantee fund framework need to be reviewed. A legislative proposal is expected by early 2023.

The EBA published its final guidelines for enhancing the resolution capabilities of banks and resolution authorities, which will be applicable as from January 1, 2024. The Single Resolution Board (SRB) published its operational guidance on the identification and mobilization of collateral in resolution, which supplements the 'Expectations for Banks' paper and helps stakeholders understand the operational and legal requirements that banks should anticipate maximizing the amount of assets that could be mobilized as collateral during and after resolution. For its part, the European Commission published a consultation paper to assess the framework for State aid in the banking system, which is linked to the crisis management framework. Finally, the EBA published a consultation paper to revise its guidance on the method for calculating contributions to the Deposit Guarantee Fund (DGF).

Digital transformation

In 2022, digitization continued to be a priority for European authorities, which have continued to make progress in implementing the digital strategy laid down in 2020. The key pillars of the initiative are strengthening the use of data and the development and regulation of artificial intelligence.

This year, the entry of large digital platforms or 'Big Tech' into the financial sector continued to be a subject of debate for financial authorities around the world. At the global level, the BIS led a discussion on the need to introduce comprehensive regulation for these new providers and to strengthen coordination between authorities across sectors and countries. At the European level, the European Supervisory Authorities issued a report with recommendations to the Commission on how to approach the review of the regulatory and supervisory framework for the financial sector to ensure that it complies with the "same activity, same risk, same regulation" principle. For instance, it is recommended to review prudential consolidation requirements and consider the need for additional supervisory structures to ensure effective regulation and supervision of the new providers, which constitute mixed activity groups.

Another area that attracted great attention from international bodies and national regulators in 2022 was that of crypto-assets. At the global level, the Basel Committee on Banking Supervision published in December the final standard on the prudential treatment of banks' exposures to cryptoassets. These were classified into two groups, with a specific regulatory treatment for each of them. In addition, a limit is imposed on the holding of certain cryptoassets. The FSB has proposed a framework for international regulation of cryptoasset activities, with broad recommendations for the regulation, supervision and oversight of their activities and markets and a review of the high-level recommendations specific to "global stablecoins". The objective is to address the associated financial stability risks more effectively.

Financial markets

During 2022, the EU continues to work along Anti-Money Laundering (AML)/Combating the Financing of Terrorism (CFT). In this field, the EBA published its guidelines on policies and procedures relating to compliance management and the role and powers of the AML/CFT compliance officer. The guidelines comprehensively address, for the first time at EU level, the AML/CFT governance structure. In addition, in 2022, negotiations have continued in the Parliament and the Council on the AML/CFT package published by the European Commission. Among other proposals, the Commission launched the idea of creating a European anti-money laundering authority. The EU Council agreed in December its position on the texts of the new AML Directive and the new AML Regulation.

1.3. Contents of the 2022 Prudential Relevance Report

Article 13 of the CRR establishes that the parent entities of the European Union are subject, based on their consolidated situation, to the disclosure requirements set by Part Eight of CRR.

The Prudential Relevance Report (Pillar 3) of the BBVA Group, corresponding to the year ended December 31, 2022, has been prepared in accordance with the requirements of Part Eight of the CRR and approved by the Audit Committee (in its meeting held on February 27, 2023), applying the rules for the preparation of financial information of the BBVA Group and in compliance with the "General Policy for disclosure of economic-financial, non-financial and corporate information" approved by the governance bodies of Banco Bilbao Vizcaya Argentaria, SA.

Likewise, it should be noted that the data disclosed in the IRP - Pillar 3, have been prepared in accordance with the internal processes and controls described in the "Standard for the preparation of periodic public information of Banco Bilbao Vizcaya Argentaria, S.A. and BBVA Group”. The aforementioned policies and standards guarantee that the information disclosed in the IRP Report - Pillar 3 is subject to the internal control framework defined by the Group, as well as to an adequate level of internal review.

This report provides the prudential information of BBVA Consolidated Group as of December 31, 2022 which has been prepared in accordance with the precepts contained in Part Eight of the CRR, complying with the guidelines published by EBA and the applicable technical implementation standards.

In addition, the main EBA guidelines that apply as of December 31, 2022 are highlighted below:

- Guidelines on materiality, proprietary information, and confidentiality, and on the frequency of disclosure of information according to Article 432, sections 1 and 2, and Article 433 of Regulation (EU) No. 575/2013 (EBA/GL/2014/14). These guidelines detail the process and the criteria to be followed regarding the principles of materiality, proprietary information, confidentiality and the right to omit information, and provide guidance for entities to assess the need to publish information more frequently than the annual one. These guidelines were adopted by the Bank of Spain Executive Commission in February 2015.

- Guidelines on reporting and disclosure of exposures subject to measures applied in response to the crisis arising from COVID-19 (EBA/GL/2020/07). These guidelines were adopted by the Bank of Spain Executive Commission on June 23, 2020.

- Guidelines amending the EBA/GL/2018/01 guidelines on the uniform disclosure of information pursuant to Article 473a of Regulation (EU) No. 575/2013 (CRR) with regard to transitional provisions to mitigate the impact on own funds caused by the implementation of IFRS 9, aiming to guarantee compliance with the Quick Fix made to the CRR in response to the COVID-19 Pandemic (EBA/GL/2020/12). These guidelines are applicable from August 11, 2020 until the end of the transitional periods contemplated in articles 468 and 473 bis of the CRR (December 31, 2024 and December 31, 2022, respectively)

- Implementing Technical Standards published in June 2020 concerning reporting and disclosure of public information (EBA/ITS/2020/04, hereinafter “New EBA ITS”). These technical standards implement the changes introduced by CRR2.

  In these technical implementation standards, the EBA, following the mandate of the European Commission in article 434a of the CRR2, implements the changes introduced by aforementioned regulation, integrating in a single document most of the disclosure requirements to the market that were disseminated in various guidelines published to date.

  Additionally, these regulations also aim to unify, as far as possible, public information with the information reported to the Supervisor through integration in regulatory reporting and has meant in some cases the simplification of standard templates that could contain similar information, maintaining only those templates that include just complete and relevant information, such as those referring to the credit quality of the exposures.

  Likewise, together with the aforementioned ITS, the EBA publishes for informative purposes a document called mapping tool that interrelates the quantitative information of most of the standard templates required in Pillar 3 with the regulatory reporting, which has been taken into account in the preparation of this report. The implementation of these standards may produce variations in the content and the way in which the information is presented with respect to previous periods.

- Guidelines on the specification and disclosure of systemic importance indicators (EBA/GL/2020/14), adopted by the Bank of Spain Executive Commission. These guidelines have been amended and subsequently adopted by Bank of Spain in 2022 by EBA/GL/2022/12 Guidelines.

- Guidelines on sound remuneration policies under Directive 2013/36/EU (EBA/GL/2021/04). These guidelines were adopted by the Bank of Spain Executive Commission in December 2021. In addition, as regards remuneration, the Guidelines on the benchmarking exercises on remuneration practices, the gender pay gap and approved higher ratios under Directive 2013/36/EU (EBA/GL/2022/06), adopted as its own by the Bank of Spain on December 21, 2022, also apply.

- Commission Implementing Regulation (EU) 2022/631 of 13 April 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of exposures to interest rate risk on positions not held in the trading book, published in the Official Journal of the European Union (OJUE) on April 19, 2022.

- Commission implementing regulation (EU) 2022/2453 of 30 November 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks, published in the Official Journal of the European Union (OJUE) on December 19, 2022.

Annex VIII.a of this report contains the correspondence of the articles of Part Eight of the CRR on disclosure of information that are applicable at the date of the report with the different sections of the document where the required information is found. Additionally, Annex VIII.b contains the correspondence of the articles of Annex II of the Commission Implementing Regulation (EU) 2022/2453 on ESG risk disclosure with the different sections of this report.

The aforementioned annex, together with the other annexes and the tables included in this report, are in an editable format in order to facilitate their treatment, following the recommendations of the EBA Guidelines. This document is called "Pillar 3 2022 - Tables & Annexes", available in the Shareholders and Investors / Financial Information section of the Group's website.

2. General information requirements

2.1. Corporate name and differences between the consolidated group for the purposes of solvency regulations and accounting criteria

2.1.1. Corporate name and scope of application

Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter “the Bank”, “BBVA" or “BBVA, S.A.”) is a private-law entity subject to the laws and regulations governing banking entities operating in Spain. It carries out its activity through branches and agencies across the country and abroad.

The Bylaws and other public information are available for inspection at the Bank’s registered address (Plaza San Nicolás, 4 Bilbao) as noted on its web site (www.bbva.com).

Solvency regulations are applicable at a consolidated level for the whole Group.

2.1.2. Differences between the consolidated group for the purposes of solvency regulations and accounting criteria

The BBVA Group’s Consolidated Financial Statements are presented in compliance with IFRS-IASB (International Financial Reporting Standards as issued by the International Accounting Standards Board), as well as in accordance with the International Financial Reporting Standards endorsed by the European Union (hereinafter, “EU-IFRS”) applicable as of December 31, 2022, considering the Bank of Spain Circular 4/2017, as well as its successive amendments, and with any other legislation governing financial reporting which is applicable and with the format and mark-up requirements established in the EU Delegated Regulation 2019/815 of the European Commission.

On the basis of accounting criteria, companies are considered to form part of a consolidated group when the parent entity holds or can hold, directly or indirectly, control of them. An institution is understood to control a subsidiary when it is exposed, or is entitled to, variable returns as a result of its involvement in the subsidiary and has the capacity to influence those returns through the power it exercises over the subsidiary. For control to exist, the following aspects must be fulfilled:

a. Power: An investor has power over a subsidiary when it has current rights that provide it with the capacity to direct its relevant activities, i.e. those that significantly affect the returns of the subsidiary.

b. Returns: An investor is exposed, or is entitled to variable returns, as a result of its involvement in the subsidiary when the returns obtained by the investor for such involvement may vary based on the economic performance of the subsidiary. Investor returns can be positive only, negative only, or positive and negative at the same time.

c. Relationship between power and returns: An investor has control over a subsidiary when it not only has power over the subsidiary and is exposed, or is entitled to, variable returns for its involvement in the subsidiary, but it also has the capacity to use its power to influence the returns it obtains due to its involvement in the subsidiary.

Therefore, in drawing up the Consolidated Financial Statements of BBVA Group, all dependent companies and consolidating structured entities have been consolidated by applying the full consolidation method.

Associated companies, as well as joint ventures (those over which joint control arrangements are in place), are valued using the equity method.

The list of all the companies forming part of the Group is included in the appendices to the Consolidated Financial Statements of BBVA Group.

For the purposes of solvency regulations, the following subsidiaries form part of the consolidated group, as defined in Article 18 of the CRR:

- Credit institutions
- Investment firms
- Financial Institutions

  A financial institution is a company, separate from other institutions (credit institution or investment firm), whose main activity may consist of acquiring holdings or performing one or more of the following activities:

  - Loans, including in particular consumer finance, credit agreements relating to immovable property, recourse and non-recourse factoring, and financing of commercial transactions (including forfaiting)
  - Financial leasing
  - Payment services

- Issuing and managing other payment channels (e.g. traveler's checks and bank checks)
- Granting of guarantees and commitments
- Trading on their own account or on behalf of customers on any of the following instruments:
  - Money market instruments (checks, bills, certificates of deposit etc.)
  - Foreign currency
  - Financial futures and options
  - Foreign-exchange or interest-rate instruments
  - Marketable securities
- Participating in the issuance of securities and the provision of corresponding services
- Advising companies with regard to capital structure, industrial strategy and related matters, as well as advice and services for mergers and acquisitions of companies
- Brokerage in the interbank markets
- Managing or advising on equity management
- Custody and administration of marketable securities
- Issuance of electronic money

  This definition includes financial holding companies, mixed financial holding companies, payment institutions and asset management firms, but excludes pure industrial holding companies, insurance companies, insurance holding companies and mixed insurance holding companies.

- Auxiliary services companies: A company whose main activity is holding or management of property, management of computing services or any other similar activity of an auxiliary nature with regard to the main activity of one or more institutions (credit institution or investment firm).

Therefore, for the purposes of calculating solvency requirements, and hence the drawing up of this Prudential Relevance Report, the scope of consolidating entities is different from the scope defined for the purposes of drawing up the Consolidated Financial Statements of BBVA Group.

The effect of the difference between the two regulations is mainly due to:

- Withdrawals from the balance made by entities (largely insurance companies regulated by the Solvency II regulatory framework) that are consolidated in the Consolidated Financial Statements of BBVA Group by the full consolidation method and consolidated for the purposes of solvency by applying the equity method.
- Entries to the balance contributed mainly by financial entities, consolidated by applying the equity method at the accounting level, but for the purposes of solvency, are proportionally integrated.

The list of entities that use different consolidation methods in their public and regulatory balance sheets is included in the table EU LI3 in Annex I.

2.1.3. Significant transactions in the Group in 2022

Announcement of the agreement with Neon Payments Limited

On February 14, 2022, BBVA announced the agreement with the company Neon Payments Limited (the "Company" in this section) for the subscription of 492,692 preference shares, representing approximately 21.7% of its share capital, through a share capital increase and in consideration of approximately USD 300 million (equal to approximately €263 million, using the applicable 1.14 EUR/USD exchange rate as of February 11, 2022).

The Company, which is incorporated and domiciled in the United Kingdom, is the owner of 100% of the shares of the Brazilian company Neon Pagamentos S.A.

As of February 14, 2022, BBVA was already the indirect owner of approximately 10.2% of the share capital of the Company through companies where BBVA owns more than 99% of the share capital. As of December 31, 2022, BBVA held, directly and indirectly, approximately 29.2% of the share capital of the Company. Despite owning more than 20% of the share capital, BBVA's ability to influence the Company´s financial and operating decisions policies is very limited, so the investment is recognized under the heading "Non-trading financial assets mandatorily at fair value through profit or loss" (see Note 11).

Voluntary takeover bid for the entire share capital of Türkiye Garanti Bankası A.Ş (Garanti BBVA)

On November 15, 2021, BBVA announced a voluntary takeover bid (hereinafter "VTB") addressed to the 2,106,300,000 shares[1] not controlled by BBVA, which represented 50.15% of the total share capital of Türkiye Garanti Bankası A.Ş (hereinafter "Garanti BBVA"). BBVA submitted for authorization an application of the VTB to the supervisor of the securities markets in Turkey

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[1] All references to “shares” or “share” shall be deemed made to lots of 100 shares, which is the trading unit in which Garanti BBVA shares are listed at Borsa Istanbul.

(Capital Markets Board, hereinafter "CMB") on November 18, 2021.

On March 31, 2022, CMB approved the offer information document and on the same day BBVA announced the commencement of the VTB acceptance period on April 4, 2022. On April 25, 2022 BBVA informed of an increase of the cash offer price per Garanti BBVA share from that initially announced (12.20 Turkish lira) to 15.00 Turkish lira.

On May 18, 2022, BBVA announced the finalization of the offer acceptance period, with the acquisition of 36.12% of Garanti BBVA's share capital. The total amount paid by BBVA was approximately 22,758 million Turkish lira (equivalent to approximately €1,390 million[2] including the expenses associated with the transaction and net of the collection of the dividends corresponding to the stake acquired).

The percentage of total share capital of Garanti BBVA owned by BBVA (after the completion of the VTB on May 18) is 85.97%.

2.1.4. Reconciliation of the Public Balance Sheet from the accounting perimeter to the regulatory perimeter

The following table includes an exercise in transparency to show the reconciliation process between the book balances reported in the public balance sheet (attached to the Consolidated Financial Statements of BBVA Group) and the book balances this report uses (regulatory perimeter), revealing the main differences between both perimeters.

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[2] Using the effective exchange rate of 16.14 Turkish lira per euro.

Table 2. EU CC2 - Reconciliation of regulatory capital to balance sheet (Million Euros. 12-31-2022)

Public Balance Sheet Headings	Public Balance Sheet	Regulatory balance sheet	Reference to template EU CC1
Cash, cash balances at central banks and other demand deposits	79,756	79,992	
Financial assets held for trading	110,671	111,578	
Non-trading financial assets mandatorily at fair value through profit or loss	6,888	1,500	
Financial assets designated at fair value through profit or loss	913	—	
Financial assets at fair value through accumulated other comprehensive income	58,980	45,428	
Financial assets at amortised cost	422,061	414,000	
Derivatives - Hedge accounting	1,891	1,812	
Fair value changes of the hedged items in portfolio hedges of interest rate risk	(148)	(148)	
Joint ventures and associates	916	3,436	
Insurance and reinsurance assets	210	—	
Tangible assets	8,737	8,205	
Intangible assets	2,156	2,125	g)
Tax assets	16,472	16,223	
Of which: deferred tax assets	*14,494*	*14,294*	h)
Other assets	2,614	3,815	
Non-current assets and disposal groups classified as held for sale	1,022	984	
Total Assets	**713,140**	**688,951**	
Financial liabilities held for trading	95,611	96,000	
Financial liabilities designated at fair value through profit or loss	10,580	3,288	
Financial liabilities at amortised cost	528,629	524,359	o) q)
Derivatives - Hedge accounting	3,303	3,069	
Fair value changes of the hedged items in portfolio hedges of interest rate risk	—	—	
Liabilities under insurance and reinsurance contracts	11,848	—	
Provisions	4,933	4,588	
Tax liabilities	2,742	2,291	
Of which: deferred tax liabilities	*1,326*	*922*	
Other liabilities	4,880	4,864	
Non-current assets and disposal groups classified as held for sale	—	—	
Total liabilities	**662,526**	**638,459**	
Capital	2,955	2,955	a)
Share premium	20,856	20,856	a)
Equity instruments issued other than capital	—	—	
Other equity	63	63	c)
Retained earnings	32,536	31,436	b)
Revaluation reserves	—	—	
Other reserves	2,345	3,234	c)
Less: treasury shares	(29)	(29)	l)
Profit or loss attributable to owners of the parent	6,420	6,407	e)
Less: interim dividend	(722)	(722)	e)
Accumulated other comprehensive income (loss)	(17,432)	(17,248)	c)
Minority interests	3,624	3,541	
Total equity	**50,615**	**50,492**	
Total equity and total liabilities	**713,140**	**688,951**	

The main differences between the public balance sheet and the regulatory balance sheet are due to withdrawals from the balance generated by insurance, real estate and financial entities that are consolidated through the application of the equity method for the amount of €-25,359 million; and balance entries generated by entities that are consolidated using the proportional integration method for an amount of €+1,170 million.

The following table also shows the risk to which each of the items on the regulatory balance sheet is exposed:

Table 3. EU LI1 - Differences between the accounting and regulatory scopes of consolidation and the mapping of the financial statements categories with regulatory risk categories (Million Euros. 12-31-2022)

			Carrying values of items[1]				
	Carrying values as reported in published financial statements	**Carrying Values under scope of regulatory consolidation**	**Subject to credit risk framework**	**Subject to counterparty credit risk framework**	**Subject to the Securitisation framework**	**Subject to the market risk framework**	**Not subject to capital requirements or subject to deduction from capital**
Assets							
Cash, cash balances at central banks and other demand deposits	79,756	79,992	79,589	402	—	—	—
Financial assets held for trading	110,671	111,578	23	83,607	—	111,555	—
Non-trading financial assets mandatorily at fair value through profit or loss	6,888	1,500	1,472	—	16	—	11
Financial assets designated at fair value through profit or loss	913	—	—	—	—	—	—
Financial assets at fair value through accumulated other comprehensive income	58,980	45,428	45,344	—	82	—	2
Financial assets at amortised cost	422,061	414,000	397,994	10,906	5,072	—	28
Derivatives - Hedge accounting	1,891	1,812	—	1,812	—	—	—
Fair value changes of the hedged items in portfolio hedges of interest rate risk	(148)	(148)	—	—	—	—	(148)
Joint ventures and associates	916	3,436	3,325	—	—	—	111
Insurance and reinsurance assets	210	—	—	—	—	—	—
Tangible assets	8,737	8,205	8,205	—	—	—	—
Intangible assets	2,156	2,125	777	—	—	—	1,348
Tax assets[2]	16,472	16,223	15,166	—	—	—	1,057
Other assets[3]	2,614	3,815	2,477	—	—	—	1,338
Non-current assets and disposal groups classified as held for sale [4]	1,022	984	984	—	—	—	—
Total assets	**713,140**	**688,951**	**555,356**	**96,727**	**5,171**	**111,555**	**3,747**
Liabilities							
Financial liabilities held for trading	95,611	96,000	—	82,043	—	96,000	—
Financial liabilities designated at fair value through profit or loss	10,580	3,288	—	—	—	—	3,288
Financial liabilities at amortised cost	528,629	524,359	—	10,557	—	—	513,802
Derivatives - Hedge accounting	3,303	3,069	—	3,069	—	—	—
Fair value changes of the hedged items in portfolio hedges of interest rate risk	—	—	—	—	—	—	—
Liabilities under insurance and reinsurance contracts	11,848	—	—	—	—	—	—
Provisions	4,933	4,588	770	—	—	—	3,818
Tax liabilities[2]	2,742	2,291	802	—	—	—	1,489
Other liabilities	4,880	4,864	—	—	—	—	4,864
Liabilities included in disposal groups classified as held for sale	—	—	—	—	—	—	—
Total Liabilities	**662,526**	**638,459**	**1,572**	**95,669**	**—**	**96,000**	**527,261**

[1] For the purpose of the template, when a single item is associated with the capital requirements according to more than one risk framework, it is shown in all the columns corresponding to the capital requirements to which it is associated. As a result, the sum of the values of the columns by type of risk may be greater than the carrying value according to the scope of regulatory consolidation.

[2] Deferred tax assets that depend on future income, reduced by the amount of deferred tax liabilities (article 38 of the CRR) are € 3,389 million and have a risk weight of 250% in application of article 48 of the CRR. The remaining tax assets include deferred tax assets that do not depend on future income and current tax assets.

[3] Other assets include mainly an amount of €1,338 million relating to insurance contracts linked to pensions, which are not subject to capital requirements.

A summary table with the main sources of differences between the amount of exposures in regulatory terms (EAD) and the accounting balances according to the Financial Statements is below:

Table 4. EU LI2 - Main sources of the differences between regulatory original exposure amounts and carrying values in financial statements (Million Euros. 12-31-2022)

		Items subject to:			
	Total	**Credit risk framework**	**Counterparty credit risk framework**	**Securitisation framework**	**Market risk framework**
Asset carrying value amount under scope of regulatory consolidation	**768,809**	**555,356**	**96,727**	**5,171**	**111,555**
Liabilities carrying value amount under scope of regulatory consolidation	**193,241**	**1,572**	**95,669**	**—**	**96,000**
Total net amount under regulatory scope of consolidation	**575,568**	**553,784**	**1,058**	**5,171**	**15,555**
Amount of off-balance-sheet	198,317	192,948	5,369	—	
Differences in valuation(1)	(356)	—	—	—	(356)
Differences due to netting agreements (netting, long/short positions) (2)	115,648	—	115,648	—	
Differences due to accounting Provisions(3)	4,720	4,720	—	—	
Differences due to credit risk mitigation techniques (CRM)	(30,016)	(5,837)	(24,027)	(152)	
Differences due to credit conversion factors (CCF)	(113,515)	(113,515)	—	—	
Differences due to risk transfer securitisations	(854)	—	—	(854)	
Other(4)	13,792	3,374	10,418	—	
Exposure amounts considered for regulatory purposes	**763,304**	**635,474**	**108,467**	**4,164**	**15,200**

(1) It includes the deduction for prudent valuation adjustments. This deduction is included in row 7 of table EU CC1.

(2) This amount includes the reversal of the accounting netting of derivatives and repurchase agreements to include the netting adjustment applicable in prudential regulation; and the impact of the collateral adjustment on securities financing transactions.

(3) Includes provisions for exposures to credit risk under advanced approach that do not reduce the EAD.

(4) Includes, among others, derivatives counterparty credit risk.

As the table shows, the main sources of difference between the accounting value on the balance sheet and the amount of exposure for regulatory purposes are the inclusion of off-balance sheet items after the conversion factor, the different treatment of the guarantees eligible as risk mitigation techniques and the regulatory treatment of derivative and securities financing transactions (inclusion of netting rules other than those applied in accounting value and the inclusion of the potential future exposure).

2.2. Identification of dependent entities with bank capital below the minimum requirement. Possible impediments to transferring own funds

As of December 31, 2022, there are no entities in the Group with capital adequacy below their applicable minimum regulatory requirement.

The Group operates mainly in Spain, Mexico, Turkey and South America. The Group’s banking subsidiaries around the world are subject to supervision and regulation (with respect to issues such as compliance with a minimum level of regulatory capital) by a number of regulatory bodies.

The obligation to comply with these capital requirements may affect the capacity of these banking subsidiaries to transfer funds (e.g. via dividends) to the parent company.

In some jurisdictions in which the Group operates, the regulations lay down that dividends may only be paid with the funds available by regulation for this purpose.

2.3. Exemptions from capital requirements at the individual or sub-consolidated level

In accordance with what is set out in the solvency regulations regarding the exemption from capital requirements compliance for Spanish credit institutions belonging to a consolidated group (at individual or sub-consolidated level) established in the aforementioned regulation, the Group obtained exemption from the supervisor on December 30, 2009 for the following companies (this exemption was ratified through ECB decision 1024/2013):

- Banco Industrial de Bilbao, S.A.
- Banco Occidental, S.A.

In addition, for Financiero de Crédito de Portugal (BBVA IFIC, S.A.), the ECB has decided not to apply prudential or liquidity requirements individually

3. Eligible own funds and minimum requirements

3.1. BBVA Group's regulatory capital tiers

Article 92 of the CRR establishes that credit institutions must maintain the following own funds requirements at all times:

a. Common Equity Tier 1 capital ratio of 4.5%, calculated as Common Equity Tier 1 capital expressed as a percentage on the total amount of risk-weighted assets.

b. Tier 1 capital ratio of 6%, calculated as the level of tier capital 1 expressed as a percentage of the total amount of risk-weighted assets.

c. Total capital ratio of 8%, calculated as the total own funds expressed as a percentage of the total amount of risk-weighted assets

Notwithstanding the application of the Pillar 1 requirement, CRD IV allows competent authorities to require credit institutions to maintain a level of own funds higher than the requirements of Pillar 1 to cover types of risk other than those already covered by the Pillar 1 requirement (this power of the competent authority is commonly referred to as "Pillar 2").

Furthermore, from 2016 and in accordance with CRD IV, credit institutions must comply with the following combined requirement of capital buffers at all times: (i) the capital conservation buffer, (ii) the buffer for global systemically important banks (the "G-SIB" buffer), (iii) the entity-specific countercyclical capital buffer, (iv) the buffer for other systemically important banks ("D-SIB" buffer) and (v) the systemic risk capital buffer. The “combined capital buffer requirement” must be met with Common Equity Tier 1 capital (“CET1”) to cover both minimum capital required by “Pillar 1” and “Pillar 2".

Both the capital conservation buffer and the G-SIB buffer (where appropriate) will apply to credit institutions as it establishes a percentage greater than 0%.

The buffer for global systemically important banks applies to those institutions on the list of global systemically important banks, which is updated annually by the Financial Stability Board (“FSB”). Considering the fact that BBVA does not appear on that list, as at the report date, the G-SIB buffer does not apply to BBVA. Detailed information on each of the quantitative indicators that form part of the evaluation process is available on the BBVA Group's website.

The Bank of Spain has extensive discretionary powers as regards the countercyclical capital buffer specific to each bank, the buffer for other systemically important financial institutions (which are those institutions considered to be systemically important domestic financial institutions “D-SIB”) and the buffer against systemic risk (to prevent or avoid systemic or macroprudential risk). The European Central Bank (ECB) has the powers to issue recommendations in this respect following the entry into force on November 4, 2014 of the Single Supervisory Mechanism (SSM).

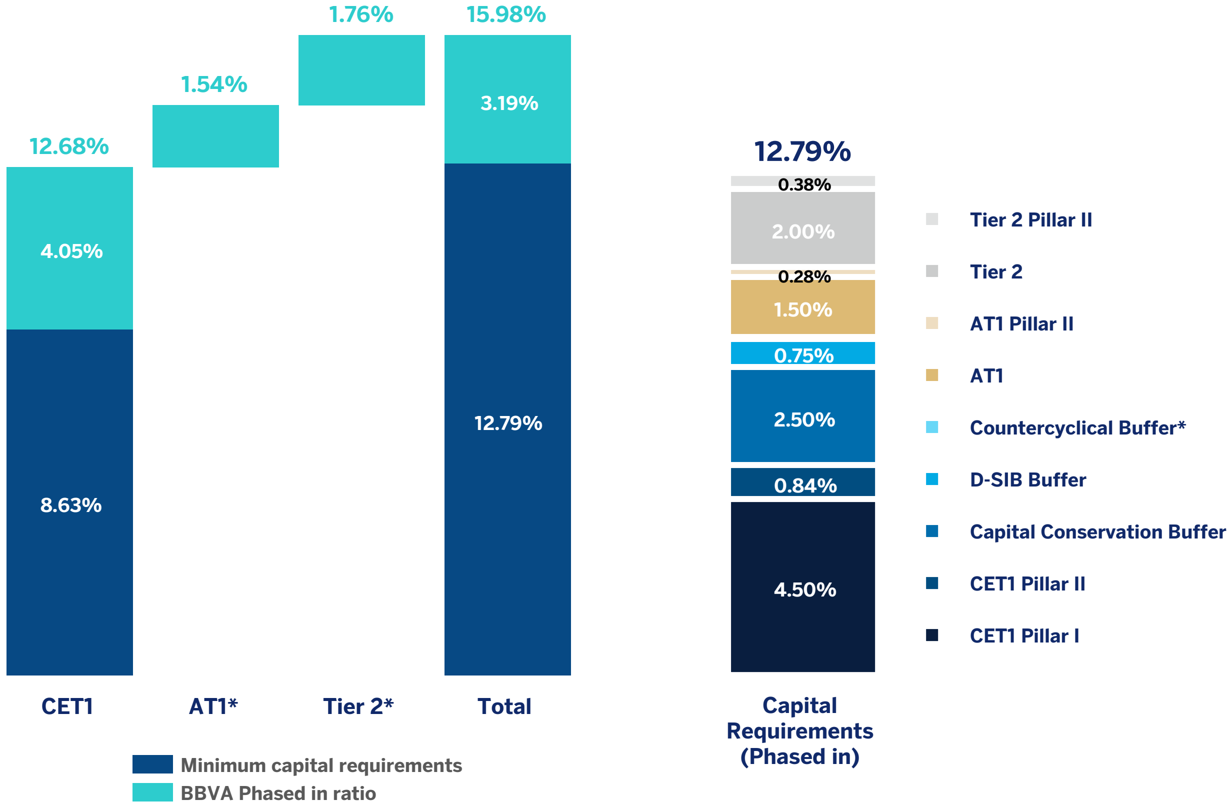
With regard to minimum capital requirements, following the latest decision of the SREP (Supervisory Review and Evaluation Process), which comes into force as of January 1, 2023, the ECB has notified the Group of maintaining the Pillar 2 requirement at 1.71 Therefore, BBVA must maintain a CET1 capital ratio of 8.75% and a total capital ratio of 13.00% at a consolidated level.

Thus, the consolidated overall capital requirement includes: i) the minimum capital requirement of Common Equity Tier 1 (CET1) of Pillar 1 (4.5%); ii) the capital requirement of Additional Tier 1 (AT1) of Pillar 1 (1.5%); iii) the capital requirement of Tier 2 of Pillar 1 (2%); iv) the CET1 requirement of Pillar 2 (0.96%), v) the capital requirement of Additional Tier 1 (AT1) of Pillar 2 (0.32%); vi) the capital requirement of Tier 2 of Pillar 2 (0.43%); vii) the capital conservation buffer (2.5% of CET1); viii) the capital buffer for Other Systemically Important Institutions (O-SIIs) (0.75% of CET1); and ix) the countercyclical buffer (CCyB) (0.04% of CET1)

The BBVA Group has set the objective of maintaining a fully-loaded CET1 ratio at a consolidated level between 11.5% and 12.0%. At the end of the financial year 2022, the fully-loaded CET1 ratio was above this target management range.

CET1 phased-in ratio reach 12.68% which represents +405 basis points over the minimum requirement of 8.63%.

Chart 5. Capital requirements and capital ratios (Phased in)



(*) The AT1 requirement is 1.78%, and Tier2, 2.38%.

(*) The countercyclical capital buffer as of December 31, 2022 amounts to 0.04%.

The following table shows the CET1 ratio that would trigger restrictions on capital distribution capacity and the capital ratios as of December 2022:

Table 5. Capital distribution constraints (12-31-2022)

	CET1 capital ratio that would trigger capital distribution constraints (%)	Current CET 1 capital ratio(%)
CET1 Pillar 1	4.50%	
CET1 Pillar 2 (P2R)	0.84%	
Capital conservation buffer	2.50%	
D-SIB buffer	0.75%	
Countercyclical buffer	0.04%	
CET1 phased-in minimum plus Basel III buffers (excluding capital used to meet other minimum regulatory capital)	**8.63%**	**12.68%**
CET1 phased-in minimum plus Basel III buffers (including capital used to meet other minimum regulatory capital)	**9.49%**	**12.68%**

The following table shows the distribution by geographic areas of the credit exposure for calculation of the countercyclical capital buffer. Countries where no buffer is established are grouped:

Table 6.1. EU CCyB1 - Geographical breakdown of relevant credit exposures for the calculation of the countercyclical capital buffer (Million Euros. 12-31-2022)

	General credit exposures [1]		Trading book exposure		Securitisation exposure		Own funds requirements						
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Trading book exposure value for internal models	Exposure value for SA	Total exposure value	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total	Risk-weighted exposure amounts	Own funds requirements weights	Countercyclical capital buffer rate
Geographical breakdown													
Bulgary	26	1	—	—	—	27	2	—	—	2	26	0.01 %	1.00 %
Denmark	5	130	6	6	—	147	6	—	—	6	75	0.03 %	2.00 %
Slovakia	—	153	—	—	—	153	20	—	—	20	251	0.11 %	1.00 %
Estonia	—	1	—	—	—	1	—	—	—	—	—	—	1.00 %
Hong-Kong	2	3,998	—	—	—	4,000	75	—	—	75	943	0.41 %	1.00 %
Iceland	—	—	—	—	—	—	—	—	—	—	—	—	2.00 %
Luxembourg	72	2,219	15	15	—	2,321	91	2	—	92	1,155	0.50 %	0.50 %
Norway	15	44	15	14	—	87	2	—	—	2	26	0.01 %	2.00 %
United Kingdom	1,133	7,576	71	69	—	8,848	413	8	—	421	5,259	2.30 %	1.00 %
Czech Republic	1	103	—	—	—	104	5	—	—	5	58	0.03 %	1.50 %
Romania	2,200	11	—	—	—	2,210	113	—	—	113	1,409	0.62 %	0.50 %
Sweden	21	267	11	11	—	310	13	1	—	14	170	0.08 %	1.00 %
Total countries with countercyclical capital buffer	**3,475**	**14,503**	**118**	**115**	**—**	**18,208**	**740**	**11**	**—**	**750**	**9,372**	**4.10 %**	
Germany	166	5,470	97	92	25	5,850	199	8	—	207	2,584	1.13 %	—
Argentina	5,279	219	124	—	—	5,622	395	—	—	395	4,938	2.16 %	—
Colombia	2,336	874	28	27	—	3,265	184	2	—	186	2,325	1.02 %	—
Spain	13,774	698	79	29	—	14,579	856	4	—	859	10,743	4.70 %	—
United States	22,620	146,003	67	43	4,140	172,873	5,413	3	36	5,452	68,154	29.81 %	—
France	724	24,704	143	158	—	25,730	785	9	—	794	9,925	4.34 %	—
Italy	1,321	8,481	204	205	—	10,211	304	7	—	312	3,898	1.71 %	—
Mexico	45	5,327	22	19	—	5,413	208	—	—	208	2,598	1.14 %	—
Netherlands	37,151	37,910	387	270	—	75,719	4,073	45	—	4,118	51,475	22.51 %	—
Peru	541	4,956	112	111	—	5,719	197	8	—	206	2,571	1.13 %	—
Portugal	18,100	849	50	1	—	19,000	1,129	—	—	1,129	14,116	6.17 %	—
United Kingdom	2,581	2,374	4	3	—	4,963	238	—	—	238	2,975	1.30 %	—
Turkey	41,677	567	246	—	—	42,491	2,755	2	—	2,758	34,471	15.08 %	—
Total countries with a 0% countercyclical buffer or without countercyclical capital buffer (with own funds requirements greater than 1%)	**146,315**	**238,432**	**1,563**	**958**	**4,165**	**391,435**	**16,736**	**88**	**36**	**16,862**	**210,773**	**92.18 %**	
Other areas [2]	4,093	12,142	167	80	—	16,483	669	11	—	679	8,497	3.72 %	
Total countries without countercyclical capital buffer (with own funds requirements less than 1%)	**4,093**	**12,142**	**167**	**80**	**—**	**16,483**	**669**	**11**	**—**	**679**	**8,497**	**3.72 %**	
Total	**153,883**	**265,077**	**1,848**	**1,153**	**4,165**	**426,126**	**18,145**	**110**	**36**	**18,291**	**228,642**	**100.00 %**	

[1] Credit exposure excludes exposures to Central Governments or Central Banks, Regional Governments or Local Authorities, Public sector entities, Multilateral Development Banks, International Organisations and Institutions in accordance with art. 140.4 of Directive 2013/36/EU.

[2] A full breakdown of the countries with relevant exposures for the calculation of the countercyclical capital buffer which are included in "Other areas", is in Annex IV.

Table 6.2. EU CCyB2 - Amount of institution-specific countercyclical capital buffer (Million Euros. 12-31-2022)

	a
Total risk exposure amount	337,066
Institution specific countercyclical buffer rate (1)	0.04 %
Institution specific countercyclical buffer requirement	121

(1) Countercyclical capital buffer calculated as of December 2022 in accordance with Commission Delegated Regulation (EU) 2015/1555.

The countercyclical capital buffer requirement applicable to the BBVA Group is approximately 0.04%, which increased 3 basis points compared to December 2021. This requirement means that the Group must maintain an additional capital buffer of 121 million euros at the end of December 2022.

The increase is mainly due to the activation of the requirement in the United Kingdom (1%), a territory where the Group has significant exposures, making it one of the 10 countries where the Group has the greatest exposure. Additionally, and to a lesser extent, it has also been affected by the activation or increase of the requirement in other less relevant geographies for the Group.

3.2. Eligible own funds

For the purposes of calculating minimum capital requirements, according to Regulation (EU) 575/2013 and subsequent amendments, which are applicable as of the report date, the elements and instruments of Tier 1 capital are defined as the sum of Common Equity Tier 1 capital (CET1) and additional Tier 1 capital (AT1), as defined in Part Two, Title I, Chapters I to III of the CRR, as well as their corresponding deductions, in accordance with Articles 36 and 56, respectively.

Also considered are the elements of Tier 2 capital defined in Part Two, Title I of Chapter IV, Section I of the CRR. The deductions defined as such in Section II of the same Chapter are also considered.

The level of Common Equity Tier 1 capital essentially comprises the following elements:

a. Capital and share premium: this includes the elements described in article 26 section 1, and 28 of the CRR and the EBA list referred to in Article 26 Section 3 of the CRR.

b. Accumulated gains: in accordance with Article 26. 1 c), the gains that may be used immediately and with no restriction to cover any risk or losses are included, in the event that they occur.

c. Other accumulated income and other reserves: in accordance with Article 26. 1, d) and e), this item primarily classifies the exchange-rate differences and the valuation adjustments associated with the portfolio of financial assets at fair value with changes to other comprehensive income.

d. Minority interests eligible as CET1: includes the sum of the Common Equity Tier 1 capital instruments of a subsidiary that arise in the process of its global consolidation and are attributable to natural or legal third persons other than companies included in the consolidation, calculated in accordance with Article 84 et seq. of the CRR.

e. Net profit of the year attributed to the Group: the independently verified profits are included, net of any possible expense or foreseeable dividend previously authorised by the supervisor (following the treatment set out in Article 5 of Decision (EU) 2015/656 of the ECB). As of December 31, 2022, it includes the prudential accrual of 0.31 cents/share as Shareholders remuneration related to 2022 results, which has been agreed by the Management Board on January, 31, 2023 (pending approval by the General Shareholders' Meeting to be held on March 17, 2023).

Furthermore, CET1 capital is adjusted mainly through the following deductions:

f. Additional value adjustments: this includes adjustments resulting from the prudent valuation of positions at fair value, as set out in Article 105 of the CRR.

g. Intangible assets: these are included net of the corresponding tax liabilities, as set out in Article 36.1 b) and Article 37 of the CRR. It mainly includes goodwill, software and other intangible assets. The amount shall be deducted from the amount of the accounting revaluation of the intangible assets of the subsidiaries derived from the consolidation of the subsidiaries attributable to persons other than the companies included in the consolidation.This includes the positive effect due to the prudent treatment of software following the publication of Delegated Regulation 2020/2176 of December 22.

h. Deferred tax assets: it includes deferred tax assets that rely on future profitability and do not rise from temporary differences (net of the corresponding tax liabilities when the conditions established in Article 38.3 of the CRR are met), as per Article 36.1 c) and Article 38 of the CRR, mainly loss carryforwards (LCFs).

i. Reserves at fair value related to losses or gains from cash flow hedging: includes value adjustments of cash flow hedging of financial instruments not valued at fair value, including expected cash flows in accordance with Article 33 a) of the CRR.

j. Negative amounts due to the calculation of the expected losses: the default provision on expected losses in exposure weighted by method based on internal ratings, calculated in accordance with Article 36.1 d) of the CRR, is included.

k. Profit and loss at fair value: these are derived from the entity’s own credit risk, in accordance with Article 33 b) of the CRR.

l. Direct, indirect and synthetic holdings of own instruments (treasury stock): includes the shares and other instruments eligible as capital that are held by any of the Group’s consolidating entities, together with those held by non-consolidating entities belonging to the economic Group, as set out in Article 36.1 f) and Article 42 of the CRR. It mainly includes the amount of the treasury stock up to the maximum limit authorized by the ECB to the BBVA Group and the financing of own treasury shares.

m. Securitisation: any instance of securitisation that receives a risk weight of 1.250% is included, as set out in Article 36.1 k) ii) of the CRR.

n. Other regulatory adjustments: other CET1 deductions are included according to the CRR, which were not recognised in the above headings, such as:

i. losses and gains at fair value arising from the entity's own credit risk related to derivative liabilities (DVA).

ii. the amount corresponding to the insufficient coverage of non-performing exposures, taking into account both Article 36.1.m) of the CRR and the supervisory expectations on prudential provisions for non-performing exposures published in the Appendix to the ECB Guide on non-performing loans for credit institutions published in March 2018.

iii. the adjustment for the transitional treatment of the impact of IFRS9. In this regard, it is worth mentioning that since 2018, the BBVA Group has applied the static and dynamic treatment of the impacts of IFRS 9, therefore, the phased-in capital and leverage ratios are calculated taking into account the transitional provisions defined in Article 473 bis of the CRR and its subsequent amendments to the aforementioned article introduced by Regulation 2020/873 of the Parliament and of the Council of June 24, 2020 in response to the COVID19 Pandemic, opting to apply section 7a of the aforementioned article in the calculation of the impact of the transitory treatment on phased-in risk-weighted assets.

iv. the amount of the deduction arise from significant holdings in financial institutions and deferred tax assets arising from temporary differences that exceed the 10% limit of the CET1, as well as the deduction for exceeding the joint limit of 17.65% of the CET1 according to Article 48.2 of the CRR.

In addition, as of December 31, 2022, the Group do not hold stakes in financial institutions that are excluded from the application of the previously mentioned limits (article 49 of the CRR) and, therefore, the standard template of the EBA EU INS1 shall not be applicable.

v. the execution of 422 million share buyback program, subject to obtaining the corresponding regulatory authorizations and the communication of the specific terms and conditions of the program prior to the beginning of its execution.

In addition, the Group includes as eligible own funds the AT1 capital, which is comprised of:

o. Capital instruments and share premium eligible as AT1: this item includes the perpetual contingent convertible securities that meet the conditions set out in Articles 51 and 52.1, 53 and 54 of the CRR.

p. Qualifying Tier 1 capital included in the consolidated additional capital issued by affiliates and held by third parties: this item includes the amount of additional Tier 1 capital from the subsidiaries, calculated in accordance with Article 85 and 86 of the CRR.

Finally, the Group also includes Tier 2 eligible capital as own funds, which includes the following elements:

q. Capital instruments and Tier 2 share premiums: includes funding that, for credit ranking purposes, comes behind all the common creditors. The issues, moreover, have to fulfil a number of conditions, which are laid out in Article 63 of the CRR, taking into account the transitory provisions established in Part Ten, Chapter 4 of the CRR

r. Eligible own funds instruments eligible as Tier 2 capital issued by subsidiaries and held by third parties: these instruments are included under Articles 87 and 88 of the CRR.

s. Credit risk adjustments: it includes the surplus resulting from comparing the provisions and expected credit losses related to exposures calculated under IRB approach with the limit of 0.6% of the risk-weighted exposure.

t. Tier 2 Regulatory adjustments: this mainly includes direct and indirect holdings of own Tier 2 capital instruments and the adjustment of the element described in letter s) derived from the transitional treatment of the impact of IFRS9.

Annex III outlines the main characteristics of capital instruments eligible for inclusion as additional Tier 1 and Tier 2 capital, in accordance with the standard template EU CCA.

The amount of total eligible capital, net of deductions, for the different items making up the capital base as of December 31, 2022 and 2021, respectively, is below, in accordance with the requirements for the disclosure of information related to regulatory own funds established by the Implementing Technical Standards (EBA/ ITS/2020/04) (Implementing Regulation 2021/637 of March 15, 2021):

Table 7. Amount of capital (EU CC1) (Million Euros)

Reference to template EU CC2(1)	12-31-2022	6-30-2022	12-31-2021
a) Capital and share premium	23,810	25,463	26,866
b) Retained earnings	31,436	31,214	30,745
c) Other accumulated earnings and other reserves	(13,952)	(13,295)	(17,200)
d) Minority interests eligible as CET1	1,853	1,988	2,800
e) Net profit of the year attributable to the Group (2)	3,814	1,478	2,573
Common Equity Tier 1 Capital before other regulatory adjustments	**46,962**	**46,847**	**45,784**
f) Additional value adjustments	(356)	(350)	(260)
g) Intangible assets	(1,395)	(1,416)	(1,484)
h) Deferred tax assets	(1,057)	(1,048)	(1,009)
i) Fair value reserves related to gains o losses on cash flow hedges	425	662	483
j) Expected losses in equity	(16)	—	—
k) Profit or losses on liabilities measured at fair value	(72)	(97)	(2)
l) Direct, indirect and synthetic holdings of own instruments	(356)	(1,749)	(2,800)
m) Securitisations tranches at 1250%	(1)	(24)	(22)
n) Other CET1 regulatory adjustments (2)	(1,396)	(1,262)	(741)
Total Common Equity Tier 1 regulatory adjustments	**(4,223)**	**(5,284)**	**(5,835)**
Common Equity Tier 1 (CET1)	**42,738**	**41,563**	**39,949**
o) Equity instruments and AT1 share premium	4,875	4,925	5,265
p) Qualifying Tier 1 capital included in consolidated AT1 capital issued by subsidiaries and held by third parties	318	339	472
Additional Tier 1 before regulatory adjustments	**5,193**	**5,264**	**5,737**
Additional Tier 1 (AT1)	**5,193**	**5,264**	**5,737**
Tier 1 (Common Equity Tier 1+Additional Tier 1)	**47,931**	**46,828**	**45,686**
q) Equity instruments and Tier 2 share premiums	3,510	3,737	4,324
r) Eligible own funds instruments included in consolidated Tier 2 issued by subsidiaries and held by third parties	2,310	2,333	2,516
s) Credit risk adjustments	213	758	722
Tier 2 before regulatory adjustments	**6,033**	**6,828**	**7,562**
t) Tier 2 regulatory adjustments	**(103)**	**(9)**	**(179)**
Tier 2	**5,930**	**6,819**	**7,383**
Total Capital (Total capital = Tier 1 + Tier 2)	**53,861**	**53,647**	**53,069**
Total RWAs	**337,066**	**330,871**	**307,795**
CET 1 (phased-in)	12.68 %	12.56 %	12.98 %
CET 1 (fully loaded)	12.61 %	12.45 %	12.75 %
TIER 1 (phased-in)	14.22 %	14.15 %	14.84 %
TIER 1 (fully loaded)	14.15 %	14.05 %	14.62 %
Total Capital (phased-in)	15.98 %	16.21 %	17.24 %
Total Capital (fully loaded)	15.94 %	16.11 %	16.99 %

(*) As of 31 December 2022, the difference between the phased-in and fully loaded ratios arises from the transitional treatment of certain elements of capital, mainly the impact of IFRS 9, to which the BBVA Group has voluntarily adhered (in accordance with article 473a of the CRR). See table 11 for more information on the transitional impact of IFRS 9.

In addition, noted that the Group as of December, 31, 2022 is not applying the transitional treatment of unrealised gains and losses valued at fair value through Other comprehensive Income (hereinafter, unrealised P&L measured at fair value through OCI) as defined in Article 1.6 of that Regulation amending Article 468 of the CRR. Therefore, the Group's own funds, capital and leverage ratios to date reflect the full impact of the above-mentioned unrealised P&L measured at fair value through OCI.

(1) References to regulatory balance sheet (EU CC2) where these items are included.

(2) As of December 31, 2022, the total shareholder remuneration for 2022 is deducted from CET 1, so that "Net profit of the year attributable to the Group" includes the amount of cash remuneration (€2,593 million) and "Other CET1 regulatory adjustments" includes the deduction of €422 million corresponding to the execution of a program to repurchase BBVA shares, approved by the Board of Directors on January 31, 2023 and subject to obtaining the corresponding regulatory authorizations.

The CET1 fully-loaded ratio of the BBVA Group (hereinafter, the Group) stood at 12.61% at the end of December 2022, which allows maintaining a large management buffer over the Group's CET 1 requirement (8.63%) and over the Group's target management range established between 11.5-12% of CET 1. The phased-in CET 1 ratio was 12.68%, the difference between the two ratios is explained by the effect of the transitional adjustments of the IFRS9 impacts on solvency indicators.

These ratios incorporate the effects of the corporate transactions carried out during the year, with a combined impact of -38 basis points on the Group's CET1. These transactions are the agreement reached with Neon Payments Limited in the first quarter of 2022, the voluntary takeover bid for Garanti BBVA and the acquisition from Merlin of 100% of Tree Inversiones Inmobiliarias Socimi, S.A. in the second quarter of 2022. Excluding these elements, the CET1 fully loaded ratio has increased by 24 basis points, mainly explained by: the generation of earnings in the year (+214 basis points) which, net of shareholder remuneration and payment of CoCos coupons (Contingent Convertible) has generated a positive contribution of +106 basis points. On the other hand, the growth of risk-weighted assets (RWAs) in constant has subtracted -101 basis points, reflecting the organic growth of the activity. Finally, the other elements that make up CET 1 had a positive contribution of +19 basis points; these include market effects, minority interests, regulatory impacts and the compensation in equity of the negative effect on results due to the loss in value of the net monetary position in hyperinflationary economies.

Additional Tier 1 (AT1) fully-loaded capital stood at 1.54% at the end of December 2022 (1.54% phased-in), 34 basis points lower than in 2021, which includes the €500 million reduction effect from the early redemption of a CoCos issue dating back to 2017.

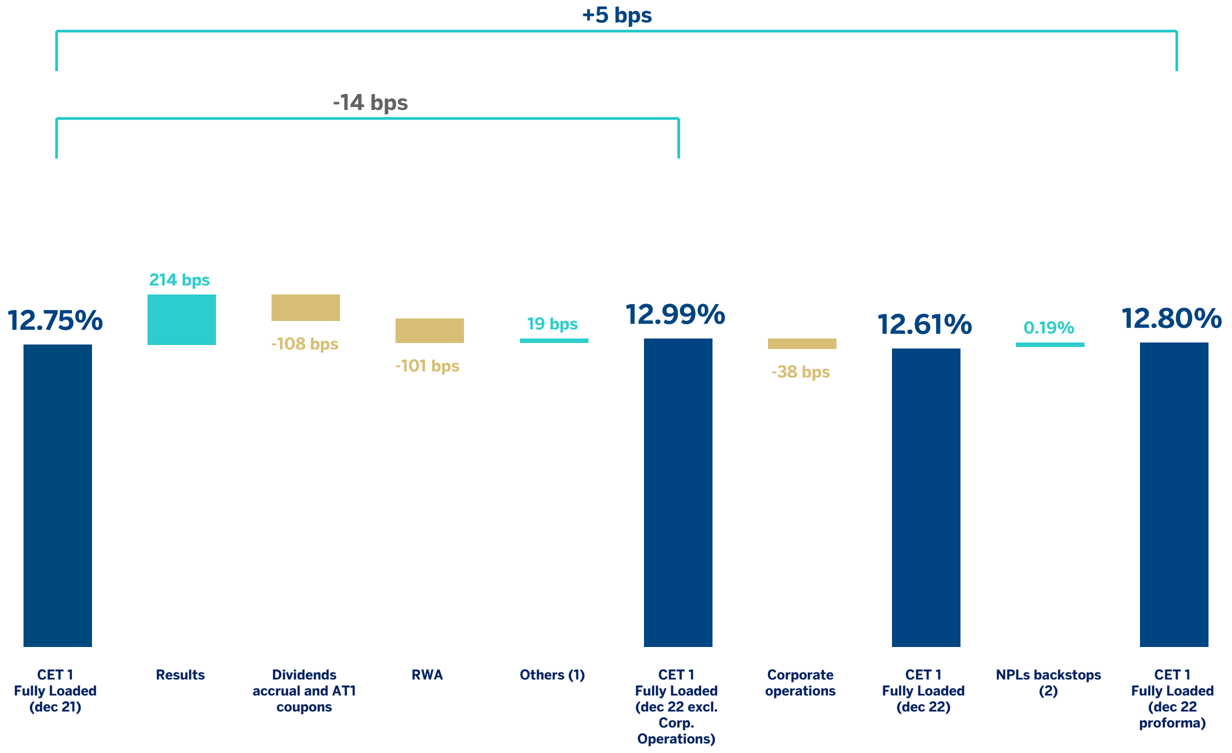
The Tier 2 fully-loaded ratio stood at 1.79% (1.76% phased-in) which represents a reduction of -58 basis points compared to 2021, mainly explained by the effect of increased RWAs during the year and the lower computability of internal credit model provisions.

As a consequence of the foregoing, the fully-loaded total capital ratio stands at 15.94 % as of December 2022, while the total phased-in ratio is 15.98 % as of the same date.

Following the latest SREP (Supervisory Review and Evaluation Process) decision, the ECB has informed the Group that with effect from January 1, 2023, it must maintain at consolidated level a total capital ratio of 13.00% and a CET1 capital ratio of 8.75%, which include a Pillar 2 requirement at consolidated level of 1.71% (a minimum of 0.96% must be satisfied with CET1). Regarding this total capital requirement, 0.21% (0.12% to be met by CET1) corresponds to the ECB's prudential provisioning expectations. Prudential provisions, as of January 1, 2023, will no longer be treated as a deduction in CET1 with a positive effect of 19 basis points on the December 2022 close, which would be equivalent to a pro-forma ratio of 12.80%.

The evolution of fully loaded CET1 ratio during the year 2022 is below:

Chart 6. Annual evolution of the CET1 fully loaded ratio



(1) Includes, among others, minority interests, market related impacts, regulatory impacts and the credit in OCIs that offsets the debit in P&L due to the hyperinflation accounting.

(2) Includes the reversal of the NPL backstop deduction (+19 bps) in January 2023. From that time the SREP Requirement is 8.75% for BBVA Group.

The process of reconciliation between accounting own funds and regulatory own funds is shown below. Based on the shareholders' equity reported in the Consolidated Financial Statements of BBVA Group and applying the deductions and adjustments shown in the table below, reaching to the regulatory capital figure eligible for solvency purposes:

Table 8. Reconciliation of the Public Balance Sheet from the accounting perimeter to the regulatory perimeter (Million Euros)

Eligible capital own funds	**12-31-2022**	**12-31-2021**
Capital	2,955	3,267
Share premium	20,856	23,599
Retained earnings, revaluation reserves and other reserves	34,881	29,984
Other equity	63	60
Less: Treasury shares	(29)	(647)
Attributable to the parent company	6,420	4,653
Attributable dividend	(722)	(532)
Total equity	**64,422**	**60,384**
Accumulated other comprehensive income (Loss)	(17,432)	(16,477)
Non-controlling interest	3,624	4,853
Shareholders`equity	**50,615**	**48,760**
Goodwill and other intangible assets	(1,395)	(1,484)
Deductions	**(1,722)**	**(1,484)**
Differences from solvency and accounting level	(123)	(130)
Equity not eligible at solvency level	**(123)**	**(130)**
Other adjustments and deductions[2]	**(6,032)**	**(7,197)**
Common Equity Tier 1 (CET 1)	**42,738**	**39,949**
Additional Tier 1 before Regulatory Adjustments	**5,193**	**5,737**
Total regulatory adjustments of additional Tier 1	**—**	**—**
Tier 1	**47,931**	**45,686**
Tier 2	**5,930**	**7,383**
Total Capital (Tier 1 + Tier 2)	**53,861**	**53,069**
Total Minimum capital required[1]	**43,111**	**39,275**

[1] Calculated over minimum total capital applicable for each period.

[2] Other adjustments and deductions include, among others, the adjustment related to the amount of minority interest not eligible as capital, the amount of the treasury shares repurchase up to the maximum limit authorised by the ECB to BBVA Group and the amount of dividends not yet distributed.

3.3. Own Funds requirements by risk type

3.3.1. Entity risk profile

The BBVA Group has a general risk management and control model (hereinafter, the "Model") that is appropriate for its business model, its organisation, the countries where it operates and its corporate governance system. This model allows the Group to carry out its activity within the risk management and control strategy and policy defined by the corporate bodies of BBVA and to adapt itself to a changing economic and regulatory environment, facing this management at a global level and aligned to the circumstances at all times. The Model establishes a suitable risk management system related to the risk profile and strategy of the entity.

The types of risk inherent in the business that make up the risk profile of the Group are as follows:

- *Credit risk and dilution:* Credit risk arises from the probability that one party to a financial instrument will fail to meet its contractual obligations for reasons of insolvency or inability to pay and cause a financial loss for the other party. This includes counterparty risk, issuer risk, liquidation risk and country risk.

- *Counterparty risk:* The credit risk corresponding to derivative instruments, repurchase and reverse repurchase transactions, securities or commodities lending or borrowing transactions and deferred settlement transactions.

- *Credit Valuation Adjustment Risk (CVA):* Its aim is to reflect the impact on the fair value of the counterparty's credit risk, resulting from OTC derivative instruments which are not recognised credit derivatives for the purpose of reducing the amount of credit risk weighted exposure

- *Market risk:* Market risk originates in the possibility that there may be losses in the value of positions held due to movements in the market variables that affect the valuation of financial products and assets in the trading book. This includes risk with respect to the position in debt and equity instruments, exchange rate risk and commodity risk.

- *Operational risk:* a risk that may cause losses as a result of human error; inadequate or defective internal processes; inadequate conduct towards customers, in the markets or against the company; failures, interruptions or deficiencies in systems or communications; theft, loss or misuse of information, as well as deterioration of its quality; internal or external fraud including, in all cases, fraud resulting from cyber-attacks; theft or physical damage to assets or persons; legal risks; risks resulting from workforce and occupational health management; and inadequate service provided by suppliers. This definition includes legal risk, but excludes strategic and/or business risk and reputational risk.

- *Structural risk:* This is divided into structural interest-rate risk (movements in market interest rates that cause changes in an entity's net interest income and book value) and structural exchange-rate risk (exposure to variations in exchange rates originating in the Group's foreign companies and in the provision of funds to foreign branches financed in a different currency from that of the investment).

- *Liquidity risk:* Risk of an entity having difficulties in duly meeting its payment commitments, or where, to meet them, it has to resort to funding under burdensome terms which may harm the Group's image or reputation.

- *Reputational risk:* Considered to be the potential loss in earnings as a result of events that may negatively affect the perception of the Group's different stakeholders.

The following table shows the total capital requirements broken down by risk type as of quarter-end from December 31, 2021 to December 31, 2022:

Table 9. EU OV1 - Overview of RWAs (Million Euros)

	RWEAs(1)					Minimum Capital Requirements (2) (3)
	12-31-2022	**9-30-2022**	**6-30-2022**	**3-31-2022**	**12-31-2021**	**12-31-2022**
Credit risk (excluding CCR) (4)	**285,362**	**278,942**	**270,369**	**257,856**	**247,299**	**22,829**
Of which the standardised approach (5)	143,612	150,696	144,373	135,061	129,741	11,489
Of which the Foundation IRB (F-IRB) approach	—	—	—	—	—	—
Of which: slotting approach	5,177	5,541	4,928	4,718	4,498	414
Of which equity IRB under the simple risk-weighted approach(6)	2,570	2,600	2,307	2,418	2,442	206
Of which the Advanced IRB (A-IRB) approach (7)	102,547	104,095	102,013	100,760	97,614	8,204
Counterparty credit risk - CCR	**11,232**	**13,436**	**11,646**	**11,115**	**13,870**	**899**
Of which the standardised approach (8)	6,725	8,908	8,023	7,791	9,661	538
Of which internal model method (IMM)	—	—	—	—	—	—
Of which exposures to a CCP(9)	702	551	223	154	156	56
Of which credit valuation adjustment - CVA	1,741	2,461	2,072	1,932	2,518	139
Of which other CCR	2,063	1,516	1,328	1,238	1,535	165
Settlement risk	**—**	**—**	**—**	**—**	**—**	**—**
Securitisation exposures in the non-trading book (after the cap)(10)	**455**	**326**	**364**	**296**	**325**	**36**
Of which internal assessment approach (SEC-IRBA)	438	271	345	274	300	35
Of which external assessment approach (SEC-ERBA)	17	17	20	22	25	1
Of which standardised approach (SEC-SA)	—	37	—	—	—	—
Of which 1250%/ deduction (10)	—	—	—	—	—	—
Market Risk	**12,969**	**15,568**	**15,751**	**14,867**	**14,712**	**1,037**
Of which the standardised approach (SA)	4,716	5,439	5,884	5,580	4,445	377
Of which IMA	8,252	10,129	9,866	9,287	10,267	660
Large exposures	**—**	**—**	**—**	**—**	**—**	**—**
Operational risk	**27,049**	**33,407**	**32,742**	**32,227**	**31,589**	**2,164**
Of which basic indicator approach	946	690	699	719	748	76
Of which standardised approach	26,103	32,717	32,043	31,508	30,841	2,088
Of which advanced measurement approach	—	—	—	—	—	—
Amounts below the thresholds for deduction (subject to 250% risk weight)(11)	*16,268*	*16,319*	*15,827*	*15,442*	*15,112*	*1,301*
Total	**337,066**	**341,678**	**330,871**	**316,361**	**307,795**	**26,965**

(1) Risk-weighted assets according to the phased-in period

(2) Considering the minimum total capital requirement of 8% (Article 92 of the CRR)

(3) Under the total capital requirement ratio after the supervisory review process (SREP), the total capital requirement ratio amounts to 12.79% (€43,111 million as of the reporting date)

(4) Including amounts below the deduction thresholds subject to 250% weight (DTAs rise to €8,472 million and significant investments in financial sector entities and insurance companies amounting to €7,796 million).

(5) Excluding deferred tax assets arising from temporary differences subject to 250% risk weight in accordance with Article 48.4 CRR. This amount is €8,472 million as of december 31, 2022.

(6) It only includes equity exposures under the simple method of IRB approach.

(7) It only includes credit risk exposures under the advanced internal ratings-based approach (AIRB).

(8) It only includes SA-CCR for derivatives.

(9) This row includes the total RWAs corresponding to exposures with central counterparties (CCPs), both qualified and non-qualified, among which are also the initial margins.

(10) The BBVA Group deducts from capital those securitisations meeting the deduction requirements, so it does not apply a weight of 1,250% to these exposures. In this row, the value of €11 million that would result from applying this weight to the exposures deducted is not included.

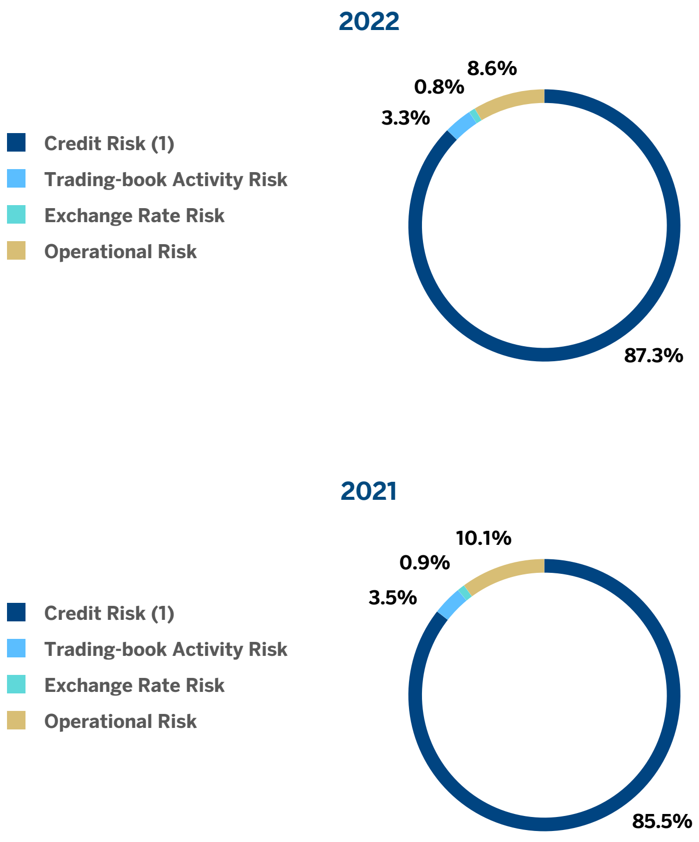
(11) The information in this row is disclosed for information purposes only, as the amount included here is also included in row 1, where institutions are requested to disclose information on credit risk. As a consequence, this row should not be taken into account when calculating the total indicated at the bottom of the table.

In 2022, , risk-weighted assets grew by approximately €30 billion euros, mainly due to the dynamism of lending activity throughout the Group. Of particular note were Turkey and South America, where the Group applies standardised approach. The above growth is partly reduced by the evolution of counterparty credit risk, as well as market risk, in line with the lower volatility observed. Finally, the Group recorded a net impact of supervisory effects and model updates in the calculation of operational risk of approximately €8.2 billion, which had an impact on the Group's CET 1 ratio of approximately -30 basis points.:

The evolution of RWAs by type of risk is explained in more detail in the respective sections of the report.

Total risk-weighted assets are shown below, broken down by type of risk (where credit risk includes counterparty risk) as of December 31, 2022 and December 31, 2021:

Chart 7. Distribution of RWAs by risk type eligible on Pillar 1



(1) Credit Risk includes Risk for CVA adjustment and the prudential advance for the impacts of the TRIM and other regulatory/supervisory impacts

3.3.2. Breakdown of minimum capital requirements by risk type

This section provides an overview of risk-weighted assets and the minimum capital requirements established by Article 92 of the CRR.

The following table is a breakdown of risk-weighted assets and capital requirements broken down by risk type and exposure categories as of December 31, 2022, September 30, 2022 and December 31, 2021:

Table 10. Capital requirements by risk type and exposure class (Million Euros)

	Capital requirements[2]			**RWA's[1]**		
Exposure Class and risk type	**12-31-2022**	**9-30-2022**	**12-31-2021**	**12-31-2022**	**9-30-2022**	**12-31-2021**
Credit Risk	**11,779**	**12,366**	**10,853**	**147,240**	**154,576**	**135,660**
Central governments or central banks	2,500	2,556	2,521	31,254	31,948	31,511
Regional governments or local authorities	107	96	95	1,335	1,194	1,189
Public sector entities	80	73	70	1,002	917	876
Multilateral development banks	—	—	—	6	6	6
International organisations	—	—	—	—	—	—
Institutions	393	544	566	4,916	6,805	7,073
Corporates	3,660	3,935	3,177	45,746	49,185	39,710
Retail	2,910	2,901	2,282	36,379	36,262	28,520
Secured by mortgages on immovable property	790	827	691	9,871	10,332	8,637
Exposures in default	215	233	280	2,691	2,913	3,495
Exposures associated with particularly high risk	225	241	292	2,809	3,007	3,654
Covered bonds	—	—	—	—	—	—
Claims on institutions and corporates with a short-term credit assessment	—	2	—	—	24	—
Collective investments undertakings	—	—	—	1	1	1
Equity exposures	—	—	—	—	—	—
Other exposures	898	959	879	11,230	11,982	10,987
Total credit risk by standardised approach	**11,779**	**12,366**	**10,853**	**147,240**	**154,576**	**135,660**
Credit Risk	**9,075**	**9,316**	**8,599**	**113,432**	**116,453**	**107,492**
Central governments or central banks	88	101	79	1,105	1,266	983
Institutions	587	662	578	7,336	8,278	7,228
Corporates	6,441	6,631	6,044	80,508	82,892	75,554
Of which: SMEs	*1,032*	*1,058*	*1,202*	*12,896*	*13,224*	*15,023*
Of which: Specialised lending	*424*	*454*	*414*	*5,306*	*5,677*	*5,173*
Of which: Others	*4,985*	*5,119*	*4,429*	*62,307*	*63,991*	*55,359*
Retail	1,959	1,921	1,898	24,483	24,017	23,727
Of which: Secured by mortgages on immovable property (SME)	*86*	*87*	*108*	*1,078*	*1,091*	*1,346*
Of which: Secured by mortgages on immovable property (non SME)	*713*	*711*	*774*	*8,916*	*8,888*	*9,681*
Of which: Qualifying revolving	*709*	*696*	*523*	*8,868*	*8,699*	*6,541*
Of which: Other SMEs	*93*	*90*	*122*	*1,158*	*1,120*	*1,520*
Of which: Other Non-SMEs	*357*	*337*	*371*	*4,463*	*4,218*	*4,639*
Equity	**1,048**	**1,053**	**1,059**	**13,097**	**13,160**	**13,235**
Simple risk weight approach	206	208	195	2,570	2,600	2,442
Exposures in sufficiently diversified portfolios (RW 190%)	*120*	*117*	*108*	*1,500*	*1,465*	*1,351*
Exchange traded exposures (RW 290%)	*44*	*49*	*56*	*551*	*612*	*702*
Others (RW 370%)	*42*	*42*	*31*	*519*	*523*	*389*
PD/LGD approach	180	180	205	2,250	2,248	2,559
Internal models approach	38	23	35	481	289	433
Exposures subject to 250% risk weght	624	642	624	7,796	8,022	7,800
Total credit risk by IRB approach	**10,122**	**10,369**	**9,658**	**126,529**	**129,612**	**120,727**
Total contributions to the default fund of a CCP	**12**	**22**	**4**	**154**	**279**	**54**
Securitisation exposures	**36**	**26**	**26**	**455**	**326**	**325**
Total credit risk	**21,950**	**22,783**	**20,541**	**274,378**	**284,793**	**256,766**
Settlement risk	**—**	**—**	**—**	**—**	**—**	**—**
Standardised approach:	377	435	191	4,716	5,439	4,445
Of which: Fixed income price risk	*167*	*189*	*113*	*2,088*	*2,358*	*1,971*
Of which: Equity market risk	*1*	*2*	*1*	*16*	*21*	*11*
Of which: Price risk in CIUs	*18*	*21*	*44*	*230*	*261*	*341*
Of which: Foreign exchange risk	*191*	*218*	*28*	*2,383*	*2,731*	*2,059*
Of which: Commodities risk	—	*5*	*5*	—	*68*	*63*
IMA: Market Risk	660	810	821	8,252	10,129	10,267
Total trading book risk	**1,037**	**1,245**	**1,012**	**12,969**	**15,568**	**14,712**
CVA risk	**139**	**197**	**201**	**1,741**	**2,461**	**2,518**
Operational risk	**2,164**	**2,673**	**2,527**	**27,049**	**33,407**	**31,589**
Others [3]	**1,674**	**436**	**177**	**20,929**	**5,450**	**2,211**
Capital requirements	**26,965**	**27,334**	**24,624**	**337,066**	**341,678**	**307,795**

[1] Risk-weighted assets for the transitional period (phased-in).

[2] Calculated on the minimum total capital requirements of 8% (Article 92 of the CRR).

[3] This line includes capital consumptions that the Group incorporates to reflect a more conservative treatment of certain elements in accordance with article 3 CRR.

The full series of the capital requirements and RWA by risk type, during the year 2022, is available in the editable file "Pillar 3 2022 - Tables & Annexes".

3.4. IFRS 9 and OCI Transitional Arrangements

The table below shows a comparison of institutions' own funds and capital and leverage ratios with and without the application of the transitional treatment of IFRS9 impact, and with and without the application of the transitional treatment in accordance with Article 468 of the CRR, according to the standard format set by EBA guidelines (EBA/GL/2018/01).

Since 2018 BBVA Group has applied the transitional treatment of IFRS9 impact. Therefore, phased-in capital ratios and leverage ratio are calculated taking into account the transitional provisions as defined by article 473a of the CRR and its subsequent amendments made by Regulation 2020/873 of the Parliament and Council of 24 June 2020 in response to the COVID-19 pandemia. The Group also applies paragraph 7a of the aforementioned article in calculating the impact of the transitional treatment on phased in risk-weighted assets.

In addition, as of the end of December 2022, the Group is not applying the transitional treatment of unrealised gains and losses measured at fair value through other comprehensive income (hereinafter, unrealised gains and losses measured at FVTOCI) outlined in Article 1, Paragraph 6 of the aforementioned regulation amending Article 468 of the CRR. Therefore, the Group's own funds, and its capital adequacy and leverage ratios, reflect to date the full impact of the aforementioned unrealised gains and losses measured at FVTOCI.

Table 11. IFRS 9-FL - Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs and with and without the application of the temporary treatment of gains and losses measured at Fair Value through OCI (Million Euros)

Available capital (Million Euros)	**12-31-2022**	**9-30-2022**	**6-30-2022**	**3-31-2022**	**12-31-2021**
Common Equity Tier 1 Capital (CET1)	42,738	42,876	41,563	40,537	39,949
Common Equity Tier 1 (CET1) if the transitional provisions of IFRS 9 or similar ECL had not been applied	42,484	42,494	41,181	40,155	39,184
Common Equity Tier 1 (CET1) if the transitional treatment of unrealized gains and losses measured at fair value through OCI (other comprehensive income) had not been applied					
Tier 1 capital (T1)	47,931	48,281	46,828	46,364	45,686
Tier 1 capital (T1) if the transitional provisions of IFRS 9 or similar ECL had not been applied	47,677	47,899	46,446	45,982	44,922
Tier 1 (T1) capital if the transitional treatment of unrealized gains and losses measured at fair value through OCI (other comprehensive income) had not been applied					
Total capital	53,861	54,895	53,647	53,203	53,069
Total capital if the transitional provisions of IFRS 9 or similar ECL had not been applied	53,699	54,512	53,264	52,820	52,473
Total capital if the transitional treatment of unrealized gains and losses measured at fair value with changes in OCI had not been applied (other comprehensive income)					
Risk-weighted assets (Million Euros)					
Total risk-weighted assets	337,066	341,678	330,871	316,361	307,795
Total risk-weighted assets had the transitional provisions of IFRS 9 or similar ECL not been applied	336,884	341,448	330,642	316,131	307,335
Total risk-weighted assets if the transitional treatment of unrealised gains and losses measured at fair value through OCI had not been applied (other comprehensive income)					
Capital ratios					
Common Equity Tier 1 (CET1) (as a percentage of the risk exposure amount)	12.68 %	12.55 %	12.56 %	12.81 %	12.98 %
Common Equity Tier 1 (CET1) (as a percentage of the risk exposure amount) if the transitional provisions of IFRS 9 or similar ECL had not been applied	12.61 %	12.45 %	12.45 %	12.70 %	12.75 %
Common Equity Tier 1 (CET1) (as a percentage of the risk exposure amount) if the transitional treatment of unrealized gains and losses measured at fair value through OCI (other comprehensive income) had not been applied					
Tier 1 capital (T1) (as a percentage of the amount of the exposure)	14.22 %	14.13 %	14.15 %	14.66 %	14.84 %
Tier 1 capital (T1) (as a percentage of the exposure amount) if the transitional provisions of IFRS 9 or similar ECL had not been applied	14.15 %	14.03 %	14.05 %	14.55 %	14.61 %
Tier 1 (T1) capital (as a percentage of the exposure amount) if the transitional treatment of unrealized gains and losses measured at fair value through OCI (other comprehensive income) had not been applied					
Total capital (as a percentage of the amount of the exposure)	15.98 %	16.07 %	16.21 %	16.82 %	17.24 %
Total capital (as a percentage of the amount of the exposure) if the transitional provisions of IFRS 9 or similar ECL had not been applied	15.94 %	15.96 %	16.11 %	16.71 %	17.07 %
Total capital (as a percentage of the amount of the risk exposure) if the transitional treatment of unrealized gains and losses measured at fair value through OCI (other comprehensive income) had not been applied					
Leverage ratio					
Measurement of total exposure corresponding to the leverage ratio (Million Euros)	737,990	765,452	752,016	687,992	671,789
Leverage ratio	6.49 %	6.31 %	6.23 %	6.74 %	6.80 %
Leverage ratio if the transitional provisions of IFRS 9 or similar ECL had not been applied	6.46 %	6.26 %	6.18 %	6.69 %	6.69 %
Leverage ratio if the transitional treatment of unrealized gains and losses measured at fair value through OCI (other comprehensive income) had not been applied					

3.5. Procedure used in the capital self-assessment process

The Group carries out the internal capital assessment process in accordance with the Capital Requirements Directive 2013/36/EU and guidelines on the supervisory review and evaluation process (SREP) published by the European Banking Authority. In accordance with Article 108 of the Capital Requirements Directive (2013/36/EU), the Group complies with the obligations set out in Article 73 thereof on a consolidated basis. Furthermore, the document is structured on the basis of the ECB's guidance on the internal capital adequacy assessment process (ICAAP) of November 2018.

Within the framework of the internal capital assessment process, the Group assesses and quantifies all risk that could significantly affect its capital position and draws a conclusion on the capital adequacy from a holistic medium-term perspective.

The Group applies a proportionate approach that aims to ensure the entity's survival and continued compliance with all legal and internal requirements. In addition to regulatory and accounting perspectives, the Group bases its capital adequacy position analysis on a sound internal approach in which its capital position is assessed under an economic vision, which includes quantifying capital needs for risk covered in Pillar 1 of Basel and the needs due to risk not covered by Pillar 1.

The following are some of the points assessed in the internal capital assessment process:

- Business and strategy model, describing both the changes planned by the bank in the current business model and its underlying activities such as the relationship between the business strategy and internal capital assessment process.
- Internal governance, risk management and the control framework, reviewing the processes and mechanisms that ensure that the bank has a sound and integrated framework for managing present and future material risk.
- Risk appetite framework, describing the correspondence between this framework and the bank’s business strategy and model.
- Identification and assessment of risk (including credit, operational, market, liquidity and other structural risk) and quantification of the capital necessary to cover them, with a quantitative reconciliation between the Pillar 1 and Pillar 2 approaches.
- Planning capital under baseline and stress scenarios, projecting the capital base of the Group, the parent and its main subsidiaries over the next four years and analysing capital sufficiency in accordance with the regulatory requirements and the internal objectives set out by the entity for the close of the period, also dealing with the planned capital actions.

This internal capital assessment process concludes with submission to the supervisor of an annual report on the process. The report plays a key role in the review and evaluation methodology applied by the Single Supervisory Mechanism, and is an important element for determining capital requirements under Pillar 2.

4. Risk

4.1. General Risk Management and Control Model

The BBVA Group has a general risk management and control model (hereinafter, the “Model”) that is appropriate for its business model, its organization, the countries where it operates and its corporate governance system. This model allows the Group to carry out its activity within the management and risk control strategy and policy defined by the corporate bodies of BBVA (considering sustainability specifically) and to adapt itself to a changing economic and regulatory environment, facing this management at a global level and aligned to the circumstances at all times.

The Model, for which the Group’s Chief Risk Officer (CRO) is responsible and that must be updated or reviewed at least annually, is fully applied in the Group and it comprises the following basic elements:

- Governance and organization
- Risk Appetite Framework
- Assessment, monitoring and reporting
- Infrastructure.

The Group promotes the development of a risk culture that ensures a consistent application of the Model in the Group, and that guarantees that the risks function is understood and internalized at all levels of the organization.

4.1.1. Governance and organisation

The risk governance model in the BBVA Group is characterized by a special involvement of its corporate bodies, both in setting the risk strategy and in monitoring and supervising its implementation on an ongoing basis.

Thus, and as explained below, the corporate bodies are responsible for approving the risk strategy and the general policies for the different types of risks. Global Risk Management (hereinafter, GRM) and Regulation & Internal Control (including, among other areas, Non-Financial Risks) are the functions responsible for its implementation and development, with the appropriate reporting to corporate bodies.

Responsibility for day-to-day management of risks falls on business and corporate areas, the activities of which adhere to the general policies, regulation, infrastructures and controls that, based on the framework set by corporate bodies, are defined by GRM and Regulation & Internal Control in their corresponding areas of responsibility.

To carry out this work adequately, the financial risks function in the BBVA Group has been set up as a single, global function and independent from commercial areas.

The head of the financial risks function at an executive level, is the Group's Chief Risk Officer, who is appointed by the Board of Directors as a member of its senior management, and reports directly on the development of the corresponding functions to the corporate bodies. The Chief Risk Officer, for the best fulfilment of the functions, is supported by a structure consisting of cross-cutting risk units in the corporate area and specific risk units in the Group's geographical and/or business areas.

In addition, and with regard to non-financial risks and internal control, the Group has a Regulation & Internal Control area independent from the rest of units and whose head (Head of Regulation & Internal Control) is also appointed by the Board of Directors of BBVA and reports directly to corporate bodies on the performance of its functions. This area is responsible for proposing and implementing non-financial risks policies and the Internal Control Model of the Group, and it is composed by, among other, the Non-Financial Risks, Regulatory Compliance and Risk Internal Control units.

The Risk Internal Control unit, within the Regulation & Internal Control area and, therefore, independent from the financial risks function (GRM), acts as a control unit for the activities carried out by GRM. In this regard, and without prejudice to the functions performed in this regard by the Internal Audit area, Risk Internal Control checks that the regulatory framework, the models and processes and established measures are sufficient and appropriate for each type of financial risk. It also monitors its implementation and operation, and confirms that those decisions taken by GRM are taken independently from the business lines and, in particular, that there's an adequate segregation of functions between units.

Governance and organizational structure are basic pillars for ensuring an effective risk management and control. This section summarizes the roles and responsibilities of the corporate bodies in the risks area, of the Group's Chief Risk Officer and, in general, of the risks function, its interrelation and the parent-subsidiary relationship model in this area and the group of committees, in addition to the Risk Internal Control unit.

Corporate Bodies of BBVA

According to the corporate governance system of BBVA, the Board of Directors of the Bank has certain reserved competencies, concerning management, through the implementation of the corresponding most relevant decisions, and concerning supervision and control, through the monitoring and supervision of implemented decisions and management of the Bank.

In addition, to ensure adequate performance of the management and supervision functions of the Board of Directors, the corporate governance system contemplates the support activity carried out by the Risk and Compliance Committee (CRC), as well as by other committees that assist the Board. for reasons of speciality of the matter, in accordance with the functions established in its own regulations.

With regard to risks, the Board of Directors' competencies are those relating to establishing the policy for controlling and managing risk and the oversight and control of its implementation.

In carrying out these functions, the Board relies on the Risk and Compliance Committee, which monitors the evolution of all the Group's financial and non-financial risks, with a global and transversal vision, and their degree of adequacy with the defined strategies and policies and the Group's Risk Appetite Framework. Added to this are the functions regarding specific non-financial risks that, due to their speciality, the Board has assigned to other committees, such as: (i) non-financial risks of an accounting, tax and reporting nature, by the Audit Commission; (ii) technological and cybersecurity risks, by the Technology and Cybersecurity Commission; and (iii) reputational and business risks, by the Permanent Delegate Committee, which thus complement the overall supervision of the Group's set of financial and non-financial risks carried out by the Risk and Compliance Committee, for which purpose It coordinates between the different Board committees through different reports, in addition to the cross composition of the Board committees.

The involvement of the corporate bodies of BBVA in the control and management of the risks of the Group is detailed below:

Board of Directors

The Board of Directors is responsible for establishing the risk strategy of the Group and, in this role, it determines the control and risk management policy, through the following documents:

- The Risk Appetite Framework of the Group, which includes in the one hand the risk appetite statement of the Group, that is, the general principles governing the risk strategy of the Group and its target profile; and, on the other hand, and based on the above mentioned risk appetite statement, a set of quantitative metrics (core metrics, and their corresponding statements, and by type of risk metrics), reflecting the risk profile of the Group;
- the framework of management policies of the different types of risk to which the Bank is or could be exposed, which contain the basic lines for managing and controlling risks in a uniform way across the Group and consistently with the Model and Risk Appetite Framework;
- and the General risk management and control model described above.

All of the above in coordination with the rest of prospective-strategic decisions of the Bank, which includes the Strategic Plan, the Annual Budget, the Capital Plan and the Liquidity & Funding Plan, in addition to the rest of management objectives, whose approval is a responsibility of the Board of Directors.

In addition to defining the risk strategy, the Board of Directors (in the performance of its risks monitoring, management and control tasks) also monitors the evolution of the risks of the Group and of each main geographical and/or business area, ensuring compliance with the Risk Appetite Framework of the Group; and also supervising the internal information and control systems.

For the development of all these functions, the Board of Directors is supported by the CRC and the CDP, which are responsible for the functions detailed below.

Risk and Compliance Committee

The CRC is, according to its own charter, composed of non-executive directors and its main purpose is to assist the Board of Directors on the establishment and monitoring of the risk control and management policy of the Group.

For this purpose, it assists the Board of Directors in a variety of risk control and monitoring areas, in addition to its analysis functions, based on the strategic pillars established at all times by both the Board of Directors and the CDP, the proposals on the strategy, control and risk management of the Group, which are particularly specified in the Risk Appetite Framework and in the “Model”. After the analysis, the Risk Appetite Framework and Model proposal is submitted to the Board of Directors for consideration and, where appropriate, approval purposes.

In addition, the CRC proposes, in a manner consistent with the Risk Appetite Framework of the Group approved by the Board of Directors, the control and management policies of the different risks of the Group, and supervises the information and internal control systems.

With regard to the monitoring of the evolution of the risks of the Group and their degree of compliance with the Risk Appetite Framework and defined general policies, and without prejudice to the monitoring task carried out by the Board of Directors and the CDP, the CRC carries out monitoring and control tasks with greater frequency and receives information with a sufficient granularity to achieve an adequate performance of its duties.

The CRC also analyzes all measures planned to mitigate the impact of all identified risks, should they materialize, which must be implemented by the CDP or the Board of Directors, as the case may be. The CRC also monitors the procedures, tools and measurement indicators of those risks established at a Group level in order to have a comprehensive view of the risks of BBVA and its Group, and monitors compliance with the regulation and supervisory requirements in terms of risks.

The CRC is also responsible for analyzing those project-related risks that are considered strategic for the Group or corporate transactions that are going to be submitted to the Board of Directors of the CDP, within its scope of competence.

In addition, it contributes to the setting of the remuneration policy, checking that it is compatible with an appropriate and effective management of risks and that it does not provide incentives to take risks breaching the level tolerated by the Bank.

Lastly, the CRC ensures the promotion of the risk culture in the Group.

In 2022, the CRC has held 22 meetings.

Executive Committee

In order to have a comprehensive and complete vision of the progress of the Group's business and its business units, the CDP monitors the evolution of the risk profile and the core metrics defined by the Board of Directors, being aware of any potential deviation or breach of the metrics of the Risk Appetite Framework and implementing, when applicable, the appropriate measures, as explained in the Model.

In addition, the CDP is responsible for proposing the basis for developing the Risk Appetite Framework, which will be established in coordination with the rest of prospective/strategic decisions of the Bank and the rest of management objectives.

Lastly, the CDP is the committee supporting the Board of Directors in decisions related to business risk and reputational risk, according to the dispositions set out in its own charter.

Parent-subsidiary risk relationship model

In accordance with the provisions of the BBVA Group's General Corporate Governance Policy, for integrated management and supervision in the Group, the Group has a common management and control framework, consisting of basic guidelines (including strategic-prospective decisions) and General Policies, established by BBVA's corporate bodies for the Group.

For the purpose of transferring the risk strategy and its management and control model to the different subsidiaries of the BBVA Group and their corresponding specific risk units, a parent-subsidiary relationship model has been designed within the scope of risk management and control in the BBVA Group.

This relationship model implies a minimum catalog of decisions that must be adopted by the corporate bodies of the subsidiaries in terms of risks in order to provide them with an adequate governance model coordinated with the parent company. It will be the responsibility of the head of the Risk function (GRM) of each subsidiary to formulate the proposals that proceed to the corresponding corporate body for its consideration and, where appropriate, approval, according to the scope of functions that apply.

The approval of these decisions by the corporate bodies of the subsidiaries obliges the risk units of the geographical areas to carry out a risk monitoring and control plan before their corporate bodies.

Notwithstanding the foregoing, it is considered necessary that certain decisions regarding risks reserved for the consideration of the corresponding corporate bodies of the subsidiary for their approval, are also subject to the approval of the corporate bodies of BBVA, in accordance with what is established regulations at all times.

In the specific case of BBVA, S.A., what is described in this document regarding the coordination of the local risk management function with the risk function of the parent company BBVA, S.A. is applicable (as in any subsidiary of the Group). And with regard to the decisions that the corporate bodies of the subsidiaries must adopt, in this case it is the responsibility of the head of the Risk function of BBVA, S.A. (GRM) formulate the proposals that proceed to the corresponding corporate body for its consideration and, where appropriate, approval, according to the scope of functions that apply.

Chief Risk Officer of the Group

The Group's Chief Risk Officer (CRO) is responsible for the management of all the financial risks of the Group with the necessary independence, authority, rank, experience, knowledge and resources. The CRO is appointed by the Board of Directors of BBVA and has direct access to its corporate bodies (Board of Directors, CDP and CRC), with the corresponding regular reporting on the risk situation in the Group.

The GRM area has a responsibility as the unit transversal to all the businesses of the BBVA Group. This responsibility is part of the structure of the BBVA Group, which is formed by subsidiaries based in different jurisdictions, which have autonomy and must comply with their local regulations, but always according to the risk management and control scheme designed by BBVA as the parent company of the BBVA Group.

The Chief Risk Officer of the BBVA Group is responsible for ensuring that the risks of BBVA Group, within the scope of its functions, are managed according to the established model, assuming, among other, the following responsibilities:

- Prepare, in coordination with the rest of areas responsible for risks monitoring and control, and propose to corporate bodies the risk strategy of the BBVA Group, which includes the

Risk Appetite statement of the BBVA Group, core (and their respective statements) and by type of risk metrics, and the Model.

- Ensure the necessary coordination to define and prepare the proposals for the Appetite Framework of the Group companies, and make sure they are applied correctly.
- Define, in coordination with the rest of areas responsible for risks monitoring and control, and propose to corporate bodies the general policies for each type of risk within its scope of responsibility and, as part these, to establish the required specific regulation.
- Prepare, in coordination with the rest of areas responsible for risks monitoring and control, and propose for approval, or approving if within its competence, the risk limits for the geographical areas, business areas and/or legal entities, which shall be consistent with the defined Risk Appetite Framework; it is also responsible for the monitoring, supervision and control of risk limits within its scope of responsibility.
- Submit to the Risk and Compliance Committee the information required to carry out its supervisory and control functions.
- Regular reporting to the corresponding corporate bodies on the situation of those risks of the BBVA Group within its scope of responsibility.
- Identify and assess the material risks faced by the BBVA Group within its scope of responsibility, with an effective management of those risks and, where necessary, with the implementation of the required mitigation measures.
- Early warning to the relevant corporate bodies and the Chief Executive Officer of any material risk within its scope of responsibility that could compromise the solvency of the BBVA Group.
- Ensure, within its scope of responsibility, the integrity of measurement techniques and management information systems and, in general, the provision of models, tools, systems, structures and resources to implement the risk strategy defined by the corporate bodies.
- Promote the risk culture of the BBVA Group to ensure the consistency of the Model in the different countries where it operates, strengthening the cross-cutting model of the risks function.

For decision-making, the Group's Chief Risk Officer has a governance structure for the role that culminates in a support forum, the Global Risk Management Committee (GRMC), which is established as the main executive-level committee on the risks within its remit. Its purpose is to develop the strategies, policies, regulations and infrastructures needed to identify, assess, measure and manage the material risks within its remit that the Group faces in its business activity. This committee is composed by the Chief Risk Officer, who chairs the meetings, and the heads of the Corporate Area of the disciplines of GRM, the “Risk Strategy, Development & BEX”, “Strategy and Development”, “South America and Turkey”, and “Risk Internal Control”; and by the heads of GRM in the three most important geographical units and in CIB. The purpose of the GRMC is to propose and challenge, among other issues, the internal regulatory framework of GRM and the infrastructures required to identify, assess, measure and manage the risks faced by the Group in carrying out its businesses and to approve risk limits.

The GRMC carries out its functions assisted by various support committees which include:

- Global Credit Risk Management Committee: It is responsible for analyzing and decision-making related to wholesale credit risk admission.
- Wholesale Credit Risk Management Committee: It is responsible for analyzing and making decisions related to wholesale credit risk admission in specific customer segments of BBVA Group, as well as being informed of the relevant decisions adopted by members of the committee within their scope of decision-making at corporate level.
- Work Out Committee: Its purpose is to analyze and make decisions regarding the admission of wholesale credit risks of customers classified in Watch List, doubtful risk or write-offs in accordance with the criteria established in the Group, as well as to be informed of the decisions adopted by the person in charge of the Work Out process in its area of responsibility; it will also include the approval of proposals on entries, exits and modifications in Watch List, entries and exits in doubtful, unlikely to pay and pass to write-offs; as well as the approval of other proposals that must be seen in this Committee according to the established thresholds and criteria.
- *Global Portfolio Management Committee*: The executive authority responsible for managing the limits by asset class for credit risk, equities and real estate not for own use, structural risks, insurance and pension risk and asset management; and by business area and at group level established in the risk limits planning exercise, which aims to achieve an optimal combination and composition of portfolios under the restrictions imposed by the Risk Appetite Framework, which allows maximizing the risk- adjusted return on regulatory and economic capital when appropriate. Additionally, it takes into account the concentration and asset quality objectives of the portfolio, as well as the prospects and strategic needs of the the BBVA Group.

- Risk Models Management Committee: It ensures an appropriate decision-making process regarding the planning, development, implementation, use, validation and monitoring of the models required to achieve an appropriate management of the Model Risk in the BBVA Group.
- Global Market and Counterparty Risk Committee: its purpose is to formalize, supervise and communicate the trading risk monitoring in all Global Markets business units, as well as coordinating and approving the key decisions of the Market and Counterparty Risk activity. It is also responsible for the analysis and decision making (opinion on the risk profile of the proposal, the mitigants and the risk-return ratio) with respect to the most relevant transactions in the different geographies in which Global Markets is present.
- Retail Credit Risk Committee: it ensures for the analysis, discussion and decision support on all issues regarding the retail credit risk management that impact or potentially do in the practices, processes and corporate metrics established in the General Policies, Rules and Operating Frameworks.

Also:

- GRM Continuity Committee: this committee operates under the provisions of the Corporate Continuity Committee for the different Areas. Its purpose is to analyze and make decisions about exceptional crisis situations, with the aim of managing continuity and the restoration of critical GRM processes, minimizing the impact of its operations through the Continuity Plan, which covers crisis management and Recovery Plans.
- The Corporate Committee for Admission of Operational Risk and Product Governance (CCAROyGP) aims to ensure the adequate evaluation of initiatives with significant operational risk (new business, product, outsourcing, process transformation, new systems, etc.) from the perspective of operational risk and approval of the proposed control environment.

Risk units of the corporate areas and the business/geographical areas

The risks function is comprised of risk units from the corporate area, which carry out cross-cutting functions, and of risk units of the geographical/business areas.

- The risk units of the corporate area develop and submit to the Group's Chief Risk Officer the different elements required to define the proposal for the Group's Risk Appetite Framework, the general policies, the regulation and global infrastructures within the operating framework approved by corporate bodies; they ensure their application and report directly or through the Group's Chief Risk Officer to the corporate bodies of BBVA. With regard to non-financial risks and reputational risk, which are entrusted to the Regulation & Internal Control and Communications areas respectively, the corporate units of GRM will coordinate, with the corresponding corporate units of those areas, the development of the elements that should be integrated into the Appetite Framework of the Group.
- The risk units of the business and/or geographical areas develop and submit to the Chief Risk Officer of the geographical and/or business areas the Risk Appetite Framework proposal applicable in each geographical and/or business area, independently and always according to the Group's Risk Appetite Framework. In addition, they ensure the application of general policies and the rest of the internal regulations, with the necessary adaptations, when applicable, to local requirements, providing the appropriate infrastructures for risk management and control purposes, within the global risk infrastructure framework defined by the corporate areas, and reporting to the corresponding corporate bodies and senior management, as applicable. With regard to Non-financial risks, which are integrated in the Regulation & Internal Control area, the local risk units will coordinate, with the unit responsible for those risks, the development of the elements that should be integrated into the local Risk Appetite Framework.

Thus, the local risk units work with the risk units of the corporate area with the aim of adapting themselves to the risk strategy at Group level and pooling all the information required to monitor the evolution of their risks.

As previously mentioned, the risks function has a decision-making process supported by a structure of committees, and also a top-level committee, the GRMC, whose composition and functions are described in the section "Chief Risk Officer of the Group."

Each geographical and/or business area has its own risk management committee(s), with objectives and contents similar to those of the corporate area. These committees perform their duties consistently and in line with general risk policies and corporate rules, and its decisions are reflected in the corresponding minutes.

Under this organizational scheme, the risks function ensures the integration and application throughout the Group of the risk strategy, the regulatory framework, the infrastructures and standardized risk controls. It also benefits from the knowledge and proximity to customers in each geographical and/or business area, and conveys the corporate risk culture to the Group's different levels. Moreover, this organization enables the risks function to conduct and report to the corporate bodies an integrated monitoring and control of the risks of the entire Group.

The risks function is cross-cutting, i.e. it is present in all of the Group's geographical and/or business areas through specific risk units. Each of these units is headed by a Chief Risk Officer for the geographical and/or business area who, within the relevant scope of responsibility, carries out risk management and control functions and is responsible for applying the Model, the general policies and corporate rules approved at Group level in a consistent manner, adapting them if necessary to local requirements and with the subsequent reporting to local corporate bodies.

The Chief Risk Officers of the geographical and/or business areas have functional reporting to the Group's Chief Risk Officer and hierarchical reporting to the head of their geographical and/or business area. This dual reporting system aims to ensure the independence of the local risks function from the operational functions and enable its alignment with the Group's general policies and goals related to risks.

Risk internal control

The Group has a specific Risk Internal Control unit, within the Regulation & Internal Control area, that, among other tasks, independently challenges and control the regulation and governance structure in terms of financial risks and its implementation and deployment in GRM, in addition to the challenge of the development and implementation of financial risks control and management processes. It is also responsible for the validation of risk models.

For this purpose, it has 3 subunits: RIC-Processes, Risks Technical Secretariat and Risk Internal Validation.

- RIC-Processes. It is responsible for challenging an appropriate development of the functions of GRM units, and for reviewing that the functioning of financial risk management and control processes is appropriate and in line with the corresponding regulation, identifying potential opportunities for improvement and contributing to the design of the action plans to be implemented by the responsible units. In addition, it is the Risk Control Specialist (RCS) in the Group's Internal Control Model and, therefore, establishes the general mitigation and control frameworks for its risk area and contrasts them with those actually implemented.
- Risks Technical Secretariat. It is responsible for the definition, design and management of the principles, policies, criteria and processes through which the regulatory risk framework is developed, processed, reported and disclosed to the countries; and for the coordination, monitoring and assessment of its consistency and completeness. In addition, it coordinates the definition and structure of the most relevant GRM Committees, and monitors their proper functioning, in order to ensure that all risk decisions are taken through an adequate governance and structure, ensuring their traceability. It also provides to the CRC the technical support required in terms of financial risks for a better performance of its functions.
- Risk Internal Validation. It is responsible for validating the risks models. In this regard, it effectively challenges the relevant models used to manage and control the risks faced by the Group, as an independent third party from those developing or using the models in order to ensure its accuracy, robustness and stability. This review process is not restricted to the approval process, or to the introduction of changes in the models; it is a plan to make a regular assessment of those models, with the subsequent issue of recommendations and actions to mitigate identified weaknesses.

The Head of Risk Internal Control of the Group is responsible for the function and reports about his activities and work plans to the Head of Regulation & Internal Control and to the CRC, with the corresponding support in the issues required, and, in particular, challenging that GRM's reports submitted to the Committee are aligned with the criteria established at the time.

In addition, the risk internal control function is global and transversal, it includes all types of financial risks and has specific units in all geographical and/or business areas, with functional reporting to the Head of Risk Internal Control of the Group.

The Risk Internal Control function must ensure compliance with the general risks strategy defined by the Board of Directors, with adequate proportionality and continuity. In order to comply with the control activity within its scope. Risk Internal Control is member of GRM's top-level committees (sometimes even assuming the Secretariat role), independently verifying the decisions that may be taken and, specifically, the decisions related to the definition and application of internal GRM regulation.

Furthermore, the control activity is developed within a homogeneous methodological framework at a Group level, covering the entire life cycle of financial risk management and carried out under a critical and analytical approach.

The Risk Internal Control team reports the results of its control function to the corresponding heads and teams, promoting the implementation of corrective measures and submitting these assessments and the resolution commitments in a transparent manner to the established levels.

Lastly, and notwithstanding the control responsibility that GRM teams have in the first instance, Risk Internal Control teams promote a control culture in GRM, conveying the importance of having robust processes.

4.1.2. Risk Appetite Framework

The Group's Risk Appetite Framework approved by the corporate bodies determines the risks and the risk level that the Group is willing to assume to achieve its business objectives considering the organic evolution of business. These are expressed in terms of solvency, liquidity and funding, and profitability, as well as recurrence of revenue, which are reviewed not only periodically but also if there are any substantial changes in the business strategy or relevant corporate transactions.

The Risk Appetite Framework is expressed through the following elements:

- Risk appetite statement: sets out the general principles of the Group's risk strategy and the target risk profile:

  "The BBVA Group develops a multichannel and responsible universal banking business model, based on values, committed to sustainable development and centred on our customers' needs, focusing on operational excellence and the preservation of adequate security and business continuity.

  BBVA intends to achieve these goals while maintaining a moderate risk profile, so the risk model established aims at ensuring a robust financial position, facilitating its commitment with sustainability and obtaining a sound risk-adjusted profitability throughout the cycle, as the best way to face adverse environments without jeopardizing its strategies.

  BBVA Group's risk management is based on prudent management, and a comprehensive and prospective vision of all risks, to allow us to adapt to the disruptive risks inherent in the banking business. It includes the climate factor, a diversification of portfolios by geographies, asset classes and customer segments, prevention of money laundering and terrorist financing, and the maintenance of a long-term relationship with customers, supporting them in the transition to a sustainable future, to promote profitable growth and recurring generation of value."
- Statements and core metrics: Statements are established, based on the risk appetite statement, specifying the general principles of risk management in terms of solvency, liquidity and funding, profitability and income recurrence. Moreover, the core metrics reflect, in quantitative terms, the principles and the target risk profile set out in the Risk Appetite statement. Each core metric has three thresholds ranging from usual management of the businesses to higher levels of impairment:
  - Management benchmark: a benchmark that determines a comfortable management level for the Group.
  - Maximum appetite: the maximum level of risk that the Group is willing to accept in its ordinary activity.
  - Maximum capacity: the maximum risk level that the Group could assume, which for some metrics is associated with regulatory requirements.
- Metrics by type of risk: based on the core metrics and their thresholds, a number of metrics are determined for each type of risk, whose observance enables compliance with the core metrics and the Group's Risk Appetite statement. These metrics have a maximum risk appetite threshold.

In addition to this Framework, statements are established that include the general principles for each risk type, as well as a level of management limits that is defined and managed by the areas responsible for the management of each type of risk in order to ensure that the early management of risks complies with the established Risk Appetite Framework.

Each significant geographical area (that is, those representing more than 1% of the assets or operating income of the BBVA Group) has its own Risk Appetite framework, consisting of its local Risk Appetite statement, core statements and metrics, and metrics by type of risk, which must be consistent with those set at the Group level, but adapted to their own reality. These are approved by the corresponding corporate bodies of each entity. This Appetite Framework is supplemented by statements for each risk type and has a limit structure in line and consistent with the above.

The corporate risks area works with the various geographical and/or business areas to define their Risk Appetite Framework, so that it is coordinated with, and integrated into, the Group's Risk Appetite Framework, making sure that its profile is in line with the one defined. Moreover, and for the purposes of monitoring at local level, the Chief Risks Officer of the geographical and/or business area regularly reports on the evolution of the metrics of the Local Risk Appetite Framework to the corporate bodies, as well as to the relevant top-level local committees, following a scheme similar to that of the Group, in accordance with its own corporate governance systems.

Within the issuing process of the Risk Appetite Framework, Risk Internal Control carries out, within the scope of the GRM area the effective challenge of the Framework proposal prior to its escalation to corporate bodies, which is also documented, and it is extended to the approval of the management limits under which it is developed, also supervising its adequate approval and extension to the different entities of the Group. Likewise, in each significant geographical area, the local Risk Internal Control unit, working in the Risk Management Committee (hereinafter, RMC), carries out an effective challenge of the local Risk Appetite Framework prior to its escalation to local corporate bodies, which is also documented, and extended to the local approval process of the management limits.

Monitoring of the Risk Appetite Framework and management of breaches

So that corporate bodies can develop the risk functions of the Group, the heads of risks at an executive level will regularly report (more frequently in the case of the CRC, within its scope of responsibility) on the evolution of the metrics of the Risk Appetite Framework of the Group, with the sufficient granularity and detail, in order to check the degree of compliance of the risks strategy set out in the Risk Appetite Framework of the Group approved by the Board of Directors.

If, through the monitoring of the metrics and supervision of the Risk Appetite Framework by the executive areas, a relevant deviation or breach of the maximum appetite levels of the metrics is identified, that situation must be reported and, where applicable, the corresponding corrective measures must be submitted to the CRC.

After the relevant review by the CRC, the deviation must be reported to the CDP (as part of its role in the monitoring of the evolution of the risk profile of the Group) and to the Board of Directors, which will be responsible, when applicable, for implementing the corresponding executive measures, including the modification of any metric of the Risk Appetite Framework. For this purpose, the CRC will submit to the corresponding corporate bodies all the information received and the proposals prepared by the executive areas, together with its own analysis.

Notwithstanding the foregoing, once the information has been analyzed and the proposal of corrective measures has been reviewed by the CRC, the CDP may adopt, on grounds of urgency and under the terms established by law, measures corresponding the Board of Directors, but always reporting those measures to the Board of Directors in the first meeting held after the implementation for ratification purposes.

In any case, an appropriate monitoring process will be established (with a greater information frequency and granularity, if required) regarding the evolution of the breached or deviated metric, and the implementation of the corrective measures, until it has been completely redressed, with the corresponding reporting to corporate bodies, in accordance with its risks monitoring, supervision and control functions.

Integration of the Risk Appetite Framework into the management

The transfer of the Risk Appetite Framework to ordinary management is underpinned by three basic elements:

1. The existence of a standardized set of regulations: the corporate risks area defines and proposes the general policies within its scope of action, and develops the additional internal regulation required for the development of those policies and the operating frameworks on the basis of which risk decisions must be adopted within the Group. The approval of the general policies for all types of risks is a responsibility of the corporate bodies of BBVA, while the rest of regulation is defined at an executive level according to the framework of competences applicable at any given time. The Risks units of the geographical and/or business areas comply with this regulation and performing, where necessary, the relevant adaptation to local requirements, in order to have a decision-making process that is appropriate at local level and aligned with the Group's policies.
2. Risk planning, which ensures the integration into the management of the Risk Appetite Framework through a cascade process established to set limits adjusted to the target risk profile. The Risks units of the corporate area and of the geographical and/or business areas are responsible for ensuring the alignment of this process with the Group's Risk Appetite Framework in terms of solvency, liquidity and funding, profitability, and recurrence of earnings.
3. A comprehensive management of risks during their life cycle, based on differentiated treatment according to their type.

4.1.3. Assessment, monitoring and reporting

Assessment, monitoring and reporting is a cross-cutting function at Group level. This function ensures that the model has a dynamic and proactive vision to enable compliance with the Risk Appetite Framework approved by the Board of Directors, even in adverse scenarios.

This process is integrated in the activity of the Risk units, both of the corporate area and in the geographical and/or business units, together with the units specialized in non-financial risks and reputational risk within the Regulation & Internal Control and Communications business areas respectively, in order to generate a comprehensive and single view of the risk profile of the Group.

This process is developed through the following phases:

1. Monitoring of the identified risk factors that can compromise the performance of the Group or of the geographical and/or business areas in relation to the defined risk thresholds.
2. Assessment of the impact of the materialization of the risk factors on the metrics that define the Risk Appetite Framework based on different scenarios, including stress testing scenarios (EU-wide stress testing).
3. Response to unwanted situations and proposals for redressing measures to the corresponding levels, in order to enable a dynamic management of the situation, even before it takes place.
4. Monitoring the Group's risk profile and the identified risk factors, through internal, competitor and market indicators, among others, to anticipate their future development.
5. Reporting: complete and reliable information on the evolution of risks to corporate bodies and senior management, in accordance with the principles of accuracy, exhaustiveness, clarity and utility, frequency, and adequate distribution and confidentiality. The principle of transparency governs all the risk information reporting process.

4.1.4. Infrastructure

For the implementation of the Model, the Group has the resources required for an effective management and supervision of risks and for achieving its goals. In this regard, the Group's risks function:

1. Has the appropriate human resources in terms of number, ability, knowledge and experience. The profile of resources will evolve over time based on the specific needs of the GRM and Regulation & Internal Control areas, always with a high analytical and quantitative capacity as the main feature in the profile of those resources. Likewise, the corresponding units of the geographical and/or business areas have sufficient means from the resources, structures and tools perspective in order to achieve a risk management process aligned with the corporate model.
2. Develops the appropriate methodologies and models for the measurement and management of the different risk profiles, and the assessment of the capital required to take those risks.
3. Has the technological systems required to: support the Risk Appetite Framework in its broadest definition; calculate and measure the variables and specific data of the risk function; support risk management according to this Model; and provide an environment for storing and using the data required for risk management purposes and reporting to supervisory bodies.
4. Promotes adequate data governance, in accordance with the principles of governance, infrastructure, precision and integrity, completeness, promptness and adaptability, following the quality standards of the internal regulations referring to this matter.

Within the risk functions, both the profiles and the infrastructure and data shall have a global and consistent approach.

The human resources among the countries must be equivalent, within proportionality, ensuring a consistent operation of the risk function within the Group. However, they will be distinguished from those of the corporate area, as the latter will be more focused on the conceptualization of appetite frameworks, operating frameworks, the definition of the regulatory framework and the development of models, among other tasks.

As in the case of the human resources, technological platforms must be global, thus enabling the implementation of the Risk Appetite Framework and the standardized management of the risk life cycle in all countries.

The corporate area is responsible for deciding on the platforms and for defining the knowledge and roles of the human resources. It is also responsible for defining risk data governance.

The foregoing is reported to the corporate bodies of BBVA so they can ensure that the Group has the appropriate means, systems, structures and resources.

4.1.5. Transactions with related parties

Regarding operations with related parties and intra-group transactions, BBVA Group has internal policies and procedures to approve, supervise and control such operations.

In this regard, BBVA and other Group subsidiaries, in their capacity as financial entities, carry out transactions with their related parties in the normal course of their business, all of which are not significant and are carried out under normal market conditions.

Additionally, BBVA Group has a resolution strategy defined by the SRB as Multiple Point of Entry (MPE), which is based, according to the Financial Self-Sufficiency Principle and the Decentralized Management Principle, on a decentralized business model in which the subsidiaries are substantially self-sufficient in terms of legal structure, governance, capital, funding relationships and operations, subject, however, to the corporate policies established for the BBVA Group and to the general supervision and control of the corporate areas. Under this model, and subject to these principles, funding operations for subsidiaries are limited and at market prices.

Details of transactions with related parties and transactions with joint ventures and associates can be found in note 53 of the BBVA Group Consolidated Annual Accounts.

4.2. Credit and Counterparty Risk

4.2.1. Scope and nature of the Credit Risk measurement and reporting systems for capital framework purposes

Credit risk arises from the probability that one of the parties to the financial instrument contract will default on its contractual obligations due to insolvency or inability to pay and cause the other party to incur a financial loss.

It is the most relevant risk for the Group and includes the management of counterparty, issuer, counterparty and country risks.

The Group has a risk strategy established by the Board of Directors of the parent company, which establishes the Group's Risk Appetite statement, core metrics and the metrics by type of risk in which it materializes, as well as the General Risk Management and Control Model.

The Risk and Compliance Committee assists the Board of Directors in different areas relating to risk control and monitoring, complementing these functions by submitting to the Board proposals on the Group's risk strategy, control and management. It also establishes, in line with the Group's Risk Appetite Framework approved by the Board of Directors, the control and management policies for the different risks of the Group.

The Risk and Compliance Committee, the Executive Committee and the Board itself adequately monitor the implementation of the Group's risk strategy and profile.

Based on the risk strategy determined by the Board of Directors, the Global Risk Management Committee approves the statements by risk type and the management limits structure that articulates the Risk Appetite Framework at the level of geographies, risk types, asset classes and portfolios, including the proposed Asset Allocation management limits with the appropriate level of disaggregation. The limits establish, on an annual basis, maximum exposure levels by type of portfolio.

Asset Allocation limits for portfolios, businesses and risks are defined, considering the established metrics, in terms of exposure, capital consumption and composition of the portfolio mix and aimed at maximizing the generation of the Group's recurring economic profit, subject to the restrictions framework resulting from the target risk profile definition.

The Corporate Risk Area establishes individual, portfolio, sector and geographic risk concentration thresholds. These thresholds are established in terms of EAD and Herfindahl indexes in order to limit the impact on capital consumption.

The Business Areas work in line with the global view and the defined metrics, optimizing in terms of profitability/risk, within the Group's limits and policies, each of the portfolios for which they are responsible.

Existing gaps with regard to the target portfolio are identified at global level and submitted to the Business Areas, establishing global and local plans to align the risk with the predefined target profile and taking into account the expected future evolution of the portfolios.

For risk and capital management purposes, credit risk at BBVA is quantified using two main measures: expected loss ("EL") and economic capital ("EC"). The expected loss reflects the average value of losses and is considered as business cost. However, economic capital is the amount of capital considered necessary to cover unexpected losses arising from the possibility that actual losses may exceed expected losses.

These risk measures are combined with profitability information within the value-based management framework, thus integrating the profitability-risk binomial in decision-making, from the business strategy definition to the approval of individual loans, pricing, the assessment of non-performing portfolios, incentives to the Group's areas, etc.

There are three essential parameters for obtaining the aforementioned measures (PE and CE): probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD"), based mainly on the estimation of credit conversion factors ("CCF"), which are generally estimated using the historical information available in the systems, and which are assigned to transactions and customers depending on their characteristics.

In this context, credit rating tools (ratings and scorings) assess the risk of each client/transaction based on its credit quality through a score, which is used in the allocation of risk metrics along with other additional information: age of facilities, loan-to-value ratio, client segment, etc.

Section 4.2.5.1. of this document details the definitions, methods and data used by the Group in determining the equity requirements for the estimation of the probability of default (PD), loss given default (LGD) and credit conversion factor (CCF).

4.2.2. Definitions and methodologies

4.2.2.1. Prudential definition of default

The definition of default in the prudential field is included in Article 178 of Regulation (EU) No. 575/2013. This definition is applicable both under the standardized approach and under the internal ratings-based (IRB) approach.

In 2021, the EBA Guidelines (EBA/GL/2016/07) and the Regulations on materiality thresholds (Delegated Regulation of the European Commission 2018/171 and Regulation 2018/1845 of the European Central Bank) that develop the content of the aforementioned article 178, entered into force. The modifications introduced cover aspects such as the calculation of past due days, clarifications on the indicators of probable non-payment ("Unlikely to Pay"), the criteria for the classification to non-defaulted status, definition of retail exposures and aspects related to documentation and external governance. During 2021, BBVA completed the implementation of the prudential definition of default, both for portfolios under the standardised approach, as well as portfolios under the IRB approach, once the relevant supervisory authorization has been received.

Currently, the BBVA Group considers that a default has occurred in relation to a certain obligor when at least one of the following circumstances occurs:

a) that the obligor has a delay for more than 90 consecutive days with respect to any significant credit obligation to the entity.

b) that the entity considers that there are reasonable doubts about the payment of all of its credit obligations to the entity itself, the parent company or any of its subsidiaries, without resorting to actions such as the execution of guarantees.

In relation to the computation of past due days, a obligor is considered in default when the sum of the past due amounts in all its credit obligations with the entity exceed the materiality thresholds (both absolute and relative) for more than 90 consecutive days. The absolute threshold is set at €100 for retail exposures and €500 for wholesale exposures and the relative threshold at 1% of all on-balance sheet exposures to the obligor.

Regarding the existence of reasonable doubts about payment, the following elements are considered as indicators of probability of default:

A) Specific credit risk adjustments: a specific adjustment as a result of a sharp deterioration in the credit quality of the obligor is an indicator of probable default.

B) Sale of credit obligations with significant economic loss: a sale of a credit obligation against an obligor with a material economic loss related to a deterioration in credit quality should be considered an indicator of default. When the economic loss exceeds the 5% threshold, the credit obligations will be considered to be in default.

C) Distressed restructuring: it is considered that there is an indicator of probable default, and therefore the client must be considered in default, when the restructuring or refinancing measures may result in a reduction of the financial obligation that is considered to be caused by a material forgiveness or deferral of principal, interest or fees.

Specifically, unless proven otherwise, transactions that meet any of the following criteria will be reclassified to the default risk category:

a) They are supported by an inadequate payment plan.

b) They Include contractual clauses that delay the reimbursement of the operation through regular payments.

c) Present amounts derecognized from the balance sheet.

In any case, a restructuring will be considered impaired when the reduction in the net present value of the financial obligation is greater than 1%.

D) Bankruptcy/Arrangement/Liquidation/Failure/Pre-arrangement of the client: These situations will be valued as indicators of non-payment as long as this prevents or delays the payments of credit obligations to the institution.

E) Fraud: If credit fraud is identified before the default is recognized.

The definition of default is applied at the debtor level for wholesale counterparties. Therefore, the classification of any material exposure of a client as defaulted, either because it is more than 90 past due days or due to any of the subjective criteria, implies the consideration of all the client's exposures as default.

Regarding retail customers, the definition of default is applied at the contract level following risk management practices. Notwithstanding the foregoing, when an operation of a retail client presents defaults of more than 90 days and this represents more than 20% of the client's total balance, all its operations are considered in default.

Additionally, it should be noted that when operations of related entities with the holder are considered in default, including both entities of the same group and those with which there is a relationship of economic or financial dependence, the operations of the holder are also classified as default if after its analysis it is concluded that there are reasonable doubts about its total reimbursement.

The classification of an operation as in default is carried out in such a way that each contract can only be either in default or non default in its entirety.

With regard to transactions/customers classified as in default, it should be noted that they will cease to be classified as such when no default trigger is still applicable, either because the client/transaction does not have material past due balances, that is, above both materiality thresholds, for more than 90 consecutive days, either when the recovery process is considered complete in accordance with the entity's recovery management or because no criterion of probable non-payment continues to apply. However, in any case, at least three months must elapse from the moment in which the situation that triggered the non-payment ceased to be fulfilled in order to stop classifying an operation in a defaulted situation as such. During this period, the obligor must show good payment behaviour and an improvement in its credit quality. In restructuring processes, the minimum period will be one year.

4.2.2.2. Accounting definitions and methodologies

The calculation of credit risk adjustments applicable to the BBVA Group's Consolidated Financial Statements follows the provisions of IFRS 9 - Financial Instruments. This standard establishes an expected loss model to calculate aforementioned provision for credit risk.

Credit risk provision is calculated for financial assets valued at amortized cost, debt instruments valued at fair value with changes in accumulated other comprehensive income, financial guarantee contracts and other commitments. All financial instruments measured at fair value through profit or loss are excluded from the impairment model.

Given the nature of the calculation of provisions under IFRS 9, all adjustments are considered specific credit risk adjustments for the purposes of Regulation (EU) No. 575/2013 of the European Parliament and of the Council.

Definition of impaired financial asset

According to IFRS 9, an asset is credit-impaired (*stage* 3) if one or more events have occurred and they have a detrimental impact on the estimated future cash flows of the asset.

Historically, the definition of impaired assets under IFRS 9 has been substantially aligned with the definition of default used by the Group for internal credit risk management purposes, which is also the definition used for regulatory purposes. As stated in section 4.2.2.1, in 2021 the Group has updated its definition of default to adapt it to the EBA Guidelines. The Group consequently updated the definition of credit-impaired asset (*stage* 3), considering it a change in accounting estimates, re-establishing the consistency with the definition of default and guaranteeing the integration of both definitions in credit risk management.

4.2.3. Information on credit risk

4.2.3.1. Exposure to credit risk

According to Article 5 of the CRR, with respect to the regulatory capital requirements for credit risk, exposure is understood to be any asset item and all items included in the Group’s off-balance sheet accounts involving credit risk and not deducted from the Group’s bank capital. Accordingly, mainly loan and advances to customers are included, with their corresponding undrawn balances, letters of credit and guarantees, debt securities and capital instruments, cash and balances with central banks and credit institutions, repurchase and reverse repurchase agreements, financial derivatives and intangible assets.

The credit risk exposure specified in the following sections of this document is broken down into credit risk according to the standardised approach (Section 4.2.4), credit risk according to the advanced approach (Section 4.2.5), counterparty credit risk (Section 4.2.6), securitisation credit risk (Section 4.2.7) and structural equity risk (Section 4.4.3).

In addition to the exposure at default and the risk-weighted assets, the table below shows the original exposure, the exposure net of provisions and the exposure after conversion factors under the standardised and advanced approaches as of December 31, 2022 and as of December 31, 2021 (including counterparty credit risk):

Table 12. Credit Risk and Counterparty Risk Exposure (Million Euros. 12-31-2022)

Exposure Class	**Original Exposure(1)**	**Provisions**	**Net exposure of provisions(3)**	**On-balance exposure after credit risk mitigation techniques(4a)**	**Off-balance exposure after credit risk mitigation techniques(4b)**	**Exposure in the adjusted value(5)**	**EAD(6)**	**RWA's(8)**	**RWA density (9=(8)/(6))**
Central governments or central banks	162,496	(189)	162,307	180,598	6,152	188,221	184,542	31,254	17 %
Regional governments or local authorities	7,234	(9)	7,226	2,243	308	2,329	2,145	1,335	62 %
Public sector entities	1,695	(2)	1,693	780	493	1,317	1,061	1,002	94 %
Multilateral development banks	187	—	187	185	—	187	187	6	3 %
International organisations	466	—	466	466	—	466	466	—	—
Institutions	35,210	(33)	35,177	10,287	17,293	29,136	13,226	4,916	37 %
Corporates	68,768	(978)	67,791	40,353	14,639	56,941	49,909	45,746	92 %
Retail	85,078	(1,473)	83,605	51,320	26,928	75,051	52,247	36,379	70 %
Secured by mortgages on immovable property	27,878	(218)	27,659	27,300	353	27,515	27,353	9,871	36 %
Exposures in default	7,299	(4,139)	3,159	2,544	359	2,806	2,598	2,691	104 %
Exposures associated with particularly high risk	2,808	(472)	2,336	1,824	396	2,127	1,873	2,809	150 %
Covered bonds	—	—	—	—	—	—	—	—	—
Claims on institutions and corporates with a short-term credit assesment	—	—	—	—	—	—	—	—	39 %
Collective investments undertakings	1	—	1	1	1	1	1	1	100 %
Other exposures	19,559	—	19,559	19,869	37	19,907	19,902	11,230	56 %
Total standardised approach	**418,680**	**(7,513)**	**411,167**	**337,772**	**66,959**	**406,006**	**355,511**	**147,240**	**41 %**
Central governments or central banks	11,531	(5)		12,034	415	12,449	12,234	1,105	9 %
Institutions	129,070	(28)		105,690	9,698	115,387	111,118	7,336	7 %
Corporates	206,910	(1,896)		108,508	88,768	197,277	161,188	80,508	50 %
Corporates (SMEs)	26,174	(810)		16,347	4,942	21,289	18,201	12,896	71 %
Corporates: Specialised lending	7,588	(37)		5,247	2,341	7,588	6,513	5,306	81 %
Corporates: Others	173,148	(1,048)		86,915	81,485	168,400	136,474	62,307	46 %
Retail	122,945	(2,791)		94,038	26,606	120,644	98,198	24,483	25 %
Of which: secured by immovable property	74,481	(913)		69,749	4,732	74,481	69,847	9,994	14 %
Of which: Qualifying revolving	30,185	(721)		9,087	21,098	30,185	12,741	8,868	70 %
Of which: Others	18,279	(1,157)		15,202	776	15,978	15,609	5,620	36 %
Retail: Other SMEs	5,445	(217)		2,438	734	3,172	2,817	1,158	41 %
Retail: Other Non-SMEs	12,834	(940)		12,764	42	12,806	12,792	4,463	35 %
Total IRB approach	**470,456**	**(4,720)**	**—**	**320,270**	**125,487**	**445,757**	**382,737**	**113,432**	**30 %**
Total credit risk dilution and delivery	**4,463**	**—**	**4,462**	**4,310**	**(145)**	**4,165**	**4,165**	**455**	**11 %**
Total positions in securitisation (7)	**893,599**	**(12,233)**	**415,629**	**662,353**	**192,301**	**855,928**	**742,413**	**261,127**	**35 %**
Equity	**5,692**	**—**	**—**	**5,692**	**—**	**5,692**	**5,692**	**13,097**	**230 %**
Simple risk weight approach	1,120			1,120		1,120	1,120	2,570	230 %
Exposures in sufficiently diversified portfolios (RW 190%)	790			790		790	790	1,500	190 %
Exchange traded exposures (RW 290%)	190			190		190	190	551	290 %
Others (RW 370%)	140			140		140	140	519	370 %
PD/LGD approach	1,335			1,335		1,335	1,335	2,250	169 %
Internal models approach	119			119		119	119	481	405 %
Exposures subject to a 250% risk weight	3,118			3,118		3,118	3,118	7,796	250 %
Total credit risk	**899,291**	**(12,233)**	**415,629**	**668,044**	**192,301**	**861,620**	**748,105**	**274,224**	**37 %**

(1) Gross exposure value before credit risk mitigation techniques and CCF, excluding contributions to the default fund for a CCP.

(2) Includes provisions and impairment of financial assets and contingent risk and commitments.

(3) Standardised Approach exposures are adjusted by credit risk adjustments. The original equity exposure is shown net of impairment.

(4a) (4b) Eligible credit risk mitigation techniques are included, either on-balance sheet or off-balance sheet, according to Chapter 4 of CRR. In the case of securitisation exposure, unfunded credit protection is included.

(5) Under the standardised approach, it corresponds to the exposure value after the application of the eligible credit risk mitigation techniques, net of volatility adjustments.

(6) Exposure at default, calculated as (4a)+((4b)*CCF).

(7) This row includes the SEC-SA, SEC-ERBA and SEC-IRBA methods. The exposure of securitisations with a risk weight of 1,250% which are deducted from own funds is included (€860 thousand).

Credit Risk and Counterparty Risk Exposure (Million Euros. 31-12-2020)

Exposure Class	Original Exposure[1]	Provisions	Net exposure of provisions[3]	On-balance exposure after credit risk mitigation techniques[4a]	Off-balance exposure after credit risk mitigation techniques[4b]	Exposure in the adjusted value[5]	EAD(6)	RWA's(8)	RWA density (9=(8)/(6))
Central governments or central banks	162,496	(189)	162,307	180,598	6,152	188,221	184,542	31,254	17 %
Regional governments or local authorities	7,234	(9)	7,226	2,243	308	2,329	2,145	1,335	62 %
Public sector entities	1,695	(2)	1,693	780	493	1,317	1,061	1,002	94 %
Multilateral development banks	187	—	187	185	—	187	187	6	3 %
International organisations	466	—	466	466	—	466	466	—	—
Institutions	35,210	(33)	35,177	10,287	17,293	29,136	13,226	4,916	37 %
Corporates	68,768	(978)	67,791	40,353	14,639	56,941	49,909	45,746	92 %
Retail	85,078	(1,473)	83,605	51,320	26,928	75,051	52,247	36,379	70 %
Secured by mortgages on immovable property	27,878	(218)	27,659	27,300	353	27,515	27,353	9,871	36 %
Exposures in default	7,299	(4,139)	3,159	2,544	359	2,806	2,598	2,691	104 %
Exposures associated with particularly high risk	2,808	(472)	2,336	1,824	396	2,127	1,873	2,809	150 %
Covered bonds	—	—	—	—	—	—	—	—	—
Claims on institutions and corporates with a short-term credit assesment	—	—	—	—	—	—	—	—	39 %
Collective investments undertakings	1	—	1	1	1	1	1	1	100 %
Other exposures	19,559	—	19,559	19,869	37	19,907	19,902	11,230	56 %
Total standardised approach	**418,680**	**(7,513)**	**411,167**	**337,772**	**66,959**	**406,006**	**355,511**	**147,240**	**41%**
Central governments or central banks	11,531	(5)		12,034	415	12,449	12,234	1,105	9 %
Institutions	129,070	(28)		105,690	9,698	115,387	111,118	7,336	7 %
Corporates	206,910	(1,896)		108,508	88,768	197,277	161,188	80,508	50 %
Corporates (SMEs)	26,174	(810)		16,347	4,942	21,289	18,201	12,896	71 %
Corporates: Specialised lending	7,588	(37)		5,247	2,341	7,588	6,513	5,306	81 %
Corporates: Others	173,148	(1,048)		86,915	81,485	168,400	136,474	62,307	46 %
Retail	122,945	(2,791)		94,038	26,606	120,644	98,198	24,483	25 %
Of which: secured by immovable property	74,481	(913)		69,749	4,732	74,481	69,847	9,994	14 %
Of which: Qualifying revolving	30,185	(721)		9,087	21,098	30,185	12,741	8,868	70 %
Of which: Others	18,279	(1,157)		15,202	776	15,978	15,609	5,620	36 %
Retail: Other SMEs	5,445	(217)		2,438	734	3,172	2,817	1,158	41 %
Retail: Other Non-SMEs	12,834	(940)		12,764	42	12,806	12,792	4,463	35 %
Total IRB approach	**470,456**	**(4,720)**	**0**	**320,270**	**125,487**	**445,757**	**382,737**	**113,432**	**30%**
Total credit risk dilution and delivery	**4,463**	**0**	**4,462**	**4,310**	**-145**	**4,165**	**4,165**	**455**	**11%**
Total positions in securitisation (7)	**893,599**	**(12,233)**	**415,629**	**662,353**	**192,301**	**855,928**	**742,413**	**261,127**	**35%**
Equity	**5,692**	**0**	**0**	**5,692**	**0**	**5,692**	**5,692**	**13,097**	**230%**
Simple risk weight approach	1,120			1,120		1,120	1,120	2,570	230 %
Exposures in sufficiently diversified portfolios (RW 190%)	790			790		790	790	1,500	190 %
Exchange traded exposures (RW 290%)	190			190		190	190	551	290 %
Others (RW 370%)	140			140		140	140	519	370 %
PD/LGD approach	1,335			1,335		1,335	1,335	2,250	169 %
Internal models approach	119			119		119	119	481	405 %
Exposures subject to a 250% risk weight	3,118			3,118		3,118	3,118	7,796	250 %
Total credit risk	**899,291**	**(12,233)**	**415,629**	**668,044**	**192,301**	**861,620**	**748,105**	**274,224**	**37%**

[1] Gross exposure value before credit risk mitigation techniques and CCF, excluding contributions to the default fund for a CCP.

[2] Includes provisions and impairment of financial assets and contingent risk and commitments.

[3] Standardised Approach exposures are adjusted by credit risk adjustments. The original equity exposure is shown net of impairment.

[4a] [4b] Eligible credit risk mitigation techniques are included, either on-balance sheet or off-balance sheet, according to Chapter 4 of CRR. In the case of securitisation exposure, unfunded credit protection is included.

[5] It corresponds to the exposure value adjusted by eligible credit risk mitigation techniques.

[6] Exposure at default, calculated as (4a)+((4b)*CCF).

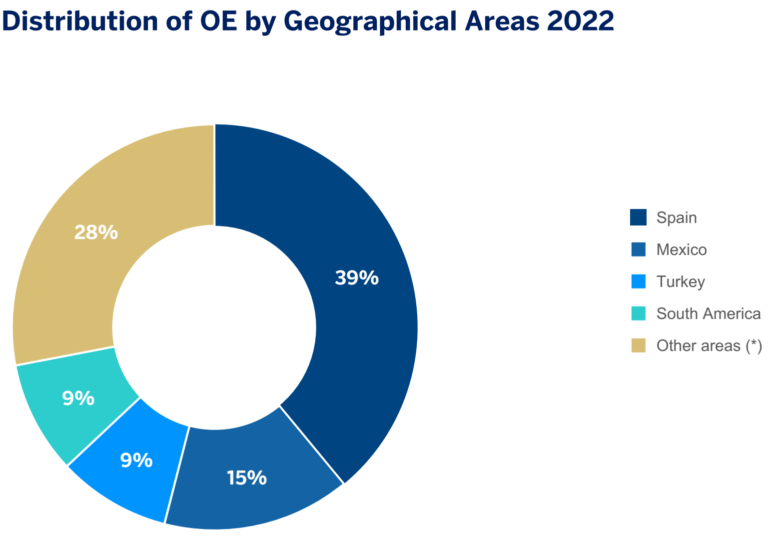
[7] This row includes the SEC-SA, SEC-ERBA and SEC-IRBA methods. The exposure of securitisations with a risk weight of 1,250% which are deducted from own funds is included (€22 million).

During 2022, the evolution in exposure and RWAs is due to the activity in the different portfolios, the variation of which will be detailed in their respective chapters. This year there have been no singular events in the Group's prudential perimeter or relevant methodological changes that have had an impact on the RWAs.

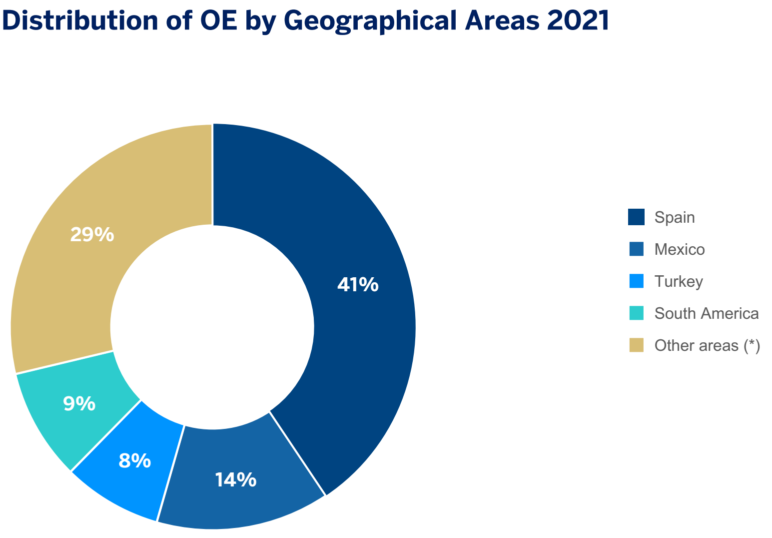
See following sections for more information on the variations of RWAs by standardised and IRB approaches.

The distribution of the Group's original exposure by geography (classification by country of the counterparty) is shown below:

Chart 8. Distribution by geographical area of Exposure to Credit Risk



(*) Other Countries includes mainly exposures in Europe (excluding Spain), United States and Asia.



(*) Other Countries includes mainly exposures in Europe (excluding Spain), United States and Asia.

The average RWAs densities for credit and counterparty risk are shown below, by exposure class and geography where the Group operates.

Table 13. Breakdown of RWA density by geographical area and approach (Million euros. 12-31-2022)

	RWA Density[1][2]					
Category of exposure	**Total**	**Spain[3]**	**Mexico**	**Turkey**	**South America**	**Other areas[4]**
Central governments or central banks	17 %	10 %	21 %	60 %	44 %	—
Regional governments or local authorities	62 %	20 %	97 %	100 %	100 %	13 %
Public sector entities	94 %	—	73 %	99 %	100 %	1 %
Multilateral Development Banks	3 %	—	—	—	7 %	—
International organisations	—	—	—	—	—	—
Institutions	37 %	—	49 %	66 %	62 %	25 %
Corporates	92 %	56 %	96 %	95 %	100 %	87 %
Retail	70 %	63 %	71 %	68 %	73 %	72 %
Secured by mortgages on immovable property	36 %	36 %	36 %	40 %	36 %	35 %
Exposures in default	104 %	109 %	100 %	103 %	104 %	106 %
Exposures associated with particularly high risk	150 %	150 %	150 %	150 %	150 %	151 %
Covered bonds	—	—	—	—	—	—
Short-term claims on institutions and corporate	39 %	—	—	—	39 %	—
Collective investments undertakings	100 %	100 %	—	—	—	100 %
Other exposures	56 %	74 %	55 %	40 %	40 %	17 %
Total credit risk by standardised approach	**41 %**	**19 %**	**44 %**	**74 %**	**70 %**	**23 %**
Central governments or central banks	9 %	72 %	65 %	122 %	63 %	8 %
Institutions	7 %	13 %	45 %	155 %	20 %	5 %
Corporates	50 %	58 %	65 %	107 %	55 %	38 %
Retail	25 %	18 %	92 %	14 %	34 %	33 %
Total credit risk by IRB approach	**30 %**	**31 %**	**71 %**	**110 %**	**41 %**	**19 %**
Securitisation exposures	**11 %**	**11 %**	**—**	**—**	**—**	**—**
Total credit risk dilution and delivery	**35 %**	**26 %**	**54 %**	**75 %**	**68 %**	**20 %**

(1) Equity positions are not included.

(2) Calculated as RWA/EAD.

(3) In Spain, the category Central Governments and Central Banks includes deferred assets net of deferred tax liabilities.

(4) Other areas includes mainly exposures in Europe (excluding Spain), United States and Asia.

Breakdown of RWA density by geographical area and approach (Million euros. 12-31-2021)

	RWA Density[1][2]						
Category of exposure	**Total**	**Spain[3]**	**Turkey**	**Mexico**	**USA**	**Other areas[4]**	**Other areas[4]**
Central governments or central banks	19 %	14 %	16 %	69 %	45 %	0 %	1 %
Regional governments or local authorities	60 %	28 %	97 %	100 %	88 %	17 %	20 %
Public sector entities	97 %	—	82 %	75 %	100 %	20 %	19 %
Multilateral Development Banks	6 %	—	—	—	0.07	0 %	—
International organisations	—	—	—	—	—	—	—
Institutions	48 %	62 %	65 %	70 %	82 %	29 %	31 %
Corporates	94 %	102 %	96 %	94 %	99 %	76 %	95 %
Retail	70 %	63 %	71 %	68 %	73 %	73 %	72 %
Secured by mortgages on immovable property	36 %	34 %	36 %	40 %	36 %	37 %	37 %
Exposures in default	110 %	112 %	101 %	119 %	103 %	109 %	108 %
Exposures associated with particularly high risk	150 %	150 %	150 %	150 %	150 %	150 %	150 %
Covered bonds	—	—	—	—	—	—	—
Short-term claims on institutions and corporate	93 %	—	—	—	0.93	0 %	—
Collective investments undertakings	100 %	100 %	—	—	— %	1	100 %
Other exposures	58 %	84 %	48 %	32 %	40 %	15 %	18 %
Total credit risk by standardised approach	**43 %**	**24 %**	**43 %**	**78 %**	**69 %**	**24 %**	**37 %**
Central governments or central banks	6 %	81 %	40 %	87 %	25 %	5 %	9 %
Institutions	7 %	11 %	67 %	201 %	18 %	5 %	6 %
Corporates	54 %	65 %	68 %	104 %	60 %	41 %	42 %
Retail	24 %	19 %	89 %	12 %	35 %	47 %	22 %
Total credit risk by IRB approach	**30 %**	**33 %**	**73 %**	**105 %**	**44 %**	**19 %**	**16 %**
Securitisation exposures	**12 %**	**12 %**	**—**	**—**	**— %**	**—**	**—**
Total credit risk dilution and delivery	**36 %**	**29 %**	**53 %**	**78 %**	**67 %**	**20 %**	**20 %**

(1) Does not include equity positions.

(2) Calculated as RWAs/EAD.

(3) In Spain, the category Central Governments and Central Banks includes deferred assets net of deferred tax liabilities..

(4) Includes all other countries not included in the previous columns. The countries with the largest exposure in this area are: United Kingdom, France, Italy, Germany and Portugal.

4.2.3.2. Credit quality of exposures

The carrying amount of performing and non-performing exposures, broken down by product and counterparty sector, as of December 31, 2022 and as of December 31, 2021, is below:

Table 14. EU CR1 - Performing and non-performing exposures and related provisions (Million Euros. 12-31-2022)

	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 [(1)]			Non-performing exposures			Performing exposures			Non-performing exposures					
		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3	Accumulated partial write-off	On performing exposures	On non-performing exposures
Cash balances at central banks and other demand deposits	**73,470**	**73,470**	**—**	**—**	**—**	**—**	**(12)**	**(12)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans and advances	**375,474**	**341,612**	**33,614**	**13,497**	**—**	**13,497**	**(4,024)**	**(2,083)**	**(1,941)**	**(7,285)**	**—**	**(7,285)**	**(352)**	**161,589**	**4,422**
Central banks	4,420	4,420	—	—	—	—	(19)	(19)	—	—	—	—	—	279	—
General governments	20,884	20,582	302	38	—	38	(19)	(8)	(11)	(11)	—	(11)	—	6,448	5
Credit institutions	16,137	16,068	69	—	—	—	(34)	(31)	(3)	—	—	—	—	1,847	—
Other financial corporations	12,151	11,913	238	17	—	17	(27)	(15)	(12)	(10)	—	(10)	—	2,260	5
Non-financial corporations	164,837	149,591	15,086	6,340	—	6,340	(1,666)	(675)	(991)	(3,829)	—	(3,829)	(352)	59,099	1,672
Of which: SME	*53,823*	*47,444*	*6,297*	*3,653*	—	*3,653*	*(721)*	*(339)*	*(382)*	*(2,192)*	—	*(2,192)*	*(110)*	*28,593*	*1,203*
Households	157,047	139,039	17,920	7,102	—	7,102	(2,260)	(1,335)	(925)	(3,435)	—	(3,435)	—	91,656	2,740
Debt securities	**81,104**	**79,937**	**1,059**	**57**	**—**	**57**	**(167)**	**(67)**	**(100)**	**(41)**	**—**	**(41)**	**—**	**—**	**—**
Central banks	3,123	3,123	—	—	—	—	(7)	(7)	—	—	—	—	—	—	—
General governments	69,525	68,418	1,055	—	—	—	(150)	(51)	(100)	—	—	—	—	—	—
Credit institutions	1,697	1,697	—	—	—	—	(3)	(3)	—	—	—	—	—	—	—
Other financial corporations	2,389	2,329	4	54	—	54	(4)	(3)	—	(40)	—	(40)	—	—	—
Non-financial corporations	4,370	4,370	—	3	—	3	(3)	(3)	—	(2)	—	(2)	—	—	—
Off-balance-sheet exposures	**191,070**	**181,076**	**9,994**	**1,147**	**—**	**1,147**	**431**	**171**	**261**	**339**	**—**	**339**	**—**	**7,390**	**196**
Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General governments	3,321	3,105	217	22	—	22	3	—	2	—	—	—	—	4	—
Credit institutions	19,992	19,560	432	24	—	24	7	6	2	1	—	1	—	39	—
Other financial corporations	8,559	8,328	231	6	—	6	6	5	1	—	—	—	—	58	3
Non-financial corporations	114,536	108,282	6,254	984	—	984	291	76	215	314	—	314	—	6,951	179
Households	44,661	41,802	2,860	112	—	112	124	84	40	23	—	23	—	338	14
Total	**721,118**	**676,095**	**44,667**	**14,701**	**—**	**14,701**	**(4,634)**	**(2,333)**	**(2,302)**	**(7,665)**	**—**	**(7,665)**	**(352)**	**168,979**	**4,618**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(**) Off-balance sheet exposures provisions are shown as positive, in line with FINREP regulatory financial reporting models.

(1) Includes gross carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios. Due to this, the balance of the rows other than "Cash and balances with central banks" performing may differ from the sum of the balances of stage 1 and stage 2 columns for these rows.

EU CR1 - Performing and non-performing exposures and related provisions (Million Euros. 12-31-2021)

	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			Non-performing exposures					
		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3	Accumulated write-off	On performing exposures	On non-performing exposures
Cash balances at central banks and other demand deposits	**61,159**	**61,159**	**—**	**—**	**—**	**—**	**(5)**	**(5)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans and advances	**334,639**	**299,825**	**34,159**	**14,693**	**17**	**14,659**	**(4,089)**	**(2,001)**	**(2,088)**	**(7,064)**	**(2)**	**(7,061)**	**—**	**161,158**	**4,880**
Central banks	5,687	5,687	—	—	—	—	(6)	(6)	—	—	—	—	—	1,182	—
General governments	19,797	19,287	369	62	—	62	(18)	(13)	(5)	(19)	—	(19)	—	5,655	10
Credit institutions	13,807	13,797	10	—	—	—	(18)	(18)	—	—	—	—	—	609	—
Other financial corporations	9,229	9,097	131	24	—	24	(14)	(8)	(6)	(9)	—	(9)	—	1,565	6
Non-financial corporations	139,903	120,125	19,340	7,316	15	7,290	(2,061)	(757)	(1,303)	(3,741)	(2)	(3,738)	—	60,850	1,803
Of which: SME	*49,447*	*39,824*	*9,548*	*3,957*	7	*3,941*	*(1,039)*	*(464)*	*(575)*	*(2,256)*	(1)	*(2,254)*	—	*29,536*	*1,332*
Households	146,216	131,832	14,309	7,291	2	7,283	(1,972)	(1,199)	(773)	(3,296)	—	(3,296)	—	91,297	3,062
Debt securities	**73,696**	**72,825**	**765**	**23**	**—**	**23**	**(104)**	**(21)**	**(82)**	**(18)**	**—**	**(18)**	**—**	**—**	**—**
Central banks	1,712	1,712	—	—	—	—	(2)	(2)	—	—	—	—	—	—	—
General governments	63,541	62,790	751	—	—	—	(97)	(15)	(82)	—	—	—	—	—	—
Credit institutions	1,795	1,795	—	—	—	—	—	—	—	—	—	—	—	—	—
Other financial corporations	2,258	2,149	4	20	—	20	(3)	(2)	—	(16)	—	(16)	—	—	—
Non-financial corporations	4,389	4,379	10	3	—	3	(2)	(2)	—	(2)	—	(2)	—	—	—
Off-balance-sheet exposures	**164,487**	**152,418**	**12,069**	**962**	**1**	**957**	**455**	**185**	**270**	**237**	**—**	**236**		**7,389**	**135**
Central banks	2	2	—	—	—	—	—	—	—	—	—	—		—	—
General governments	3,830	3,742	88	27	—	26	2	1	—	1	—	1		17	—
Credit institutions	20,694	20,246	447	2	—	2	6	4	2	—	—	—		51	—
Other financial corporations	6,736	6,582	154	8	—	8	2	2	—	—	—	—		45	3
Non-financial corporations	97,019	87,707	9,312	812	1	810	342	103	239	213	—	213		6,945	119
Households	36,206	34,138	2,068	113	—	112	102	74	28	22	—	22		332	13
Total	**633,980**	**586,227**	**46,993**	**15,678**	**18**	**15,639**	**(4,653)**	**(2,212)**	**(2,440)**	**(7,319)**	**(2)**	**(7,315)**	**—**	**168,548**	**5,015**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(**) Off-balance sheet exposures provisions are shown as positive, in line with FINREP regulatory financial reporting models.

(1) Includes gross carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios. Due to this, the balance of the rows other than "Cash and balances with central banks" performing may differ from the sum of the balances of stage 1 and stage 2 columns for these rows.

During 2022 there has been an increase in exposure, mainly linked to the organic growth of the business; thus the total gross book value of performing exposures has grown by approximately €87 billion (+14% over the 2021 value) driven by the growth of loans and advances (€ +40,835 million) and off-balance sheet exposures (€ +26,583 million euros). Non-performing exposures, on the other hand, decreased compared to 2021 by €977 million, mainly in loans and advances portfolio, positively affected by the exchange rate and the sale of a default portfolio in Spain. Lastly, accumulated impairment and negative changes in fair value increased by €327 million during the year.

The following table shows the credit quality of performing and non-performing exposures according to the number of past due days as of December 31, 2022 and December 31, 2021:

Table 15. EU CQ3 - Credit quality of performing and non-performing exposures by past due days (Million Euros. 12-31-2022)

	Gross carrying amount/nominal amount											
	Performing exposures			Non-performing exposures								
		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
Cash balances at central banks and other demand deposits	**73,470**	**73,470**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans and advances	**375,474**	**374,028**	**1,446**	**13,497**	**8,331**	**1,157**	**1,048**	**1,090**	**1,702**	**68**	**101**	**13,497**
Central banks	4,420	4,420	—	—	—	—	—	—	—	—	—	—
General governments	20,884	20,850	34	38	33	—	1	—	—	—	4	38
Credit institutions	16,137	16,137	—	—	—	—	—	—	—	—	—	—
Other financial corporations	12,151	12,151	—	17	15	—	1	—	1	—	—	17
Non-financial corporations	164,837	164,528	309	6,340	3,996	307	437	429	1,044	52	75	6,340
Of which SMEs	*53,823*	*53,605*	*217*	*3,653*	*1,854*	*233*	*351*	*373*	*743*	*38*	*61*	*3,653*
Households	157,047	155,944	1,103	7,102	4,287	849	610	661	657	15	22	7,102
Debt Securities	**81,104**	**81,104**	**—**	**57**	**57**	**—**	**—**	**—**	**—**	**—**	**—**	**57**
Central banks	3,123	3,123	—	—	—	—	—	—	—	—	—	—
General governments	69,525	69,525	—	—	—	—	—	—	—	—	—	—
Credit institutions	1,697	1,697	—	—	—	—	—	—	—	—	—	—
Other financial corporations	2,389	2,389	—	54	54	—	—	—	—	—	—	54
Non-financial corporations	4,370	4,370	—	3	3	—	—	—	—	—	—	3
Off-balance sheet exposures	**191,070**			**1,147**								**1,147**
Central banks	—			—								—
General governments	3,321			22								22
Credit institutions	19,992			24								24
Other financial corporations	8,559			6								6
Non-financial corporations	114,536			984								984
Households	44,661			112								112
Total exposures December 2021	**721,118**	**528,602**	**1,446**	**14,701**	**8,388**	**1,157**	**1,048**	**1,090**	**1,702**	**68**	**101**	**14,701**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

EU CQ3 - Credit quality of performing and non-performing exposures by past due days (Million Euros. 12-31-2021)

	Gross carrying amount/nominal amount											
	Performing exposures			Non-performing exposures								
		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
Cash balances at central banks and other demand deposits	**61,159**	**61,159**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans and advances	**334,639**	**332,811**	**1,173**	**14,693**	**8,983**	**834**	**967**	**1,437**	**2,246**	**108**	**118**	**14,693**
Central banks	5,687	5,687	—	—	—	—	—	—	—	—	—	—
General governments	19,797	19,639	17	62	45	—	—	—	2	—	15	62
Credit institutions	13,807	13,807	—	—	—	—	—	—	—	—	—	—
Other financial corporations	9,229	9,228	—	24	15	7	—	1	1	—	—	24
Non-financial corporations	139,903	139,235	229	7,316	4,602	232	334	723	1,264	81	79	7,316
Of which SMEs	*49,447*	*49,232*	*140*	*3,957*	*1,941*	*185*	*266*	*523*	*966*	*47*	*30*	*3,957*
Households	146,216	145,215	925	7,291	4,321	595	632	712	979	27	24	7,291
Debt Securities	**73,696**	**73,591**	**—**	**23**	**23**	**—**	**—**	**—**	**—**	**—**	**—**	**23**
Central banks	1,712	1,712	—	—	—	—	—	—	—	—	—	—
General governments	63,541	63,541	—	—	—	—	—	—	—	—	—	—
Credit institutions	1,795	1,795	—	—	—	—	—	—	—	—	—	—
Other financial corporations	2,258	2,153	—	20	20	0	—	—	—	—	—	20
Non-financial corporations	4,389	4,389	—	3	3	—	—	—	—	—	—	3
Off-balance sheet exposures	**164,487**			**962**								**962**
Central banks	2			—								—
General governments	3,830			27								27
Credit institutions	20,694			2								2
Other financial corporations	6,736			8								8
Non-financial corporations	97,019			812								812
Households	36,206			113								113
Total exposures December 2020	**633,980**	**467,561**	**1,173**	**15,678**	**9,006**	**834**	**967**	**1,437**	**2,246**	**108**	**118**	**15,677**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

The distribution of exposures by geographical area as of December 31, 2022 and December 31, 2021 are below:

Table 16. EU CQ4 - Quality of non-performing exposures by geography (Million Euros. 12-31-2022)

	Gross carrying amount(2) / nominal amount						
		Of which: non performing	**Of which: defaulted**	**Of which: subject to impairment (3)**	**Accumulated impairment**	**Provisions on off-balance sheet**	**Accumulated negative changes in fair value due to credit risk on non-performing exposures**
On balance exposures	**470,131**	**13,554**	**13,554**	**469,776**	**(11,518)**		**—**
Spain	198,128	7,203	7,203	198,111	(4,562)		—
Mexico	88,946	1,945	1,945	88,701	(2,502)		—
Turkey	51,228	2,218	2,218	51,225	(2,031)		—
South America	51,530	1,768	1,768	51,478	(1,965)		—
Other areas (1)	80,301	419	419	80,261	(459)		—
Off balance exposures	**192,217**	**1,147**	**1,147**			**770**	
Spain	53,974	716	716			241	
Mexico	23,209	9	9			60	
Turkey	21,077	260	260			294	
South America	15,209	148	148			141	
Other areas (1)	78,748	14	14			34	
Total	**662,349**	**14,701**	**14,701**	**469,776**	**(11,518)**	**770**	**—**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(**) Impairment of off-balance sheet exposures is shown as positive, in line with FINREP regulatory financial reporting models.

(1) Other Countries includes mainly exposures in Europe (excluding Spain), United States and Asia.

(2) Includes gross carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios.

(3) Includes gross carrying amount of assets at amortised cost and assets at fair value through other comprehensive income.

EU CQ4 - Quality of non-performing exposures by geography (Million Euros. 12-31-2021)

	Gross carrying amount(2) / nominal amount						
		Of which: non performing	Of which: defaulted	Of which: subject to impairment (3)	Accumulated impairment	Provisions on off-balance sheet	Accumulated negative changes in fair value due to credit risk on non-performing exposures
On balance exposures	**423,050**	**14,716**	**14,716**	**422,290**	**(11,275)**		**—**
Spain	194,453	7,822	7,822	194,280	(4,983)		—
Mexico	71,410	1,939	1,939	71,190	(2,051)		—
Turkey	42,261	2,697	2,697	41,966	(1,934)		—
South America	45,317	1,817	1,817	45,317	(1,888)		—
Other areas (1)	69,609	442	442	69,537	(419)		—
Off balance exposures	**165,448**	**962**	**962**			**691**	
Spain	52,051	655	655			261	
Mexico	19,805	12	12			67	
Turkey	14,052	170	170			209	
South America	11,317	116	116			110	
Other areas (1)	68,223	9	9			45	
Total	**588,498**	**15,678**	**15,678**	**422,290**	**(11,275)**	**691**	

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(**) Impairment of off-balance sheet exposures is shown as positive, in line with FINREP regulatory financial reporting models.

(1) Other Countries includes mainly exposures in Europe (excluding Spain), United States and Asia.

(2) Includes gross carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios.

(3) Includes gross carrying amount of assets at amortised cost and assets at fair value through other comprehensive income.

Throughout 2022, there has been a growth in activity in all the geographies in where the Group operates, mainly due to the dynamism of lending activity.

The distribution by counterparty sector of total and non-performing exposures of loans and advances, as well as their impairment as of December 31, 2022 and December 31, 2021, are shown below:

Table 17. EU CQ5 - Credit quality of loans and advances to non-financial corporations by industry (Million Euros. 12-31-2022)

	Gross carrying amount(1)/nominal amount					
		Of which: non performing	Of which: defaulted	Of which: subject to impairment (2)	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
Agriculture, forestry and fishing	4,475	153	153	4,475	(151)	—
Mining and quarrying	5,006	179	179	5,006	(106)	—
Manufacturing	44,658	869	869	44,583	(795)	—
Electricity, gas, steam and air conditioning supply	15,344	650	650	15,344	(535)	—
Water supply	875	21	21	875	(16)	—
Construction	8,349	784	784	8,349	(538)	—
Wholesale and retail trade	30,974	1,184	1,184	30,974	(951)	—
Transport and storage	11,054	319	319	11,051	(343)	—
Accommodation and food service activities	8,003	451	451	8,003	(329)	—
Information and communication	7,497	113	113	7,497	(47)	—
Real estate activities	11,431	718	718	11,349	(527)	—
Financial activities and insurance	7,468	200	200	7,468	(187)	—
Professional, scientific and technical activities	3,948	169	169	3,948	(154)	—
Administrative and support service activities	4,021	180	180	4,021	(124)	—
Public administration and defence, compulsory social security	268	8	8	268	(13)	—
Education	556	35	35	556	(29)	—
Human health services and social work activities	2,108	138	138	2,108	(53)	—
Arts, entertainment and recreation	927	68	68	927	(79)	—
Other services	4,214	101	101	4,214	(519)	—
Total	**171,176**	**6,340**	**6,340**	**171,017**	**(5,495)**	**—**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(1) Includes gross carrying amount of assets at amortised cost, assets at fair value through other comprehensive income and assets designated at fair value through profit and loss other than those held for trading.

(2) Includes gross carrying amount of assets at amortised cost and assets at fair value through other comprehensive income.

EU CQ5 - Credit quality of loans and advances to non-financial corporations by activity sector (Million Euros. 12-31-2021)

	Gross carrying amount[1]/nominal amount					
		Of which: non performing	Of which: defaulted	Of which: subject to impairment [2]	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
Agriculture, forestry and fishing	4,077	125	125	4,077	(154)	—
Mining and quarrying	4,889	222	222	4,889	(130)	—
Manufacturing	35,129	1,008	1,008	35,058	(867)	—
Electricity, gas, steam and air conditioning supply	13,718	570	570	13,718	(489)	—
Water supply	782	22	22	782	(21)	—
Construction	8,336	896	896	8,336	(619)	—
Wholesale and retail trade	25,856	1,312	1,312	25,856	(1,104)	—
Transport and storage	10,310	879	879	10,310	(400)	—
Accommodation and food service activities	7,693	470	470	7,693	(405)	—
Information and communication	6,827	118	118	6,533	(56)	—
Real estate activities	9,511	719	719	9,438	(466)	—
Financial activities and insurance	6,236	210	210	6,236	(181)	—
Professional, scientific and technical activities	3,910	185	185	3,910	(152)	—
Administrative and support service activities	3,049	185	185	3,049	(132)	—
Public administration and defence, compulsory social security	203	9	9	203	(11)	—
Education	582	43	43	582	(34)	—
Human health services and social work activities	1,888	48	48	1,888	(41)	—
Arts, entertainment and recreation	1,011	209	209	1,011	(95)	—
Other services	3,211	84	84	3,211	(445)	—
Total	**147,219**	**7,316**	**7,316**	**146,781**	**(5,801)**	**—**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(1) Includes gross carrying amount of assets at amortised cost, assets at fair value through other comprehensive income and assets designated at fair value through profit and loss other than those held for trading.

(2) Includes gross carrying amount of assets at amortised cost and assets at fair value through other comprehensive income.

During 2022, the gross book balance of loans and advances to non-financial corporations has grown by approximately €24 billion, representing an increase of 16% over the December 31, 2021 figures. In this growth, the contribution of the manufacturing industry sector (€ +9,526 million) stands out, representing a relative growth of 27% compared to December 2021. Exposures in default decreased by €976 million and accumulated impairment by €306 million; both figures were partly affected by exchange rates and the sale of a default portfolio in Spain in the last quarter of 2022.

The distribution of the gross book value of performing and non-performing exposures of loans and debt securities by residual maturity is presented below. The accounting values as of December 31, 2022 and December 31, 2021 are presented:

Table 18. EU CR1-A - Maturity of exposures (Million Euros. 12-31-2022)

	Value of net exposure[1]					
	On demand	**≤ 1 year**	**> 1 year ≤ 5 year**	**> 5 year**	**No stated maturity**	**Total**
Loans and advances	4,101	114,139	106,902	152,519	—	377,661
Debt securities	—	19,378	41,795	19,772	7	80,952
Total	**4,101**	**133,517**	**148,698**	**172,291**	**7**	**458,613**

[1] Includes gross carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios.

Table 18. EU CR1-A - Maturity of exposures (Million Euros. 12-31-2021)

	Value of net exposure[1]					
	On demand	**≤ 1 year**	**> 1 year ≤ 5 year**	**> 5 year**	**No stated maturity**	**Total**
Loans and advances	3,161	85,967	96,524	152,525	—	338,178
Debt securities	—	14,922	34,243	24,175	257	73,597
Total	**3,161**	**100,889**	**130,767**	**176,700**	**257**	**411,775**

[1] Includes gross carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios.

The changes of non performing exposures between December 31, 2021 and December 31, 2022 is shown below in the following tables:

Table 19. EU CR2 - Changes in the balance of exposures to credit risk in default and impaired (Million Euros)

	Gross book value of defaulted exposures
Opening balance as at December 2021	**15,678**
Loans and debt securities that have defaulted or whose value has deteriorated since the last reporting period	3,908
Reclassification to non-default status	(2,981)
Amounts recognized as write-offs	(1,158)
Other changes	336
Closing balance as at June 2022	**15,783**

	Gross book value of defaulted exposures
Opening balance as at June 2022	**15,783**
Loans and debt securities that have defaulted or whose value has deteriorated since the last reporting period	4,204
Reclassification to non-default status	(2,765)
Amounts recognized as write-offs	(1,610)
Other changes	(910)
Closing balance as at December 2022	**14,701**

The balance of defaulted exposures decreased by approximately 6% during the year, mainly due to the effect of the sale of the default portfolio in Spain in the last quarter of the year, as well as the evolution of exchange rates.

A table with a general overview of forborne exposures is shown below, which includes the amounts as of December 31, 2022 and the main figures as of December 31, 2021:

Table 20. EU CQ1 - Credit quality of forborne exposures (Million Euros. 12-31-2022)

	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						
	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
Cash balances at central banks and other demand deposits	—	—	—	—	—	—	—	—
Loans and advances	**6,985**	**8,135**	**8,135**	**8,135**	**(678)**	**(4,242)**	**6,312**	**2,689**
Central banks	—	—	—	—	—	—	—	—
General governments	18	29	29	29	(1)	(8)	6	5
Credit institutions	—	—	—	—	—	—	—	—
Other financial corporations	3	10	10	10	—	(5)	6	4
Non-financial corporations	3,848	4,442	4,442	4,442	(469)	(2,658)	2,355	964
Households	3,116	3,654	3,654	3,654	(208)	(1,571)	3,945	1,717
Debt Securities	—	—	—	—	—	—	—	—
Loan commitments given	**391**	**41**	**41**	**41**	**16**	**6**	—	—
Total exposures	**7,376**	**8,176**	**8,176**	**8,176**	**(694)**	**(4,248)**	**6,312**	**2,689**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(**) Off-balance sheet exposures provisions are shown as positive, in line with FINREP regulatory financial reporting models.

EU CQ1 - Credit quality of forborne exposures (Million Euros. 12-31-2021)

	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						
	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
Cash balances at central banks and other demand deposits	—	—	—	—	—	—	—	—
Loans and advances	**8,736**	**9,212**	**9,212**	**9,200**	**(801)**	**(4,033)**	**7,992**	**3,187**
Central banks	—	—	—	—	—	—	—	—
General governments	47	38	38	38	(1)	(10)	15	6
Credit institutions	—	—	—	—	—	—	—	—
Other financial corporations	17	9	9	9	—	(4)	21	4
Non-financial corporations	4,436	5,217	5,217	5,205	(531)	(2,491)	3,170	1,242
Households	4,236	3,947	3,947	3,947	(268)	(1,529)	4,786	1,935
Debt Securities	—	—	—	—	—	—	—	—
Loan commitments given	**364**	**34**	**34**	**34**	**16**	**4**	—	—
Total exposures	**9,101**	**9,246**	**9,246**	**9,234**	**(817)**	**(4,037)**	**7,992**	**3,187**

(*) Includes the carrying amount of reverse repurchase agreements and positions subject to the securitisation framework.

(**) Off-balance sheet exposures provisions are shown as positive, in line with FINREP regulatory financial reporting models.

The amounts of collateral obtained by taking possession and execution processes as of December 31, 2022 and December 31, 2021 are shown below, differentiating property, plant and equipment from other collateral:

Table 21. EU CQ7 - Collateral obtained by taking possession and execution processes (Million Euros)

	12-31-2022		12-31-2021	
	Collateral obtained		Collateral obtained	
	Value at initial recognition⁽¹⁾	Accumulated negative changes⁽²⁾	Value at initial recognition⁽¹⁾	Accumulated negative changes⁽²⁾
Property, plant and equipment (PP&E)	—	—	—	—
Other than PP&E	**1,769**	**(833)**	**2,140**	**(948)**
Residential immovable property	1,051	(432)	1,369	(522)
Commercial Immovable property	333	(140)	344	(139)
Movable property (auto, shipping, etc.)	9	(6)	9	(7)
Equity and debt instruments	372	(254)	412	(278)
Other	4	(2)	6	(2)
Total	**1,769**	**(833)**	**2,140**	**(948)**

(1) Value at initial recognition: the gross carrying amount of the collateral obtained by taking possession at initial recognition.

(2) Cumulative negative changes: cumulative impairment or negative cumulative changes in the value of collateral initially recognised.

4.2.3.3. Public guarantees and moratorium programmes in response to COVID-19 crisis

Since the beginning of the pandemic, the Group offered COVID-19 support measures to its customers in all the geographic areas where it operates, consisting of both deferrals on existing loans and new public-guaranteed lending. Deferral support schemes have expired in all geographical areas. Measures related to new government-guaranteed loans are:

Spain:

- The Official Credit Institute (ICO by its Spanish acronym) published several support programs aimed at the self-employed, small and medium-sized enterprises (hereinafter "SMEs") and companies, through which a guarantee of between 60% and 80% was granted by the ICO (for a term of up to 5 years for new financing granted under RDL Mar/2020, RDL Nov/2020, RDL 5/2021 and the Code of Good Practices).
- In March 2022, the Council of Ministers agreed to modify the Code of Good Practices to lessen access conditions given the difficulties of clients, which are facing sharp increases in costs due to their special exposure to tensions in the prices of energy and other raw materials.
- As an additional measure of the Code of Good Practices, the Council of Ministers approved the agreement to establish the possibility of term extensions of ICO financing given to self-employed and companies, after June 30, 2022, after the expiry of the Temporary Framework of state support approved by the European Commission.

In addition, on November 23, 2022, Royal Decree-Law 19/2022, of November 22, was published. It amends the Code of Good Practices, establishes a new Code of Good Practices easing the interest rates hike on mortgage loans agreements related to primary residences, and provides for other structural measures aiming to improve the loan market. BBVA has adhered to the new Code of Good Practices with effect from January 1, 2023.

Peru:

- There were public support programs such as *Reactiva, Crecer* or FAE aimed at companies and micro-enterprises with government guaranteeing amounts ranging from 60% to 98%, depending on the program and the type of company.
- Through a Decree published in May 2022, for loans granted under the *Reactiva* program, both the maturity and grace period of such loans could be extended. The ability to benefit from this measure expires on June 30, 2023, following the extension of the initial period that ended December 31, 2022.

New government-guaranteed financing was also granted in Turkey, Colombia and Argentina.

Information about public guarantees and moratorium schemes, introduced by the governments in response to COVID-19 crisis as of December 31, 2022 and as of December 31, 2021 is shown below.

Table 22. Information on loans and advances subject to to legislative and non-legislative moratoria (Million Euros. 12-31-2022)

	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
		Performing			Non performing				Performing			Non performing			
			Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days			Of which:exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which:exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
Loans and advances subject to moratorium	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
of which: Households	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
of which: Collateralised by residential immovable property	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
of which: Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
of which: Small and Medium-sized Corporates	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
of which: Collateralised by commercial immovable property	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Information on loans and advances subject to to legislative and non-legislative moratoria (Million Euros. 12-31-2021)

	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
		Performing			Non performing				Performing			Non performing			
			Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days			Of which:exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which:exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
Loans and advances subject to moratorium	**189**	**169**	**60**	**122**	**20**	**13**	**18**	**(23)**	**(19)**	**(6)**	**(19)**	**(4)**	**(2)**	**(3)**	**3**
of which: Households	107	90	11	46	17	12	17	(12)	(10)	—	(10)	(2)	(2)	(2)	1
of which: Collateralised by residential immovable property	*97*	*81*	*9*	*42*	*16*	*11*	*15*	*(11)*	*(10)*	—	*(10)*	*(2)*	*(1)*	*(2)*	*1*
of which: Non-financial corporations	82	79	49	76	3	1	2	(11)	(9)	(5)	(9)	(2)	—	(1)	2
of which: Small and Medium-sized Corporates	*44*	*42*	*22*	*40*	*2*	*1*	*2*	*(7)*	*(6)*	*(5)*	*(6)*	*(1)*	—	*(1)*	*1*
of which: Collateralised by commercial immovable property	*50*	*49*	*22*	*48*	*1*	*1*	*1*	*(7)*	*(7)*	*(3)*	*(7)*	—	—	—	*1*

Table 23. Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria (Million Euros. 12-31-2022)

		Gross carrying amount							
					Residual maturity of moratoria				
	Number of obligors		Of which: legislative moratoria	Of which: expired	<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances for which moratorium was offered	**1,869,737**	**21,243**							
Loans and advances subject to moratorium (granted)	**1,791,756**	**18,103**	**15,592**	**18,103**	**—**	**—**	**—**	**—**	**—**
of which: Households		12,974	10,476	12,974	—	—	—	—	—
of which: Collateralised by residential immovable property		9,542	7,315	9,542	—	—	—	—	—
of which: Non-financial corporations		5,039	5,027	5,039	—	—	—	—	—
of which: Small and Medium-sized Corporates		2,725	2,724	2,725	—	—	—	—	—
of which: Collateralised by commercial immovable property		1,378	1,365	1,378	—	—	—	—	—

Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria (Million Euros. 12-31-2021)

		Gross carrying amount							
					Residual maturity of moratoria				
	Number of obligors		Of which: legislative moratoria	Of which: expired	<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances for which moratorium was offered	**2,230,390**	**24,392**							
Loans and advances subject to moratorium (granted)	**2,188,720**	**21,931**	**19,116**	**21,743**	**152**	**2**	**—**	**33**	**1**
of which: Households		15,011	12,213	14,904	105	—	—	2	—
of which: Collateralised by residential immovable property		10,291	7,848	10,195	94	—	—	2	—
of which: Non-financial corporations		6,798	6,781	6,716	47	1	—	31	1
of which: Small and Medium-sized Corporates		3,994	3,987	3,950	11	—	—	31	1
of which: Collateralised by commercial immovable property		1,573	1,556	1,523	18	—	—	31	—

Table 24. Information on new loans and advances subject to public guarantee schemes introduced in response to the COVID-19 crisis (Million Euros. 12-31-2022)

	Gross carrying amount		Maximum amount of collateral that can be considered	Gross carrying amount
		of which: forborne	Public guarantees received	Inflows to non-performing exposures
Newly originated loans and advances subject to public guarantee schemes	**13,955**	**588**	**10,851**	**349**
of which: Households	1,302			30
of which: Collateralised by residential immovable property	5			—
of which: Non-financial corporations	12,636	573	9,806	319
of which: Small and medium-sized Corporates	9,672			282
of which: Collateralised by commercial immovable property	17			2

Information on new loans and advances subject to public guarantee schemes introduced in response to the COVID-19 crisis (Million Euros. 12-31-2021)

	Gross carrying amount		Maximum amount of collateral that can be considered	Gross carrying amount
		of which: forborne	Public guarantees received	Inflows to non-performing exposures
Newly originated loans and advances subject to public guarantee schemes	**16,093**	**471**	**12,560**	**275**
of which: Households	1,376			20
of which: Collateralised by residential immovable property	6			—
of which: Non-financial corporations	14,700	464	11,454	254
of which: Small and medium-sized Corporates	10,911			211
of which: Collateralised by commercial immovable property	8			1

As of December 31, 2022, there are no moratoriums in accordance with EBA requirements that are active on the balance sheet, nor are extensions granted on them.

4.2.4. Information on the standardised approach

4.2.4.1. Identification of external rating agencies

The external credit assessment institutions (ECAIs) appointed by the Group to determine the risk weights applicable to its exposure are as follows: Standard & Poors', Moodys, Fitch.

The ratings of ECAI are used for exposures to wholesale portfolios, basically those involving "Sovereigns and central banks" in developed countries, and "Financial Institutions".

In cases where a counterparty has ratings from different ECAIs, the Group follows the procedure laid down in Article 138 of the Solvency Regulations, which specifies the order of priority to be used in the assignment of ratings.

When two different credit ratings made by designated ECAIs are available for a rated exposure, the higher risk weight will be applied. However, when there are more than two credit ratings for the same rated exposure, use is to be made of the two credit ratings that provide the lowest risk weights. If the two lowest risk weights coincide, then that weight will be applied; if they do not coincide, the higher of the two will be applied.

The correspondence between the alphanumeric scale of each agency used and the risk categories used by the Group are defined in the Final Draft Implementing Technical Standards on the mapping of ECAIs credit assessment under Article 136(1) and (3) of Regulation (EU) No. 575/2013; complying with the provisions of Article 136 of the CRR.

4.2.4.2. Assignment of the credit ratings to public share issues

The number of cases and the amount of these assignments are not relevant for the Group in terms of credit admission and issuer risk management.

4.2.4.3. Exposure values before and after the application of credit risk mitigation techniques

The original exposure net of value adjustments and provisions, exposure after risk mitigation techniques, and

RWA density for each exposure category, according to the standardised approach, are shown below, excluding securitisation and counterparty credit risk exposure:

Table 25. EU CR4 - Standardised approach - credit risk exposure and credit risk mitigation effects (Million Euros. 12-31-2022)

	Exposures before CCF and CRM(1)		Exposures post-CCF and CRM(2)		RWA(3) and RWA Density	
Exposure Class	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWA**	**RWA Density**
Central governments or central banks	150,118	963	180,598	2,473	30,891	17 %
Regional governments or local authorities	6,843	278	2,019	124	1,333	62 %
Public sector entities	805	493	779	237	964	95 %
Multilateral development banks	185	—	185	—	6	3 %
International Organisations	466	—	466	—	—	—
Institutions	10,218	17,250	10,251	1,383	4,303	37 %
Corporates	41,486	14,706	38,614	7,365	43,187	94 %
Retail	56,115	27,410	48,393	3,791	36,333	70 %
Secured by mortgages on immovable property	27,306	353	27,163	190	9,871	36 %
Exposures in default	2,795	361	2,456	138	2,685	104 %
Exposures associated with particularly high risk	1,940	396	1,733	140	2,809	150 %
Covered bonds	—	—	—	—	—	—
Institutions and corporates with a short term credit assessment	—	—	—	—	—	39 %
Collective Investment Undertakings	1	1	1	1	1	100 %
Equity	—	—	—	—	—	—
Other Items	19,537	20	19,869	31	11,229	56 %
Total	**317,816**	**62,232**	**332,527**	**15,872**	**143,612**	**41%**

(1) Net OE: original exposure net of value adjustments and provisions.

(2) EAD: original exposure net of value adjustments and provisions after CRM and CCF.

(3) RWAs: EAD after risk-weighting.

EU CR4 - Standardised approach - credit risk exposure and credit risk mitigation effects (Million Euros. 12-31-2021)

	Exposures before CCF and CRM(1)		Exposures post-CCF and CRM(2)		RWA(3) and RWA Density	
Exposure Class	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWA**	**RWA Density**
Central governments or central banks	126,752	979	157,250	2,925	30,094	19 %
Regional governments or local authorities	5,255	1,179	1,304	675	1,188	60 %
Public sector entities	615	769	610	262	846	97 %
Multilateral development banks	104	—	104	—	6	6 %
International Organisations	—	—	—	—	—	—
Institutions	9,640	17,439	9,751	1,674	4,863	43 %
Corporates	36,166	11,382	33,745	6,020	37,525	94 %
Retail	45,470	18,828	38,476	2,404	28,508	70 %
Secured by mortgages on immovable property	24,062	269	23,893	142	8,637	36 %
Exposures in default	3,190	267	3,040	127	3,483	110 %
Exposures associated with particularly high risk	2,366	484	2,238	164	3,602	150 %
Covered bonds	—	—	—	—	—	—
Institutions and corporates with a short term credit assessment	—	—	—	—	—	93 %
Collective Investment Undertakings	—	1	—	1	1	100 %
Equity	—	—	—	—	—	—
Other Items	18,457	—	18,726	69	10,987	58 %
Total	**272,077**	**51,598**	**289,137**	**14,461**	**129,741**	**43%**

(1) Net OE: original exposure net of value adjustments and provisions.

(2) EAD: original exposure net of value adjustments and provisions after CRM and CCF.

(3) RWAs: EAD after risk-weighting.

The increase in exposure observed during the period is mainly explained by the increase in activity in all the geographies where the Group operates and the increase in sovereign exposures, due to the increase in balances with central banks as well as in the fixed-income portfolio, although with little effect in terms of RWA because most of the growth is in exposure to European sovereigns and other geographies where supervisory and regulatory equivalence applies. In terms of the density of the different exposure categories, no significant changes were observed.

In addition, the following tables show the exposure net of provisions, before and after the application of credit risk mitigation techniques by risk weights and exposure categories under the standardised approach, excluding securitisation positions and counterparty credit risk exposure.

Exposure net of provisions and after applying CCF and CRM related to counterparty credit risk are shown in table EU CCR3 of Section 4.2.6.2.1 of this report.

Table 26. EU CR5 - Standardised approach: exposure values after application of credit risk mitigation techniques (Million Euros. 12-31-2022)

	Risk Weight															Total credit exposures amount (post-CCF and post-CRM)	Of which: unrated [1]
Exposure Class	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Others**		
Central Government or central banks	154,318	—	—	—	275	—	6,596	—	—	17,542	853	3,486	—	—	—	183,071	56,214
Regional government or local authorities	45	—	—	—	947	—	16	—	—	1,136	—	—	—	—	—	2,143	190
Public sector entities	24	—	—	—	3	—	51	—	—	938	—	—	—	—	—	1,016	913
Multilateral development banks	174	—	—	—	—	—	11	—	—	—	—	—	—	—	—	185	81
International Organisations	466	—	—	—	—	—	—	—	—	—	—	—	—	—	—	466	466
Institutions	—	198	—	—	8,042	—	1,513	—	—	1,774	107	—	—	—	—	11,633	6,658
Corporates	—	—	—	—	721	—	1,270	—	—	42,244	1,743	—	—	—	—	45,978	37,976
Retail	—	—	—	—	—	—	—	—	52,184	—	—	—	—	—	—	52,184	52,184
Secured by mortgages on immovable property	—	—	—	—	—	22,649	4,579	—	2	122	—	—	—	—	—	27,353	27,353
Exposures in default	—	—	—	—	—	—	—	—	—	2,411	182	—	—	—	—	2,594	2,594
Exposures associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	1,873	—	—	—	—	1,873	1,873
Covered bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Institutions and corporates with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Collective investment undertakings	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
Equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other items	8,538	—	—	—	167	—	—	—	—	11,195	—	—	—	—	—	19,900	19,900
Total	**163,566**	**198**	**—**	**—**	**10,154**	**22,649**	**14,037**	**—**	**52,186**	**77,365**	**4,758**	**3,486**	**—**	**—**	**—**	**348,399**	**179,495**

(1) Of which: Unrated refers to exposure for which no credit rating from designated ECAIs is available.

EU CR5 - Standardised approach: exposure values after application of credit risk mitigation techniques (Million Euros. 12-31-2021)

	Risk Weight															Total credit exposures amount (post-CCF and post-CRM)	Of which: unrated [(1)]
Exposure Class	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Others**		
Central Government or central banks	131,024	—	—	—	350	—	7,721	—	—	17,152	808	3,120	—	—	—	160,175	56,724
Regional government or local authorities	58	—	—	—	806	—	177	—	—	938	—	—	—	—	—	1,979	244
Public sector entities	—	—	—	—	28	—	5	—	—	838	—	—	—	—	—	871	871
Multilateral development banks	93	—	—	—	—	—	12	—	—	—	—	—	—	—	—	104	—
International Organisations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	—	204	—	—	6,876	—	1,806	—	—	2,456	83	—	—	—	—	11,425	3,566
Corporates	—	—	—	—	347	—	974	—	—	37,430	1,014	—	—	—	—	39,765	34,150
Retail	—	—	—	—	—	—	—	—	40,880	—	—	—	—	—	—	40,880	40,880
Secured by mortgages on immovable property	—	—	—	—	—	20,136	3,727	—	2	171	—	—	—	—	—	24,035	24,035
Exposures in default	—	—	—	—	—	—	—	—	—	2,534	633	—	—	—	—	3,167	3,167
Exposures associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	2,401	—	—	—	—	2,401	2,401
Covered bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Institutions and corporates with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Collective investment undertakings	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
Equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other items	7,773	—	—	—	42	—	—	—	—	10,979	—	—	—	—	—	18,795	18,795
Total	**138,948**	**204**	**—**	**—**	**8,450**	**20,136**	**14,421**	**—**	**40,882**	**72,500**	**4,939**	**3,120**	**—**	**—**	**—**	**303,599**	**184,834**

(1) Of which: Unrated refers to exposure for which no credit rating from designated ECAIs is available.

The largest changes in exposures by risk weights during the period occurred, on the one hand, in sovereign exposures subject to a 0% risk weight due to the increase in reserves and in the fixed-income portfolio and, on the other hand, in exposures to retail and corporate portfolios subject to a 75% and 100% risk weight, respectively, as a result of the boost in the growth of activity with this type of client.

The following table shows the flow statements of credit and counterparty credit risk RWA under standardised approach during the fourth quarter of 2022:

Table 27. RWA flow statements of credit risk exposures under the standardised approach (Million Euros)

	Credit Risk		Counterparty Credit Risk		Total	
	RWA amounts	Capital Requirements	RWA amounts	Capital Requirements	RWA amounts	Capital requirements
RWAs as of September 30, 2022	**150,696**	**12,056**	**3,880**	**310**	**154,576**	**12,366**
Asset size	3,029	242	(31)	(3)	2,997	240
Asset quality	(122)	(10)	(12)	(1)	(134)	(11)
Model updates	—	—	—	—	—	—
Methodology and policy	—	—	—	—	—	—
Acquisitions and disposals	—	—	—	—	—	—
Foreign exchange movements	(9,991)	(799)	(208)	(17)	(10,199)	(816)
Other	—	—	—	—	—	—
RWAs as of December 31, 2022	**143,612**	**11,489**	**3,628**	**290**	**147,240**	**11,779**

During the fourth quarter of 2022, there was a significant reduction in risk-weighted assets under the standardised approach, mainly due to the appreciation of the euro against the currencies with which the Group operates, with particular relevance for U.S. dollar exposures.

Credit risk RWAs, isolating this effect, grew by €3,029 million, in line with the evolution of the lending business in the geographies that measure RWAs under the standard method and, secondarily, due to a greater increase in the consumption of DTAs.

The APRs for counterparty risk fell slightly over the quarter, with the exchange-rate effect being the main reason.

The full annual series of RWA flow of credit risk under the standardised approach is available in the editable file “Pillar III 2022 – Tables & Annexes”.

4.2.5. Information on the IRB approach

4.2.5.1. General information

4.2.5.1.1. Authorisation by the supervisor to use the IRB approach

The following are the models authorised by the supervisor for use in the calculation of regulatory capital requirements.

Table 28. Models authorised by the supervisor for the purpose of their use in the calculation of capital requirements (12-31-2022)

Institution Portfolio	Portfolio	Number of models	Model description
BBVA S.A.	Financial institutions	4	1 Rating, 1 PD model, 1 LGD model, 1 CCF model
	Public institutions	5	1 Rating, 1 PD model, 2 LGD models, 1 CCF model
	Specialised finance	2	1 Slotting criteria, 1 CCF model
	Developers	4	1 Rating, 1 PD model, 1 LGD model, 1 CCF model
	Small Corporates	5	1 Rating, 1 PD model, 2 LGD models, 1 CCF model
	Medium-sized Corporates	5	1 Rating, 1 PD model, 2 LGD models, 1 CCF model
	Large Corporates	5	1 Rating, 1 PD model, 2 LGD models, 1 CCF model
	Mortgages	6	2 Scorings, 2 PD models, 1 LGD model, 1 CCF model
	Consumer finance	5	2 Scorings, 2 PD models, 1 LGD model
	Credit cards	10	2 Scorings, 2 PD models, 3 LGD models, 3 CCF models
	Automobiles	4	2 Scorings, 1 PD model, 1 LGD model
BBVA Bancomer	Retail Revolving (Credit Cards)	11	4 Scorings, 5 PD models, 1 LGD model, 1 CCF model
	Large Corporates	5	1 Rating, 1 PD model, 2 LGD models, 1 CCF model
	Medium-sized Corporates	5	1 Rating, 1 PD model, 2 LGD models, 1 CCF model
BBVA Group	Equity	1	1 capital model

The following table shows the distribution of EAD of credit and counterparty risk by method for each category of exposure as of December 31, 2022 and as of December 31, 2021, in addition to the percentage subject to rollout[3] (counterparty credit risk included and securitisations are excluded):

Table 29. EU CR6-A — Scope of the use of IRB and SA approaches (Million euros. 12-31-2022)

	Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach	Percentage of total exposure value subject to the permanent partial use of the SA (%)	Percentage of total exposure value subject to IRB Approach (%)	Percentage of total exposure value subject to a roll-out plan (%)
Central governments or central banks	11,276	165,501	0.66	0.07	0.27
Of which Regional governments or local authorities		—	—	—	—
Of which Public sector entities		—	—	—	—
Institutions	177,693	97,889	8.33 %	75.89 %	15.79 %
Corporates	142,572	218,092	3.95 %	74.22 %	21.83 %
Of which Corporates - Specialised lending, excluding slotting approach		—	—	—	—
Of which Corporates - Specialised lending under slotting approach		6,475	—	100.00 %	—
Retail	100,150	177,698	7.89 %	53.70 %	38.41 %
of which Retail – Secured by real estate SMEs		2,327	21.57 %	39.99 %	38.44 %
of which Retail – Secured by real estate non-SMEs		91,510	5.94 %	74.31 %	19.75 %
of which Retail – Qualifying revolving		23,058	2.19 %	52.13 %	45.68 %
of which Retail – Other SMEs		27,434	11.47 %	9.54 %	78.99 %
of which Retail – Other non-SMEs		33,369	13.30 %	35.52 %	51.19 %
Equity	5,692	5,692	0.00	100.00 %	—
Other non-credit obligation assets	—	13,335	8.03 %	—	91.97 %
Total	**437,384**	**678,207**	**21.25 %**	**50.29 %**	**28.46 %**

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[3] Sequential deployment process of IRB models in each exposure category.

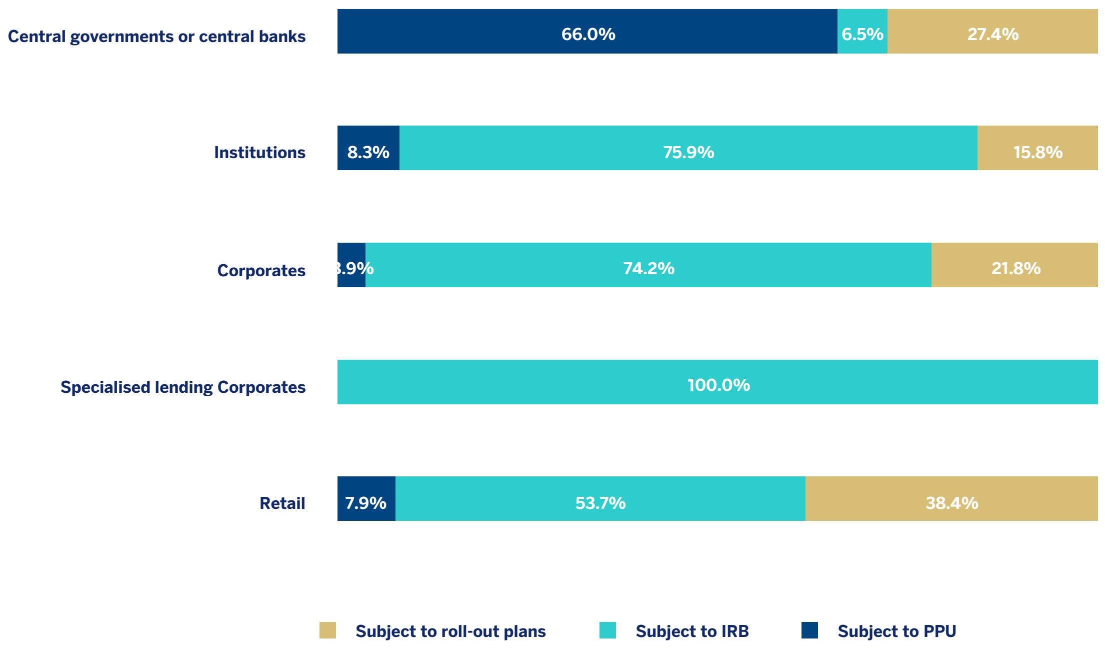
Table 29. EU CR6-A — Scope of the use of IRB and SA approaches (Million euros. 12-31-2021)

	Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach	Percentage of total exposure value subject to the permanent partial use of the SA (%)	Percentage of total exposure value subject to IRB Approach (%)	Percentage of total exposure value subject to a roll-out plan (%)
Central governments or central banks	16,117	145,807	0.61	0.07	0.31
Of which Regional governments or local authorities		—	—	—	—
Of which Public sector entities		—	—	—	—
Institutions	120,899	99,448	7.23 %	76.63 %	16.13 %
Corporates	147,326	192,649	7.77 %	71.84 %	20.39 %
Of which Corporates - Specialised lending, excluding slotting approach		—	—	—	—
Of which Corporates - Specialised lending under slotting approach		6,333	—	100.00 %	—
Retail	101,191	162,671	12.80 %	59.07 %	28.13 %
of which Retail – Secured by real estate SMEs		2,538	22.46 %	42.91 %	34.63 %
of which Retail – Secured by real estate non-SMEs		91,855	5.64 %	76.66 %	17.71 %
of which Retail – Qualifying revolving		17,831	11.48 %	54.44 %	34.08 %
of which Retail – Other SMEs		22,556	17.42 %	14.31 %	68.27 %
of which Retail – Other non-SMEs		27,891	32.64 %	41.77 %	25.59 %
Equity	5,809	5,809	0.00	100.00 %	—
Other non-credit obligation assets	—	13,693	6.57 %	—	93.43 %
Total	**391,342**	**620,077**	**21.46 %**	**52.77 %**	**25.77 %**

The above table is shown according to the EBA ITS where the first column includes the exposure value (EAD) of the portfolios subject to the IRB method, while the second column includes the value of the exposures subject to the standard and IRB approaches. The second column includes the value of the exposure defined by article 429(4) of the CRR that corresponds to the exposure to the leverage ratio (see section 5.1. for more information on the definition of the exposure to the leverage ratio).

The following chart shows the exposures distributed by permanent partial use of the standard method, subject to roll-out plans and those that are already subject to the IRB method:

Chart 9. Distribution of Exposure between the use of PPU, IRB and rollout plans



The main types of rating models used in the IRB portfolios are ratings for wholesale portfolios and proactive and reactive scorings in the case of retail portfolios.

The rating models give contracts/customers a score that orders customers according to their credit quality. This score is determined, among others, by the characteristics of the transactions, economic and financial conditions of the customer, information on payment behaviour, credit bureau.

The approval of the models by the supervisor includes both own estimations of the probability of default (PD), loss given default (LGD) and the internal estimation of credit conversion factors (CCFs).

The Group continues with the development of a new rollout plan that increases the coverage of IRB models (see table EU CR6-A for more information).

4.2.5.1.2. Structure of internal rating systems and relationship between internal and external ratings

The Group has rating tools for each exposure category listed in the Basel Agreement.

The retail portfolio has scoring tools for determining the credit quality of transactions on the basis of information on the transaction itself and on the customer. The scoring models are algorithms calculated using statistical methods that score each transaction. This score reflects the transaction's level of risk and is in direct relation to its probability of default (PD).

These decision models are the basic tool to decide who should receive a loan and the amount to be granted, thereby contributing to both the arrangement and management of retail-type loans.

For the wholesale portfolio, the Group has rating tools that, unlike scorings, do not assess transactions but rather customers. The Group has different tools for rating the various customer segments: small companies, corporates, government and the public sector, etc. In those wholesale portfolios where the number of defaults is very low (sovereign risk, corporates, financial institutions) the internal information is supplemented by the benchmarks of external rating agencies.

The PD estimates made by the Group are transferred to the Master Scale, enabling a comparison to be made with the scales used by external agencies.

Table 30. Master Scale of BBVA's rating (12-31-2022)

External rating	Internal rating	Probability of default (basic points)		
Standard & Poor's List	Reduced List (22 groups)	Average	Minimum from >=	Maximum
AAA	AAA	1	0	2
AA+	AA+	2	2	3
AA	AA	3	3	4
AA-	AA-	4	4	5
A+	A+	5	5	6
A	A	8	6	9
A-	A-	10	9	11
BBB+	BBB+	14	11	17
BBB	BBB	20	17	24
BBB-	BBB-	31	24	39
BB+	BB+	51	39	67
BB	BB	88	67	116
BB-	BB-	150	116	194
B+	B+	255	194	335
B	B	441	335	581
B-	B-	785	581	1,061
CCC+	CCC+	1,191	1,061	1,336
CCC	CCC	1,500	1,336	1,684
CCC-	CCC-	1,890	1,684	2,121
CC+	CC+	2,381	2,121	2,673
CC	CC	3,000	2,673	3,367
CC-	CC-	3,780	3,367	4,243

4.2.5.1.3. Use of internal estimates for purposes other than the calculation of regulatory capital requirements

The Group’s internal estimates are a critical component of management based on value creation, giving rise to criteria for assessing the risk-return trade-off.

These measures have a broad range of uses, from the adoption of strategic business decisions through to the individual admission of transactions.

Specifically, internal estimates are used in everyday business in support of credit risk management through their inclusion in admission and monitoring processes, as well as in the pricing of transactions.

The management use of performance metrics that consider expected loss, economic capital and risk-adjusted return enables the monitoring of portfolios and the assessment of non-performing positions, among others.

4.2.5.1.4. Process for managing and recognizing the effects of credit risk mitigation

Mitigation is an iterative process whose purpose is to recognize the benefits of the existence of collateral and guarantees, ordering them from the highest to the lowest credit quality.

The Group uses risk mitigation techniques for exposure pertaining to the wholesale portfolio by replacing the debtor’s PD with that of the guarantor, in cases in which the latter is eligible and its PD is lower than the debtor’s.

In retail admission processes the guarantor is included in the scoring itself.

Collateral in IRB models is recognised through the LGD and must meet eligibility criteria based on maturity and minimum exposure coverage, and making the necessary adjustments depending on the type of existing collateral, financial or real.

4.2.5.1.5. Control mechanisms for internal rating models

The Group has a management framework for rating models that covers all the phases of the model life-cycle: from the moment where a specific need that triggers the development or change of a model is identified, through its validation, regular monitoring and use within the credit risk processes.

Model Development

The development of a model is an activity that requires the involvement of different stakeholders, experience and multidisciplinary technical knowledge. GRM Analytics is the area responsible for the development of BBVA Group's risk models. As a global function, it must ensure that the models are developed according to the best market practices, that the model development process is homogenous within the Group and an efficient management of existing resources.

Every model development must be properly documented. A correct and updated documentation allows to reduce the dependencies of key people and facilitates control, review and training tasks, mitigating the model risk.

An outsourcing of specific activities in the development of risk models is possible, but in no case does this imply a transfer of responsibility outside the Group.

The Group has internal policies where all concepts are defined.

Model Approval

The Group's Chief Risk Officer (CRO) is the head of the risk function in the executive line and, in order to better perform his duties, he is supported by a specific committee structure.

The Regulation for Changes in Risk Models defines the internal governance process that must be followed in order to start using the BBVA Group's risk models, as defined in the Model Risk Management Policy, indicating the committees that must authorize the new models and their changes (methodological changes, changes in scope and usage), as well as the cessation of its use, depending on the relevance of the model for BBVA Group and the materiality of the changes introduced in the model.

The Global Risk Management Committee (GRMC) is constituted as a forum for advising and supporting the Group Risk Director for the exercise of the functions and decision-making that the latter is responsible for adopting. This includes with regards to model risk, among other functions, approving both the material modifications or measures of the Internal Models that are used in the Calculations of Regulatory Capital (IRB; IMA; Longevity) as well as of new models that will be used to this end.

Moreover, the Risk Models Management Committee (RMMC) reports to the GRMC, providing it with adequate technical support in decisions associated with model risk management. One of its functions is the review, prior to its presentation to the GRMC, of the requests for new Internal models that will be for Regulatory Capital calculations or the changes to be introduced in the existing ones, acting in a delegated manner to approve those changes of less relevance or immaterial.

Given its technical component, the presidency is exercised by the Head of GRM Analytics. In addition to including members of GRM's Senior Management and the responsible for GRM Internal Control, the committee is also complemented by members of the GRM Analytics and Internal Validation COEs.

Model Monitoring

A comprehensive monitoring framework allows to identify unexpected behaviour incorrect model usages and even to anticipate when changes in the risk profile of portfolios or products require corrective actions to be taken. The risk rating models are monitored with a frequency appropriate to the nature of the model, the availability of new data, modelling techniques and the importance of their use in management.The monitoring is analysed with a double perspective: performance and use.

Performance monitoring aims to detect deficiencies in the behaviour of risk rating models, anticipating their possible deterioration over time. It is a mechanism to determine if the models are working correctly, helping to verify that the components of the model work as expected. The performance monitoring framework makes possible to identify weaknesses and establish the necessary action plans to ensure its proper functioning. This analytical framework, a fundamental component of risk model planning, establishes the minimum criteria that must be taken into account, as well as the metrics and thresholds that allow warning of unwanted behaviour.

Usage monitoring aims to verify that the model is effectively used in the risk management process, for the uses defined, and in an appropriate way. This control mechanism continuously allows the detection of deviations from the intended use of the models, as well as the establishment of action plans for their correction.

In addition, the Group has an area independent from the developers and users of the rating models, as well as independent of the departments responsible for model monitoring, whose main function is to backtest the models, in order to ensure their accuracy, robustness and stability (see next section “Validation Process”)

On the other hand, a series of reports are periodically presented to the governing bodies for their review, which purpose of is to monitor the main risk indicators and management metrics, the presentation of follow-up reports and plans to redirect exceeded indicators with respect to the action frameworks approved annually.

4.2.5.1.6. Description of the internal rating process

There follows a description of the internal rating process by type of customer:

- ***Central banks and central governments:*** For this segment, the assignment of ratings is made by country risk unit, which periodically analyse this type of customer, rating them according to the parameters included in the corresponding rating model. There are 3 different methodologies currently in use for allocating country ratings: (i) ratings from external agencies, used for developed countries, emerging countries with elevated incomes and emerging countries where the Group has little risk; (ii) internal rating based on a proprietary tool used for emerging countries where the Group has an appreciable risk; and lastly (iii) the country risk scores published by the Belgian export credit agency (which manages the quantitative model used by the OECD to assign its country risk scores) for countries of marginal importance for the

Group that have no external ratings. Sovereign ratings are generated in local and foreign currency for all countries, as well as a transfer rating, which evaluates the risk of inconvertibility/transfer restrictions.

For emerging countries rated with the internal tool, the local currency rating is obtained by adjusting the foreign currency rating provided by the internal tool with authorization from the Risk Committee allocated for such purpose.

- ***Financial institutions***: The relevant risk unit periodically rates these types of clients, and constantly monitors the evolution of these clients in national and international markets. External ratings are a key factor in the ratings assignment for financial institutions.
- ***Public institutions***: the rating is generally obtained by the risk units responsible for their sanction, on an annual basis, at the same time as the review of clients' risks or the publication of their accounts.
- ***Large Companies:*** Includes the rating of exposure with corporate business groups. The result is affected both by indicators of business risk (evaluation of the competitive environment, business positioning, regulation, etc.) and financial risk indicators (size of the group by sales, cash generation, levels of debt, financial flexibility, etc.).

  In accordance with the characteristics of the large companies, the rating model has a global nature with specific algorithms according to the sector of activity and geographical adaptations. The rating of these customers is generally calculated within the framework of the annual risk review process, or the admission of new operations.

  The responsibility for the assessment lies with the units proposing the risk, while those responsible of approvals, validate it when the decision is taken.
- ***Medium-sized companies:*** This segment also takes into account quantitative factors derived from economic and financial information, and qualitative factors that are related to the age of the company, the sector, management quality, etc. and alert factors derived from risk monitoring.

  As in the Corporate segment, the rating tends to run parallel to the admission process, so the responsibility for rating lies with the unit proposing the risk, while the decision-making level is in charge of validating it.
- ***Small-sized companies:*** As in the case of medium-sized companies, this segment also takes into account quantitative factors derived from economic and financial information, and qualitative factors that are related to the age of the company, the sector, management quality, etc. and alert factors derived from risk monitoring. Similarly, the rating tends to run parallel with the admission process, so the responsibility for rating is with the unit proposing the risk, while the decision-making level is in charge of validating it.
- ***Specialised Lending:*** To classify this segment, the Group has chosen to use the approach of slotting criteria, as included in the Basel Accord of June 2004 and in the solvency regulations (CRR Article 153.5).
- ***Developers***: The rating of real estate developers covers the rating of both customers who are developers and the Property Projects unit. Its use makes it easier to monitor and rate projects during their execution phase, as well as enriching the admission processes.
- ***BBVA Mexico Corporates:*** This segment also takes into account quantitative factors derived from economic and financial information and bureau information, as well as qualitative factors related to the age of the company, the sector, the quality of its management, etc. The rating tends to run parallel to the admission process, so that responsibility for the rating is with the unit originating the risk, while the decision-making body validates it.

In general in the wholesale area, the rating of customers is not limited to admission, as the ratings are updated according to new information available at any time (economic and financial data, changes in the company, external factors, etc.).

- ***Retailers:*** Retail exposure is rated by models developed internally by the Entity that allow the credit risk of portfolios to be assessed. The model score can be assigned at the customer or product level and transformed into a probability of default, allowing for management based on risk groups. Depending on the information available, ratings can be reactive or proactive. The reactive ratings are generated from the customer's request to take out a product, while the proactive ratings are periodically calculated on the basis of the information available, internal and external, on the customer's payment behaviour. Proactive models allow offers of pre-approved and/or pre-offered products, which are instrumentalised in mass marketing campaigns. Ratings are integrated into admission and monitoring processes for retail portfolios, ensuring adequate credit risk management.

  The rating process is as follows for each specific category of retail exposure:

  a. *Mortgages, Consumer Finance and Retail Cards - Spain*:

  - Reactive processes: The manager collects data on the customer (personal, financial, banking relationship information) and on the transaction (LTV, amount, maturity, destination etc.) and calculates the rating of the transaction with the scoring. The decision on whether it is approved is made based on the results of applying the model and risk policies
  - Proactive processes: Each month all the customers who have asset positions in credit cards, consumer finance or mortgages and first and second in liability seniority, are rated according to information on their behavior.

b. *Consumer Finance Autos Spain:* The financing request may come through the call center or be directly recorded in the web application by our authorised dealers. The necessary information on the customer (personal, financial information, authorisation to consult the external bureau of credit) and on the transaction (maturity, amount, etc.) is recorded to rate the transaction with the scoring. Once the validity of the information provided is verified, the decision of whether to approve it is made based on the results of applying the model and risk policies.

c. *Retail Revolving- Cards BBVA Mexico*: The manager or specialist party gathers the necessary information on the customer (personal, financial information and authorisation to consult the external bureau of credit) and on the transaction (limit requested) to rate the transaction with the scoring. There are additional processes for validating and checking this information through the back office or operational support areas. The decision on whether it is approved is made based on the results of applying the model and risk policies.

  - Behavioural: Every month all the active cards are rated according to their transactional behaviour and payment status.
  - Proactive: Each month all the customers who have asset positions on credit cards, consumer finance or mortgages and liabilities positions are rated, based on information on internal behaviour and flows.

d. *SMEs Spain (legal persons):* Management is based on the allocation of limits/ceilings at the customer level, based on the results of a proactive monthly update rating.

- ***Equity:*** For its portfolio position registered as equity, the Group is applying the rating obtained for customers as a result of their rating in the lending process.

4.2.5.1.7. Definitions, methods and data for estimating and validating risk parameters

The estimation of the parameters is based on the uniform definition of default established at Group level. Specifically, for a contract or customer to be considered in a situation of default, the provisions of current regulations must be met.

Specifically, there are two approaches in the Group for considering default and estimating parameters:

- The facility level approach is applied within the sphere of retail risk. Each customer transaction is handled as an independent unit in terms of credit risk. Therefore, noncompliance with credit obligations to the bank is handled at the transaction level, regardless of the customer's behaviour with respect to other obligations.
- The obligor level approach is applied to the remainder portfolios. The significant unit for defining default is the customer's sum of contracts, which enter a situation of default en masse when the customer defaults.

Furthermore, to avoid including non material defaults in the estimates, non-performing volumes have to pass through a materiality filter that depends on the type of customer and transaction.

Estimating parameters

In the case of Spain and Mexico, the Group has an internal information system denominated CORE – Risk Adjusted Return that reflects exposure to credit risk in the Group's different portfolios included in advanced internal models.

This information system guarantees the availability of historical data recorded by the Group, which are used to estimate the parameters of Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion Factors (CCF). These are then used to calculate the regulatory capital using the advanced approach, economic capital and expected loss by credit risk.

Other sources of information for the Bank may be used in addition, depending on any new needs detected in the estimation process. Internal estimates of the PD, LGD and CCF parameters are made for all the Group's portfolios.

In the case of low default portfolios (LDP), in which the number of defaults tends to be insufficient for obtaining empirical estimates, use is made of data from external agencies that are merged with the internal information available and expert criteria.

The following shows the estimation methodologies used for the PD, LGD and CCF risk parameters, for the purpose of calculating regulatory capital requirements.

- **Probability of default (PD)**

The methodology used for estimating the PD in cases that have a sufficiently large mass of internal data is based on the creation of risk groups. The groups proposed with a view to calibration are defined by grouping contracts together, seeking to achieve intra-group homogeneity in terms of credit quality and differentiation with all the other risk groups. The largest possible number of groups is defined in order to allow a suitable discrimination of risk.

The fundamental metric used for making these groupings is the score, being supplemented by other metrics relevant to PD that are proven to be sufficiently discriminating depending on the portfolio.

Once the risk groups have been defined, the average empirical PD recorded for each one is obtained and adjusted to the cycle. The adjustment to the cycle provides stable estimates over the course of the economic cycle, referred to as PD-TTC (through the cycle). This calculation considers the portfolio’s track record and provides long-term levels of PD.

In low default portfolios (LDPs) the empirical PDs observed by external rating agencies are used to obtain the PD of internal risk groups.

Finally, in obligor level portfolios there is a Master Scale, which is simply a standard and uniform rule for credit levels that makes it possible to make comparisons of credit quality in the Group’s different portfolios.

- **Loss given default (LGD)**

As a general rule, the method used to estimate loss given default (LGD) in portfolios with a sufficient number of defaults is Workout LGD. Here, the LGD of a contract is obtained as a quotient of the sum of all the financial flows recorded during the recovery process that takes place when a transaction defaults, and the transaction’s exposure at the time of default.

This estimate is made by considering all the historical data recorded in internal systems. When making the estimates, there are transactions that have already defaulted but for which the recovery process is still ongoing. The loss given default recorded at the time of the estimate is therefore higher than it will ultimately be. The necessary adjustments are made in these cases so as not to distort the estimate.

These estimates are made by defining uniform risk groups in terms of the nature of the operations that determine the LGD. They are made in such a way that there are enough groups for each one to be distinguishable and receive a different estimate.

In line with the guidelines set out by the regulations, the estimates are made by distinguishing between wholesale and retail type exposure.

There is insufficient historical experience to make a robust estimate in low default portfolios (LDP) using the Workout LGD method, so external sources of information are used, combined with internal data to provide the portfolio with a representative rate of loss given default (LGD).

The loss given default (LGD) rates estimated according to the internal databases the Bank holds are conditioned to the moment of the cycle of the data window used, since loss given default varies over the economic cycle. Hence, the following concepts can be defined: long-run loss given default (LRLGD), the downturn loss given default (DLGD), and loss given default best estimate (LGD BE).

LRLGD is calculated by making an adjustment to capture the difference between the loss given default obtained empirically with the available sample and the average loss given default observed throughout the economic cycle if the observation of the cycle is complete. In addition, the loss given default observed in a period of stress in the economic cycle, the downturn loss given default (DLGD) is determined.

These estimates are made for those portfolios whose loss given default (LGD) is noticeably sensitive to the cycle. The different ways in which the recovery cycles can conclude are determined for each portfolio where this loss given default (LGD) in conditions of stress has not yet been observed, and the level these parameters would have in a downturn situation are estimated.

Finally, LGD BE is determined according to the loss given default (LGD) observed in the BE period, which aims to cover the defaults closest in time to the present, in other words those that have been produced at a time of the economic cycle that is similar to the present and that also correspond to a very similar portfolio to the present one.

However, for defaulted transactions, the LGD at the worst time will be the LGD BE plus a stress, which is measured based on the volatility of LGD.

- **Credit conversion factor (CCF)**

As with the two preceding parameters, exposure at default is another of the necessary inputs for calculating expected loss and regulatory capital. A contract’s exposure usually coincides with its balance. However, this is not applicable in all cases.

For example, for products with explicit limits, such as credit cards or credit facilities, the exposure should incorporate the potential increase in the balance that may be recorded up to the time of default.

In observance of regulatory requirements, exposure is calculated as the drawn balance, which is the real risk at any specific moment, plus a percentage (CCF) of the undrawn balance, which is the part that the customer can still use until the available limit is reached. Therefore, the CCF is defined as the percentage of the undrawn balance that is expected to be used before default occurs.

CCF is estimated by using the cohort[4] approach, analysing how the exposure varies from a pre-established reference date through to the moment of default, obtaining the average performance according to the relevant metrics.

Different approaches are used for retail and wholesale exposure. The facility level approach analyses the evolution of the exposure up to the time of the breach of contract, while the obligor level approach analyses the evolution of the exposure up to the moment of the non-compliance of the client.

Again, in low-default portfolios there is not enough historical experience to be able to make a reliable estimate with the defined LGD methodology. In this case, external sources are also used, which are combined with internal data to obtain a CCF representative of the portfolio.

- **Validation process**

The models used for calculating the parameters, as explained above, are subject to an effective contrast, in accordance with the principle of proportionality, by the Internal Approval team, independent from those that have developed or used said calculation, in order to ensure its accuracy, robustness and stability.

This review process is not restricted as to the time of approval, or the inclusion of changes in the models, but rather is framed within a plan that allows for a periodic evaluation of them, resulting in the issuance of recommendations and mitigating actions for the deficiencies identified.

As such, all models used in regulatory capital calculations using internal models must be subject to an annual review of the calculation, which meet the minimum quantitative and qualitative test content requested by the regulator in Section 4 of the ECB's Guidelines on Internal Models (General Aspects); even when, in accordance with the principle of proportionality, certain aspects or models that are relatively insignificant within the capital calculation may be subject to revision in the context of a broader review cycle.

However, this possibility does not provide an exemption from conducting the various tests defined in the Instructions for Reporting the Validation Results of Internal Models, issued by the ECB in February 2019, and that should—for Internal Models on Capital for Credit Risk—be sent to the supervisor on an annual basis and include:

- Back-testing of the parameters by comparing the model estimates with the levels actually achieved in the annual study period.
- Discrimination Capacity Analysis, it being important to analyse the evolution of the calculated indices over time by comparing them with indices obtained at different points in time (for example, during model construction).
- Representativeness Analysis, both in order to analyse that the model's application perimeter is set to the approved and defined perimeter, and in order to analyse the representativeness of the historical data used in the estimation of the risk parameters applied; with particular emphasis on tracking the record of changes made to the definition of default.
- Override analyses, which modify the final score obtained as a large number of analyses could indicate that the model is lacking certain important information.
- Stability Analysis: in order to assess the stability of the rating system, analyses will be conducted on customer migrations, on the stability of the migration matrix and on concentration in rating grades; these analyses may be supplemented, optionally and based on results, by comparing the Population Stability Index (PSI).
- Evaluation of the Data Used in the calibration by analysing the data extraction, processing and purging processes; analysing the Data Quality Management Framework and the results obtained therefrom.

The various aspects detected by Internal Validation during the review process which are susceptible to be improved will be reflected in the validation report by setting weaknesses (recommendations, suggestions or limitations) whose criticality is expressed on a four-color scale based on the risk assigned to the same.

For each recommendation issued, the validation report will include the details of the person responsible for its resolution, the proposed action plan and the committed resolution date (which will be limited by the maximum terms defined by validation based on the severity granted to the same and the model TIER, these being greater for recommendations of lesser severity and TIER).

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[4] A cohort is a twelve-month window that has a reference date (closing of each month) and contains all delinquent transactions whose default date occurs within the cohort. All operations must have a contract date prior to the reference date.

Once the suggestions, limitations and recommendations have been established, Internal Validation will issue its opinion on the level of risk existing in the revised model, using a four-level scale.

The reports issued by Internal Validation, required as part of the approval process for the implementation of new models or relevant changes to existing ones, will be presented to the committees established for this purpose.

Additionally, at least every six months, the periodic reports that have been issued throughout the period will be sent to the Risk Models Management Committee (RMMC) for information purposes, and those classified as having a high level of Model Risk will be presented.

Annually, the results of the year's Internal Validation work will be presented to the Global Risk Management Committee (GRMC) and to the Risk and Compliance Committee of the BBVA Group Board of Directors (CRyC), with a summary of the conclusions obtained on the models reviewed detailing the main strengths and weaknesses of the most relevant.

In addition, the details of the expired recommendations will be presented to the RMMC on a quarterly basis. The Committee urges its members to take the appropriate measures to execute the necessary plans aiming to solve or mitigate the weaknesses associated with the expired recommendations. Moreover, the information to these recommendations will be submitted to the GRMC on a biannual basis.

4.2.5.2. Exposure values by category and PD range

The following table presents the information on credit risk as of December 31, 2022 (excluding counterparty credit risk, which is set out in detail in Table CCR4 in section 4.2.6.2.2) using the internal ratings-based (IRB) approach, by debtor grade for the different categories of exposure:

Table 31. EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range (Million Euros. 12-31-2022)

PD Scale (1)(6)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF(2)	EAD post CRM and post-CCF	Average PD(3)	Number of obligors	Average LGD(4)	Average Maturity (days)(5)	RWAs	RWA Density	EL	Value adjustments and provisions
Prudential portfolios for AIRB approach	**213,817**	**123,145**	**49.77 %**	**275,019**	**3.18 %**	**14,468,381**	**39.49 %**		**102,547**	**37 %**	**3,378**	**(4,682)**
Central governments or central banks	**11,959**	**415**	**48.19 %**	**12,159**	**0.14 %**	**87**	**24.22 %**	**2**	**1,103**	**9 %**	**6**	**(5)**
0,00 to <0,15	11,765	108	45.79 %	11,814	0.02 %	23	23.76 %	2	734	6 %	1	—
0,00 to <0,10	11,765	108	45.79 %	11,814	0.02 %	19	23.76 %	2	734	6 %	1	—
0,10 to <0,15	—	—	20.00 %	—	0.11 %	4	46.53 %	2	—	20 %	—	—
0,15 to <0,25	54	165	50.00 %	137	0.20 %	9	40.00 %	2	54	40 %	—	—
0,25 to <0,50	—	13	26.24 %	3	0.31 %	3	47.61 %	1	2	45 %	—	—
0,50 to <0,75	—	—	54.22 %	—	0.51 %	1	49.97 %	1	—	64 %	—	—
0,75 to <2,50	—	—	—	—	1.15 %	5	40.00 %	1	—	79 %	—	—
0,75 to <1,75	—	—	—	—	1.15 %	5	40.00 %	1	—	79 %	—	—
1,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <10,00	100	129	50.01 %	164	4.47 %	15	40.00 %	3	233	142 %	3	(4)
2,50 to <5,00	97	128	50.00 %	161	4.41 %	7	40.00 %	3	228	142 %	3	(4)
5,00 to <10,00	2	1	50.69 %	3	7.85 %	8	40.00 %	2	5	163 %	—	—
10,00 to <100,00	40	—	72.84 %	40	15.21 %	29	40.19 %	1	80	200 %	2	—
10,00 to <20,00	40	—	—	40	15.09 %	2	40.26 %	1	79	200 %	2	—
20,00 to <30,00	—	—	—	—	—	—	—	—	—	—	—	—
30,00 to <100,00	—	—	72.84 %	—	37.05 %	27	28.20 %	2	—	164 %	—	—
100,00 (Default)	—	—	62.50 %	—	100.00 %	2	40.00 %	2	—	7 %	—	—
Institutions	**11,486**	**9,698**	**55.34 %**	**16,914**	**0.50 %**	**2,808**	**42.45 %**	**2**	**4,598**	**27 %**	**20**	**(28)**
0,00 to <0,15	8,652	7,800	54.28 %	12,951	0.07 %	1,547	43.90 %	2	2,844	22 %	4	(3)
0,00 to <0,10	6,219	6,197	52.71 %	9,498	0.06 %	280	44.78 %	2	1,796	19 %	2	(1)
0,10 to <0,15	2,434	1,602	60.35 %	3,453	0.11 %	1,267	41.48 %	2	1,048	30 %	2	(3)
0,15 to <0,25	1,598	1,203	64.26 %	2,369	0.18 %	491	43.92 %	3	838	35 %	2	(2)
0,25 to <0,50	454	413	49.00 %	649	0.33 %	266	33.51 %	3	337	52 %	1	(2)
0,50 to <0,75	567	146	58.73 %	652	0.55 %	150	18.86 %	2	205	31 %	1	(2)
0,75 to <2,50	127	47	48.75 %	150	1.19 %	128	42.74 %	2	155	103 %	1	—
0,75 to <1,75	127	47	48.75 %	150	1.19 %	128	42.74 %	2	155	103 %	1	—
1,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <10,00	20	39	58.30 %	43	4.69 %	99	40.76 %	6	67	158 %	1	(1)
2,50 to <5,00	14	34	62.52 %	35	3.98 %	82	43.20 %	3	57	163 %	1	(1)
5,00 to <10,00	6	5	27.48 %	7	8.04 %	17	29.31 %	18	10	133 %	—	—
10,00 to <100,00	41	22	47.76 %	51	24.32 %	67	47.10 %	2	141	275 %	6	(7)
10,00 to <20,00	20	20	46.81 %	30	14.26 %	12	44.31 %	2	70	235 %	2	(1)
20,00 to <30,00	—	—	—	—	29.74 %	1	45.00 %	16	—	300 %	—	—
30,00 to <100,00	21	2	59.51 %	22	38.09 %	54	50.91 %	3	71	329 %	4	(7)
100,00 (Default)	26	27	57.30 %	50	100.00 %	60	16.33 %	3	11	22 %	5	(10)

PD Scale [1][6]	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF[2]	EAD post CRM and post-CCF	Average PD[3]	Number of obligors	Average LGD[4]	Average Maturity (days)[5]	RWAs	RWA Density	EL	Value adjustments and provisions
Corporate - SMEs	**16,240**	**4,942**	**38.96 %**	**18,095**	**8.55 %**	**47,725**	**43.29 %**	**3**	**12,810**	**71 %**	**669**	**(810)**
0,00 to <0,15	905	434	42.71 %	1,088	0.12 %	3,045	45.24 %	2	278	26 %	—	—
0,00 to <0,10	54	1	2.04 %	54	0.04 %	156	27.96 %	4	9	16 %	—	—
0,10 to <0,15	851	433	42.79 %	1,033	0.12 %	2,889	46.15 %	2	269	26 %	—	—
0,15 to <0,25	584	231	41.60 %	677	0.20 %	2,094	46.44 %	2	204	30 %	—	—
0,25 to <0,50	2,760	545	38.29 %	2,963	0.35 %	5,308	44.55 %	2	1,419	48 %	4	(4)
0,50 to <0,75	2,153	478	44.64 %	2,359	0.53 %	3,621	45.23 %	2	1,302	55 %	5	(3)
0,75 to <2,50	4,151	876	42.35 %	4,503	1.24 %	7,115	44.68 %	3	3,606	80 %	23	(21)
0,75 to <1,75	3,937	875	42.39 %	4,289	1.20 %	6,982	44.81 %	3	3,387	79 %	22	(19)
1,75 to <2,50	214	1	3.66 %	214	2.03 %	133	42.19 %	3	219	102 %	2	(2)
2,50 to <10,00	3,792	2,102	33.60 %	4,464	4.40 %	8,186	39.11 %	3	4,019	90 %	75	(82)
2,50 to <5,00	2,960	1,756	33.12 %	3,512	3.52 %	5,493	38.98 %	3	2,982	85 %	47	(55)
5,00 to <10,00	832	346	36.05 %	952	7.61 %	2,693	39.58 %	3	1,037	109 %	28	(28)
10,00 to <100,00	918	135	52.79 %	989	21.97 %	13,976	41.58 %	2	1,673	169 %	89	(67)
10,00 to <20,00	582	67	42.18 %	609	13.59 %	1,303	41.90 %	2	922	151 %	35	(37)
20,00 to <30,00	40	13	50.26 %	47	23.88 %	213	40.86 %	2	76	162 %	5	(7)
30,00 to <100,00	295	55	66.45 %	333	37.03 %	12,460	41.10 %	2	674	203 %	50	(23)
100,00 (Default)	979	141	52.05 %	1,052	100.00 %	4,380	44.79 %	3	310	29 %	471	(632)
Corporate - Non-SMEs	**80,096**	**81,485**	**60.89 %**	**129,655**	**1.10 %**	**11,476**	**45.75 %**	**2**	**59,554**	**46 %**	**629**	**(1,048)**
0,00 to <0,15	18,137	26,105	65.60 %	35,281	0.09 %	1,187	45.04 %	3	8,347	24 %	15	(3)
0,00 to <0,10	10,554	13,885	63.67 %	19,383	0.07 %	333	45.02 %	2	3,710	19 %	6	(1)
0,10 to <0,15	7,583	12,220	67.79 %	15,898	0.12 %	854	45.06 %	4	4,637	29 %	9	(2)
0,15 to <0,25	37,013	39,120	60.65 %	60,647	0.20 %	2,907	46.21 %	2	23,955	39 %	56	(16)
0,25 to <0,50	12,840	7,857	55.93 %	17,257	0.37 %	1,684	46.46 %	2	10,263	59 %	29	(7)
0,50 to <0,75	4,200	1,667	55.81 %	5,119	0.59 %	1,128	46.67 %	2	4,117	80 %	14	(13)
0,75 to <2,50	4,342	3,498	57.33 %	6,372	1.39 %	1,666	45.12 %	2	6,346	100 %	40	(33)
0,75 to <1,75	2,541	2,401	50.44 %	3,774	1.11 %	1,375	45.06 %	2	3,471	92 %	18	(6)
1,75 to <2,50	1,801	1,097	72.40 %	2,598	1.80 %	291	45.21 %	2	2,875	111 %	21	(27)
2,50 to <10,00	2,450	2,889	43.62 %	3,695	4.77 %	1,712	42.10 %	2	5,182	140 %	75	(407)
2,50 to <5,00	1,302	1,602	38.00 %	1,894	3.16 %	943	40.01 %	2	2,213	117 %	24	(24)
5,00 to <10,00	1,148	1,288	50.61 %	1,801	6.46 %	769	44.31 %	2	2,969	165 %	51	(383)
10,00 to <100,00	406	173	54.31 %	503	25.19 %	791	45.17 %	2	1,204	239 %	59	(48)
10,00 to <20,00	228	79	50.54 %	269	14.83 %	250	42.75 %	2	587	219 %	17	(35)
20,00 to <30,00	38	49	67.30 %	72	26.20 %	57	46.50 %	2	192	266 %	9	(6)
30,00 to <100,00	141	45	46.88 %	163	41.87 %	484	48.58 %	1	424	261 %	33	(8)
100,00 (Default)	707	175	44.12 %	780	100.00 %	401	43.61 %	2	140	18 %	340	(521)

PD Scale [1][6]	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF[2]	EAD post CRM and post-CCF	Average PD[3]	Number of obligors	Average LGD[4]	Average Maturity (days)[5]	RWAs	RWA Density	EL	Value adjustments and provisions
Retail - Immovable property SMEs	**935**	**308**	**2.00 %**	**941**	**25.88 %**	**18,276**	**19.29 %**	**—**	**1,078**	**115 %**	**48**	**(11)**
0,00 to <0,15	—	—	—	—	—	—	—	—	—	—	—	—
0,00 to <0,10	—	—	—	—	—	—	—	—	—	—	—	—
0,10 to <0,15	—	—	—	—	—	—	—	—	—	—	—	—
0,15 to <0,25	—	—	—	—	—	—	—	—	—	—	—	—
0,25 to <0,50	—	—	—	—	—	—	—	—	—	—	—	—
0,50 to <0,75	—	—	—	—	—	—	—	—	—	—	—	—
0,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
0,75 to <1,75	—	—	—	—	—	—	—	—	—	—	—	—
1,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <10,00	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <5,00	—	—	—	—	—	—	—	—	—	—	—	—
5,00 to <10,00	—	—	—	—	—	—	—	—	—	—	—	—
10,00 to <100,00	904	307	2.00 %	910	23.36 %	17,717	19.13 %	—	1,075	118 %	41	(2)
10,00 to <20,00	—	—	—	—	—	—	—	—	—	—	—	—
20,00 to <30,00	889	307	2.00 %	895	22.36 %	17,504	19.10 %	—	1,068	119 %	38	(1)
30,00 to <100,00	15	—	— %	15	82.72 %	213	20.90 %	—	7	46 %	3	(1)
100,00 (Default)	31	1	2.01 %	31	100.00 %	559	23.85 %	—	3	11 %	7	(8)
Retail - Immovable property non-SMEs	**68,814**	**4,424**	**2.08 %**	**68,906**	**4.26 %**	**982,504**	**21.21 %**	**—**	**8,916**	**13 %**	**545**	**(903)**
0,00 to <0,15	43,775	3,106	2.06 %	43,839	0.05 %	644,789	20.44 %	—	1,287	3 %	4	(14)
0,00 to <0,10	41,556	2,991	2.06 %	41,617	0.04 %	615,512	20.21 %	—	1,119	3 %	3	(13)
0,10 to <0,15	2,219	115	2.12 %	2,221	0.12 %	29,277	24.77 %	—	169	8 %	1	(2)
0,15 to <0,25	8,017	602	2.12 %	8,030	0.19 %	120,996	21.81 %	—	740	9 %	3	(7)
0,25 to <0,50	4,976	264	2.12 %	4,982	0.35 %	67,975	22.85 %	—	750	15 %	4	(7)
0,50 to <0,75	1,608	88	2.08 %	1,609	0.57 %	23,553	23.51 %	—	351	22 %	2	(5)
0,75 to <2,50	4,824	212	2.16 %	4,829	1.39 %	61,383	23.73 %	—	1,921	40 %	16	(32)
0,75 to <1,75	3,996	171	2.19 %	4,000	1.28 %	51,607	22.75 %	—	1,424	36 %	11	(20)
1,75 to <2,50	828	42	2.04 %	829	1.96 %	9,776	28.49 %	—	497	60 %	5	(12)
2,50 to <10,00	1,904	107	2.06 %	1,907	5.01 %	22,960	25.61 %	—	1,699	89 %	24	(118)
2,50 to <5,00	1,112	64	2.08 %	1,113	3.36 %	13,157	25.36 %	—	814	73 %	9	(86)
5,00 to <10,00	793	42	2.03 %	794	7.33 %	9,803	25.97 %	—	886	112 %	15	(32)
10,00 to <100,00	1,278	36	2.10 %	1,279	21.58 %	13,462	25.89 %	—	1,891	148 %	73	(65)
10,00 to <20,00	701	27	2.13 %	702	12.93 %	7,513	25.30 %	—	962	137 %	23	(29)
20,00 to <30,00	312	9	2.00 %	313	23.30 %	3,357	25.52 %	—	501	160 %	19	(16)
30,00 to <100,00	264	—	1.72 %	264	42.51 %	2,592	27.91 %	—	428	162 %	31	(20)
100,00 (Default)	2,432	9	2.15 %	2,433	100.00 %	27,386	17.25 %	—	276	11 %	419	(653)

PD Scale (1)(6)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF(2)	EAD post CRM and post-CCF	Average PD(3)	Number of obligors	Average LGD(4)	Average Maturity (days)(5)	RWAs	RWA Density	EL	Value adjustments and provisions
Retail - Other exposures SMEs	**2,437**	**734**	**54.28 %**	**2,816**	**14.29 %**	**173,792**	**47.97 %**	**—**	**1,157**	**41 %**	**210**	**(217)**
0,00 to <0,15	230	191	53.10 %	323	0.12 %	26,430	46.80 %	—	35	11 %	—	—
0,00 to <0,10	—	—	—	—	—	—	—	—	—	—	—	—
0,10 to <0,15	230	191	53.10 %	323	0.12 %	26,430	46.80 %	—	35	11 %	—	—
0,15 to <0,25	96	54	54.28 %	124	0.20 %	8,694	47.51 %	—	20	16 %	—	—
0,25 to <0,50	187	100	52.69 %	236	0.31 %	13,769	46.98 %	—	50	21 %	—	—
0,50 to <0,75	253	102	54.43 %	307	0.51 %	16,679	47.59 %	—	88	29 %	1	(1)
0,75 to <2,50	528	151	55.09 %	608	1.17 %	32,173	48.04 %	—	259	43 %	3	(4)
0,75 to <1,75	528	151	55.09 %	608	1.17 %	32,173	48.04 %	—	259	43 %	3	(4)
1,75 to <2,50	—	—	—	—	—	—	—	—	—	— %	—	—
2,50 to <10,00	558	83	55.95 %	602	4.32 %	33,352	47.69 %	—	345	57 %	12	(12)
2,50 to <5,00	433	70	56.46 %	471	3.35 %	25,789	47.79 %	—	263	56 %	8	(7)
5,00 to <10,00	125	13	53.23 %	132	7.78 %	7,563	47.33 %	—	82	62 %	5	(5)
10,00 to <100,00	338	12	53.36 %	344	27.71 %	29,139	44.51 %	—	318	92 %	42	(14)
10,00 to <20,00	59	6	57.46 %	62	14.60 %	3,799	46.84 %	—	47	75 %	4	(6)
20,00 to <30,00	257	2	44.10 %	258	29.51 %	23,509	44.29 %	—	252	97 %	34	(4)
30,00 to <100,00	22	3	52.43 %	23	42.62 %	1,831	40.70 %	—	19	82 %	4	(3)
100,00 (Default)	247	42	57.06 %	271	100.00 %	13,556	55.71 %	—	43	16 %	151	(186)
Retail - Other exposures Non-SMEs	**12,764**	**42**	**67.40 %**	**12,792**	**9.70 %**	**1,235,130**	**47.28 %**	**—**	**4,463**	**35 %**	**593**	**(940)**
0,00 to <0,15	4,315	3	53.87 %	4,317	0.06 %	336,172	44.11 %	—	346	8 %	1	(6)
0,00 to <0,10	3,319	—	47.06 %	3,319	0.04 %	230,408	43.72 %	—	201	6 %	1	(4)
0,10 to <0,15	996	3	53.91 %	997	0.13 %	105,764	45.41 %	—	145	15 %	1	(2)
0,15 to <0,25	1,059	1	49.72 %	1,060	0.22 %	103,329	45.74 %	—	225	21 %	1	(3)
0,25 to <0,50	1,137	1	48.40 %	1,138	0.39 %	126,578	46.40 %	—	354	31 %	2	(5)
0,50 to <0,75	621	2	55.27 %	622	0.61 %	74,175	49.33 %	—	266	43 %	2	(3)
0,75 to <2,50	3,321	3	55.94 %	3,322	1.41 %	368,943	49.71 %	—	2,021	61 %	23	(44)
0,75 to <1,75	2,395	3	55.91 %	2,397	1.10 %	274,067	48.90 %	—	1,331	56 %	13	(23)
1,75 to <2,50	926	—	75.00 %	926	2.23 %	94,876	51.81 %	—	690	75 %	11	(20)
2,50 to <10,00	946	4	46.51 %	948	4.50 %	100,434	53.26 %	—	799	84 %	22	(72)
2,50 to <5,00	645	2	51.98 %	646	3.65 %	66,387	54.74 %	—	548	85 %	13	(48)
5,00 to <10,00	301	2	41.84 %	302	6.33 %	34,047	50.09 %	—	251	83 %	10	(24)
10,00 to <100,00	329	24	72.58 %	346	28.30 %	42,109	50.67 %	—	409	118 %	49	(49)
10,00 to <20,00	168	4	40.55 %	169	13.10 %	16,374	52.66 %	—	180	106 %	12	(18)
20,00 to <30,00	54	13	89.99 %	65	27.63 %	13,782	46.91 %	—	82	125 %	8	(5)
30,00 to <100,00	107	7	59.67 %	112	51.74 %	11,953	49.86 %	—	147	132 %	29	(26)
100,00 (Default)	1,037	4	91.61 %	1,040	100.00 %	83,390	47.41 %	—	42	4 %	493	(759)

PD Scale [1][6]	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF[2]	EAD post CRM and post-CCF	Average PD[3]	Number of obligors	Average LGD[4]	Average Maturity (days)[5]	RWAs	RWA Density	EL	Value adjustments and provisions
Retail - qualifying revolving (QRRE)	**9,087**	**21,098**	**17.33 %**	**12,741**	**6.64 %**	**11,996,583**	**71.63 %**	**—**	**8,868**	**70 %**	**659**	**(721)**
0,00 to <0,15	764	2,993	27.86 %	1,598	0.04 %	1,639,421	41.79 %	—	20	1 %	—	—
0,00 to <0,10	696	2,838	27.81 %	1,485	0.03 %	1,498,419	41.58 %	—	16	1 %	—	—
0,10 to <0,15	68	156	28.83 %	113	0.13 %	141,002	44.60 %	—	4	4 %	—	—
0,15 to <0,25	543	2,019	29.74 %	1,143	0.19 %	1,330,789	42.36 %	—	54	5 %	1	(2)
0,25 to <0,50	296	1,411	9.83 %	434	0.44 %	351,024	75.45 %	—	72	17 %	1	(5)
0,50 to <0,75	790	2,878	9.78 %	1,071	0.60 %	892,791	75.25 %	—	226	21 %	5	(16)
0,75 to <2,50	2,481	5,804	13.35 %	3,256	1.42 %	2,435,737	80.06 %	—	1,405	43 %	37	(84)
0,75 to <1,75	1,727	4,266	12.67 %	2,267	1.15 %	1,649,034	79.50 %	—	831	37 %	20	(51)
1,75 to <2,50	754	1,538	15.22 %	988	2.05 %	786,703	81.34 %	—	574	58 %	16	(32)
2,50 to <10,00	2,785	5,086	15.39 %	3,568	5.68 %	3,695,832	81.36 %	—	4,101	115 %	164	(207)
2,50 to <5,00	1,296	2,100	16.74 %	1,647	3.69 %	1,423,139	79.75 %	—	1,411	86 %	48	(76)
5,00 to <10,00	1,490	2,986	14.44 %	1,921	7.39 %	2,272,693	82.74 %	—	2,690	140 %	116	(131)
10,00 to <100,00	1,169	893	26.95 %	1,409	22.99 %	1,435,603	79.46 %	—	2,978	211 %	240	(209)
10,00 to <20,00	679	559	28.39 %	837	13.50 %	891,549	82.99 %	—	1,647	197 %	93	(85)
20,00 to <30,00	215	108	18.27 %	235	24.56 %	249,935	81.71 %	—	590	251 %	47	(43)
30,00 to <100,00	275	226	27.54 %	337	45.48 %	294,119	69.12 %	—	741	220 %	100	(81)
100,00 (Default)	259	14	22.05 %	262	100.00 %	215,386	80.78 %	—	13	5 %	211	(197)
Total IRB Approach	**213,817**	**123,145**	**49.77 %**	**275,019**	**3.18 %**	**14,468,381**	**39.49 %**		**102,547**	**37 %**	**3,378**	**(4,682)**

(*) Exposures of less than 500,000 euros rounded down to zero are shown with a dash.

[1] PD intervals established by the EBA ITS (Implementing Regulation 2021/637).

[2] Calculated as EAD after CCF for off-balance sheet exposure over total off-balance exposure before CCF.

[3] Corresponds to obligor grade PD weighted by EAD post CRM.

[4] Corresponds to obligor grade LGD weighted by EAD post CRM.

[5] Corresponds to the maturity of the obligor in years weighted by EAD. In accordance with Regulation (EU) 680/2014, it is reported only for those categories where average maturities are relevant for the calculation of RWAs. Residual maturities of less than one year are rounded to 1.

[6] Specialised lending exposures are included in the FIRB approach. The Group has chosen to use the supervisory category attribution criteria method, in line with the provisions of article 153.5 of the CRR, and therefore, following the New EBA ITS, Specialised lending exposures are not included in this table.

EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range (Million Euros. 12-31-2021)

PD Scale (1)(6)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF(2)	EAD post CRM and post-CCF	Average PD(3)	Number of obligors	Average LGD(4)	Average Maturity (days)(5)	RWAs	RWA Density	EL	Value adjustments and provisions
Prudential portfolios for AIRB approach	**195,081**	**108,414**	**51.52 %**	**252,973**	**4.29 %**	**13,058,657**	**38.46 %**		**97,614**	**39 %**	**4,032**	**(5,053)**
Central governments or central banks	**11,516**	**317**	**49.59 %**	**11,678**	**0.06 %**	**93**	**24.03 %**	**2**	**958**	**8 %**	**2**	**(2)**
0,00 to <0,15	11,401	130	50.07 %	11,472	0.03 %	22	23.74 %	2	821	7 %	1	—
0,00 to <0,10	11,400	130	50.07 %	11,471	0.03 %	17	23.74 %	2	821	7 %	1	—
0,10 to <0,15	1	—	50.00 %	1	0.10 %	5	40.23 %	5	1	46 %	—	—
0,15 to <0,25	38	152	50.00 %	114	0.20 %	9	40.00 %	2	40	35 %	—	—
0,25 to <0,50	—	11	28.72 %	3	0.31 %	4	47.27 %	1	1	45 %	—	—
0,50 to <0,75	—	—	37.88 %	—	0.51 %	1	19.43 %	3	—	32 %	—	—
0,75 to <2,50	66	—	—	66	1.50 %	7	40.00 %	1	57	87 %	—	—
0,75 to <1,75	66	—	—	66	1.50 %	7	40.00 %	1	57	87 %	—	—
1,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <10,00	6	24	49.90 %	17	5.25 %	16	40.51 %	4	28	160 %	—	—
2,50 to <5,00	2	22	50.00 %	13	4.41 %	6	40.02 %	4	20	155 %	—	—
5,00 to <10,00	3	2	48.51 %	4	7.78 %	10	41.99 %	2	8	178 %	—	—
10,00 to <100,00	5	—	78.93 %	5	17.44 %	32	37.25 %	1	10	179 %	—	(1)
10,00 to <20,00	4	—	—	4	11.91 %	2	40.00 %	1	8	185 %	—	(1)
20,00 to <30,00	—	—	—	—	—	—	—	—	—	—	—	—
30,00 to <100,00	1	—	78.93 %	1	36.59 %	30	27.75 %	1	2	160 %	—	—
100,00 (Default)	—	—	—	—	—	2	—	—	—	—	—	—
Institutions	**10,003**	**7,686**	**63.16 %**	**15,088**	**0.70 %**	**2,970**	**42.11 %**	**2**	**4,630**	**31 %**	**32**	**(41)**
0,00 to <0,15	7,152	5,368	62.51 %	10,643	0.08 %	1,488	43.40 %	2	2,544	24 %	3	(13)
0,00 to <0,10	5,118	4,322	63.58 %	7,957	0.06 %	268	44.14 %	2	1,759	22 %	2	(3)
0,10 to <0,15	2,034	1,046	58.09 %	2,686	0.11 %	1,220	41.22 %	3	785	29 %	1	(10)
0,15 to <0,25	1,635	1,738	69.48 %	2,864	0.18 %	604	44.08 %	3	1,145	40 %	2	(2)
0,25 to <0,50	676	292	54.37 %	871	0.33 %	286	21.83 %	2	239	27 %	1	(4)
0,50 to <0,75	249	72	55.56 %	288	0.55 %	159	37.76 %	2	177	62 %	1	(1)
0,75 to <2,50	139	129	63.58 %	214	1.15 %	154	44.72 %	2	221	103 %	1	(1)
0,75 to <1,75	139	129	63.58 %	214	1.15 %	154	44.72 %	2	221	103 %	1	(1)
1,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <10,00	60	23	48.97 %	71	5.03 %	116	42.96 %	4	117	164 %	1	(3)
2,50 to <5,00	15	18	49.87 %	24	3.90 %	94	46.23 %	5	36	150 %	—	(1)
5,00 to <10,00	45	4	45.22 %	47	5.61 %	22	41.27 %	4	80	171 %	1	(3)
10,00 to <100,00	56	34	46.12 %	73	23.64 %	84	42.80 %	2	173	236 %	7	(2)
10,00 to <20,00	26	31	50.26 %	46	14.77 %	16	43.99 %	2	108	236 %	2	(1)
20,00 to <30,00	—	—	—	—	23.81 %	2	51.59 %	1	—	290 %	—	—
30,00 to <100,00	30	3	—	28	38.42 %	66	40.80 %	1	65	236 %	4	(1)
100,00 (Default)	37	31	86.27 %	64	100.00 %	79	25.42 %	3	13	20 %	16	(16)

PD Scale (1)(6)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF(2)	EAD post CRM and post-CCF	Average PD(3)	Number of obligors	Average LGD(4)	Average Maturity (days)(5)	RWAs	RWA Density	EL	Value adjustments and provisions
Corporate - SMEs	**16,050**	**4,847**	**41.30 %**	**18,031**	**14.23 %**	**50,962**	**42.28 %**	**3**	**14,858**	**82 %**	**969**	**(1,143)**
0,00 to <0,15	562	309	43.08 %	694	0.12 %	2,481	43.66 %	2	171	25 %	—	(1)
0,00 to <0,10	50	1	2.02 %	50	0.04 %	167	28.82 %	5	9	18 %	—	—
0,10 to <0,15	512	308	43.24 %	644	0.12 %	2,314	44.82 %	2	162	25 %	—	(1)
0,15 to <0,25	543	213	46.37 %	638	0.20 %	1,806	45.24 %	2	203	32 %	—	(1)
0,25 to <0,50	1,811	451	40.31 %	1,989	0.34 %	4,228	44.45 %	2	875	44 %	3	(6)
0,50 to <0,75	1,626	450	46.04 %	1,831	0.53 %	3,483	45.59 %	2	1,058	58 %	4	(7)
0,75 to <2,50	3,492	764	42.84 %	3,815	1.21 %	7,030	43.88 %	3	2,957	77 %	19	(28)
0,75 to <1,75	3,279	761	42.95 %	3,602	1.16 %	6,923	43.97 %	3	2,713	75 %	17	(24)
1,75 to <2,50	214	3	11.17 %	214	2.04 %	107	42.37 %	4	244	114 %	2	(3)
2,50 to <10,00	4,948	2,133	38.29 %	5,738	4.88 %	11,788	38.92 %	3	5,759	100 %	106	(181)
2,50 to <5,00	3,191	1,696	38.13 %	3,814	3.55 %	7,562	39.16 %	3	3,472	91 %	52	(103)
5,00 to <10,00	1,757	438	38.91 %	1,923	7.51 %	4,226	38.44 %	3	2,287	119 %	55	(78)
10,00 to <100,00	1,623	348	48.06 %	1,789	24.18 %	14,332	42.06 %	3	3,385	189 %	184	(118)
10,00 to <20,00	856	197	44.18 %	939	13.56 %	1,813	41.57 %	3	1,527	163 %	53	(71)
20,00 to <30,00	102	12	48.53 %	108	23.80 %	254	37.80 %	3	181	168 %	10	(7)
30,00 to <100,00	665	138	53.54 %	742	37.68 %	12,265	43.30 %	3	1,676	226 %	121	(39)
100,00 (Default)	1,444	180	51.93 %	1,537	100.00 %	5,814	42.52 %	3	451	29 %	653	(802)
Corporate - Non-SMEs	**62,456**	**71,197**	**66.28 %**	**109,343**	**1.67 %**	**10,847**	**45.59 %**	**2**	**53,442**	**49 %**	**854**	**(1,089)**
0,00 to <0,15	13,793	20,491	70.67 %	28,262	0.10 %	1,041	45.09 %	3	6,974	25 %	12	(21)
0,00 to <0,10	7,812	11,474	70.43 %	15,882	0.08 %	348	45.00 %	3	3,287	21 %	6	(12)
0,10 to <0,15	5,982	9,016	70.98 %	12,379	0.12 %	693	45.20 %	2	3,687	30 %	7	(8)
0,15 to <0,25	28,170	33,823	65.92 %	50,405	0.19 %	2,530	45.87 %	2	19,909	40 %	44	(12)
0,25 to <0,50	8,897	8,649	63.80 %	14,421	0.37 %	1,503	46.24 %	2	8,618	60 %	24	(12)
0,50 to <0,75	2,834	1,951	63.37 %	4,075	0.60 %	946	45.00 %	2	3,067	75 %	11	(14)
0,75 to <2,50	3,729	2,722	57.84 %	5,285	1.33 %	1,533	45.77 %	2	5,340	101 %	32	(35)
0,75 to <1,75	2,535	1,884	53.65 %	3,537	1.09 %	1,219	45.56 %	2	3,335	94 %	17	(11)
1,75 to <2,50	1,194	839	67.27 %	1,747	1.80 %	314	46.18 %	2	2,005	115 %	15	(23)
2,50 to <10,00	3,440	3,119	52.28 %	5,050	4.85 %	1,912	43.18 %	2	7,409	147 %	106	(468)
2,50 to <5,00	1,823	2,024	44.47 %	2,702	3.28 %	973	42.16 %	2	3,438	127 %	37	(84)
5,00 to <10,00	1,617	1,096	66.70 %	2,349	6.66 %	939	44.36 %	2	3,971	169 %	69	(384)
10,00 to <100,00	696	205	51.10 %	810	28.22 %	909	43.70 %	2	1,914	236 %	98	(57)
10,00 to <20,00	263	108	51.85 %	323	14.79 %	261	45.01 %	2	748	232 %	21	(23)
20,00 to <30,00	49	32	63.60 %	70	23.58 %	63	46.36 %	2	176	250 %	8	(8)
30,00 to <100,00	385	65	43.75 %	417	39.40 %	585	42.23 %	2	990	237 %	69	(26)
100,00 (Default)	898	236	59.13 %	1,035	100.00 %	473	50.79 %	3	213	21 %	526	(471)

PD Scale [1][6]	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF[2]	EAD post CRM and post-CCF	Average PD[3]	Number of obligors	Average LGD[4]	Average Maturity (days)[5]	RWAs	RWA Density	EL	Value adjustments and provisions
Retail - Immovable property SMEs	**1,093**	**422**	**2.05 %**	**1,101**	**26.12 %**	**21,516**	**20.60 %**	**—**	**1,347**	**122 %**	**60**	**(12)**
0,00 to <0,15	—	—	—	—	—	—	—	—	—	—	—	—
0,00 to <0,10	—	—	—	—	—	—	—	—	—	—	—	—
0,10 to <0,15	—	—	—	—	—	—	—	—	—	—	—	—
0,15 to <0,25	—	—	—	—	—	—	—	—	—	—	—	—
0,25 to <0,50	—	—	—	—	—	—	—	—	—	—	—	—
0,50 to <0,75	—	—	—	—	—	—	—	—	—	—	—	—
0,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
0,75 to <1,75	—	—	—	—	—	—	—	—	—	—	—	—
1,75 to <2,50	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <10,00	—	—	—	—	—	—	—	—	—	—	—	—
2,50 to <5,00	—	—	—	—	—	—	—	—	—	—	—	—
5,00 to <10,00	—	—	—	—	—	—	—	—	—	—	—	—
10,00 to <100,00	1,052	420	2.05 %	1,060	23.24 %	20,847	20.51 %	—	1,339	126 %	51	(2)
10,00 to <20,00	—	—	—	—	—	—	—	—	—	—	—	—
20,00 to <30,00	1,036	420	2.05 %	1,045	22.36 %	20,638	20.48 %	—	1,331	127 %	48	(1)
30,00 to <100,00	15	—	—	15	82.72 %	209	22.38 %	—	8	49 %	3	(1)
100,00 (Default)	41	2	2.69 %	41	100.00 %	669	22.99 %	—	8	18 %	9	(11)
Retail - Immovable property non-SMEs	**71,199**	**4,485**	**2.07 %**	**71,292**	**4.65 %**	**1,015,918**	**21.90 %**	**—**	**9,681**	**14 %**	**572**	**(881)**
0,00 to <0,15	44,579	3,206	2.06 %	44,645	0.05 %	656,561	21.24 %	—	1,374	3 %	4	(7)
0,00 to <0,10	42,186	3,079	2.06 %	42,249	0.04 %	624,609	21.00 %	—	1,187	3 %	3	(6)
0,10 to <0,15	2,393	127	2.24 %	2,396	0.12 %	31,952	25.47 %	—	187	8 %	1	(1)
0,15 to <0,25	9,022	629	2.09 %	9,035	0.19 %	135,037	22.69 %	—	866	10 %	4	(5)
0,25 to <0,50	4,908	249	2.12 %	4,914	0.35 %	69,130	23.36 %	—	759	15 %	4	(4)
0,50 to <0,75	1,645	88	2.10 %	1,646	0.57 %	24,365	24.32 %	—	370	23 %	2	(4)
0,75 to <2,50	4,975	188	2.20 %	4,979	1.41 %	63,538	24.43 %	—	2,059	41 %	17	(25)
0,75 to <1,75	4,154	148	2.21 %	4,157	1.30 %	53,981	23.51 %	—	1,553	37 %	12	(15)
1,75 to <2,50	821	41	2.18 %	822	1.97 %	9,557	29.13 %	—	506	62 %	5	(10)
2,50 to <10,00	1,943	89	2.05 %	1,945	5.08 %	23,296	26.03 %	—	1,772	91 %	26	(168)
2,50 to <5,00	1,107	52	2.07 %	1,108	3.38 %	13,022	25.97 %	—	834	75 %	10	(121)
5,00 to <10,00	835	37	2.02 %	836	7.33 %	10,274	26.11 %	—	938	112 %	16	(46)
10,00 to <100,00	1,422	27	2.06 %	1,423	21.74 %	14,701	26.46 %	—	2,152	151 %	84	(65)
10,00 to <20,00	774	20	2.08 %	775	13.03 %	8,217	25.89 %	—	1,089	141 %	26	(28)
20,00 to <30,00	353	6	2.00 %	353	23.46 %	3,605	26.01 %	—	576	163 %	22	(16)
30,00 to <100,00	295	—	2.67 %	295	42.54 %	2,879	28.52 %	—	486	165 %	36	(21)
100,00 (Default)	2,705	10	2.01 %	2,705	100.00 %	29,290	15.99 %	—	330	12 %	432	(603)

PD Scale [1][6]	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF[2]	EAD post CRM and post-CCF	Average PD[3]	Number of obligors	Average LGD[4]	Average Maturity (days)[5]	RWAs	RWA Density	EL	Value adjustments and provisions
Retail - Other exposures SMEs	**3,101**	**902**	**57.94 %**	**3,590**	**19.63 %**	**204,978**	**47.08 %**	**—**	**1,519**	**42 %**	**347**	**(390)**
0,00 to <0,15	207	179	56.30 %	299	0.12 %	24,069	46.36 %	—	33	11 %	—	(1)
0,00 to <0,10	—	—	—	—	—	—	—	—	—	—	—	—
0,10 to <0,15	207	179	56.30 %	299	0.12 %	24,069	46.36 %	—	33	11 %	—	(1)
0,15 to <0,25	107	59	57.75 %	139	0.20 %	8,682	47.11 %	—	22	16 %	—	(1)
0,25 to <0,50	197	102	57.76 %	252	0.31 %	14,362	46.82 %	—	54	22 %	—	(1)
0,50 to <0,75	252	112	58.88 %	314	0.51 %	18,162	46.76 %	—	91	29 %	1	(3)
0,75 to <2,50	575	192	59.03 %	682	1.19 %	37,137	46.49 %	—	290	42 %	4	(13)
0,75 to <1,75	573	192	59.03 %	680	1.19 %	37,059	46.57 %	—	289	43 %	4	(13)
1,75 to <2,50	2	—	—	2	1.89 %	78	17.41 %	—	—	21 %	—	—
2,50 to <10,00	899	184	58.02 %	997	4.64 %	48,789	43.98 %	—	553	55 %	20	(52)
2,50 to <5,00	638	145	57.76 %	716	3.58 %	36,244	44.99 %	—	392	55 %	11	(31)
5,00 to <10,00	260	38	59.00 %	281	7.35 %	12,545	41.39 %	—	161	57 %	9	(21)
10,00 to <100,00	426	20	60.48 %	437	26.90 %	33,537	44.89 %	—	406	93 %	52	(22)
10,00 to <20,00	96	11	61.82 %	102	14.53 %	5,585	45.80 %	—	78	76 %	7	(13)
20,00 to <30,00	289	3	44.88 %	290	29.41 %	25,300	45.46 %	—	289	100 %	39	(4)
30,00 to <100,00	41	6	65.32 %	45	38.84 %	2,652	39.13 %	—	39	86 %	7	(5)
100,00 (Default)	439	55	57.20 %	470	100.00 %	20,240	57.34 %	—	70	15 %	269	(297)
Retail - Other exposures Non-SMEs	**12,492**	**70**	**61.52 %**	**12,535**	**10.50 %**	**1,290,640**	**47.38 %**	**—**	**4,639**	**37 %**	**679**	**(887)**
0,00 to <0,15	3,944	3	57.34 %	3,946	0.06 %	300,733	43.51 %	—	308	8 %	1	(3)
0,00 to <0,10	3,022	—	54.55 %	3,022	0.04 %	202,507	43.03 %	—	175	6 %	—	(2)
0,10 to <0,15	923	2	57.40 %	924	0.13 %	98,226	45.08 %	—	133	14 %	—	(1)
0,15 to <0,25	1,057	1	53.11 %	1,057	0.22 %	101,141	45.28 %	—	225	21 %	1	(2)
0,25 to <0,50	1,001	1	57.00 %	1,001	0.39 %	111,797	45.36 %	—	309	31 %	2	(3)
0,50 to <0,75	557	2	55.51 %	558	0.63 %	66,857	47.81 %	—	236	42 %	2	(2)
0,75 to <2,50	3,404	27	51.15 %	3,418	1.44 %	447,148	48.84 %	—	2,059	60 %	24	(33)
0,75 to <1,75	2,393	27	51.15 %	2,406	1.12 %	301,368	47.91 %	—	1,318	55 %	13	(18)
1,75 to <2,50	1,011	—	66.67 %	1,011	2.20 %	145,780	51.06 %	—	741	73 %	11	(15)
2,50 to <10,00	1,072	8	57.83 %	1,076	4.37 %	123,391	51.98 %	—	882	82 %	24	(72)
2,50 to <5,00	751	6	57.94 %	755	3.50 %	91,577	52.73 %	—	614	81 %	14	(52)
5,00 to <10,00	321	2	57.53 %	322	6.40 %	31,814	50.21 %	—	268	83 %	10	(20)
10,00 to <100,00	444	25	72.26 %	462	29.72 %	45,930	50.82 %	—	570	123 %	68	(50)
10,00 to <20,00	183	4	42.54 %	184	13.64 %	16,691	55.23 %	—	210	114 %	14	(18)
20,00 to <30,00	76	13	87.73 %	87	26.85 %	15,628	49.93 %	—	116	132 %	12	(8)
30,00 to <100,00	186	8	62.13 %	191	46.59 %	13,611	46.97 %	—	245	128 %	43	(24)
100,00 (Default)	1,012	4	92.18 %	1,016	100.00 %	93,643	54.96 %	—	49	5 %	558	(723)

PD Scale (1)(6)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF(2)	EAD post CRM and post-CCF	Average PD(3)	Number of obligors	Average LGD(4)	Average Maturity (days)(5)	RWAs	RWA Density	EL	Value adjustments and provisions
Retail - qualifying revolving (QRRE)	**7,172**	**18,488**	**17.08 %**	**10,315**	**6.96 %**	**10,460,733**	**69.68 %**	**—**	**8,868**	**70 %**	**659**	**(721)**
0,00 to <0,15	698	2,906	28.07 %	1,514	0.04 %	1,587,147	41.86 %	—	20	1 %	—	—
0,00 to <0,10	627	2,734	27.96 %	1,392	0.03 %	1,437,152	41.55 %	—	16	1 %	—	—
0,10 to <0,15	71	172	29.77 %	122	0.14 %	149,995	45.31 %	—	4	4 %	—	—
0,15 to <0,25	494	1,917	29.50 %	1,060	0.19 %	1,243,165	42.10 %	—	54	5 %	1	(2)
0,25 to <0,50	241	1,160	10.45 %	362	0.43 %	327,427	73.83 %	—	72	17 %	1	(5)
0,50 to <0,75	639	2,446	9.43 %	870	0.60 %	776,720	74.01 %	—	226	21 %	5	(16)
0,75 to <2,50	1,898	4,973	12.45 %	2,517	1.42 %	2,081,563	79.34 %	—	1,405	43 %	37	(84)
0,75 to <1,75	1,325	3,647	11.95 %	1,760	1.15 %	1,413,293	78.64 %	—	831	37 %	20	(51)
1,75 to <2,50	573	1,326	13.83 %	757	2.05 %	668,270	80.97 %	—	574	58 %	16	(32)
2,50 to <10,00	2,187	4,380	14.08 %	2,804	5.65 %	3,252,103	80.74 %	—	4,101	115 %	164	(207)
2,50 to <5,00	1,032	1,887	15.27 %	1,320	3.69 %	1,240,999	78.99 %	—	1,411	86 %	48	(76)
5,00 to <10,00	1,155	2,493	13.19 %	1,484	7.40 %	2,011,104	82.29 %	—	2,690	140 %	116	(131)
10,00 to <100,00	785	690	24.96 %	957	23.75 %	994,170	77.48 %	—	2,978	211 %	240	(209)
10,00 to <20,00	467	385	25.29 %	564	13.22 %	603,827	82.54 %	—	1,647	197 %	93	(85)
20,00 to <30,00	129	79	14.63 %	141	24.70 %	151,787	81.11 %	—	590	251 %	47	(43)
30,00 to <100,00	188	226	27.99 %	252	46.82 %	238,556	64.13 %	—	741	220 %	100	(81)
100,00 (Default)	229	15	20.13 %	232	100.00 %	198,438	84.01 %	—	13	5 %	211	(197)
Total IRB Approach	**195,081**	**108,414**	**51.52 %**	**252,973**	**4.29 %**	**13,058,657**	**38.46 %**		**102,547**	**37 %**	**3,378**	**(4,682)**

(*) Exposures of less than 500,000 euros rounded down to zero are shown with a dash.

(1) PD intervals established by the EBA ITS (Implementing Regulation 2021/637).

(2) Calculated as EAD after CCF for off-balance sheet exposure over total off-balance exposure before CCF.

(3) Corresponds to obligor grade PD weighted by EAD post CRM.

(4) Corresponds to obligor grade LGD weighted by EAD post CRM.

(5) Corresponds to the maturity of the obligor in years weighted by EAD. In accordance with Regulation (EU) 680/2014, it is reported only for those categories where average maturities are relevant for the calculation of RWAs. Residual maturities of less than one year are rounded to 1.

(6) Specialised lending exposures are included in the FIRB approach. The Group has chosen to use the supervisory category attribution criteria method, in line with the provisions of article 153.5 of the CRR, and therefore, following the New EBA ITS, Specialised lending exposures are not included in this table.

For information about exposures and RWA under IRB approach, see Table 12.

The information included in the above tables is set out below in chart format:

Chart 10. IRB Approach: EAD by obligor category

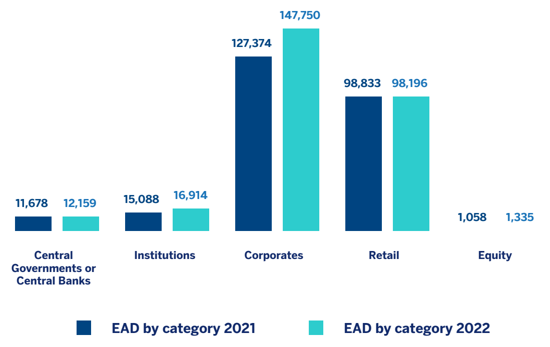


Chart 11. IRB Approach: Weighted average PD by EAD

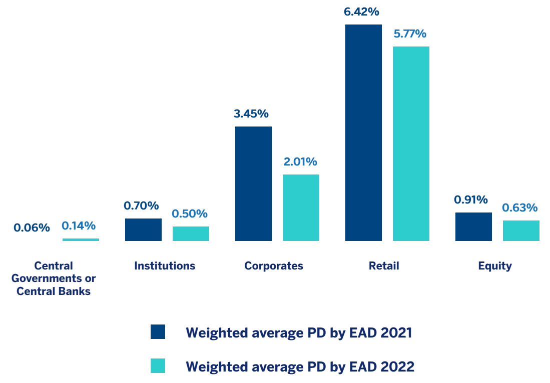


Chart 12. IRB Approach: Weighted average LGD by EAD

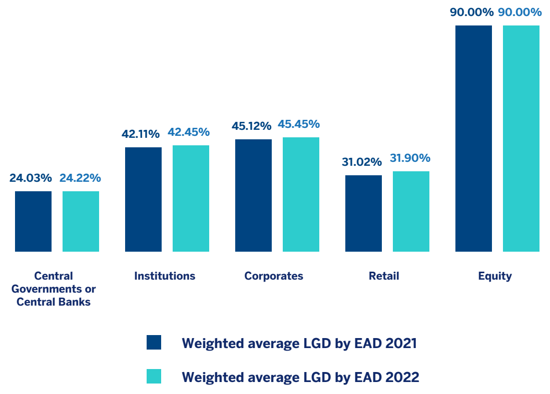
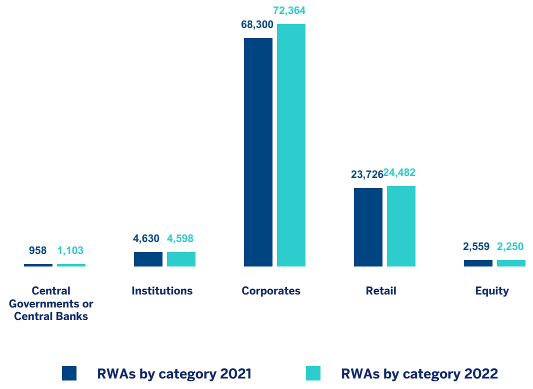


Chart 13. IRB Approach: RWAs by obligor category



The following table shows the flow statements of credit and counterparty credit risk RWA under internal model (IRB) during the last quarter of 2022:

Table 32. EU CR8 - RWA flow statements of credit and counterparty risk exposures under the IRB approach (Million Euros)

	Credit Risk		Counterparty Credit Risk		Total	
	RWA amounts	Capital Requirements	RWA amounts	Capital Requirements	RWA amounts	Capital requirements
RWAs as of September 30, 2022	**109,636**	**8,771**	**6,817**	**545**	**116,453**	**9,316**
Asset size	3,345	268	(950)	(76)	2,395	192
Asset quality	(1,951)	(156)	(42)	(3)	(1,993)	(159)
Model updates	—	—		—	—	—
Methodology and policy	—	—		—	—	—
Acquisitions and disposals	—	—		—	—	—
Foreign exchange movements	(3,306)	(264)	(117)	(9)	(3,423)	(274)
Other	—	—		—	—	—
RWAs as of December 31, 2022	**107,724**	**8,618**	**5,708**	**457**	**113,432**	**9,075**

RWA under the IRB approach fell by €3,021 million in the quarter due to the favourable evolution of the exchange rate as a result of the appreciation of the euro, as the case for exposures under the standardised approach.

In credit risk, there has been an improvement in asset quality, with a reduction in the average RWA density of the corporate portfolio, mainly, which has been partially offset by organic growth. In the quarter, the effect of new securitisations, with risk transfer, generated a reduction in RWAs of approximately 700 million, included in asset size.

The full annual series of RWA flow of credit risk under the IRB approach is available in the editable file “Pillar III 2022 – Tables & Annexes”.

4.2.5.3. Comparative analysis of the estimates made

In application of article 452.h) of the CRR, two tables are presented below that show relevant information on the retrospective tests of the probability of default (PD backesting) of exposures to credit risk (excluding counterparty and securitizations), at consolidated level of the BBVA Group. Specifically, the PD estimated for the IRB models is compared with the average annual default rate of obligors.

As of December 31, 2022, this information is shown in the standard format and applying the instructions of the EBA ITS:

- EU CR9: Backtesting of PD per exposure class by fixed PD scale.
- EU CR9.1: Backtesting of PD by exposure class where an additional column is added to report the equivalent external rating. The equivalence between the PD and the external ratings described in section 4.2.5.1.2 has been used.

Both tables exclude counterparty risk, securitizations and equity. It should be noted that this information is presented at a consolidated level, adding the IRB portfolios of BBVA.S.A. and BBVA Mexico. The information presented in these tables is as follows:

- Number of obligors: the obligors at the end of the previous fiscal year are presented.
- Of which: number of obligors who have defaulted: customers who defaulted at some point during the last 12 months, so that the debtors in default during the year are shown for each PD interval.
- Observed average default rate: arithmetic mean of one-year default rates. To calculate this rate, the obligors at the end of the previous year are taken into account in the denominator, and the obligors in default in the numerator.
- Arithmetic average PD and weighted average PD (EU CR9 only): the first one refers to the arithmetic average of the PD per obligor grade at the beginning of the period. The weighted average PD will be calculated by weighting by the exposure value of each PD range used for the RWA calculation. This weighted average PD will be the same as the one reported in the EU CR6 table.
- *Average historical annual default rate*: it corresponds to the average annual default rate for the previous five years.

Table 33. EU CR9 - IRB approach - Backtesting of PD per exposure class (fixed PD scale) (12-31-2022)

PD Range	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Weighted average PD[1]	Arithmetic average PD by obligors[1]	Average historical annual default rate
Central governments or central banks						
0,00 to <0,15	22	—	—	0.02 %	0.05 %	12.12 %
0,00 to <0,10	17	—	—	0.02 %	0.03 %	15.69 %
0,10 to <0,15	5	—	—	0.11 %	0.12 %	—
0,15 to <0,25	9	—	—	0.20 %	0.20 %	—
0,25 to <0,50	4	—	—	0.31 %	0.31 %	—
0,50 to <0,75	1	—	—	0.51 %	0.51 %	—
0,75 to <2,50	7	—	—	1.15 %	1.41 %	—
0,75 to <1,75	7	—	—	1.15 %	1.41 %	—
1,75 to <2,50	—	—	—	—	—	—
2,50 to <10,00	16	—	—	4.47 %	6.21 %	—
2,50 to <5,00	6	—	—	4.41 %	4.41 %	—
5,00 to <10,00	10	—	—	7.85 %	7.29 %	—
10,00 to <100,00	32	2	6.25 %	15.21 %	34.89 %	—
10,00 to <20,00	2	1	50.00 %	15.09 %	11.91 %	—
20,00 to <30,00	—	—	—	—	—	—
30,00 to <100,00	30	1	3.33 %	37.05 %	36.42 %	—
100,00 (Default)	2	—	—	100.00 %	100.00 %	—
Institutions						
0,00 to <0,15	1,496	19	1.27 %	0.07 %	0.12 %	2.81 %
0,00 to <0,10	276	5	1.81 %	0.06 %	0.06 %	5.87 %
0,10 to <0,15	1,220	14	1.15 %	0.11 %	0.13 %	2.12 %
0,15 to <0,25	611	10	1.64 %	0.18 %	0.20 %	1.56 %
0,25 to <0,50	288	4	1.39 %	0.33 %	0.33 %	2.58 %
0,50 to <0,75	160	1	0.63 %	0.55 %	0.54 %	2.79 %
0,75 to <2,50	156	1	0.64 %	1.19 %	1.26 %	1.23 %
0,75 to <1,75	156	1	0.64 %	1.19 %	1.26 %	1.23 %
1,75 to <2,50	—	—	—	—	—	—
2,50 to <10,00	117	1	0.85 %	4.69 %	4.12 %	3.93 %
2,50 to <5,00	95	1	1.05 %	3.98 %	3.40 %	2.95 %
5,00 to <10,00	22	—	—	8.04 %	7.25 %	8.15 %
10,00 to <100,00	85	2	2.35 %	24.32 %	32.97 %	—
10,00 to <20,00	16	1	6.25 %	14.26 %	12.62 %	—
20,00 to <30,00	2	—	—	29.74 %	23.81 %	—
30,00 to <100,00	67	1	1.49 %	38.09 %	38.11 %	—
100,00 (Default)	79	—	—	100.00 %	100.00 %	—

PD Range	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Weighted average PD[1]	Arithmetic average PD by obligors[1]	Average historical annual default rate
Corporate - SMEs						
0,00 to <0,15	2,481	3	0.12 %	0.12 %	0.12 %	0.91 %
0,00 to <0,10	167	—	—	0.04 %	0.04 %	0.57 %
0,10 to <0,15	2,314	3	0.13 %	0.12 %	0.12 %	0.93 %
0,15 to <0,25	1,806	4	0.22 %	0.20 %	0.20 %	1.00 %
0,25 to <0,50	4,227	21	0.50 %	0.35 %	0.33 %	1.24 %
0,50 to <0,75	3,484	19	0.55 %	0.53 %	0.52 %	1.94 %
0,75 to <2,50	7,030	67	0.95 %	1.24 %	1.17 %	3.13 %
0,75 to <1,75	6,923	67	0.97 %	1.20 %	1.16 %	3.15 %
1,75 to <2,50	107	—	—	2.03 %	2.04 %	2.13 %
2,50 to <10,00	11,788	256	2.17 %	4.40 %	5.00 %	5.18 %
2,50 to <5,00	7,562	136	1.80 %	3.52 %	3.67 %	4.82 %
5,00 to <10,00	4,226	120	2.84 %	7.61 %	7.37 %	5.82 %
10,00 to <100,00	14,332	783	5.46 %	21.97 %	33.69 %	7.02 %
10,00 to <20,00	1,813	95	5.24 %	13.59 %	14.17 %	9.87 %
20,00 to <30,00	254	29	11.42 %	23.88 %	23.94 %	14.39 %
30,00 to <100,00	12,265	659	5.37 %	37.03 %	36.78 %	6.45 %
100,00 (Default)	5,814	—	—	100.00 %	100.00 %	—
Corporate - Non-SMEs						
0,00 to <0,15	1,069	5	0.47 %	0.09 %	0.11 %	1.72 %
0,00 to <0,10	359	3	0.84 %	0.07 %	0.08 %	1.56 %
0,10 to <0,15	710	2	0.28 %	0.12 %	0.12 %	1.80 %
0,15 to <0,25	2,528	7	0.28 %	0.20 %	0.20 %	0.51 %
0,25 to <0,50	1,513	12	0.79 %	0.37 %	0.35 %	1.75 %
0,50 to <0,75	946	9	0.95 %	0.59 %	0.56 %	2.42 %
0,75 to <2,50	1,533	7	0.46 %	1.39 %	1.24 %	1.93 %
0,75 to <1,75	1,219	5	0.41 %	1.11 %	1.09 %	2.42 %
1,75 to <2,50	314	2	0.64 %	1.80 %	1.80 %	—
2,50 to <10,00	1,914	34	1.78 %	4.77 %	5.10 %	4.75 %
2,50 to <5,00	973	9	0.92 %	3.16 %	3.48 %	4.78 %
5,00 to <10,00	941	25	2.66 %	6.46 %	6.78 %	4.72 %
10,00 to <100,00	915	17	1.86 %	25.19 %	31.61 %	5.37 %
10,00 to <20,00	267	5	1.87 %	14.83 %	15.14 %	6.96 %
20,00 to <30,00	63	2	3.17 %	26.20 %	24.50 %	10.89 %
30,00 to <100,00	585	10	1.71 %	41.87 %	39.89 %	4.05 %
100,00 (Default)	473	—	—	100.00 %	100.00 %	—

PD Range	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Weighted average PD(1)	Arithmetic average PD by obligors(1)	Average historical annual default rate
Retail - Immovable property SMEs						
0,00 to <0,15	—	—	—	—	—	—
0,00 to <0,10	—	—	—	—	—	—
0,10 to <0,15	—	—	—	—	—	—
0,15 to <0,25	—	—	—	—	—	—
0,25 to <0,50	—	—	—	—	—	—
0,50 to <0,75	—	—	—	—	—	—
0,75 to <2,50	—	—	—	—	—	—
0,75 to <1,75	—	—	—	—	—	—
1,75 to <2,50	—	—	—	—	—	—
2,50 to <10,00	—	—	—	—	—	—
2,50 to <5,00	—	—	—	—	—	—
5,00 to <10,00	—	—	—	—	—	—
10,00 to <100,00	20,847	192	0.92 %	23.36 %	22.97 %	0.91 %
10,00 to <20,00	—	—	—	—	—	—
20,00 to <30,00	20,638	127	0.62 %	22.36 %	22.36 %	0.61 %
30,00 to <100,00	209	65	31.10 %	82.72 %	82.72 %	30.95 %
100,00 (Default)	669	—	—	100.00 %	100.00 %	—
Retail - Immovable property non-SMEs						
0,00 to <0,15	656,561	565	0.09 %	0.05 %	0.05 %	0.38 %
0,00 to <0,10	624,609	496	0.08 %	0.04 %	0.04 %	0.30 %
0,10 to <0,15	31,952	69	0.22 %	0.12 %	0.12 %	1.96 %
0,15 to <0,25	135,037	470	0.35 %	0.19 %	0.19 %	1.37 %
0,25 to <0,50	69,130	446	0.65 %	0.35 %	0.36 %	1.95 %
0,50 to <0,75	24,365	294	1.21 %	0.57 %	0.57 %	2.10 %
0,75 to <2,50	63,538	1,289	2.03 %	1.39 %	1.38 %	3.27 %
0,75 to <1,75	53,981	1,059	1.96 %	1.28 %	1.27 %	3.12 %
1,75 to <2,50	9,557	230	2.41 %	1.96 %	1.98 %	4.16 %
2,50 to <10,00	23,296	1,660	7.13 %	5.01 %	5.11 %	13.91 %
2,50 to <5,00	13,022	614	4.72 %	3.36 %	3.41 %	9.00 %
5,00 to <10,00	10,274	1,046	10.18 %	7.33 %	7.26 %	20.13 %
10,00 to <100,00	14,701	3,218	21.89 %	21.58 %	22.21 %	28.57 %
10,00 to <20,00	8,217	1,369	16.66 %	12.93 %	13.36 %	27.20 %
20,00 to <30,00	3,605	865	23.99 %	23.30 %	23.93 %	24.92 %
30,00 to <100,00	2,879	984	34.18 %	42.51 %	45.28 %	37.08 %
100,00 (Default)	29,290	—	—	100.00 %	100.00 %	—

PD Range	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Weighted average PD[1]	Arithmetic average PD by obligors[1]	Average historical annual default rate
Retail - Other exposures SMEs						
0,00 to <0,15	24,069	29	0.12 %	0.12 %	0.12 %	0.25 %
0,00 to <0,10	—	—	—	—	—	—
0,10 to <0,15	24,069	29	0.12 %	0.12 %	0.12 %	0.25 %
0,15 to <0,25	8,682	11	0.13 %	0.20 %	0.20 %	0.34 %
0,25 to <0,50	14,362	65	0.45 %	0.31 %	0.31 %	0.63 %
0,50 to <0,75	18,162	124	0.68 %	0.51 %	0.51 %	0.90 %
0,75 to <2,50	37,137	503	1.35 %	1.17 %	1.18 %	1.51 %
0,75 to <1,75	37,059	498	1.34 %	1.17 %	1.18 %	1.50 %
1,75 to <2,50	78	5	6.41 %	—	1.89 %	5.17 %
2,50 to <10,00	48,789	1,661	3.40 %	4.32 %	4.52 %	4.25 %
2,50 to <5,00	36,244	976	2.69 %	3.35 %	3.58 %	3.40 %
5,00 to <10,00	12,545	685	5.46 %	7.78 %	7.24 %	6.70 %
10,00 to <100,00	33,533	1,893	5.65 %	27.71 %	26.51 %	7.79 %
10,00 to <20,00	5,580	623	11.16 %	14.60 %	15.05 %	12.08 %
20,00 to <30,00	25,309	692	2.73 %	29.51 %	27.57 %	5.11 %
30,00 to <100,00	2,644	578	21.86 %	42.62 %	40.47 %	24.37 %
100,00 (Default)	20,240	—	—	100.00 %	100.00 %	—
Retail - Other exposures Non-SMEs						
0,00 to <0,15	301,790	422	0.14 %	0.06 %	0.07 %	0.34 %
0,00 to <0,10	202,504	152	0.08 %	0.04 %	0.05 %	0.21 %
0,10 to <0,15	99,286	270	0.27 %	0.13 %	0.13 %	0.59 %
0,15 to <0,25	100,073	458	0.46 %	0.22 %	0.21 %	1.04 %
0,25 to <0,50	114,155	841	0.74 %	0.39 %	0.39 %	1.79 %
0,50 to <0,75	60,013	582	0.97 %	0.61 %	0.62 %	2.27 %
0,75 to <2,50	467,782	8,120	1.74 %	1.41 %	1.51 %	3.47 %
0,75 to <1,75	316,097	4,871	1.54 %	1.10 %	1.15 %	3.33 %
1,75 to <2,50	151,685	3,249	2.14 %	2.23 %	2.25 %	3.78 %
2,50 to <10,00	107,267	5,524	5.15 %	4.50 %	4.55 %	8.24 %
2,50 to <5,00	75,760	2,836	3.74 %	3.65 %	3.69 %	6.85 %
5,00 to <10,00	31,507	2,688	8.53 %	6.33 %	6.61 %	11.60 %
10,00 to <100,00	45,916	10,856	23.64 %	28.30 %	29.47 %	37.57 %
10,00 to <20,00	15,685	2,734	17.43 %	13.10 %	14.18 %	28.20 %
20,00 to <30,00	18,368	1,406	7.65 %	27.63 %	27.28 %	32.30 %
30,00 to <100,00	11,863	6,716	56.61 %	51.74 %	53.07 %	58.14 %
100,00 (Default)	93,643	—	—	100.00 %	100.00 %	—

PD Range	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Weighted average PD[1]	Arithmetic average PD by obligors[1]	Average historical annual default rate
Retail - qualifying revolving (QRRE)						
0,00 to <0,15	1,587,147	1,141	0.07 %	0.04 %	0.04 %	0.20 %
0,00 to <0,10	1,437,152	748	0.05 %	0.03 %	0.04 %	0.14 %
0,10 to <0,15	149,995	393	0.26 %	0.13 %	0.14 %	0.69 %
0,15 to <0,25	1,243,165	3,648	0.29 %	0.19 %	0.19 %	0.44 %
0,25 to <0,50	327,427	2,142	0.65 %	0.44 %	0.43 %	0.97 %
0,50 to <0,75	776,720	6,900	0.89 %	0.60 %	0.60 %	1.54 %
0,75 to <2,50	2,081,563	38,664	1.86 %	1.42 %	1.48 %	2.26 %
0,75 to <1,75	1,413,293	22,197	1.57 %	1.15 %	1.19 %	1.97 %
1,75 to <2,50	668,270	16,467	2.46 %	2.05 %	2.08 %	2.87 %
2,50 to <10,00	3,252,122	156,891	4.82 %	5.68 %	6.17 %	5.78 %
2,50 to <5,00	1,240,999	44,987	3.63 %	3.69 %	3.76 %	4.06 %
5,00 to <10,00	2,011,123	111,904	5.56 %	7.39 %	7.66 %	6.83 %
10,00 to <100,00	994,172	200,602	20.18 %	22.99 %	24.43 %	18.66 %
10,00 to <20,00	603,827	93,862	15.54 %	13.50 %	13.54 %	14.63 %
20,00 to <30,00	151,787	44,367	29.23 %	24.56 %	24.52 %	27.91 %
30,00 to <100,00	238,558	62,373	26.15 %	45.48 %	51.93 %	22.95 %
100,00 (Default)	198,438	6,533	3.29 %	100.00 %	100.00 %	1.46 %

(1) A floor of 0.03% PD is applied to exposures in the categories of Institutions, Corporates and Retail, according to Articles 160 and 163 of the CRR.

Table 34. EU CR9.1 - Backtesting of PD per exposure class (internal PD scale) (12-31-2022)

PD Scale	External rating equivalent	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Arithmetic average PD by obligors(1)	Average historical annual default rate
Central governments or central banks						
0.00 to <0.02	AAA	5	—	—	0.01 %	20.00 %
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	3	—	—	0.03 %	—
0.04 to <0.05	AA-	2	—	—	0.04 %	33.33 %
0.05 to <0.06	A+	7	—	—	0.05 %	14.29 %
0.06 to <0.09	A	—	—	—	—	—
0.09 to <0.11	A-	1	—	—	0.10 %	—
0.11 to <0.17	BBB+	5	—	—	0.13 %	—
0.17 to <0.24	BBB	8	—	—	0.20 %	—
0.29 to <0.39	BBB-	4	—	—	0.31 %	—
0.39 to <0.67	BB+	1	—	—	0.51 %	—
0.67 to <1.16	BB	1	—	—	0.88 %	—
1.16 to <1.94	BB-	6	—	—	1.50 %	—
1.94 to <3.35	B+	—	—	—	—	—
3.35 to <5.81	B	8	—	—	4.57 %	—
5.81 to <11.61	B-	8	—	—	7.85 %	—
11.61 to <100.00	CCC	32	2	6.25 %	34.89 %	—
100.00 (default)	D	2	—	—	100.00 %	—
Institutions						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	18	—	—	0.03 %	5.56 %
0.04 to <0.05	AA-	54	—	—	0.04 %	9.23 %
0.05 to <0.06	A+	96	1	1.04 %	0.06 %	5.08 %
0.06 to <0.09	A	106	4	3.77 %	0.09 %	5.50 %
0.09 to <0.11	A-	238	4	1.68 %	0.10 %	3.38 %
0.11 to <0.17	BBB+	1,112	13	1.17 %	0.14 %	1.65 %
0.17 to <0.24	BBB	476	7	1.47 %	0.21 %	1.75 %
0.29 to <0.39	BBB-	295	4	1.36 %	0.32 %	2.59 %
0.39 to <0.67	BB+	160	1	0.63 %	0.54 %	2.70 %
0.67 to <1.16	BB	81	—	—	0.92 %	1.27 %
1.16 to <1.94	BB-	75	1	1.33 %	1.62 %	1.19 %
1.94 to <3.35	B+	56	—	—	2.67 %	3.08 %
3.35 to <5.81	B	45	1	2.22 %	4.55 %	4.55 %
5.81 to <11.61	B-	16	—	—	8.03 %	3.70 %
11.61 to <100.00	CCC	85	2	2.35 %	32.97 %	—
100.00 (default)	D	79	—	—	100.00 %	—

PD Scale	External rating equivalent	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Arithmetic average PD by obligors[1]	Average historical annual default rate
Corporate - SMEs						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	104	—	—	0.03 %	—
0.04 to <0.05	AA-	19	—	—	0.04 %	—
0.05 to <0.06	A+	19	—	—	0.05 %	4.76 %
0.06 to <0.09	A	17	—	—	0.07 %	—
0.09 to <0.11	A-	1,139	2	0.18 %	0.10 %	0.76 %
0.11 to <0.17	BBB+	1,209	1	0.08 %	0.14 %	1.03 %
0.17 to <0.24	BBB	1,767	4	0.23 %	0.20 %	1.05 %
0.29 to <0.39	BBB-	3,523	13	0.37 %	0.31 %	1.35 %
0.39 to <0.67	BB+	4,198	27	0.64 %	0.50 %	1.84 %
0.67 to <1.16	BB	3,802	39	1.03 %	0.88 %	2.75 %
1.16 to <1.94	BB-	3,131	28	0.89 %	1.50 %	3.79 %
1.94 to <3.35	B+	3,113	51	1.64 %	2.55 %	4.73 %
3.35 to <5.81	B	5,147	98	1.90 %	4.49 %	4.70 %
5.81 to <11.61	B-	3,629	107	2.95 %	7.74 %	6.04 %
11.61 to <100.00	CCC	14,331	783	5.46 %	33.69 %	7.97 %
100.00 (default)	D	5,814	—	—	100.00 %	—
Corporate - Non-SMEs						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—		—	—
0.03 to <0.04	AA	36	—	—	0.03 %	2.56 %
0.04 to <0.05	AA-	36	—	—	0.05 %	—
0.05 to <0.06	A+	—	—	— %	—	2.27 %
0.06 to <0.09	A	49	—	—	0.07 %	2.59 %
0.09 to <0.11	A-	400	3	0.75 %	0.10 %	1.26 %
0.11 to <0.17	BBB+	1,698	8	0.47 %	0.15 %	1.67 %
0.17 to <0.24	BBB	223	—	—	0.20 %	2.16 %
0.29 to <0.39	BBB-	2,668	13	0.49 %	0.30 %	1.43 %
0.39 to <0.67	BB+	946	9	0.95 %	0.56 %	1.90 %
0.67 to <1.16	BB	895	3	0.34 %	0.95 %	1.84 %
1.16 to <1.94	BB-	638	4	0.63 %	1.65 %	3.33 %
1.94 to <3.35	B+	531	7	1.32 %	2.73 %	4.86 %
3.35 to <5.81	B	904	9	1.00 %	4.80 %	4.40 %
5.81 to <11.61	B-	479	18	3.76 %	8.30 %	5.94 %
11.61 to <100.00	CCC	915	17	1.86 %	31.61 %	6.91 %
100.00 (default)	D	473	—	—	100.00 %	—

PD Scale	External rating equivalent	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Arithmetic average PD by obligors[1]	Average historical annual default rate
Retail - Immovable property SMEs						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	—	—	—	—	—
0.04 to <0.05	AA-	—	—	—	—	—
0.05 to <0.06	A+	—	—	—	—	—
0.06 to <0.09	A	—	—	—	—	—
0.09 to <0.11	A-	—	—	—	—	—
0.11 to <0.17	BBB+	—	—	—	—	—
0.17 to <0.24	BBB	—	—	—	—	—
0.29 to <0.39	BBB-	—	—	—	—	—
0.39 to <0.67	BB+	—	—	—	—	—
0.67 to <1.16	BB	—	—	—	—	—
1.16 to <1.94	BB-	—	—	—	—	2.27 %
1.94 to <3.35	B+	—	—	—	—	—
3.35 to <5.81	B	—	—	—	—	—
5.81 to <11.61	B-	—	—	—	—	—
11.61 to <100.00	CCC	20,847	192	0.92 %	22.97 %	0.91 %
100.00 (default)	D	669	—	—	100.00 %	—
Retail - Immovable property non-SMEs						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	420,667	213	0.05 %	0.03 %	0.17 %
0.04 to <0.05	AA-	43,032	29	0.07 %	0.04 %	0.34 %
0.05 to <0.06	A+	65,494	204	0.15 %	0.05 %	0.21 %
0.06 to <0.09	A	88,720	132	0.15 %	0.08 %	0.87 %
0.09 to <0.11	A-	10,058	27	0.27 %	0.09 %	1.14 %
0.11 to <0.17	BBB+	43,087	118	0.27 %	0.13 %	1.53 %
0.17 to <0.24	BBB	110,132	353	0.32 %	0.19 %	1.56 %
0.29 to <0.39	BBB-	61,759	367	0.59 %	0.31 %	1.48 %
0.39 to <0.67	BB+	45,506	441	0.97 %	0.51 %	2.37 %
0.67 to <1.16	BB	19,981	317	1.59 %	0.91 %	2.95 %
1.16< to 1.94	BB-	34,000	742	2.18 %	1.49 %	3.41 %
1.94 to <3.35	B+	13,376	448	3.35 %	2.52 %	6.31 %
3.35 to <5.81	B	8,457	468	5.53 %	4.51 %	11.30 %
5.81 to <11.61	B-	7,970	909	11.41 %	7.90 %	23.05 %
11.61 to <100.00	CCC	14,389	3,174	22.06 %	22.46 %	27.14 %
100.00 (default)	D	29,290	—	—	100.00 %	—

PD Scale	External rating equivalent	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Arithmetic average PD by obligors[1]	Average historical annual default rate
Retail - Other exposures SMEs						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	—	—	—	—	—
0.04 to <0.05	AA-	—	—	—	—	—
0.05 to <0.06	A+	—	—	—	—	—
0.06 to <0.09	A	—	—	—	—	12.50 %
0.09 to <0.11	A-	14,556	10	0.07 %	0.10 %	0.16 %
0.11 to <0.17	BBB+	9,513	19	0.20 %	0.14 %	0.36 %
0.17 to <0.24	BBB	8,682	11	0.13 %	0.20 %	0.34 %
0.29 to <0.39	BBB-	14,362	65	0.45 %	0.31 %	0.63 %
0.39 to <0.67	BB+	18,154	124	0.68 %	0.51 %	0.87 %
0.67 to <1.16	BB	19,418	220	1.13 %	0.88 %	1.31 %
1.16 to <1.94	BB-	17,727	283	1.60 %	1.50 %	1.74 %
1.94 to <3.35	B+	16,724	416	2.49 %	2.55 %	2.92 %
3.35 to <5.81	B	20,595	605	2.94 %	4.50 %	3.92 %
5.81 to <11.61	B-	11,470	640	5.58 %	7.43 %	6.90 %
11.61 to <100.00	CCC	33,533	1,893	5.65 %	26.51 %	10.94 %
100.00 (default)	D	20,240	—	—	100.00 %	—
Retail - Other exposures Non-SMEs						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	87,963	29	0.03 %	0.03 %	0.08 %
0.04 to <0.05	AA-	60,321	50	0.08 %	0.04 %	0.19 %
0.05 to <0.06	A+	—	—	—	—	0.30 %
0.06 to <0.09	A	49,106	60	0.12 %	0.07 %	0.42 %
0.09 to <0.11	A-	23,688	46	0.19 %	0.10 %	0.53 %
0.11 to <0.17	BBB+	96,926	268	0.28 %	0.14 %	0.72 %
0.17 to <0.24	BBB	82,407	421	0.51 %	0.22 %	1.01 %
0.29 to <0.39	BBB-	51,556	338	0.66 %	0.33 %	1.60 %
0.39 to <0.67	BB+	111,043	986	0.89 %	0.50 %	2.08 %
0.67 to <1.16	BB	196,372	2,745	1.40 %	0.92 %	2.92 %
1.16 to <1.94	BB-	157,458	2,914	1.85 %	1.50 %	3.89 %
1.94 to <3.35	B+	151,895	3,194	2.10 %	2.41 %	4.71 %
3.35 to <5.81	B	63,353	3,272	5.16 %	4.38 %	7.60 %
5.81 to <11.61	B-	20,916	1,865	8.92 %	7.64 %	13.64 %
11.61 to <100.00	CCC	43,992	10,615	24.13 %	30.31 %	38.39 %
100.00 (default)	D	93,643	—	—	100.00 %	—

PD Scale	External rating equivalent	Number of obligors at the end of previous year	Of which number of obligors which defaulted in the year	Observed average default rate	Arithmetic average PD by obligors[1]	Average historical annual default rate
Retail - qualifying revolving (QRRE)						
0.00 to <0.02	AAA	—	—	—	—	—
0.02 to <0.03	AA+	—	—	—	—	—
0.03 to <0.04	AA	1,233,902	459	0.04 %	0.03 %	0.10 %
0.04 to <0.05	AA-	35,413	60	0.17 %	0.04 %	0.32 %
0.05 to <0.06	A+	53,383	40	0.07 %	0.05 %	0.47 %
0.06 to <0.09	A	113,564	188	0.17 %	0.08 %	0.47 %
0.09 to <0.11	A-	1,636	3	0.18 %	0.10 %	0.39 %
0.11 to <0.17	BBB+	391,454	1,750	0.45 %	0.16 %	0.69 %
0.17 to <0.24	BBB	997,931	2,286	0.23 %	0.20 %	0.39 %
0.29 to <0.39	BBB-	65,785	192	0.29 %	0.35 %	1.08 %
0.39 to <0.67	BB+	894,821	7,418	0.83 %	0.54 %	1.35 %
0.67 to <1.16	BB	714,879	8,805	1.23 %	0.86 %	1.56 %
1.16 to <1.94	BB-	1,058,738	19,405	1.83 %	1.47 %	2.30 %
1.94 to <3.35	B+	862,010	25,987	3.01 %	2.54 %	3.33 %
3.35 to <5.81	B	1,029,630	43,730	4.25 %	4.42 %	4.78 %
5.81 to <11.61	B-	1,867,564	106,123	5.68 %	7.96 %	7.14 %
11.61 to <100.00	CCC	941,606	193,542	20.55 %	25.22 %	24.04 %
100.00 (default)	D	198,438	6,533	3.29 %	100.00 %	1.55 %

As of December 31, 2022, the total number of short-term wholesale obligors (residual maturity of less than 1 year) whose exposures are calculated under IRB approach rises to approximately 22,000 obligors. The largest proportion of these corresponds to the regulatory categories of Institutions and Central Governments and Central Banks. Additionally, the Group only has one PD model authorized by the Supervisor for each of the aforementioned categories, therefore, 100% of the RWAs are calculated under this PD model.

The comparability of the information and the composition of the time window are conditioned by the following factors:

- Long life cycle between the time the IRB parameters are updated and their final implementation, depending on the materiality of the change, supervisory prioritization for the inspection and decision phases.
- Different nature, risk profile and economic cycles of the different portfolios, especially relevant in cases where several geographies are aggregated in the same exposure class (mainly Corporates and Credit Cards in Spain and Mexico).

Minimum historical depth of 5 years: The annual historical default rates cover more than 5 years, seeking consistency between regulatory and economic capital, as long as the supervisory process for the approval of the changes allows it.

Window overlap: Although there is an overlap of quarterly windows in the calibration of the pools, analysis are carried out to measure and mitigate the possible bias that this overlapping could imply. In the quantification of the long-term PD, however, there are no overlapping windows.

4.2.5.4. Risk weights of specialised lending exposure

The solvency regulation stipulates that the classification of specialised lending companies should apply to legal entities with the following characteristics:

- The exposure is to an entity created specifically to finance and/or operate physical assets.
- The contractual arrangements give the lender a substantial degree of control over the assets and income they generate.
- The primary source of repayment of the obligation is the income generated by the assets being financed, rather than the independent capacity of the borrower.

Corporate specialized lending exposures subject to the IRB Supervisory Slotting Approach, which is used by BBVA for RWA calculations, are assigned to a grade, the determination of which takes into account the following factors:

1. Financial Strength that includes: market conditions, financial ratios, stress analysis and financial structure.
2. Political and legal environment that includes: political risks, country risks, force majeure risks, government support, stability of legal and regulatory environment, local support and legal force of the contracts.
3. Asset and operational characteristics that includes: design and technology risks, permits and license risks, construction risks, completion guarantees, Contractor and Operator qualifications, O&M agreements and supply risks.
4. Strength of the Sponsor that includes: financial strength, experience and support to the project.
5. Legal & Finance Structure that includes: pledges and assignments, covenants and restrictions, DSRA.

Once assigned to a grade, the exposure is risk-weighted in accordance with the risk weight applicable to that grade and remaining maturity banding.

The following tables show information on specialised lending exposures by type according to EBA ITS. as of December 31, 2022 and December 31, 2021:

Table 35. EU CR10 (1-4) - IRB: specialised lending (Million Euros. 12-31-2022)

Specialised lending: Project Finance

Regulatory categories	Remaining maturity	On-balance sheet amount[1]	Off-balance sheet amount[2]	RW	Exposure amount[3]	RWAs	Expected losses
Category 1	Less than 2.5 years	93	71	50%	142	68	—
Category 1	Equal to or more than 2.5 years	2,162	287	70%	2,322	1,451	9
Category 2	Less than 2.5 years	177	142	70%	270	162	1
Category 2	Equal to or more than 2.5 years	1,582	1,757	90%	2,500	2,098	20
Category 3	Less than 2.5 years	8	1	115%	9	10	—
Category 3	Equal to or more than 2.5 years	170	52	115%	201	231	6
Category 4	Less than 2.5 years	69	1	250%	70	175	6
Category 4	Equal to or more than 2.5 years	231	23	250%	241	604	19
Category 5	Less than 2.5 years	5	—		5	—	3
Category 5	Equal to or more than 2.5 years	3	—		3	—	2
Total	**Less than 2.5 years**	**352**	**214**		**495**	**415**	**9**
Total	**Equal to or more than 2.5 years**	**4,149**	**2,119**		**5,268**	**4,385**	**56**

[1] Corresponds to the original exposure.

[2] Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

[3] Corresponds to exposure value after CRM and CCF.

Specialised lending: IPRE & HVCRE

Regulatory categories	Remaining maturity	On-balance sheet amount(1)	Off-balance sheet amount(2)	RW	Exposure amount(3)	RWAs	Expected losses
Category 1	Less than 2.5 years	123	—	50 %	123	61	—
Category 1	Equal to or more than 2.5 years	367	8	70 %	370	259	1
Category 2	Less than 2.5 years	—	—	70 %	—	—	—
Category 2	Equal to or more than 2.5 years	89	—	90 %	89	80	1
Category 3	Less than 2.5 years	—	—	115 %	—	—	—
Category 3	Equal to or more than 2.5 years	—	—	115 %	—	—	—
Category 4	Less than 2.5 years	—	—	250 %	—	—	—
Category 4	Equal to or more than 2.5 years	—	—	250 %	—	—	—
Category 5	Less than 2.5 years	—	—		—	—	—
Category 5	Equal to or more than 2.5 years	—	—		—	—	—
Total	**Less than 2.5 years**	**123**	**—**		**123**	**61**	**—**
Total	**Equal to or more than 2.5 years**	**456**	**8**		**459**	**339**	**2**

(1) Corresponds to the original exposure.

(2) Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

(3) Corresponds to exposure value after CRM and CCF.

Specialised lending: Object Finance

Regulatory categories	Remaining Maturity	On-balance sheet amount(1)	Off-balance sheet amount(2)	RW	Exposure Amount(3)	RWAs	Expected Losses
Category 1	Less than 2.5 years	59	1	50 %	59	29	—
Category 1	Equal to or more than 2.5 years	109	—	70 %	109	76	—
Category 2	Less than 2.5 years	—	—	70 %	—	—	—
Category 2	Equal to or more than 2.5 years	—	—	90 %	—	—	—
Category 3	Less than 2.5 years	—	—	115 %	—	—	—
Category 3	Equal to or more than 2.5 years	—	—	115 %	—	—	—
Category 4	Less than 2.5 years	—	—	250 %	—	—	—
Category 4	Equal to or more than 2.5 years	—	—	250 %	—	—	—
Category 5	Less than 2.5 years	—	—		—	—	—
Category 5	Equal to or more than 2.5 years	—	—		—	—	—
Total	**Less than 2.5 years**	**59**	**1**		**59**	**29**	**—**
Total	**Equal to or more than 2.5 years**	**109**	**—**		**109**	**76**	**—**

(1) Corresponds to the original exposure.

(2) Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

(3) Corresponds to exposure value after CRM and CCF.

Specialised lending: Commodities Finance

Regulatory categories	Remaining Maturity	On-balance sheet amount(1)	Off-balance sheet amount(2)	RW	Exposure Amount(3)	RWAs	Expected Losses
Category 1	Less than 2.5 years	—	—	50%	—	—	—
Category 1	Equal to or more than 2.5 years	—	—	70%	—	—	—
Category 2	Less than 2.5 years	—	—	70%	—	—	—
Category 2	Equal to or more than 2.5 years	—	—	90%	—	—	—
Category 3	Less than 2.5 years	—	—	115%	—	—	—
Category 3	Equal to or more than 2.5 years	—	—	115%	—	—	—
Category 4	Less than 2.5 years	—	—	250%	—	—	—
Category 4	Equal to or more than 2.5 years	—	—	250%	—	—	—
Category 5	Less than 2.5 years	—	—		—	—	—
Category 5	Equal to or more than 2.5 years	—	—		—	—	—
Total	**Less than 2.5 years**	**—**	**—**		**—**	**—**	**—**
Total	**Equal to or more than 2.5 years**	**—**	**—**		**—**	**—**	**—**

(1) Corresponds to the original exposure.

(2) Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

(3) Corresponds to exposure value after CRM and CCF.

EU CR10 (1-4) - IRB: specialised lending (Million Euros. 12-31-2021)

Specialised lending: Project Finance

Regulatory categories	Remaining Maturity	On-balance sheet amount(1)	Off-balance sheet amount(2)	RW	Exposure Amount(3)	RWAs	Expected Losses
Category 1	Less than 2.5 years	103	5	50%	108	51	—
Category 1	Equal to or more than 2.5 years	2,793	212	70%	2,917	1,850	11
Category 2	Less than 2.5 years	88	15	70%	99	59	—
Category 2	Equal to or more than 2.5 years	1,493	560	90%	1,782	1,402	13
Category 3	Less than 2.5 years	46	1	115%	47	53	1
Category 3	Equal to or more than 2.5 years	396	64	115%	436	502	12
Category 4	Less than 2.5 years	9	—	250%	9	23	1
Category 4	Equal to or more than 2.5 years	312	12	250%	319	796	26
Category 5	Less than 2.5 years	6	—		6	—	3
Category 5	Equal to or more than 2.5 years	38	3		40	—	20
Total	**Less than 2.5 years**	**252**	**20**		**269**	**186**	**5**
Total	**Equal to or more than 2.5 years**	**5,032**	**850**		**5,493**	**4,550**	**82**

(1) Corresponds to the original exposure.

(2) Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

(3) Corresponds to exposure value after CRM and CCF.

Specialised lending: IPRE & HVCRE

Regulatory categories	Remaining Maturity	On-balance sheet amount (1)	Off-balance sheet amount (2)	RW	Exposure Amount (3)	RWAs	Expected Losses
Category 1	Less than 2.5 years	163	2	50 %	165	83	—
Category 1	Equal to or more than 2.5 years	206	4	70 %	208	145	1
Category 2	Less than 2.5 years	1	5	70 %	3	2	—
Category 2	Equal to or more than 2.5 years	50	7	90 %	54	48	—
Category 3	Less than 2.5 years	—	—	115 %	—	—	—
Category 3	Equal to or more than 2.5 years	—	—	115 %	—	—	—
Category 4	Less than 2.5 years	—	—	250 %	—	—	—
Category 4	Equal to or more than 2.5 years	—	—	250 %	—	—	—
Category 5	Less than 2.5 years	—	—		—	—	—
Category 5	Equal to or more than 2.5 years	—	—		—	—	—
Total	**Less than 2.5 years**	**164**	**7**		**168**	**85**	**—**
Total	**Equal to or more than 2.5 years**	**256**	**11**		**261**	**194**	**1**

(1) Corresponds to the original exposure.

(2) Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

(3) Corresponds to exposure value after CRM and CCF.

Specialised lending: Object Finance

Regulatory categories	Remaining Maturity	On-balance sheet amount(1)	Off-balance sheet amount(2)	RW	Exposure Amount(3)	RWAs	Expected Losses
Category 1	Less than 2.5 years	18	—	50 %	18	9	—
Category 1	Equal to or more than 2.5 years	14	—	70 %	14	10	—
Category 2	Less than 2.5 years	71	1	70 %	71	50	—
Category 2	Equal to or more than 2.5 years	100	—	90 %	100	90	1
Category 3	Less than 2.5 years	—	—	115 %	—	—	—
Category 3	Equal to or more than 2.5 years	—	—	115 %	—	—	—
Category 4	Less than 2.5 years	—	—	250 %	—	—	—
Category 4	Equal to or more than 2.5 years	—	—	250 %	—	—	—
Category 5	Less than 2.5 years	—	—		—	—	—
Category 5	Equal to or more than 2.5 years	—	—		—	—	—
Total	**Less than 2.5 years**	**90**	**1**		**90**	**59**	**—**
Total	**Equal to or more than 2.5 years**	**115**	**—**		**115**	**100**	**1**

(1) Corresponds to the original exposure.

(2) Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

(3) Corresponds to exposure value after CRM and CCF.

Specialised lending: Commodities Finance

Regulatory categories	Remaining Maturity	On-balance sheet amount[1]	Off-balance sheet amount[2]	RW	Exposure Amount[3]	RWAs	Expected Losses
Category 1	Less than 2.5 years	—	—	50%	—	—	—
Category 1	Equal to or more than 2.5 years	—	—	70%	—	—	—
Category 2	Less than 2.5 years	—	—	70%	—	—	—
Category 2	Equal to or more than 2.5 years	—	—	90%	—	—	—
Category 3	Less than 2.5 years	—	—	115%	—	—	—
Category 3	Equal to or more than 2.5 years	—	—	115%	—	—	—
Category 4	Less than 2.5 years	—	—	250%	—	—	—
Category 4	Equal to or more than 2.5 years	—	—	250%	—	—	—
Category 5	Less than 2.5 years	—	—		—	—	—
Category 5	Equal to or more than 2.5 years	—	—		—	—	—
Total	**Less than 2.5 years**	**—**	**—**		**—**	**—**	**—**
Total	**Equal to or more than 2.5 years**	**—**	**—**		**—**	**—**	**—**

[1] Corresponds to the original exposure.

[2] Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

[3] Corresponds to exposure value after CRM and CCF.

For risk measurement of the Specialised Lending portfolio, the Group uses the "slotting criteria" approach, which classifies exposures into different regulatory categories based on the risk assessment performed by the entity and the residual maturity. In terms of the type of specialised lending, project finance represents 88% of total portfolio with a total exposure of €5,763 million and RWAs consumption of €4,800 million.

During the second half of the year there were no significant movements in the portfolio.

4.2.5.5. Equity exposure by method

The following table shows equity exposure by the following approaches: internal, PD/LGD and simple method (in this case, broken down by risk weights), as of December 31, 2022 and as of December 31, 2021.

Table 36. EU CR10 (5) - IRB: equity (Million Euros. 12-31-2022)

	Equity under the IRB approach					
Categories	On-balance sheet amount[1]	Off-balance sheet amount[2]	RW	Exposure Amount[3]	RWAs	Expected Losses
Simple method - Private Equity Exposures	790	—	190 %	790	1,500	6
Simple method - Exchange-traded equity exposures	190	—	290 %	190	551	2
Simple method - Other Equity Exposures	140	—	370 %	140	519	3
Total	**1,120**	**—**		**1,120**	**2,570**	**11**

[1] Corresponds to the original exposure.

[2] Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

[3] Corresponds to exposure value after CRM and CCF.

EU CR10 (5) - IRB: equity (Million Euros. 12-31-2021)

	Equity under the IRB approach					
Categories	On-balance sheet amount[1]	Off-balance sheet amount[2]	RW	Exposure Amount[3]	RWAs	Expected Losses
Simple method - Private Equity Exposures	711	—	190 %	711	1,351	6
Simple method - Exchange-traded equity exposures	242	—	290 %	242	702	2
Simple method - Other Equity Exposures	105	—	370 %	105	389	2
Total	**1,058**	**—**		**1,058**	**2,442**	**10**

[1] Corresponds to the original exposure.

[2] Corresponds to the value of off-balance sheet exposure, regardless of credit conversion factors (CCF), or the effect of the Credit Risk Mitigation (CRM) techniques.

[3] Corresponds to exposure value after CRM and CCF.

During 2022 there is no relevant changes in the composition of equity exposures using the simple method.

Additionally, section 4.4.3 shows detailed information on the structural risk of equities.

4.2.6. Information on counterparty credit risk

Counterparty credit risk exposure involves that part of the original exposure corresponding to derivative instruments, repurchase and reverse repurchase transactions, securities or commodities lending transactions and deferred settlement transactions.

4.2.6.1. Policies for managing counterparty risk

4.2.6.1.1. Methodology: allocation of internal capital and limits to exposure subject to counterparty risk

The Group has an economic model for calculating internal capital through exposure to counterparty risk in treasury operations. This model has been implemented in the Risk unit systems in Market areas. It is used to estimate the credit exposure for each of the counterparties for which the entity operates.

Exposure is generated in a manner consistent with those used for the monitoring and control of credit risk limits. The time horizon is divided up into intervals, and the market risk factors (interest rates, exchange rates, etc.) underlying the instruments that determine their valuation are simulated for each interval.

Exposure is obtained based on the 2000 different scenarios generated using the Monte Carlo method for risk factors (subject to counterparty risk) and applying the corresponding mitigating factors to each counterparty (i.e. applying collateral and/or compensation arrangements, or netting, as applicable).

The correlations, loss given defaults, internal ratings and associated probabilities of default are consistent with the Group's economic model for general credit risk.

The capital for each counterparty is then calculated using the exposure profile and taking into account the analytical formula adopted by Basel. This figure is modified by an adjustment factor for possible subsequent maturity after one year of the operations, in a similar vein to the general approach adopted by Basel for the treatment of credit risk.

Counterparty limits are specified within the financial programs authorised for each subsidiary within the line item of treasury limits. It stipulates both the limit and the maximum maturity for the transaction.

Small businesses Transactions that generate counterparty risk are subject to risk limits that control both bilateral risk and risk with CCPs. When setting these limits for each business area and segment, and to ensure their correct application, the corresponding capital consumption and revenue generated by this operation are taken into account.

There is also a risk committee that individually analyzes the most significant transactions to assess (among other aspects) the relationship between profitability and risk.

The consumption of transactions within the limits is measured in terms of market capitalisation (mark to market) plus the potential risk with Monte Carlo Simulation methodology (95% confidence level or above if there are mitigating agreements or a risk of adverse links) and considering possible mitigating factors (such as netting, break clauses and collateral contracts).

Management of consumption by lines in the Markets area is carried out through a corporate platform that enables online monitoring of the limits and liquid assets established for the different counterparties and customers. This control is completed by independent units of the business area to guarantee proper segregation of functions.

4.2.6.1.2. Policies for ensuring the effectiveness of collateral and setting the value adjustments for impairment losses to cover this risk

The Group negotiates agreements with its customers to mitigate counterparty risk within the legal frameworks applicable in each of the countries where it operates. These agreements regulate the exchange of guarantees as a mechanism to reduce exposure derived from transactions that generate counterparty risk.

The assets covered by these agreements include cash, as well as financial assets with a high credit quality. In addition, the agreements with customers include mechanisms that allow the immediate replacement of the collateral if its quality is impaired (for example, a reduction in the market capitalisation or adverse changes in the asset rating).

Mitigation by compensation or netting transactions and by collateral only reduces the consumption of limits and capital if there is a positive opinion on their immediate effectiveness in case of the counterparty's default or insolvency.

An internal tool has been specifically designed to store and process the collateral contracts concluded with counterparties. This application enables the existence of collateral to be taken into account at the transaction level (useful for controlling and monitoring the status of specific operations) as well as at the counterparty level. Furthermore, this tool feeds the applications responsible for estimating counterparty risk by providing all the necessary parameters for considering the impact of mitigation in the portfolio due to the agreements signed.

Likewise, there is also application process that reconciles and adjusts the positions serving the Collateral and Risk units.

In order to guarantee the effectiveness of collateral contracts, the Group carries out daily monitoring of the market values of operations governed by such contracts and of the deposits made by the counterparties. Once the amount of the collateral to be delivered or received is obtained, the collateral demand (margin call), or the demand received, is carried out at the intervals established in the contract, usually daily.

If significant variations arise from the process of reconciliation between the counterparties, after a reconciliation in economic terms, they are reported by the Collateral unit to the Risk unit for subsequent analysis and monitoring. Within the control process, the Collateral unit issues a daily report on the guarantees which includes a description by counterparty of the exposure and deposited collateral, making special reference to those guarantee deficits at or beyond the set warning levels.

Financial assets and liabilities may be the object of compensation, or netting, in other words presentation for a net amount in the consolidated balance sheet, only when the Group’s entities comply with the provisions laid down in IAS 32 - Paragraph 42, and thus have the legally obliged right to offset the amounts recognised, and the intention to settle the net amount or to divest the asset and pay the liability at the same time.

In addition, the Group has assets and liabilities on the balance sheet that are not netted and for which there are master netting agreements, but for which there is neither the intention nor the right to settle. The most common types of events that trigger the compensation of reciprocal obligations include the bankruptcy of the credit institution in question, swiftly accumulating indebtedness, default, and the restructuring or dissolution of the entity.

In the current market context, derivatives are arranged under a variety of framework contracts, with the most general being those developed by the International Swaps and Derivatives Association (ISDA), and for the Spanish market the Framework Agreement for Financial Transactions (FAFT). Practically all portfolio derivative operations have been concluded under these master contracts, including in them the netting clauses referred to in the above point as Master Netting Agreements, considerably reducing the credit exposure in these instruments. Furthermore, in the contracts concluded with professional counterparties, annexes are included with collateral agreements called Credit Support Annexes (CSA), thus minimizing exposure to a possible counterparty insolvency.

At the same time, the Group has a high volume of assets sold under repurchase agreements traded through clearing houses that use mechanisms to reduce counterparty risk, as well as through various master contracts in bilateral operations, the most common being the Global Master Repurchase Agreement (GMRA), which is published by the International Capital Market Association (ICMA). This tends to have clauses added relating to the exchange of collateral within the main body of the master contract itself.

4.2.6.1.3. Policies on the risk of adverse effects due to correlations

Derivatives contracts may give rise to potential adverse correlation effects between the exposure to the counterparty and its credit quality (wrong-way-exposure).

The Group has specific policies for handling these type of exposures, which establish:

- How to identify transactions subject to adverse correlation risk.
- A specific transaction-by-transaction admission procedure.
- Measurements appropriate to the risk profile with adverse correlation and sanctioned in the corresponding decision-making areas.
- Control and monitoring of the transaction.

4.2.6.1.4. Impact of collateral in the event of a downgrade in credit quality

In derivatives transactions, as a general policy the Group does not subscribe collateral contracts that involve an increase in the amount to be deposited in the event of the Group being downgraded.

The general criteria applied to date with banking counterparties is to establish a zero threshold within collateral contracts, irrespective of the mutual rating; provision will be made as collateral of any difference that arises through market capitalisation (mark to market).

Since 2018, with the entry into force of the regulatory obligations for exchange of margins for derivatives that are not offset in the clearing houses, all the collateral annexes have been adapted to the characteristics required by the regulation, among which is that of establishing a zero threshold. Furthermore, the obligation to exchange initial margins with the main financial counterparties to overcollateralize exposure was added in 2019.

4.2.6.2. Amounts of counterparty risk

The exposure value of derivative instruments will be determined based on one of the following methods established in sections 3 to 6 of chapter 6 of the CRR: standard method for counterparty credit risk, simplified standard method for credit risk counterparty, original risk method or internal models method.

The exposure value of the securities financing transactions (SFTs) is determined in accordance with the methods provided in the preceding paragraph or using those provided for in Chapter 4 of the CRR.

In this regard, the BBVA S.A. Group calculates the exposure value of derivative instruments in accordance with the standardised method for counterparty credit risk (SA-CCR) which is applicable since June 2021.

The SA-CCR framework calculates the aforementioned exposure by each netting set of the entity. The SA-CCR method defines the exposure value as the product of a surcharge (α) applied to the sum of the replacement cost (RC) and the potential future exposure (PFE). Where α is equal to 1.4.

Exposure value = α * (RC + PFE)

The BBVA Group S.A. calculates the exposure value of the repurchase operations in accordance with the provisions of chapter 4 on credit risk mitigation and in accordance with the financial collateral comprehensive method.

A breakdown of the original exposure, EAD and RWAs under counterparty credit risk (including exposures to Central Counterparties) is below:

Table 37. Positions subject to counterparty credit risk in terms of OE, EAD and RWAs (Million Euros. 12-31-2022)

	Securities financing transactions			Derivatives and transactions with deferred settlement			Total		
Exposure Class and risk types	**OE**	**EAD**	**RWAs**	**OE**	**EAD**	**RWAs**	**OE**	**EAD**	**RWAs**
Central governments or central banks	10,860	992	208	366	479	155	11,226	1,471	363
Regional governments or local authorities	10	—	—	95	2	1	105	2	2
Public sector entities	360	10	5	35	35	33	394	45	38
Multilateral Development Banks	—	—	—	2	2	—	2	2	—
International Organisations	—	—	—	—	—	—	—	—	—
Institutions	6,336	220	62	1,373	1,373	551	7,709	1,593	613
Corporates	8,599	915	825	3,016	3,016	1,734	11,616	3,931	2,559
Retail	31	14	11	49	49	36	80	63	46
Secured by mortgages on immovable property	—	—	—	—	—	—	—	—	—
Exposures in default	—	—	—	4	4	6	4	4	6
Exposures associated with particularly high risk	—	—	—	—	—	—	—	—	—
Covered bonds	—	—	—	—	—	—	—	—	—
Short-term claims on institutions and corporate	—	—	—	—	—	—	—	—	—
Collective investments undertakings	—	—	—	—	—	—	—	—	—
Other exposures	—	—	—	2	2	2	2	2	2
Total counterparty risk by standardised approach	**26,197**	**2,152**	**1,111**	**4,940**	**4,960**	**2,518**	**31,137**	**7,112**	**3,629**
Central governments or central banks	70	70	2	6	6	—	75	75	3
Institutions	86,213	86,213	1,140	8,010	7,991	1,597	94,224	94,204	2,737
Corporates	97	97	—	6,977	6,977	2,968	7,074	7,074	2,968
Of which: SMEs	—	—	—	107	107	86	107	107	86
Of which: specialised lending	—	—	—	148	148	129	148	148	129
Of which: other	97	97	—	6,721	6,721	2,753	6,819	6,819	2,753
Retail	—	—	—	2	2	1	2	2	1
Of which: Secured by immovable property	—	—	—	—	—	—	—	—	—
Of which: Qualifying revolving	—	—	—	—	—	—	—	—	—
Of which: Other retail	—	—	—	2	2	1	2	2	1
Other retail: SMEs	—	—	—	1	1	—	1	1	—
Other retail: Non SMEs	—	—	—	—	—	—	—	—	—
Total counterparty risk by IRB approach	**86,381**	**86,381**	**1,142**	**14,994**	**14,974**	**4,566**	**101,375**	**101,355**	**5,708**
Total counterparty risk	**112,578**	**88,532**	**2,253**	**19,934**	**19,934**	**7,084**	**132,512**	**108,467**	**9,337**

Positions subject to counterparty credit risk in terms of OE, EAD and RWAs (Million Euros. 12-31-2021)

	Securities financing transactions			**Derivatives and transactions with deferred settlement**			**Total**		
Exposure Class and risk types	**OE**	**EAD**	**RWAs**	**OE**	**EAD**	**RWAs**	**OE**	**EAD**	**RWAs**
Central governments or central banks	16,430	2,716	300	1,419	1,601	1,117	17,848	4,317	1,417
Regional governments or local authorities	—	—	—	2	2	1	2	2	1
Public sector entities	26	1	1	31	31	29	57	32	29
Multilateral Development Banks	—	—	—	—	—	—	—	—	—
International Organisations	—	—	—	—	—	—	—	—	—
Institutions	6,954	311	84	2,912	2,912	2,127	9,866	3,223	2,211
Corporates	2,862	112	87	2,528	2,528	2,098	5,390	2,640	2,185
Retail	10	2	1	16	16	11	26	18	12
Secured by mortgages on immovable property	—	—	—	—	—	—	—	—	—
Exposures in default	—	—	—	8	8	12	8	8	12
Exposures associated with particularly high risk	—	—	—	34	34	52	34	34	52
Covered bonds	—	—	—	—	—	—	—	—	—
Short-term claims on institutions and corporate	—	—	—	—	—	—	—	—	—
Collective investments undertakings	—	—	—	—	—	—	—	—	—
Other exposures	—	—	—	—	—	—	—	—	—
Total counterparty risk by standardised approach	**26,282**	**3,141**	**473**	**6,950**	**7,132**	**5,446**	**33,231**	**10,273**	**5,919**
Central governments or central banks	5,536	5,536	21	11	11	3	5,548	5,548	25
Institutions	83,461	83,461	1,091	7,752	7,569	1,506	91,213	91,031	2,598
Corporates	236	236	—	5,484	5,484	2,755	5,720	5,720	2,756
Of which: SMEs	—	—	—	136	136	164	136	136	164
Of which: specialised lending	—	—	—	839	839	675	839	839	675
Of which: other	236	236	—	4,509	4,509	1,916	4,745	4,745	1,917
Retail	—	—	—	3	3	1	3	3	1
Of which: Secured by immovable property	—	—	—	—	—	—	—	—	—
Of which: Qualifying revolving	—	—	—	—	—	—	—	—	—
Of which: Other retail	—	—	—	3	3	1	3	3	1
Other retail: SMEs	—	—	—	3	3	1	3	3	1
Other retail: Non SMEs	—	—	—	—	—	—	—	—	—
Total counterparty risk by IRB approach	**89,234**	**89,234**	**1,113**	**13,250**	**13,067**	**4,266**	**102,483**	**102,301**	**5,379**
Total counterparty risk	**115,515**	**92,375**	**1,586**	**20,199**	**20,199**	**9,712**	**135,714**	**112,574**	**11,298**

Exposures subject to counterparty risk increased in 2022 with the increase in securities financing transactions to central counterparties under the advanced approach during the first half of the year. This favourable evolution is slightly boosted by the evolution of the value of the exposure from derivatives transactions. Risk-weighted assets evolved in line with exposures and due to the improved risk profile of transactions subject to counterparty credit risk under the standardized approach.

From the amounts shown in the table above, those referring to the counterparty risk of trading book exposures in terms of capital requirements are shown below:

Table 38. Amounts of counterparty risk in the trading book (Million Euros)

	Capital requirements			
	2022		2021	
Counterparty Risk Trading Book Activities	**SA-CCR Method**	**Internal Models (IMM)**	**SA-CCR Method**	**Internal Models (IMM)**
Standardised Approach	211		444	
Advanced Approach	419		406	
Total	**630**		**850**	

The Group currently has a totally immaterial amount of own funds requirements for settlement risk of the trading portfolio.

Below is an overview of the methods used to calculate the regulatory requirements for counterparty credit risk and the main parameters of each method (excluding requirements for CVA and exposure cleared through a CCP, which are shown in tables CCR2 and CCR8, respectively).

Table 39. EU CCR1 - Analysis of CCR exposure by approach (Million Euros)

	12-31-2022							
	Replacement cost (RC)	**Potential future exposure (PFE)**	**Expected Effective Positive Exposure (EEPE)**	**Alpha**	**Exposure value pre-CRM**	**Exposure value post-CRM**	**Exposure value (without CVA)**	**RWEA**
EU - Original Exposure Method (for derivatives)	—	—		1.40	—	—	—	—
EU - Simplified SA-CCR (for derivatives)	—	—		1.40	—	—	—	—
SA-CCR (for derivatives)	5,871	6,905		1.40	19,621	19,621	18,166	6,725
IMM (for derivatives and SFTs)			—	—	—	—	—	—
Of which securities financing transactions netting sets			—		—	—	—	—
Of which derivatives and long settlement transactions netting sets			—		—	—	—	—
Of which from contractual cross-product netting sets			—		—	—	—	—
Financial collateral simple method (for SFTs)					—	—	—	—
Financial collateral comprehensive method (for SFTs)					80,795	64,687	64,363	2,210
VaR for SFTs					—	—	—	—
Total					**100,416**	**84,308**	**82,528**	**8,935**

EU CCR1 - Analysis of CCR exposure by approach (Million Euros)

	12-31-2021							
	Replacement cost (RC)	**Potential future exposure (PFE)**	**Expected Effective Positive Exposure (EEPE)**	**Alpha**	**Exposure value pre-CRM**	**Exposure value post-CRM**	**Exposure value (without CVA)**	**RWEA**
EU - Original Exposure Method (for derivatives)	—	—		1.40	—	—	—	—
EU - Simplified SA-CCR (for derivatives)	—	—		1.40	—	—	—	—
SA-CCR (for derivatives)	5,393	7,273		1.40	19,135	19,221	19,135	9,662
IMM (for derivatives and SFTs)			—	—	—	—	—	—
Of which securities financing transactions netting sets			—		—	—	—	—
Of which derivatives and long settlement transactions netting sets			—		—	—	—	—
Of which from contractual cross-product netting sets			—		—	—	—	—
Financial collateral simple method (for SFTs)					—	—	—	—
Financial collateral comprehensive method (for SFTs)					96,621	75,680	75,680	1,551
VaR for SFTs					—	—	—	—
Total					**115,756**	**94,901**	**94,815**	**11,213**

During 2022, the exposure to counterparty risk excluding exposures to central counterparties is reduced both under the SA-CCR method for derivatives and under the comprehensive approach for SFTs. In addition, an improvement in the risk profile of transactions subject to the SA-CCR method contributes to the fall of capital requirements.

4.2.6.2.1. Counterparty credit risk by standardised approach

The following table shows a breakdown of exposure to counterparty credit risk (following credit risk mitigation and CCF techniques) calculated using the standardised approach, by exposure category and risk weights (excluding exposures to central counterparties):

Table 40. EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk (Million Euros. 12-31-2022)

	Risk weight											
Exposure Class	**0%**	**2%**	**4%**	**10%**	**20%**	**50%**	**70%**	**75%**	**100%**	**150%**	**Others**	**Total**
Central governments or central banks	863	—	—	—	2	486	—	—	120	—	—	1,471
Regional government or local authorities	—	—	—	—	—	—	—	—	1	—	—	2
Public sector entities	—	—	—	—	1	13	—	—	31	—	—	45
Multilateral development banks	2	—	—	—	—	—	—	—	—	—	—	2
International organisations	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	—	43	98	—	608	712	—	—	130	—	—	1,593
Corporates	—	—	—	—	1,288	747	—	—	1,817	80	—	3,931
Retail	—	—	—	—	—	—	—	63	—	—	—	63
Institutions and corporates with a short term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—
Other items	—	—	—	—	—	—	—	—	2	4	—	6
Total	**865**	**43**	**98**	**—**	**1,899**	**1,959**	**—**	**63**	**2,101**	**84**	**—**	**7,112**

EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk (Million Euros. 12-31-2021)

	Risk weight											
Exposure Class	**0%**	**2%**	**4%**	**10%**	**20%**	**50%**	**70%**	**75%**	**100%**	**150%**	**Others**	**Total**
Central governments or central banks	2,491	—	—	—	3	814	—	—	1,010	—	—	4,317
Regional government or local authorities	—	—	—	—	—	1	—	—	—	—	—	2
Public sector entities	—	—	—	—	—	5	—	—	27	—	—	32
Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—
International organisations	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	—	127	86	—	277	1,167	—	—	1,566	—	—	3,223
Corporates	—	—	—	—	19	915	—	—	1,641	65	—	2,640
Retail	—	—	—	—	—	—	—	18	—	—	—	18
Institutions and corporates with a short term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—
Other items	—	—	—	—	—	—	—	—	—	42	—	42
Total	**2,491**	**127**	**86**	**—**	**298**	**2,902**	**—**	**18**	**4,244**	**107**	**—**	**10,273**

For information on counterparty trading activity under the standardised approach of credit risk, see comments on Table 37.

4.2.6.2.2. Composition of collateral for counterparty risk exposure

A table with a breakdown of collaterals contributed or received by the Group to strengthen or reduce exposure to counterparty credit risk related to derivatives transactions and securities financing transactions as of December 31, 2022 and as of December 31, 2021 is presented below:

Table 41. EU CCR4 - IRB approach: CCR exposures by portfolio and PD scale (Million Euros. 12-31-2022)

PD scale (1)(5)	EAD post-CRM	Average PD(2)	Number of Obligors	Average LGD(3)	Average Maturity (days)(4)	RWAs	RWA Density
Total AIRB approach	**76,763**	**0.17 %**	**2,922**	**13.38 %**		**5,533**	**7 %**
Central governments or central banks	**75**	**0.19 %**	**3**	**9.09 %**	**—**	**3**	**3 %**
0,00 <0,15	6	0.05 %	2	40.47 %	—	—	5 %
0,15 <0,25	70	0.20 %	1	6.58 %	—	2	3 %
0,25 <0,50	—	—	—	—	—	—	—
0,50 <0,75	—	—	—	—	—	—	—
0,75 <2,50	—	—	—	—	—	—	—
2,50 <10,00	—	—	—	—	—	—	—
10,00 <100,00	—	—	—	—	—	—	—
100,00 (Default)	—	—	—	—	—	—	—
Institutions	**69,761**	**0.15 %**	**792**	**10.27 %**	**—**	**2,690**	**4 %**
0,00 <0,15	57,262	0.07 %	505	11.33 %	—	2,021	4 %
0,15 <0,25	7,700	0.20 %	88	5.76 %	—	375	5 %
0,25 <0,50	2,864	0.34 %	47	4.20 %	—	115	4 %
0,50 <0,75	917	0.56 %	21	3.71 %	—	50	5 %
0,75 <2,50	872	1.13 %	119	6.88 %	—	111	13 %
2,50 <10,00	123	2.82 %	6	5.26 %	—	15	12 %
10,00 <100,00	—	41.58 %	2	45.00 %	4	—	289 %
100,00 (Default)	21	100.00 %	4	45.00 %	—	3	14 %
Corporate - SMEs	**107**	**6.39 %**	**876**	**41.57 %**	**1**	**86**	**81 %**
0,00 <0,15	6	0.11 %	73	40.16 %	1	1	13 %
0,15 <0,25	3	0.20 %	54	40.60 %	1	1	21 %
0,25 <0,50	6	0.36 %	226	42.40 %	2	3	43 %
0,50 <0,75	17	0.51 %	114	41.03 %	1	7	43 %
0,75 <2,50	40	1.17 %	183	41.52 %	1	26	65 %
2,50 <10,00	11	4.00 %	139	41.60 %	2	10	89 %
10,00 <100,00	23	23.43 %	72	42.66 %	1	39	171 %
100,00 (Default)	—	100.00 %	15	26.60 %	1	—	15 %
Corporate - Non-SMEs	**6,819**	**0.28 %**	**1,045**	**44.77 %**	**4**	**2,753**	**40 %**
0,00 <0,15	3,312	0.11 %	138	43.67 %	6	1,001	30 %
0,15 <0,25	2,901	0.19 %	356	45.87 %	2	1,205	42 %
0,25 <0,50	291	0.37 %	181	45.87 %	2	186	64 %
0,50 <0,75	61	0.59 %	116	46.06 %	2	44	71 %
0,75 <2,50	106	1.37 %	147	44.85 %	3	114	108 %
2,50 <10,00	144	4.05 %	82	44.79 %	2	197	137 %
10,00 <100,00	3	22.40 %	17	43.50 %	2	6	231 %
100,00 (Default)	1	100.00 %	8	44.91 %	—	—	14 %
Retail - Other SMEs	**1**	**2.15 %**	**196**	**39.98 %**	**—**	**—**	**33 %**
0,00 <0,15	—	0.10 %	39	40.00 %	—	—	10 %
0,15 <0,25	—	0.20 %	11	40.00 %	—	—	13 %
0,25 <0,50	—	0.31 %	26	40.00 %	—	—	18 %
0,50 <0,75	—	0.51 %	12	40.00 %	—	—	23 %
0,75 <2,50	1	1.38 %	41	40.00 %	—	—	38 %
2,50 <10,00	—	4.93 %	57	40.00 %	—	—	48 %
10,00 <100,00	—	11.91 %	6	40.00 %	—	—	50 %
100,00 (Default)	—	100.00 %	4	25.94 %	—	—	—

PD scale (1)(5)	EAD post-CRM	Average PD(2)	Number of Obligors	Average LGD(3)	Average Maturity (days)(4)	RWAs	RWA Density
Retail - Other Non-SMEs	**—**	**2.17 %**	**10**	**40.00 %**	**—**	**—**	**40 %**
0,00 <0,15	—	0.10 %	3	40.00 %	—	—	10 %
0,15 <0,25	—	—	—	—	—	—	—
0,25 <0,50	—	—	—	—	—	—	—
0,50 <0,75	—	—	—	—	—	—	—
0,75 <2,50	—	—	—	—	—	—	—
2,50 <10,00	—	2.55 %	7	40.00 %	—	—	45 %
10,00 <100,00	—	—	—	—	—	—	—
100,00 (Default)	—	—	—	—	—	—	—
Total AIRB Approach	**76,763**	**0.17 %**	**2,922**	**13.38 %**		**5,533**	**7 %**

(*) Exposures of less than 500,000 euros which are rounded down to zero are shown with a dash.

(1) PD intervals established by the EBA ITS (Implementing Regulation 2021/637 of 15 March 2021).

(2) Corresponds to obligor grade PD weighted by EAD.

(3) Corresponds to obligor grade LGD weighted by EAD.

(4) Corresponds to the maturity of the obligor in years weighted by EAD. In accordance with Regulation (EU) 680/2014, it is reported only for those categories where average maturities are relevant for the calculation of RWAs. Residual maturities of less than one year are rounded to 1.

(5) Specialised lending exposures are included in the FIRB approach. The Group has chosen to use the supervisory category criteria method, in line with the provisions of article 153.5 of the CRR, therefore, following the EBA ITS, Specialised Lending exposures are not included in this table.

EU CCR4 - IRB approach: CCR exposures by portfolio and PD scale (Million Euros. 12-31-2021)

PD scale (1)(5)	EAD post-CRM	Average PD(2)	Number of Obligors	Average LGD(3)	Average Maturity (days)(4)	RWAs	RWA Density
Total AIRB approach	**83,933**	**0.21%**	**3,505**	**10.04%**		**4,651**	**6 %**
Central governments or central banks	**5,548**	**0.05%**	**6**	**2.61%**	**—**	**25**	**— %**
0,00 <0,15	5,469	0.05%	4	2.45%	—	18	—
0,15 <0,25	79	0.20%	2	13.47%	—	6	8 %
0,25 <0,50	—	—	—	—	—	—	—
0,50 <0,75	—	—	—	—	—	—	—
0,75 <2,50	—	—	—	—	—	—	—
2,50 <10,00	—	—	—	—	—	—	—
10,00 <100,00	—	—	—	—	—	—	—
100,00 (Default)	—	—	—	—	—	—	—
Institutions	**73,502**	**0.14%**	**1,095**	**8.40%**	**—**	**2,545**	**3 %**
0,00 <0,15	49,121	0.06%	708	10.23%	—	1,437	3 %
0,15 <0,25	12,123	0.19%	105	5.13%	—	489	4 %
0,25 <0,50	10,534	0.34%	42	3.62%	—	366	3 %
0,50 <0,75	1,181	0.56%	27	2.51%	—	46	4 %
0,75 <2,50	458	1.05%	192	24.64%	—	189	41 %
2,50 <10,00	80	3.35%	10	3.76%	—	8	11 %
10,00 <100,00	4	37.90%	9	40.13%	—	10	250 %
100,00 (Default)	1	100.00%	2	45.00%	—	—	14 %
Corporate - SMEs	**136**	**10.77%**	**941**	**42.61%**	**3**	**164**	**121 %**
0,00 <0,15	1	0.12%	48	40.36%	1	—	15 %
0,15 <0,25	1	0.20%	40	40.39%	1	—	20 %
0,25 <0,50	12	0.35%	186	41.53%	4	8	65 %
0,50 <0,75	14	0.54%	110	42.96%	3	10	75 %
0,75 <2,50	34	1.24%	220	42.56%	3	28	82 %
2,50 <10,00	41	4.90%	199	41.56%	2	44	106 %
10,00 <100,00	32	35.32%	115	44.17%	3	74	232 %
100,00 (Default)	1	100.00%	23	51.59%	4	—	26 %
Corporate - Non-SMEs	**4,745**	**1.09%**	**960**	**43.16%**	**5**	**1,917**	**40 %**
0,00 <0,15	1,786	0.11%	138	40.38%	10	480	27 %
0,15 <0,25	2,246	0.18%	303	44.41%	2	773	34 %
0,25 <0,50	340	0.37%	167	47.10%	3	253	74 %
0,50 <0,75	52	0.60%	84	44.94%	2	38	74 %
0,75 <2,50	221	1.36%	107	45.46%	3	249	112 %
2,50 <10,00	56	5.89%	109	45.16%	3	96	172 %
10,00 <100,00	9	33.80%	40	41.94%	3	22	247 %
100,00 (Default)	35	100.00%	12	46.02%	—	5	15 %

PD scale (1)(5)	EAD post-CRM	Average PD(2)	Number of Obligors	Average LGD(3)	Average Maturity (days)(4)	RWAs	RWA Density
Retail - Other SMEs	**3**	**4.39%**	**431**	**40.16%**	**—**	**1**	**32 %**
0,00 <0,15	—	0.10 %	81	40.00 %	—	—	6 %
0,15 <0,25	—	0.20 %	19	40.00 %	—	—	11 %
0,25 <0,50	—	0.31 %	17	40.00 %	—	—	16 %
0,50 <0,75	1	0.51 %	114	40.89 %	—	—	25 %
0,75 <2,50	—	1.12 %	84	40.00 %	—	—	34 %
2,50 <10,00	1	5.74 %	93	40.06 %	—	—	49 %
10,00 <100,00	—	33.16 %	9	40.00 %	—	—	87 %
100,00 (Default)	—	100.00 %	14	26.38 %	—	—	13 %
Retail - Other Non-SMEs	**—**	**5.69%**	**72**	**40.00%**	**—**	**—**	**38 %**
0,00 <0,15	—	0.10 %	14	40.00 %	—	—	5 %
0,15 <0,25	—	—	—	—	—	—	—
0,25 <0,50	—	—	—	—	—	—	—
0,50 <0,75	—	0.51 %	6	40.00 %	—	—	14 %
0,75 <2,50	—	1.50 %	2	40.00 %	—	—	—
2,50 <10,00	—	6.41 %	3	40.00 %	—	—	50 %
10,00 <100,00	—	37.80 %	47	40.00 %	—	—	125 %
100,00 (Default)	—	—	—	—	—	—	—
Total AIRB Approach	**83,933**	**0.21%**	**3,505**	**10.04%**		**4,651**	**6 %**

(*) Exposures of less than 500,000 euros which are rounded down to zero are shown with a dash.

(1) PD intervals established by the EBA ITS (Implementing Regulation 2021/637 of 15 March 2021).

(2) Corresponds to obligor grade PD weighted by EAD.

(3) Corresponds to obligor grade LGD weighted by EAD.

(4) Corresponds to the maturity of the obligor in years weighted by EAD. In accordance with Regulation (EU) 680/2014, it is reported only for those categories where average maturities are relevant for the calculation of RWAs. Residual maturities of less than one year are rounded to 1.

(5) Specialised lending exposures are included in the FIRB approach. The Group has chosen to use the supervisory category criteria method, in line with the provisions of article 153.5 of the CRR, therefore, following the EBA ITS, Specialised Lending exposures are not included in this table.

As of December 31, 2022, exposures to central counterparties included in EU CCR8 table are excluded from this table. For more information on counterparty trading activity under the standardized approach to credit risk, see table 37.

4.2.6.2.3. Composition of collateral for counterparty risk exposure

A table with a breakdown of collaterals contributed or received by the Group to strengthen or reduce exposure to counterparty credit risk related to derivatives transactions and securities financing transactions as of December 31, 2022 is presented below:

Table 42. EU CCR5 - Composition of collateral for exposure to Counterparty Credit Risk (Million Euros. 12-31-2022)

	Collateral used in derivative transactions				Collateral used in SFTs			
	Fair Value of Collateral received		Fair Value of posted Collateral(1)		Fair Value of Collateral received		Fair Value of posted Collateral	
	Segregated(2)	Unsegregated(3)	Segregated(2)	Unsegregated(3)	Segregated(2)	Unsegregated(3)	Segregated(2)	Unsegregated(3)
Cash- domestic currency	—	3,515	—	5,148	300	30,343	43	32,425
Cash- other currencies	184	2,906	112	1,638	13	23,797	—	14,477
Domestic sovereign debt	113	2,475	1,351	252	—	9,271	610	10,706
Other sovereign debt	632	355	181	10	13	33,672	—	32,402
Government agency debt	—	—	—	—	—	—	—	—
Corporate bonds	254	374	56	—	—	6,883	—	14,922
Equity securities	—	—	—	—	—	—	—	—
Other collateral	—	—	—	—	—	—	—	2,882
Total	**1,184**	**9,624**	**1,700**	**7,048**	**326**	**103,966**	**653**	**107,814**

(1) In accordance with Articles 279 and 298 of Regulation (EU) 2015/13 regarding the treatment of collateral for the purpose of calculating counterparty risk, the amount of collateral provided as collateral for the netting of derivative liability arrangements has been taken into account in the EAD calculation.

(2) Refers to collateral that is held in a bankruptcy-remote manner.

(3) Refers to collateral that is not held in a bankruptcy-remote manner.

EU CCR5 - Composition of collateral for exposure to Counterparty Credit Risk (Million Euros. 12-31-2021)

	Collateral used in derivative transactions				Collateral used in SFTs			
	Fair Value of Collateral received		Fair Value of posted Collateral[1]		Fair Value of Collateral received		Fair Value of posted Collateral	
	Segregated[2]	Unsegregated[3]	Segregated[2]	Unsegregated[3]	Segregated[2]	Unsegregated[3]	Segregated[2]	Unsegregated[3]
Cash- domestic currency	—	2,773	—	6,270	300	30,824	26	40,342
Cash- other currencies	170	1,223	933	976	12	22,945	—	13,609
Domestic sovereign debt	63	2,744	2,101	494	—	13,726	548	15,685
Other sovereign debt	1,052	231	179	23	12	34,635	—	25,320
Government agency debt	—	—	—	—	—	2,198	—	630
Corporate bonds	147	480	4	28	—	5,498	—	11,213
Equity securities	—	—	—	—	—	—	—	—
Other collateral	—	—	—	—	—	—	—	—
Total	**1,433**	**7,451**	**3,216**	**7,791**	**324**	**109,826**	**574**	**106,800**

[1] In accordance with Articles 279 and 298 of Regulation (EU) 2015/13 regarding the treatment of collateral for the purpose of calculating counterparty risk, the amount of collateral provided as collateral for the netting of derivative liability arrangements has been taken into account in the EAD calculation.

[2] Refers to collateral that is held in a bankruptcy-remote manner.

[3] Refers to collateral that is not held in a bankruptcy-remote manner.

As of December 31, 2022, the composition of collateral for counterparty risk exposures in derivative transactions and securities financing transactions (SFTs) evolves without major changes and remains at similar levels to those recorded as of December 31, 2021.

4.2.6.2.4. Credit derivatives transactions

The table below shows the amounts of credit derivative transactions, broken down into purchased and sold derivatives:

Table 43. EU CCR6 - Credit derivatives exposures (Million Euros. 12-31-2022)

	Credit derivative hedges	
	Protection Bought	Protection Sold
Notionals		
Single-name credit default swaps	5,244	6,343
Index credit default swaps	14,428	15,745
Total return swaps	—	1,665
Credit options	—	—
Other credit derivatives	25	—
Notionals Total	**19,697**	**23,753**
Fair Values		
Positive fair value (asset)	162	138
Negative fair value (liability)	(258)	(125)

EU CCR6 - Credit derivatives exposures (Million Euros. 12-31-2021)

	Credit derivative hedges	
	Protection Bought	Protection Sold
Notionals		
Single-name credit default swaps	5,246	5,408
Index credit default swaps	3,570	3,898
Total return swaps	—	1,815
Credit options	—	—
Other credit derivatives	—	—
Notionals Total	**8,816**	**11,121**
Fair Values		
Positive fair value (asset)	236	—
Negative fair value (liability)	(38)	(452)

During 2022 there has been a rise in the index credit default swaps due to the increase in bond hedges as a consequence of higher volatility and economic uncertainty.

Additionally, at the end of 2022 and 2021, the Group has no credit derivatives used as collateral in brokerage activities.

4.2.6.3. CVA charge requirements

The CVA surcharge in Capital refers to the additional capital requirements to cover unexpected losses due to credit valuation adjustments, for which there are two approaches:

- Standardised Approach (Art. 384 CRR): application of a standard regulatory formula. The formula applied is an analytical approximation to the calculation of the CVA VaR by supposing that the counterparty spreads depend on a single systematic risk factor and on its own idiosyncratic factor, both variables distributed by independent normal distributions, assuming a 99% confidence level.
- Advanced Approach (Art 383 CRR): based on the market risk VaR methodology, which requires a calculation of the “CVA VaR”, assuming the same confidence level (99%) and time horizon (10 days), as well as a stressed scenario. As of December 31, 2022 and as of December 31, 2021, the Group has no surcharge for CVA calculated under the advanced approach.

Procedures for calculating the valuation adjustments and reserves

The fair value of liabilities should reflect the entity's default risk, which includes, among other components, its own credit risk. Taking this into account, the Group makes valuation adjustments for credit risk in the estimates of the fair value of its assets and liabilities.

These adjustments are calculated by estimating Exposure At Default, Probability of Default and Loss Given Default, which are based on the recovery levels for all derivative products on any instrument, deposits and repos at the legal entity level (all counterparties under a same master agreement), in which BBVA has exposure.

Credit Valuation Adjustment (hereinafter “CVA”) and Debit Valuation Adjustments (hereinafter “DVA”) are included in the valuation of derivatives, both assets and liabilities, to reflect the impact on the fair value of the counterparty credit risk and its own, respectively. The Group incorporates in its valuation, for all exposures classified in any of the categories valued at fair value, both the counterparty credit risk and its own. In the trading portfolio, and in the specific case of derivatives, credit risk is recognized through such adjustments.

As a general rule, the calculation of CVA is the sum of the expected positive exposure in time t, the probability of default between t-1 and t, and the Loss Given Default of the counterparty. Consequently, the DVA is calculated as the sum of the expected negative exposure in time t, the probability of default of BBVA between t-1 and t, and the Loss Given Default of BBVA. Both calculations are performed throughout the entire period of potential exposure.

The calculation of the expected positive and negative exposure is done through a Montecarlo simulation of the market variables involved in all trades’ valuation under the same legal netting set.

The information needed to calculate the probability of default and the loss given default of a counterparty comes from the credit markets. The counterparty’s Credit Default Swaps are used if liquid quotes are available. If a market price is not available, BBVA has implemented a mapping process based on the sector, rating and geography of the counterparty to assign probabilities of default and loss given default calibrated directly to market.

An additional adjustment for Own Credit Adjustment (OCA) is applied to the instruments accounted for by applying the Fair Value Option permitted by IFRS 9.

The credit valuation adjustments in million euros as of December 31, 2022 and as of December 31, 2021 are shown below:

Table 44. EU CCR2 - CVA Capital Charge (Million Euros)

	12-31-2022		12-31-2021	
	Exposure value	**RWA**	**Exposure value**	**RWA**
Total portfolios subject to the advanced method	**—**	**—**	**—**	**—**
(i) VaR component (included 3x multiplier)		—		—
(ii) SVaR component (included 3x multiplier)		—		—
All portfolios subject to the standardised method	7,606	1,741	6,977	2,518
Portfolios subject to alternative approach (based on original exposure method)	—	—	—	—
Total subject to the CVA capital charge	**7,606**	**1,741**	**6,977**	**2,518**

As of December 31, 2022, BBVA calculates the capital requirements for credit valuation adjustment (CVA) according to the standard method described in Part Three, Title VI of the CRR in accordance with Regulation (EU) 2019/876.

The value of the exposure used to calculate the CVA capital requirements is calculated in accordance with the standardized method for counterparty credit risk.

The variations in terms of RWAs during 2022 are presented below:

Table 45. Flow statements CVA RWAs (Million Euros)

CVA	
RWAs as of December 31, 2021	**2,518**
Asset size	(603)
Foreign exchange movements	(174)
Other	—
RWAs as of December 31, 2022	**1,741**

As of December 31, 2022, the CVA own funds requirements are mainly affected by the increase in the exposure value as a result of a greater position in derivative instruments. This increase is partially offset by a reduction in the EAD driven by a decrease in the amount of the guarantees considered in the calculation of the replacement cost.

4.2.6.4. Exposure to central counterparty clearing houses

The following table presents a complete overview of the exposure to central counterparty clearing houses by type of exposure (arising from transactions, margins, or contributions to the default fund) and their corresponding capital requirements:

Table 46. EU CCR8 - Exposures to CCPs (Million Euros)

	12-31-2022		**12-31-2021**	
	EAD post CRM	**RWA**	**EAD post CRM**	**RWA**
Exposures to QCCPs (total)		**103**		**129**
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	24,553	49	17,730	58
(i) OTC Derivatives	310	10	726	17
(ii) Exchange-traded derivatives	79	2	309	6
(iii) Securities financing transactions (SFTs)	24,164	37	16,695	35
(iv) Netting sets where cross-product netting has been approved	—	—	—	—
Segregated initial margin	1,093		1,075	
Non-segregated initial margin	574	19	617	17
Pre-funded default fund contributions	140	36	247	54
Alternative calculation of own funds requirements for exposures	281	—	482	—
Exposures to non-QCCPs (total)		**599**		**27**
Exposures for trades at non-QCCPs (excluding initial margin and default to contributions); of which	1,385	353	29	27
(i) OTC Derivatives	93	82	11	1
(ii) Exchange-traded derivatives	1,286	265	18	26
(iii) Securities financing transactions (SFTs)	6	6	—	—
(iv) Netting sets where cross-product netting has been approved	—	—	—	—
Segregated initial margin	—		—	
Non-segregated initial margin	531	128	—	—
Pre-funded default fund contributions	9	118	—	—
Unfunded default fund contributions	—	—	—	—

As of December 31, 2022, the exposures through central counterparties have grown compared to December 2021 due to the increase in securities financing transactions during the first half of the year. In addition, during 2022, the extension of the transitional treatment of capital requirements for central counterparties has ended, after which, those exposures to non-EU central counterparties that have not been recognized by ESMA, cannot benefit from the capital requirements of qualified entities.

4.2.7. Information on securitisation

4.2.7.1. General characteristics of securitisation

4.2.7.1.1. Purposes of securitisation

The Group's current securitisation policy considers a recurrent issuance program with a deliberate diversification of securitised assets that adjusts their volume to the Bank's capital requirements and to market conditions.

This program is complemented by all the other finance and capital instruments, thereby diversifying the need to resort to wholesale markets.

The definition of the strategy and the execution of the operations, as with all other wholesale finance and capital management, is supervised by the Assets & Liabilities Committee, with the pertinent internal authorisations obtained directly from the Board of Directors or from the Executive Committee.

The main objective of securitisation is to serve as an instrument for the efficient management of the balance sheet, mainly as a source of liquidity at an efficient cost, obtaining liquid assets through eligible collateral, as a complement to other financial instruments. In addition, there are other secondary objectives associated with the use of securitisation instruments, such as the freeing up of regulatory capital by transferring risk, and the freeing of potential excess over the expected loss,as long as the volume of the first-loss tranche and risk transfer allow it.

In accordance with the STS (Simple, Transparent and Standardized) securitisation framework, the Group does not take into account the STS classification when selecting the portfolios to be securitised.

Main risks exposed in securitisation operations.

1. **Default risk**

It is the risk that the debtor does not pay the assumed contractual obligations by the due date and in the correct manner (for example, potential non-payment of instalments).

In the particular case of securitisation, the entities provide information to investors on the situation of the securitised loan portfolio. In this respect, it is worth noting that transactions transferred to the Securitisation Fund do not include defaults, or at most, if there is one, in no case do they exceed 30 days of non-payment, demonstrating the high quality of securitised transactions. The rating agencies take this element closely into account when analysing the credit risk of transactions.

BBVA monitors the changes in these indicators with the aim of establishing specific action plans in the different products, in order to correct any deviations that are leading to a deterioration in credit quality.

In order to monitor these indicators, monthly, and in some cases, daily information is available. It includes flows of additions, recoveries, irregular investments and non-performing loans. The information is obtained through different applications and reports prepared in the Risk area.

BBVA's policy of recovery for impaired loans consists of defining an operating system that allows a speedy and efficient correction of the irregular situation. It is based on a highly personalised management, with a key role being played by the Recovery Manager and his close and ongoing relationship with the debtor.

The main guarantee is always mortgage on the asset subject of the transaction, or on the main residence. In addition, there are frequent personal guarantees issued by the holders of the loan or the guarantors, which reinforce the repayment of the debt and quality of the risk. The rights to collection before insurance companies are also subrogated in favour of the Bank in cases where there is damage to the mortgaged building due to fire or other duly stipulated causes.

2. **Early repayment risk**

This derives from the potential total or partial prepayment by the debtor of the amounts corresponding to the (fully or partially) securitised loans, which could imply that the maturity of the securitisation bonds calculated at the time of the issue is shorter than the maturity of the loans transferred to the Fund.

This risk is mainly due to the variations of market interest rates, but despite its importance it is not the only determining factor; to this have to be added other more personal elements, such as inheritance, divorce, change of residence, etc.

In the specific case of the Group's securitisations, this risk is very limited, as the maturity date of the securitisation Bonds is set according to the maturity of the last loan of the securitised portfolio.

3. **Liquidity risk**

At times it is noted that a possible limited liquidity of the markets in which the Bonds are traded could constitute a risk derived from the securitisation processes.

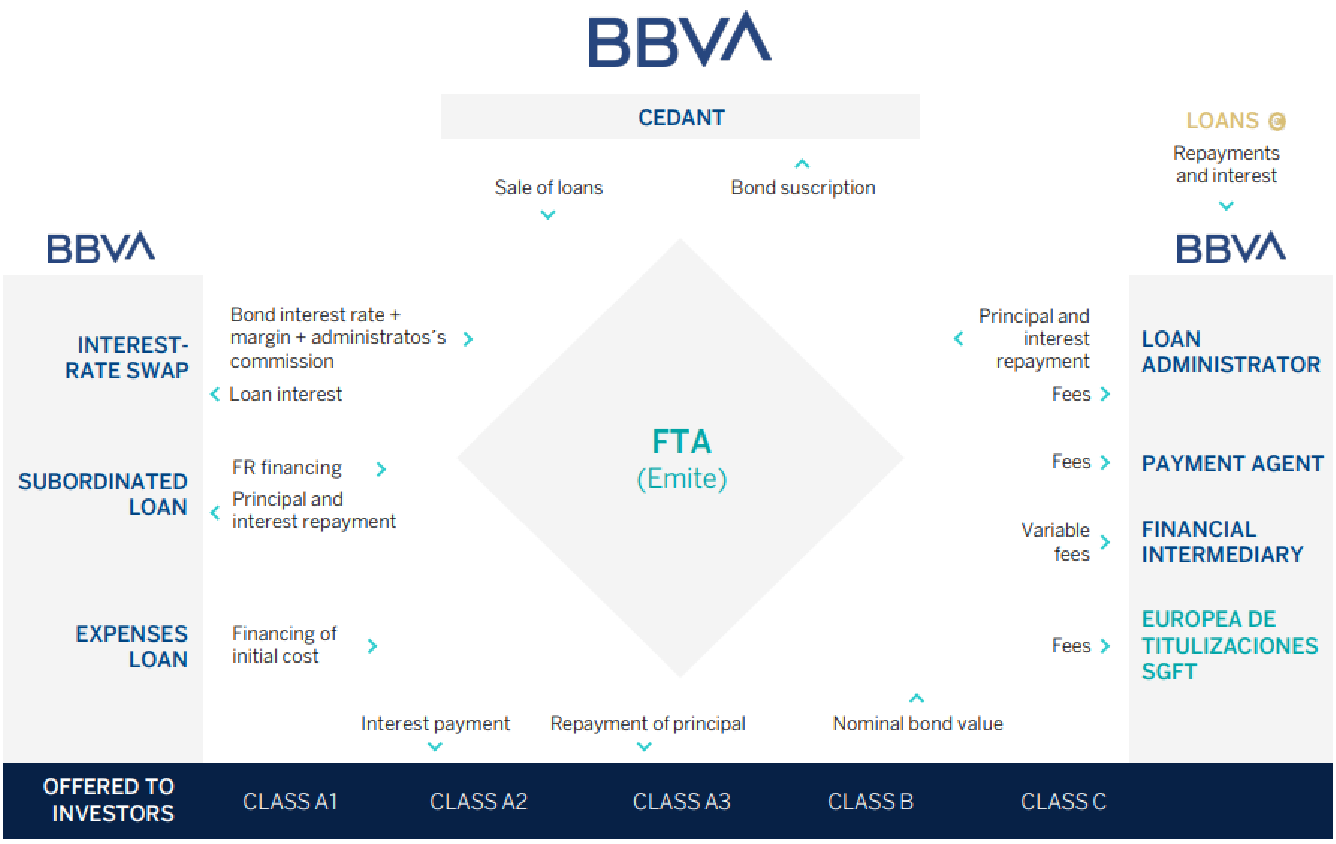
Although an entity may not undertake contracts in the secondary market of Bonds issued by the Securitisation Fund, and thus provide liquidity to the funds, the securitisation process itself consists of converting illiquid assets that form part of the Bank's balance sheet into liquid assets in the form of securitisation Bonds, which give the possibility of trading and transferring them in a regulated market. This would not be the case if they were not subject to the securitisation process.

In addition, understanding liquidity risk as the possible time mismatch between the maturities of the collections generated by the loans and the payments the Bonds originate, BBVA has not so far made any securitisation issues in which there is a divergence between collections and payments. The entities that have programs for debt security issues, in which this risk is typically present, mitigate it with the use of liquidity lines that are included in the structure of the Fund.

4.2.7.1.2. Functions performed by the securitisation process and degree of involvement

The Group's involvement degree in its securitisation funds is not usually restricted to the mere role of assignor and administrator of the securitised portfolio.

Chart 14. Functions performed in the securitization process and Group's level of involvement



As can be seen in the above chart, the Group has usually taken additional roles such as:

- Payment Agent.
- Provider of treasury account.
- Provider of the subordinated loan and of the financing of initial costs, being the one that finances the first-loss tranche, and the latter financing the fund's fixed expenditure.
- Administrative agent of the securitised portfolio.

The Group has not assumed the role of sponsor of securitisation originated by third-party institutions.

The Group's balance sheet maintains the first-loss tranches of all securitisation that has been carried out.

It is worth noting that the Group has maintained a consistent line on generating securitisation operations since the credit crunch, which began in July 2007.

In addition, the Group has performed various Synthetic Securitisation operations to date, introducing this new operation as an additional source of regulatory capital release.

4.2.7.1.3. Methods used for the calculation of risk-weighted exposure in securitisation transactions.

When securitisation positions meet the criteria for significant and effective risk transfer as defined by Articles 244 and 245 of Regulation 2017/2401, under the securitisation framework set in Regulation 2017/2402, the Group calculates the capital requirements of these securitisations by applying the following methods, which apply to both originated securitisations and investment positions in securitisation funds originated by third parties:

- IRBA method (Article 259): When according to the securitisation features, all information on the underlying loans of the securitised portfolio is accesible, and at least for 95% of the loans the risk weights are calculated under IRB approach.
- SA method (Article 261): When information is available on the underlying loans of the securitised portfolio, but the threshold of 95% of the loans under the IRB approach is not reached.
- ERBA method (Article 263): When information on the underlying securitisation loans is not accesible, and it is necessary to use external rating data.

4.2.7.1.4. Transfer of risk in securitisation activities and criteria for recognition of gains on sales

The Group considers that the risks and benefits of the securitisations are substantially retained if the subordinated bonds are held and/or if subordination funding has been granted to those securitisation funds, which means that the credit loss risk of the securitised assets will be assumed. Consequently, the Group is not derecognizing those transferred loan portfolios.

In addition, the Group recognizes the gains on sales of securitised assets when they are derecognised from the balance sheet, which implies to comply with the substantial transfer of risks and benefits requirements described above.

The result will be recognised in the income statement and calculated as the difference between the carrying amount and the sum of the amount received, including any new asset received minus liabilities assumed.

When the amount of the transferred financial asset matches the total amount of the original financial asset, the new financial assets, financial liabilities and service-delivery liabilities, which, if any, arise as a result of the transfer, shall be recorded at fair value..

4.2.7.2. Securitisation exposure in the banking and trading book

The Group has carried out seven securitisations in 2022, three of them in cash or traditional format and the other four in synthetic securitisation format. The most of them with risk transfer, excluding two cash operations.

The first of them in March, from a portfolio of Mortgage loans portfolio (BBVA RMBS 21 FT) amounting to €12.4 billion, the second in June, for an amount of €1,200 million (BBVA Autos 2022-1 FT), from a portfolio of auto loans, the third one, a synthetic operation (VELA SME 2022-1) also in June, for an amount of €675 million from a portfolio of loans to SMEs and corporates. During the Q4 the last four securitizations where carried out. One in November (BBVA RMBS 22 FT), for an amount of €1.4 billion from a mortgage loans portfolio, and during December the remaining three in synthetic securitisation format, amounting €2,080 milllion from a corporate loan portfolio.

Given that there is no risk transfer for the BBVA RMBS 21 FT and for BBVA RMBS 22 FT securitisation, these two operations are not included in the securitisation framework defined by the CRR, the calculation of its risk-weighted assets are based on the underlying loans.

Table EU SEC1 below shows the exposure to securitisations of the banking book, broken down by type of underlying asset, indicating whether it is traditional or synthetic securitisations, and identifying the functions (origination, sponsorship and investment). In the "Bank acts as originator" block, the figures presented in the total columns are the total securitised amounts, obtained as the sum of the amount corresponding to the first loss tranche, and those with risk transfer:

Table 47. EU SEC1 - Securitisation exposures in the banking book (Million Euros. 12-31-2022)

	Bank acts as originator							Bank acts as sponsor				Bank acts as investor			
	Traditional				Synthetic		Subtotal	Traditional		Synthetic	Subtotal	Traditional		Synthetic	Subtotal
	STS		Non STS					STS	Non STS			STS	Non STS		
		Of which: SRT		Of which: SRT		Of which: SRT									
Total	**353**	**353**	**—**	**—**	**3,723**	**3,695**	**4,076**	**—**	**—**	**—**	**—**	**81**	**8**	**—**	**89**
Retail (total)- of which	**353**	**353**	**—**	**—**	**3,695**	**3,695**	**4,048**	**—**	**—**	**—**	**—**	**81**	**5**	**—**	**86**
Residential mortgage	—	—	—	—	—	—	—	—	—	—	—	—	5	—	5
Credit card	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other retail exposures	353	353	—	—	3,695	3,695	4,048	—	—	—	—	81	—	—	81
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Wholesale (total)- of which	**—**	**—**	**—**	**—**	**28**	**—**	**28**	**—**	**—**	**—**	**—**	**—**	**3**	**—**	**3**
Loans to corporates	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Commercial mortgage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lease and receivables	—	—	—	—	28	—	28	—	—	—	—	—	—	—	—
Other wholesale	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

EU SEC1 - Securitisation exposures in the banking book (Million Euros. 12-31-2021)

	Bank acts as originator							Bank acts as sponsor				Bank acts as investor			
	Traditional				Synthetic		Subtotal	Traditional		Synthetic	Subtotal	Traditional		Synthetic	Subtotal
	STS		Non STS					STS	Non STS			STS	Non STS		
		Of which: SRT		Of which: SRT		Of which: SRT									
Total	**157**	**157**	**—**	**—**	**2,399**	**2,399**	**2,556**	**—**	**—**	**—**	**—**	**114**	**21**	**—**	**135**
Retail (total)- of which	**157**	**157**	**—**	**—**	**2,399**	**2,399**	**2,556**	**—**	**—**	**—**	**—**	**114**	**14**	**—**	**128**
Residential mortgage	—	—	—	—	—	—	—	—	—	—	—	—	14	—	14
Credit card	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other retail exposures	157	157	—	—	2,399	2,399	2,556	—	—	—	—	114	—	—	114
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Wholesale (total)- of which	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**7**	**—**	**7**
Loans to corporates	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Commercial mortgage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other wholesale	—	—	—	—	—	—	—	—	—	—	—	—	7	—	7
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

The EU SEC2 table below shows the amounts in terms of net positions of the securitisation positions in the trading book, broken down by type of underlying asset of the securitization, indicating whether it is traditional or synthetic securitisations, and identifying the functions (origination, sponsorship and investment):

Table 48. EU SEC2 - Securitisation exposures in the trading portfolio (Million Euros. 12-31-2022)

	Bank acts as originator				Bank acts as sponsor				Bank acts as investor			
	Traditional		Synthetic	Subtotal	Traditional		Synthetic	Subtotal	Traditional		Synthetic	Subtotal
	STS	Non-STS			STS	Non-STS			STS	Non-STS		
Total	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**7**	**—**	**7**
Retail (total) - of which	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**7**	**—**	**7**
Residential mortgage	—	—	—	—	—	—	—	—	—	7	—	7
Credit card	—	—	—	—	—	—	—	—	—	—	—	—
Other retail exposures	—	—	—	—	—	—	—	—	—	—	—	—
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—
Wholesale (total)- of which	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans to corporates	—	—	—	—	—	—	—	—	—	—	—	—
Commercial mortgage	—	—	—	—	—	—	—	—	—	—	—	—
Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	—
Other wholesale	—	—	—	—	—	—	—	—	—	—	—	—
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—

(*) It includes securitisation positions in the trading portfolio.

EU SEC2 - Securitisation exposures in the trading portfolio (Million Euros. 12-31-2021)

	Bank acts as originator				Bank acts as sponsor				Bank acts as investor			
	Traditional		Synthetic	Subtotal	Traditional		Synthetic	Subtotal	Traditional		Synthetic	Subtotal
	STS	Non-STS			STS	Non-STS			STS	Non-STS		
Total	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**7**	**—**	**7**
Retail (total) - of which	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**7**	**—**	**7**
Residential mortgage	—	—	—	—	—	—	—	—	—	7	—	7
Credit card	—	—	—	—	—	—	—	—	—	—	—	—
Other retail exposures	—	—	—	—	—	—	—	—	—	—	—	—
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—
Wholesale (total)- of which	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans to corporates	—	—	—	—	—	—	—	—	—	—	—	—
Commercial mortgage	—	—	—	—	—	—	—	—	—	—	—	—
Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	—
Other wholesale	—	—	—	—	—	—	—	—	—	—	—	—
Re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—

(*) It includes securitisation positions in the trading portfolio.

The securitisation positions in the trading book have been stable along 2022.

4.2.7.3. Securitisation – Group acting as originator

4.2.7.3.1. Rating agencies used

The external credit assessment institutions (ECAI) involved in the rating of those securitisations originated by the Group which fulfill the criteria of risk transfer and falling within the securitisation solvency framework are, generally, Fitch, Moody's, S&P, and DBRS. The types of securitisation exposure for which each agency is used are, with no differentiation between the different agencies, all the asset types that tend to be used as residential mortgage loans to Corporates and SMEs, consumer finance and autos and leasing.

In all the securitisation funds, the agencies have assessed the risk of the entire issuance structure:

- Awarding ratings to all bond tranches.
- Establishing the volume of the credit enhancement.
- Establishing the necessary triggers (early termination of the restitution period, pro-rata depreciation of AAA classes, pro-rata amortization of series subordinated to AAA and amortization of the reserve fund, amongst others).

For each issue, in addition to the initial rating, the agencies carry out regular quarterly monitoring.

4.2.7.3.2. Positions in securitisation originated by the Group

The table below shows the EAD and RWAs of securitisation positions originated by the Group in the banking book, broken down by type of securitised exposure, tranches and risk weight ranges and their corresponding capital requirements as of December 31, 2022 and as of December 31, 2021.

Table 49. EU SEC3 - Securitisation exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor (Million Euros. 12-31-2022)

	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital requirement after cap			
	≤20% RW	>20% to 50% RW	>50% to100% RW	>100% to <1250% RW	1250% RW / deductions	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW / deductions	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW / deductions	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW / deductions
Total Exposures	**3,997**	**78**	**—**	**—**	**1**	**4,075**	**—**	**—**	**1**	**438**	**—**	**—**	**—**	**35**	**—**	**—**	**—**
Traditional Securitisation	**274**	**78**	**—**	**—**	**1**	**352**	**—**	**—**	**1**	**43**	**—**	**—**	**—**	**3**	**—**	**—**	**—**
Of which Securitisation	274	78	—	—	1	352	—	—	1	43	—	—	—	3	—	—	—
Of which retail underlying	274	78	—	—	1	352	—	—	1	43	—	—	—	3	—	—	—
Of which STS	274	78	—	—	1	352	—	—	1	43	—	—	—	3	—	—	—
Of which wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Synthetic Securitisation	**3,723**	**—**	**—**	**—**	**—**	**3,723**	**—**	**—**	**—**	**395**	**—**	**—**	**—**	**31**	**—**	**—**	**—**
Of which Securitisation	3,723	—	—	—	—	3,723	—	—	—	395	—	—	—	31	—	—	—
Of which retail underlying	3,695	—	—	—	—	3,695	—	—	—	391	—	—	—	31	—	—	—
Of which wholesale	28	—	—	—	—	28	—	—	—	4	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(*) Securitisations with a risk weight of 1,250% are deducted from own funds, as explained in section m) of chapter 3.2 of this report.

EU SEC3 - Securitisation exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor (Million Euros. 12-31-2021)

	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital requirement after cap			
	≤20% RW	>20% to 50% RW	>50% to100% RW	>100% to <1250% RW	1250% RW / deductions	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW / deductions	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW / deductions	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW / deductions
Total Exposures	**2,378**	**156**	**—**	**—**	**22**	**2,534**	**—**	**—**	**22**	**300**	**—**	**—**	**—**	**24**	**—**	**—**	**—**
Traditional Securitisation	**—**	**156**	**—**	**—**	**1**	**156**	**—**	**—**	**1**	**40**	**—**	**—**	**—**	**3**	**—**	**—**	**—**
Of which Securitisation	—	156	—	—	1	156	—	—	1	40	—	—	—	3	—	—	—
Of which retail underlying	—	156	—	—	1	156	—	—	1	40	—	—	—	3	—	—	—
Of which STS	—	156	—	—	1	156	—	—	1	40	—	—	—	3	—	—	—
Of which wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Synthetic Securitisation	**2,378**	**—**	**—**	**—**	**21**	**2,378**	**—**	**—**	**21**	**260**	**—**	**—**	**—**	**21**	**—**	**—**	**—**
Of which Securitisation	2,378	—	—	—	21	2,378	—	—	21	260	—	—	—	21	—	—	—
Of which retail underlying	2,378	—	—	—	21	2,378	—	—	21	260	—	—	—	21	—	—	—
Of which wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(*) Securitisations with a risk weight of 1,250% are deducted from own funds, as explained in section m) of chapter 3.2 of this report.

In the case of securitisations where the Group acts as originator, the variation of the requirements in 2022 is explained by the securitisations mentioned above which complied with the risk transfer requirements set in the applicable regulatory provision. The net effect on the Group's RWAs by changing the capital consumption of the underlying assets under the credit risk framework to the capital consumption under the securitisation framework is a reduction of approximately €1.9 billion.

4.2.7.3.3. Breakdown of securitised positions by type of asset

The table below shows the outstanding amount, non-performing exposures and impairment losses recognised in the period by underlying assets of originated securitisation operations which meet the risk transfer criteria, broken down by asset type as of December 31, 2022 and as of December 31, 2021.

Table 50. EU SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments (Million Euros. 12-31-2022)

	Nominal amount	Of which exposures in default	credit risk adjustments made during the period(1)
Total	**31,778**	**333**	**224**
Retail exposure	**30,916**	**313**	**199**
Residential mortgage	23,609	150	44
Credit card	—	—	—
Other retail exposures	7,307	163	155
Re-securitisation	—	—	—
Wholesale exposure	**862**	**20**	**26**
Loans to corporates	**—**	**—**	**—**
Commercial mortgage	—	—	—
Lease and receivables	862	20	26
Other wholesale	—	—	—
Re-securitisation	—	—	—

[1] Negative amounts indicate an increase in credit risk adjustments during the period.

EU SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments (Million Euros. 12-31-2021)

	Nominal amount	Of which exposures in default	credit risk adjustments made during the period(1)
Total	**36,079**	**231**	**41**
Retail exposure	**34,644**	**206**	**47**
Residential mortgage	26,690	193	35
Credit card	—	—	—
Other retail exposures	7,954	12	12
Re-securitisation	—	—	—
Wholesale exposure	**1,434**	**25**	**(6)**
Loans to corporates	**—**	**—**	**—**
Commercial mortgage	—	—	—
Lease and receivables	1,434	25	(6)
Other wholesale	—	—	—
Re-securitisation	—	—	—

[1] Negative amounts indicate an increase in credit risk adjustments during the period.

The above tables include balances of all securitised exposures, regardless of whether they meet the risk transfer criteria.

The table below shows the outstanding balance corresponding to the underlying assets of securitisation originated by the Group, which do not meet the risk transfer criteria, and which, therefore, are not included in the securitisation framework, but rather for which the capital calculation of the exposure is carried out as if it had not been securitised:

Table 51. Outstanding balance corresponding to the underlying assets of the Group's originated securitisations, in which risk transfer criteria are not fulfilled (Million Euros)

	Outstanding amount	
Type of asset	**2022**	**2021**
Commercial and residential mortgages	23,609	26,690
Credit cards	—	—
Financial leasing	781	1,434
Lending to corporates and SMEs	2	37
Consumer finance	2,455	3,822
Receivables	—	—
Securitisation balances	—	—
Mortgage-covered bonds	—	—
Others	—	—
Total	**26,847**	**31,983**

4.2.7.4. Securitisation - Group acting as investor

The amounts in terms of EAD and RWAs of the securitisation positions of the banking book where the Group acts as investor are shown below, broken down by type of underlying asset, tranches and risk weight bands that correspond to the securitisations and their corresponding capital requirements at December 31, 2022 and December 31, 2021.

Table 52. EU SEC4 - Securitisation exposures in the banking book and associated capital requirements – bank acting as investor (Million Euros. 12-31-2022)

	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital requirement after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW
Total Exposures	**81**	**5**	**3**	**—**	**—**	**—**	**89**	**—**	**—**	**—**	**17**	**—**	**—**	**—**	**1**	**—**	**—**
Traditional Securitisation	**81**	**5**	**3**	**—**	**—**	**—**	**89**	**—**	**—**	**—**	**17**	**—**	**—**	**—**	**1**	**—**	**—**
Of which Securitisation	81	5	3	—	—	—	89	—	—	—	17	—	—	—	1	—	—
Of which retail underlying	81	5	—	—	—	—	86	—	—	—	14	—	—	—	1	—	—
Of which STS	81	—	—	—	—	—	81	—	—	—	12	—	—	—	1	—	—
Of which wholesale	—	—	3	—	—	—	3	—	—	—	2	—	—	—	—	—	—
Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Securitisation	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Of which Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(*) Securitisations with a risk weight of 1250% are deducted from own funds, as explained in section m) of chapter 3.2 of this report.

EU SEC4 - Securitisation exposures in the banking book and associated capital requirements – bank acting as investor (Million Euros. 12-31-2021)

	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital requirement after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA & SEC-IAA	SEC-SA	1250% RW
Total Exposures	**114**	**13**	**7**	**—**	**—**	**—**	**134**	**—**	**—**	**—**	**25**	**—**	**—**	**—**	**2**	**—**	**—**
Traditional Securitisation	**114**	**13**	**7**	**—**	**—**	**—**	**134**	**—**	**—**	**—**	**25**	**—**	**—**	**—**	**2**	**—**	**—**
Of which Securitisation	114	13	7	—	—	—	134	—	—	—	25	—	—	—	2	—	—
Of which retail underlying	114	13	—	—	—	—	127	—	—	—	22	—	—	—	2	—	—
Of which STS	114	—	—	—	—	—	114	—	—	—	16	—	—	—	1	—	—
Of which wholesale	—	—	7	—	—	—	7	—	—	—	4	—	—	—	—	—	—
Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Synthetic Securitisation	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Of which Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which re-Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(*) Securitisations with a risk weight of 1250% are deducted from own funds, as explained in section m) of chapter 3.2 of this report.

4.2.8. Hedging and risk reduction policies. Supervision strategies and processes

In certain cases, maximum credit risk exposure is reduced by collateral, credit enhancements and other actions which mitigate the Group's exposure. The BBVA Group applies a credit risk hedging and mitigation policy deriving from a banking approach focused on relationship banking. The existence of guarantees could be a necessary but not sufficient instrument for accepting risks, as the assumption of risks by the Group requires prior evaluation of the debtor's capacity for repayment, or that the debtor can generate sufficient resources to allow the amortization of the risk incurred under the agreed terms.

The policy of accepting risks is therefore organized into three different levels in the BBVA Group:

- Analysis of the financial risk of the transaction, based on the debtor's capacity for repayment or generation of funds.
- The constitution of guarantees that are adequate, or at any rate generally accepted, for the risk assumed, in any of the generally accepted forms: monetary, secured, personal or hedge guarantees; and finally
- Assessment of the repayment risk (asset liquidity) of the guarantees received.

This is carried out through a prudent risk policy that consists of the analysis of the financial risk, based on the capacity for reimbursement or generation of resources of the borrower, the analysis of the guarantee, assessing, among others, the efficiency, the robustness and the risk, the adequacy of the guarantee with the operation and other aspects such as the location, currency, concentration or the existence of limitations. Additionally, the necessary tasks for the constitution of guarantees must be carried out - in any of the generally accepted forms (collaterals, personal guarantees and financial hedge instruments) - appropriate to the risk assumed.

The procedures for the management and valuation of collateral are set out in the corporate general policies (retail and wholesale), which establish the basic principles for credit risk management, including the management of collaterals assigned in transactions with customers. The criteria for the systematic, standardized and effective treatment of collateral in credit transaction procedures in BBVA Group's wholesale and retail banking are included in the Specific Collateral Rules.

The methods used to value the collateral are in line with the best market practices and imply the use of appraisal of real-estate collateral, the market price in market securities, the trading price of shares in mutual funds, etc. All the collaterals received must be correctly assigned and entered in the corresponding register. They must also have the approval of the Group's legal units.

The valuation of the collateral is taken into account in the calculation of the expected losses. The Group has developed internal models to estimate the realization value of the collaterals received, the time that elapses until then, the costs for their acquisition, maintenance and subsequent sale, from real observations based on its own experience. This modeling is part of the LGD estimation processes that are applied to the different segments, and is included within the annual review and validation procedures.

The following is a description of the main types of collateral for each financial instrument class:

- Debt instruments held for trading: The guarantees or credit enhancements obtained directly from the issuer or counterparty are implicit in the clauses of the instrument (mainly guarantees of the issuer).
- Derivatives and hedging derivatives: In derivatives, credit risk is minimized through contractual netting agreements, where positive- and negative-value derivatives with the same counterparty are offset for their net balance. There may likewise be other kinds of guarantees and collaterals, depending on counterparty solvency and the nature of the transaction (mainly collaterals).
- Other financial assets designated at fair value through profit or loss and financial assets at fair value through other comprehensive income: The guarantees or credit enhancements obtained directly from the issuer or counterparty are inherent to the structure of the instrument (mainly personal guarantees).
- Financial assets at amortized cost:
    a. Loans and advances to credit institutions: These usually have the counterparty's personal guarantee or pledged securities in the case of repos.
    b. Loans and advances to customers: Most of these loans and advances are backed by personal guarantees extended by the customer. There may also be collateral to secure loans and advances to customers (such as mortgages, cash collaterals, pledged securities and other collateral), or to obtain other credit enhancements (bonds or insurances).

c. Debt securities: The guarantees or credit enhancements obtained directly from the issuer or counterparty are inherent to the structure of the instrument.

- Financial guarantees, other contingent risks and drawable by third parties: these have the counterparty's personal guarantee or other types of collaterals.

4.2.9. Information on credit risk mitigation techniques

4.2.9.1. Hedging based on on-balance sheet and off-balance sheet netting

Within the limits established by the netting rules in each operating country, the Group negotiates with its customers the assignment of the derivatives business to master agreements (e.g., ISDA or CMOF) by including the netting of off-balance sheet transactions.

The specific clauses of each agreement determine the transactions subject to netting.

The mitigation of counterparty risk exposure stemming from the use of mitigation techniques (netting plus the use of collateral agreements) leads to a reduction in overall exposure (mark to market plus add-on).

As pointed out above, financial assets and liabilities may be netted in certain cases. In particular, they are presented for a net amount on the consolidated balance sheet only when the Group's entities satisfy the provisions of IAS 32-Paragraph 42, so they have both the legal right to net recognised amounts, and the intention of settling the net amount or of realizing the asset and simultaneously paying the liability.

4.2.9.2. Hedging based on collateral

4.2.9.2.1. Management and valuation policies and procedures

The procedures for management and valuation of collateral are included in the Specific Collateral Rules, or in the Policies and Procedures for Retail and Wholesale Credit Risk.

These Policies and Procedures lay down the basic principles of credit risk management, which includes the management of the collateral assigned in transactions with customers.

Accordingly, the risk management model jointly values the existence of a suitable cash flow generation by the debtor that enables them to service the debt, together with the existence of suitable and sufficient guarantees that ensure the recovery of the credit when the debtor's circumstances render them unable to meet their obligations.

The valuation of collaterals is carried out in a rigorous and prudent manner, with the necessary information to determine it and with extreme caution in the use of appraisal values and any other type of valuation by independent experts. At the time of granting credit, unless local regulations provide for a shorter term, individual appraisals / independent expert appraisals must be available for a maximum age of one year in new origination proposals or that imply an increase in the amount over the existing risk; and three years in proposals on existing risk such as subrogations, forbearance, financing of assets on the group's balance sheet, etc. In the case of non-performing assets, as well as in restructuring and refinancing, the appraisal review period will be twelve months.

The milestones under which the valuations of the collaterals must be updated in accordance with local regulation are established under these prudential principles.

Random or rotating case assignment processes must be established to ensure the independence in the activity of the professionals or companies in charge of the appraisal with respect to the credit originating units. The valuation of non-real estate guarantees will also be carried out considering the general principles of prudence and rigour. Similarly, the independence and objectivity of the valuations is a critical factor that must be guaranteed through the use of external sources or the value contrast with them. Given the heterogeneity of this type of guarantees, in general the validity of the valuations must be ensured through documentation (for example, pro-forma invoices for movable property, certificates of deposits) or through consultation processes of market values (eg. in securities accounts, investment funds).

With respect to the entities that carry out the valuation of the collateral, principles are in place in accordance with local regulations that govern the level of customer loyalty and dependence on the Group, along with related processes. These valuations will be updated by statistical methods, indices or appraisals of goods, consultation of internal and external sources, etc. which shall be carried out under the generally accepted standards in each market and in accordance with local regulations.

For the validation of the collaterals, the Legal Services, support in the formalisation process ensuring that the requirements are met so that the guarantees are duly established in the corresponding jurisdiction. The guarantees are required to be included in the corresponding policies, duly guarded and registered in the official formats and bodies established, in order to fully preserve their recovery effectiveness. In general, these policies must include the general circumstances of the guarantees, the description of the assets that act as collateral, the obligations and rights of the parties involved and the related insurance.

Additionally, a critical review of the valuation is carried out, focusing in particular on aspects such as its understandability, the prudence of the assumptions and the clear and reasonable identification of other comparable properties used as a reference to determine the appraised value.In the wholesale sphere, the possibility of carrying out a due diligence will be considered when the risk or complexity of the operation so requires.

4.2.9.2.2. Types of collateral

As collateral for the purpose of calculating bank capital, the Group uses the hedging established in the solvency regulations. The following are the main types of collateral available in the Group:

- *Mortgage Guarantees: The collateral is the property upon which the loan is arranged.*
- *Financial guarantees: Their object is any one of the following financial assets, as per articles 197 and 198 of the solvency regulation.*
    - Cash deposits, deposit certificates or similar instruments.
    - Debt securities issued for the different categories.
    - Shares or convertible bonds.
- *Other goods and rights used as a real collateral: The following property and rights are considered acceptable as collateral as per Article 200 of the solvency regulation.*
    - Cash deposits, deposit certificates or similar instruments held in third-party institutions other than the lending credit institution, when these are pledged in favour of the latter.
    - Life insurance policies pledged in favour of the lending credit institution.
    - Debt securities issued by other institutions, provided that these securities are to be repurchased at a pre-set price by the issuing institutions at the request of the holder of the securities.

4.2.9.3. Hedging based on personal guarantees

According to the solvency regulations, unfunded credit protection consists of personal guarantees, including those arising from credit insurance, that have been granted by the providers of protection defined in Articles 201 and 202 of the solvency regulation.

In the category of Retail exposure under the advanced measurement approach, unfunded credit protection impacts the PD and does not reduce the amount of the credit risk in EAD.

In line with the EBA standards published in June 2020 (EBA/ITS/2020/04), the following table shows the book value of secured and unsecured exposures, including all guarantees recognised for accounting purposes, regardless of their use for capital purposes. The main change with respect to the previous version is the inclusion of a row to breakdown non-performing exposures.

Table 53. EU CR3 - CRM techniques - overview (Million Euros. 12-31-2022)

	Exposures unsecured - carrying amount [1]	Exposures secured - Carrying amount [1]	Exposures secured by collateral	Exposures secured by financial guarantees[2]	Exposures secured by credit derivatives
Total Loans	285,109	166,011	125,961	40,050	—
Total debt securities	80,952	—	—	—	—
Total exposures	**366,061**	**166,011**	**125,961**	**40,050**	**—**
Of which: non performing	**1,805**	**4,422**	**3,438**	**984**	**—**
Of which: defaulted	**1,805**	**4,422**	**3,438**	**984**	**—**

[1] Includes net carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios, as well as cash and balances with central banks.

[2] Excluding personal guarantees (unfunded credit protection which impacts on the PD but not in EAD.

EU CR3 - CRM techniques - overview[*] (Million Euros. 12-31-2021)

	Exposures unsecured - carrying amount (1)	Exposures secured - Carrying amount (1)	Exposures secured by collateral	Exposures secured by financial guarantees(2)	Exposures secured by credit derivatives
Total Loans	233,294	166,038	117,359	48,680	—
Total debt securities	73,597	—	—	—	—
Total exposures	**306,891**	**166,038**	**117,359**	**48,680**	**—**
Of which: non performing	**2,753**	**4,880**	**3,989**	**891**	**—**
Of which: defaulted	**2,753**	**4,880**	**3,989**	**891**	**—**

(*) The 2021 figures have been restated to bring the information in line with the updated mapping tool published by the EBA on May 23, 2022, which modifies the approach of the table to include carrying amount (net of value adjustments), instead of gross.

(1) Includes net carrying amount of the "amortised cost" portfolio, the "fair value through other comprehensive income" portfolio and the "fair value through P&L" portfolios, as well as cash and balances with central banks.

(2) Excluding personal guarantees (unfunded credit protection which impacts on the PD but not in EAD.

During 2022, no significant variations have been observed in the coverage level, which reached a percentage of 31% similar to 2021.

The breakdown of the specific credit mitigation techniques used in the IRB credit risk approach is below.

Table 54. EU CR7-A - IRB approach – Disclosure of the extent of the use of CRM techniques (Million Euros. 12-31-2022)

		Funded credit Protection (FCP)									**Unfunded credit Protection (UFCP)**			
			Part of exposures covered by Other eligible collaterals (%)				**Part of exposures covered by Other funded credit protection (%)**							
Exposure class	**Total exposures**	**Part of exposures covered by Financial Collaterals (%)**		**Part of exposures covered by Immovable property Collaterals (%)**	**Part of exposures covered by Receivables (%)**	**Part of exposures covered by Other physical collateral (%)**		**Part of exposures covered by Cash on deposit (%)**	**Part of exposures covered by Life insurance policies (%)**	**Part of exposures covered by Instruments held by a third party (%)**	**Part of exposures covered by Guarantees (%)**	**Part of exposures covered by Credit Derivatives (%)**	**RWEA without substitution effects (reduction effects only)**	**RWEA with substitution effects (both reduction and sustitution effects)**
Central governments and central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Corporates	6,364	—	—	—	—	—	—	—	—	—	—	—	6,611	5,177
Of which Corporates – SMEs	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which Corporates – Specialised lending	6,364	—	—	—	—	—	—	—	—	—	—	—	6,611	5,177
Of which Corporates – Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total FIRB	**6,364**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**6,611**	**5,177**
Central governments and central banks	12,159	—	—	—	—	—	—	—	—	—	—	—	1,523	1,103
Institutions	16,914	1.95 %	1.20 %	1.03 %	—	0.17 %	—	—	—	—	—	—	13,360	4,598
Corporates	147,750	0.26 %	5.01 %	2.32 %	0.07 %	2.62 %	—	—	—	—	—	—	108,434	72,364
Of which Corporates – SMEs	18,095	1.07 %	23.04 %	11.88 %	0.41 %	10.75 %	—	—	—	—	—	—	22,917	12,810
Of which Corporates – Specialised lending	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which Corporates – Other	129,655	0.15 %	2.49 %	0.98 %	0.02 %	1.49 %	—	—	—	—	—	—	85,516	59,554
Retail	98,196	0.03 %	65.41 %	65.22 %	—	0.19 %	—	—	—	—	—	—	35,101	24,482
Of which Retail – Immovable property SMEs	941	—	92.21 %	92.21 %	—	—	—	—	—	—	—	—	1,511	1,078
Of which Retail – Immovable property non-SMEs	68,906	—	91.51 %	91.50 %	—	0.01 %	—	—	—	—	—	—	9,333	8,916
Of which Retail – Qualifying revolving	12,741	—	—	—	—	—	—	—	—	—	—	—	17,032	8,868
Of which Retail – Other SMEs	2,816	1.07 %	10.80 %	4.44 %	—	6.36 %	—	—	—	—	—	—	2,736	1,157
Of which Retail – Other non-SMEs	12,792	0.01 %	0.03 %	0.01 %	—	0.02 %	—	—	—	—	—	—	4,489	4,463
Total AIRB	**275,019**	**0.27 %**	**26.12 %**	**24.59 %**	**0.04 %**	**1.49 %**	**—**	**—**	**—**	**—**	**—**	**—**	**158,417**	**102,547**

EU CR7-A - IRB approach – Disclosure of the extent of the use of CRM techniques (Million Euros. 12-31-2021)

		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
Exposure class	Total exposures	Part of exposures covered by Financial Collaterals (%)		Part of exposures covered by Immovable property Collaterals (%)	Part of exposures covered by Receivables (%)	Part of exposures covered by Other physical collateral (%)		Part of exposures covered by Cash on deposit (%)	Part of exposures covered by Life insurance policies (%)	Part of exposures covered by Instruments held by a third party (%)	Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and sustitution effects)
Central governments and central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Corporates	5,556	—	—	—	—	—	—	—	—	—	—	—	5,935	4,498
Of which Corporates – SMEs	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which Corporates – Specialised lending	5,556	—	—	—	—	—	—	—	—	—	—	—	5,935	4,498
Of which Corporates – Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total FIRB	**5,556**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**5,935**	**4,498**
Central governments and central banks	11,678	—	—	—	—	—	—	—	—	—	—	—	1,027	958
Institutions	15,088	2.15 %	0.88 %	0.73 %	—	0.15 %	—	—	—	—	—	—	11,389	4,630
Corporates	127,375	0.32 %	6.00 %	2.82 %	0.05 %	3.13 %	—	—	—	—	—	—	99,295	68,300
Of which Corporates – SMEs	18,031	1.66 %	25.62 %	13.52 %	0.25 %	11.84 %	—	—	—	—	—	—	26,448	14,858
Of which Corporates – Specialised lending	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Of which Corporates – Other	109,343	0.10 %	2.77 %	1.06 %	0.02 %	1.69 %	—	—	—	—	—	—	72,848	53,442
Retail	98,833	0.05 %	67.66 %	67.34 %	—	0.32 %	—	—	—	—	—	—	33,740	23,726
Of which Retail – Immovable property SMEs	1,101	—	92.31 %	92.28 %	—	0.03 %	—	—	—	—	—	—	1,946	1,347
Of which Retail – Immovable property non-SMEs	71,292	—	91.52 %	91.51 %	—	0.02 %	—	—	—	—	—	—	10,068	9,681
Of which Retail – Qualifying revolving	10,315	—	—	—	—	—	—	—	—	—	—	—	13,511	6,541
Of which Retail – Other SMEs	3,590	1.27 %	16.48 %	8.11 %	—	8.36 %	—	—	—	—	—	—	3,531	1,519
Of which Retail – Other non-SMEs	12,535	0.05 %	0.13 %	0.06 %	—	0.07 %	—	—	—	—	—	—	4,684	4,639
Total AIRB	**252,973**	**0.31 %**	**29.51 %**	**27.77 %**	**0.03 %**	**1.71 %**	**—**	**—**	**—**	**—**	**—**	**—**	**145,452**	**97,614**

The table includes all collaterals meeting the eligibility criteria for solvency purposes, and have an effect on EAD or other parameters such as LGD in the case of credit risk exposures under internal models (IRB).

Currently, the Group does not use credit derivatives as a credit risk mitigation technique, so the EU CR7 table “IRB Approach - Effect on RWAs of credit derivatives used as credit risk mitigation techniques” is not applicable.

4.2.9.4. Risk concentration

BBVA has established the measurement, monitoring and reporting criteria for the analysis of large credit exposures that could represent a concentration risk, with the aim of ensuring their alignment with the risk appetite framework defined in the Group.

Particularly, measurement and monitoring criteria are established for large exposures at the level of individual concentrations, concentrations of retail portfolios, wholesale sectors and geographies.

A quarterly measurement and monitoring process has been established for reviewing concentration risk.

The main measures to prevent risk concentration in BBVA are:

- At both the Group level and the subsidiaries belonging to the banking group, the information of customers (groups) that hold the largest exposures (greater than 10% of fully loaded Tier1; in the subsidiaries their level of own funds are used) is available. If a customer presents a concentration that exceeds the thresholds, the reasonableness of maintaining this exposure must be justified, or the measures to reduce the exposure be explained (for example, cancellation of risk) in writing every year.

- As an additional support to management, the portfolio concentration is calculated using the Herfindahl index. To date, the concentration at Group level is “very low”.

- The credit risk mitigation does not have a significant impact on the Group’s large exposures, being used solely as a mechanism for mitigating intra-group risk (“standby letters of credit” issued by BBVA in favor of the banking Group’s subsidiaries).

- The concentration to different industries is calculated based on the risk aggregation by economic activity. BBVA uses a classification that groups activities into 15 sectors. All of them are under the acceptable thresholds at the Group level.

- In retail portfolios, the analysis is carried out at subportfolio level (mortgages and non-mortgage retail). Both are below the acceptable thresholds at the Group level.

4.3. Market Risk

4.3.1. Scope and nature of the market risk measurement and reporting systems

Market risk is the possibility that there may be losses in the value of positions held due to movements in the market variables that affect the valuation of financial products and assets.

The scope of market risk in the Group's trading portfolios is mainly defined by the portfolios originated by Global Markets valued at fair value and maintained for the purpose of trading and generates short term results. The market risk in the banking book is clearly delimited and separated in the structural risk of interest and credit spread, exchange rate and equity, which are broken down in section 4.4.

The main market risks can be classified into the following groups:

- Interest-rate risk: This arises as a result of exposure to movements in the different interest-rate curves involved in trading. Although the typical products that generate sensitivity to the movements in interest rates are money-market products (deposits, interest-rate futures, call money swaps, etc.) and traditional interest-rate derivatives (swaps and interest-rate options such as caps, floors, swaptions, etc.), practically all the financial products are exposed to interest-rate movements due to the effect that such movements have on the valuation of the financial discount.

- Equity risk: This arises as a result of movements in share prices. This risk is generated in spot positions in shares or any derivative products whose underlying asset is a share or an equity index. Dividend risk is a sub-risk of equity risk, arising as an input for any equity option. Its variation may affect the valuation of positions and it is therefore a factor that generates risk on the books.

- Exchange-rate risk: This is caused by movements in the exchange rates of the different currencies in which a position is held. As in the case of equity risk, this risk is generated in spot currency positions, and in any derivative product whose underlying asset is an exchange rate. In addition, the quanto effect (operations where the underlying asset and the instrument itself are denominated in different currencies) means that in certain transactions in which the underlying asset is not a currency, an exchange-rate risk is generated that has to be measured and monitored.

- Credit-spread risk: Credit spread is an indicator of an issuer's credit quality. Spread risk occurs due to variations in the levels of spread of both corporate and government issues, and affects positions in bonds and credit derivatives.

- Volatility risk: This occurs as a result of changes in the levels of implied price volatility of the different market instruments on which derivatives are traded. This risk, unlike the others, is exclusively a component of trading in derivatives and is defined as a first-order convexity risk that is generated in all possible underlying assets in which there are products with options that require a volatility input for their valuation.

The metrics developed to control and monitor market risk in the BBVA Group are aligned with market practices and are implemented consistently across all the local market risk units.

Measurement procedures are established in terms of the possible impact of negative market conditions on the trading portfolio of the Group's Global Markets units, both under ordinary circumstances and in situations of heightened risk factors.

In addition, in Chapter 4.3.4.2 more information about the risk measurement models used in the Group, focused on internal models approved by the supervisor for BBVA S.A. and BBVA Mexico to calculate regulatory capital requirements on trading portfolios is detailed. For the other geographic areas (mainly South America and Garanti BBVA), the calculation of own funds requirements for trading portfolios is carried out using the standardised approach.

Analysis of the Group’s RWA structure shows that almost 4% corresponds to Market Risk (including structural exchange risk).

4.3.2. Differences in the trading book under accounting and prudential regulation

According to the solvency regulations, trading book shall be made up of all the positions on financial instruments and commodities that the credit institution holds for the purpose of trading or that act as hedging for other elements in this portfolio.

With respect to this portfolio, the rule also refers to the need to establish clearly defined policies and procedures.

For this purpose, regulatory trading book defined by the Group includes the positions managed by the Group’s Trading units, for which market risk limits are set and then monitored daily. Moreover, they comply with the other requirements defined in the solvency regulations.

In accounting, Financial assets are recorded under the heading "Financial assets held for trading" if the objective of the business model is to generate gains by buying and selling these financial instruments or generate short-term results.

4.3.3. Standardised approach

Market risk-weighted assets under the standardised approach (including structural exchange rate risk) account for 36% of total market risk-weighted assets.

The amounts in terms of RWAs and market risk capital requirements calculated by standardised approach as of December 31, 2022 and as of December 31, 2021 are below.

Table 55. EU MR1 - Market risk under the standardised approach (Million Euros. 12-31-2022)

	RWAs	Capital Requirements
Outright Products	**3,809**	**305**
Interest Rate Risk	1,180	94
Equity Risk	246	20
Foreign Exchange Risk	2,383	191
Commodity Risk	—	—
Options	**—**	**—**
Simplified approach	—	—
Delta-plus method	—	—
Scenario approach	—	—
Securitisation	**907**	**73**
Total	**4,716**	**377**

EU MR1 - Market risk under the standardised approach (Million Euros. 12-31-2021)

	RWAs	Capital Requirements
Outright Products	**3,889**	**311**
Interest Rate Risk	1,414	113
Equity Risk	353	28
Foreign Exchange Risk	2,059	165
Commodity Risk	63	5
Options	**—**	**—**
Simplified approach	—	—
Delta-plus method	—	—
Scenario approach	—	—
Securitisation	**557**	**45**
Total	**4,445**	**356**

During 2022, the equity requirements for market risk under standardised approach are mainly affected by changes in positions subject to correlation risk in the trading portfolio (including in row "Securitisation"), as well as by currency fluctuations.

4.3.4. Internal models

4.3.4.1. Scope of application

For the purposes of calculating own funds requirements as approved by the supervisor, the scope of application of the internal market risk model extends to BBVA S.A. and BBVA Mexico trading activity.

As explained in the following section, most of the items on the Group's consolidated balance sheet that are subject to market risk are positions whose principal metric used to measure their market risk is VaR.

4.3.4.2. Characteristics of the models used

Measurement procedures are established in terms of the possible impact of negative market conditions on the trading portfolio of the Group's Global Markets units, both under ordinary circumstances and in situations of heightened risk factors.

The standard metric used to measure market risk is Value at Risk (hereinafter "VaR"), which indicates the maximum loss that may occur in the portfolios at a given confidence level (99%) and time horizon (one day).

This statistic value is widely used in the market and has the advantage of summing up in a single metric the risks inherent to trading activity, taking into account how they are related and providing a prediction of the loss that the trading book could sustain as a result of fluctuations in equity prices, interest rates, foreign exchange rates and credit spreads. Additionally, for certain positions, other risks need to be considered, such as a credit spread, base, volatility or correlation risk.

With respect to the risk measurement models used in the Group, the supervisor has authorised the use of the internal model to determine the regulatory capital requirements deriving from risk positions on the BBVA, S.A. and BBVA Mexico trading book, which together, account for around 63% of the Group's trading book market risk at December 31, 2022 .

BBVA uses a single model to calculate the regulatory requirements by risk, taking into account the correlation between the assets and thus recognizing the diversification effect of the portfolios. The model used estimates the VaR in accordance with the "historical simulation" methodology, which involves estimating the profit and loss that would have been incurred in the current portfolio if the changing market conditions that occurred over a given period of time were repeated. Based on this information, it infers the maximum foreseeable loss in the current portfolio with a given level of confidence.

Absolute and relative returns are used in simulating the potential variation of the risk factors, depending on the type of risk factor. Relative returns are used in the case of equity and foreign currency; while absolute returns are used in the case of spreads and interest rates.

The decision on the type of return to apply is made according to the risk factor metric subject to variation. The relative return is used in the case of price risk factors, while for interest-rate risk factors it is absolute returns.

The model has the advantage of accurately reflecting the historical distribution of the market variables and of not requiring any specific distribution assumption. The historical period used in this model is two years.

The VaR figures are estimated through the VaR without smoothing methodology, which awards equal weight to the daily information for the previous two years. This is currently the official methodology for measuring market risks for the purpose of monitoring compliance with risk limits.

At the same time, and following the guidelines established by the Spanish and European authorities, BBVA incorporates metrics in addition to VaR with the aim of meeting the Bank of Spain's regulatory requirements with respect to the calculation of bank capital for the trading book. Specifically, the measures incorporated in the Group since December 2011 (stipulated by Basel 2.5) are:

- VaR: In regulatory terms, the VaR charge incorporates the stressed VaR charge, and the sum of the two (VaR and stressed VaR) is calculated. This quantifies the losses associated with the movements of the risk factors inherent to market operations (including interest-rate risk, exchange-rate risk, equity risk and credit risk, among others). Both VaR and stressed VaR are rescaled by a regulatory multiplier (between three and four) and by the square root of ten to calculate the capital charge.
- Specific Risk - Incremental Risk Capital ("IRC"). Quantification of the risks of default and changes of the credit ratings of the bond and derivative positions and debt funds with daily look-through or significant benchmark (correlation > 90%) in the trading portfolio. The IRC charge is exclusively applied in entities in respect of which the internal market risk model is used (i.e. BBVA, S.A. and BBVA Mexico). The IRC charge is determined based on the associated losses (calculated at 99.9% confidence level over a one year horizon under the hypothesis of constant risk) due to a rating change and/or default of the issuer with respect to an asset. In addition, the price risk is included in sovereign positions for the specified items.

  - Specific Risk: Securitization, correlation portfolios and Investment funds without look-through. Capital charges for securitizations and correlation portfolios are assessed based on the potential losses associated with the occurrence of a credit event in the underlying exposures. They are calculated by the standard model. The scope of the correlations portfolios refers to the First To Default (FTD)-type market operation and/or tranches of market CDOs and only for positions with an active market and hedging capacity. Capital charge for Funds include losses associated with volatility and credit risk of the underling positions of the fund. All charges are calculated by the standard model.

The capital charge is determined based on the associated losses (at 99.9% over a time horizon of 1 year under the assumption of constant risk) resulting from the rating migration and/or default of the asset's issuer. Also included is the price risk in sovereign positions for the indicated items.

The calculation methodology is based on the Monte Carlo simulation of the impact of defaults and rating transitions on the portfolio subject to incremental risk capital. The model defining the transition and default process of a counterparty is based on the changes in a counterparty's credit quality. Under a one-factor Merton model, which underlies the Basel or Creditmetrics model, this credit quality will correspond to the value of the issuer's assets, depending on a systemic factor that is common to all the issuers, and an idiosyncratic factor specific to each.

All that is needed to simulate the rating and default transition process for the issuers is to simulate the systemic factor and the idiosyncratic component. Once the underlying variable is available, the final rating can be obtained. The individual credit quality simulation of the issuers allows losses due to systemic risk and idiosyncratic risk to be obtained.

Transition matrices

The transition matrix used for calculation is estimated based on the external information about the rating transitions provided by the rating agencies. Specifically, the information provided by the Standard & Poor's agency is used.

The appropriateness of using information on external transitions is justified by:

- The internal ratings for the Sovereign, Emerging Sovereign Country, Financial Institution and Corporate segments (which constitute the core positions subject to incremental risk capital) are aligned with the external ratings. By way of example, the internal rating system for financial institutions is based on an algorithm that uses external ratings.
- The rating agencies provide sufficient historical information to cover a complete economic cycle (rating transition information is available dating back to the 1981 financial year) and obtain a long-term transition matrix in the same way that long-term probabilities of default are required for the calculation of the regulatory capital for credit risk in the banking book.

This depth level of historical information is not available for the internal rating systems.

Although external data are used for determining the transitions between ratings, to establish the default, the probabilities used are assigned by the BBVA master scale, which ensures consistency with the probabilities used for the calculations of capital in the banking book.

The transition matrix is recalibrated every year, based on information on transitions provided by Standard & Poor's. A procedure has been defined to readjust the transitions in accordance with the probability of default assigned by the master scale.

Liquidity horizons

The calculation of incremental risk capital used by BBVA explicitly includes the use of positions with a hypothesis of a constant level of risk and quarterly liquidity horizons of less than one year. The average liquidity horizon is in the range of 3-6 months.

The establishment of liquidity horizons follows the guidelines/criteria established by Basel in its guidelines for computing capital for incremental risk.

First, a criterion has been used of capacity for managing positions through liquid instruments that allow their inherent risk to be hedged. The main instrument for hedging the price risk for rating transitions and defaults is the Credit Default Swap (CDS). The existence of this hedging instrument serves as a justification for considering a short term liquidity horizon.

However, in addition to considering the existence of a liquid CDS, a distinction has to be made according to the issuer's rating (this factor is also mentioned in the aforementioned guidelines). Specifically, between investment grade issuers or those with a rating of BBB- or above, and issuers below this limit.

According to these criteria, the issuers are mapped to standard liquidity horizons of 3, 6 or 12 months.

Correlation

The calculation methodology is based on a single-factor model, in which there is one factor common to all the counterparties. The coefficient of the model is determined by the correlation curves established by Basel for corporates, financial institutions and sovereigns based on the probability of default.

The use of the Basel correlation curve ensures consistency with the calculation of regulatory capital under the IRB approach for the positions in the banking book.

Validity tests are performed periodically on the risk measurement models used by the Group. They estimate the maximum loss that could have been incurred in the positions assessed with a given level of probability (backtesting), as well as measurements of the impact of extreme market events on the risk positions held (stress testing).

Backtesting is performed at the trading floor level as an additional control measure in order to carry out a more specific monitoring of the validity of the measurement models.

The current structure for market risk management includes monitoring market risk limits, which consists of a system of limits based on metrics of market activities (Value at Risk (VaR), economic capital, as well as stop-loss limits for each of the Group’s business units). The global limits are approved by the Executive Committee on an annual basis, once they have been analysed by the Global Risk Management Committee (GRMC). This limits structure is developed by identifying specific risks by type, trading activity and trading floor. The market risk unit also maintains consistency between limits. The control structure in place is supplemented by limits on loss and a system of alert signals to anticipate the effects of adverse situations in terms of risk and/or result.

The review of the quality of the inputs used by the evaluation processes is based on checking the data against other sources of information accepted as standard. These checks detect errors in the historical series such as repetitions, data outside the range, missing data, etc. As well as these periodic checks of the historical data loaded, the daily data that feed these series are subject to a data quality process to guarantee their integrity.

The choice of proxies is based on the correlation detected between the performance of the factor to be entered and the proxy factor. A Simple Linear Regression model is used, selecting the proxy that best represents the determination coefficient (R2) within the whole period for which the performance of both series is available. Next, the performance of the factor on the necessary dates is reconstructed, using the beta parameter estimated in the simple linear regression.

4.3.4.2.1. Valuation methodology and description of the independent price verification process

As part of the process established in the Group for determining the fair value in order to ensure that financial assets and liabilities are properly following the IFRS 13 principles: Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or most advantageous market, at the measurement date.

The fair value is reached without making any deduction in transaction costs that might be incurred due to sale or disposal by other means.

BBVA has established, at a geographical level, a structure of Risk Operational Admission and Product Governance Committees responsible for validating and approving new products or types of financial assets and liabilities before being contracted. Local management responsible for valuation, which are independent from the business are members of these committees.

These areas are required to ensure, prior to the approval *stage*, the existence of not only technical and human resources, but also adequate informational sources to measure the fair value of these financial assets and liabilities, in accordance with the rules established by the valuation global area and using models that have been validated and approved by the responsible areas complying with the governance of BBVA Group's official models.

Fair value hierarchy

All financial instruments, both assets and liabilities are initially recognized at fair value, which at that point is equivalent to the transaction price, unless there is evidence to the contrary in the market. Subsequently, depending on the type of financial instrument, it may continue to be recognized at amortized cost or fair value through adjustments in the consolidated income statement or equity.

When possible, the fair value is determined as the market price of a financial instrument. However, for many of the financial assets and liabilities of the Group, especially in the case of derivatives, there is no market price available, so its fair value is estimated on the basis of the price established in recent transactions involving similar instruments or, in the absence thereof, by using mathematical measurement models that are sufficiently tried and trusted by the international financial community. The estimates of the fair value derived from the use of such models take into consideration the specific features of the asset or liability to be measured and, in particular, the various types of risk associated with such asset or liability. However, the limitations inherent in the measurement models and possible inaccuracies in the assumptions and parameters required by these models may mean that the estimated fair value of an asset or liability does not exactly match the price for which the asset or liability could be exchanged or settled on the date of its measurement.

Additionally, for financial assets and liabilities that show significant uncertainty in inputs or model parameters used for valuation, criteria is established to measure said uncertainty and activity limits are set based on these.

Finally, these measurements are compared, as much as possible, against other sources such as the measurements obtained by the business teams or those obtained by other market participants.

The process for determining the fair value requires the classification of the financial assets and liabilities according to the measurement processes used as set forth below:

- Level 1: Valuation using directly the quotation of the instrument, observable and readily and regularly available from independent price sources and referenced to active markets that the entity can access at the measurement date. The instruments classified within this level are fixed-income securities, equity instruments and certain derivatives.
- Level 2: Valuation of financial instruments with commonly accepted techniques that use inputs obtained from observable data in markets.
- Level 3: Valuation of financial instruments with valuation techniques that use significant unobservable inputs in the market. As of December 31, 2022, the affected instruments at fair value accounted for approximately 0.57% of financial assets and 0.43% of the Group's financial liabilities. Model selection and validation is undertaken by control areas outside the business areas.

Full revaluation is used for most financial products at BBVA Group.

In addition, the Group calculates Prudent Valuation Adjustments (PVA) for all instruments valued at fair value. PVA is an additional or conservative adjustment to the fair value that allows a more prudent assessment to be obtained by considering sources of risks that exist in the calculation of the fair value (uncertainty inputs, risk model, etc). A detailed breakdown of the method for calculating PVAs for the Group is below:

Table 56. EU PV1 - Prudent Valuation Adjustments (Million Euros. 12-31-2022)

	Risk category					Category level AVA - Valuation uncertainty				
Category level AVA	**Equity**	**Interest Rates**	**Foreign exchange**	**Credit**	**Commodities**	**Unearned credit spreads AVA**	**Investment and funding costs AVA**	**Total category level post-diversification**	**Of which: Total core approach in the trading book**	**Of which: Total core approach in the banking book**
Market price uncertainty	46	140	36	4	—	3	—	114	94	21
Close-out cost	115	78	46	9	—	9	—	129	109	19
Concentrated positions	19	47	—	—	—	—	—	66	34	32
Early termination	—	1	—	—	—	—	—	1	1	—
Model risk	9	3	—	5	—	9	4	15	15	—
Operational risk	8	11	4	1	—	—	—	24	20	4
Future administrative costs	—	6	—	—	—	—	—	6	6	—
Total Additional Valuation Adjustments (AVAs)								**356**	**280**	**76**

EU PV1 - Prudent Valuation Adjustments (Million Euros. 12-31-2021)

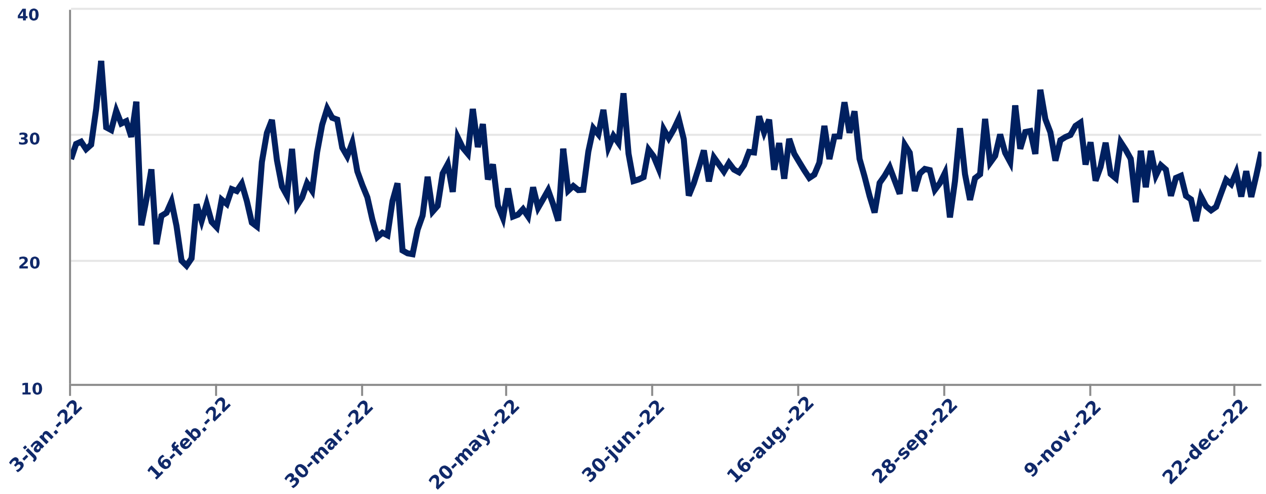
	Risk category					Category level AVA - Valuation uncertainty				
Category level AVA	**Equity**	**Interest Rates**	**Foreign exchange**	**Credit**	**Commodities**	**Unearned credit spreads AVA**	**Investment and funding costs AVA**	**Total category level post-diversification**	**Of which: Total core approach in the trading book**	**Of which: Total core approach in the banking book**
Market price uncertainty	37	120	21	3	—	4	—	93	75	17
Close-out cost	31	64	32	7	—	5	—	69	60	9
Concentrated positions	26	40	—	—	—	—	—	67	28	39
Early termination	—	—	—	—	—	—	—	—	—	—
Model risk	6	1	—	1	—	8	3	10	10	—
Operational risk	3	9	3	1	—	—	—	16	14	3
Future administrative costs	—	6	—	—	—	—	—	6	6	—
Total Additional Valuation Adjustments (AVAs)								**260**	**193**	**68**

The increase in Total AVAs is mainly due to the general increase in uncertainty valuation factors and the introduction of new AVA concepts with an impact on close-out cost factors.

4.3.4.2.2. Market risk in 2022

The Group’s market risk related to its trading portfolio remained in 2022 at low levels compared to other risks managed by BBVA, particularly credit risk. This is due to the nature of the business. In 2022 the average VaR was €27 million, below the figure of 2021, with a maximum level in the year reached on January 12, 2022 of €36 million. The evolution in the BBVA Group’s market risk during 2022, measured as VaR without smoothing (see Glossary) with a 99% confidence level and a 1-day horizon (shown in Millions of Euros) is as follows:

Chart 15. Trading book. Trends in VaR without smoothing



VaR without smoothing figures by risk factors are below:

Table 57. Trading Book. VaR without smoothing by risk factors (Million Euros)

VaR by risk factors	Interest-rate and spread risk	Exchange - rate risk	Equity risk	Vega / correlation risk	Diversification effect[1]	Total
December 2022						
Average VaR for the period	33	8	3	7	(23)	27
Maximum VaR for the period	35	12	2	11	(24)	36
Minimum VaR for the period	25	10	2	11	(28)	19
VaR at the end of the period	**32**	**13**	**7**	**5**	**(28)**	**29**
December 2021						
Average VaR for the period	33	10	2	11	(28)	29
Maximum VaR for the period	32	13	4	1	(14)	36
Minimum VaR for the period	27	9	1	10	(25)	22
VaR at the end of the period	**34**	**9**	**5**	**11**	**(29)**	**31**

[1] The diversification effect is the difference between the sum of the average individual risk factors and the total VaR figure that includes the implied correlation between all the variables and scenarios used in the measurement.

By type of market risk assumed by the Group's trading portfolio, the main risk factor for the Group continued to be that linked to interest rates, with a weight of 57% of the total at December 31, 2022 (this figure includes the spread risk). These figures are similar to the ones as of the end of 2021. Exchange-rate risk accounted for 23% of the total risk, increasing its weight with respect to December 2021 (16%), as well as equity, which increase to 12% as of 2022, from 9% as of 2021, while volatility and correlation risk has increased 10% from 19% at the end of 2021.

According to article 455, letter d) and e) of the CRR - corresponding to the breakdown of information on internal models of Market Risk-, the elements that make up the Own Funds requirements to which a reference is made in articles 364 and 365 of the CRR, are presented below.

Table 58. EU MR2-A - Market risk under the IMA (Million Euros. 12-31-2022)

	RWAs	Capital Requirements
VaR	**1,966**	**157**
Previous day's VaR		59
Average of the daily VaR on each of the preceding sixty business days (VaRavg) x multiplication factor		157
SVaR	**4,077**	**326**
Latest SVaR		132
Average of the SVaR during the preceding sixty business days (sVaRavg) x multiplication factor (mc)		326
Incremental risk charge - IRC	**2,210**	**177**
Most recent IRC value		154
Average of the IRC number over the preceding 12 weeks		177
Comprehensive Risk Measure- CRM	**—**	**—**
Most recent risk number for the correlation trading portfolio over the preceding 12 weeks		—
Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		—
8% of the own funds requirement in SA on most recent risk number for the correlation trading portfolio		—
Others		**—**
Total	**8,252**	**660**

EU MR2-A - Market risk under the IMA (Million Euros. 12-31-2021)

	RWAs	Capital Requirements
VaR	**2,634**	**211**
Previous day's VaR		74
Average of the daily VaR on each of the preceding sixty business days (VaRavg) x multiplication factor		211
SVaR	**5,431**	**434**
Latest SVaR		143
Average of the SVaR during the preceding sixty business days (sVaRavg) x multiplication factor (mc)		434
Incremental risk charge - IRC	**2,201**	**176**
Most recent IRC value		176
Average of the IRC number over the preceding 13 weeks		135
Comprehensive Risk Measure- CRM	**—**	**—**
Most recent risk number for the correlation trading portfolio over the preceding 13 weeks		—
Average of the risk number for the correlation trading portfolio over the preceding 13 weeks		—
8% of the own funds requirement in SA on most recent risk number for the correlation trading portfolio		—
Others		**—**
Total	**10,267**	**821**

For more information about RWA and capital requirements under IMA, see Table 60.

Table 59. EU MR3 - IMA values for trading portfolios (Million Euros. 12-31-2022)

IMA values for trading portfolios (1)(2)	
VaR (10 day 99%)	
Maximum value	72
Average value	52
Minimum value	38
Period value	59
SVar (10 day 99%)	
Maximum value	162
Average value	109
Minimum value	79
Period value	132
IRC (99.9%)	
Maximum value	198
Average value	181
Minimum value	144
Period value	154
CRM (99.9%)	
Maximum value	—
Average value	—
Minimum value	—
Period value	—

(1) Data related to the second half of 2022.

(2) As of 31 December 2022, the additional surcharge of 1.60 on the IRC component which apply from 2019 is included.

EU MR3 - IMA values for trading portfolios (Million Euros. 12-31-2021)

IMA values for trading portfolios (1)(2)	
VaR (10 day 99%)	
Maximum value	95
Average value	70
Minimum value	46
Period value	74
SVar (10 day 99%)	
Maximum value	198
Average value	144
Minimum value	100
Period value	143
IRC (99.9%)	
Maximum value	176
Average value	135
Minimum value	121
Period value	176
CRM (99.9%)	
Maximum value	—
Average value	—
Minimum value	—
Period value	—

(1) Data related to the second half of 2021.

(2) As of 31 December 2021, the additional surcharge of 1.60 on the IRC component which apply from 2019 is included.

For more information about RWA and capital requirements under IMA, see Table 60.

The main changes in the market RWAs, calculated using the method based on internal models are below:

Table 60. EU MR2-B - RWA flow statements of market risk exposures under the IMA (Million Euros)

	VaR	SVaR	IRC	CRM	Other	Total RWAs	Total Capital Requirements
RWAs September, 2022	**2,456**	**5,045**	**2,628**	**—**	**—**	**10,129**	**810**
Regulatory adjustments	(1,740)	(3,641)	—	—	—	(5,382)	(430)
RWAs as of last day of September 2022	**716**	**1,404**	**2,628**	**—**	**—**	**4,747**	**380**
Level risk variation	(439)	(834)	(439)	—	—	(1,712)	(137)
Model updates	—	—	—	—	—	—	—
Methodology and policy	—	—	—	—	—	—	—
Acquisitions and disposals	—	—	—	—	—	—	—
Foreign Exchange movements	(51)	(135)	(57)	—	—	(243)	(19)
Other	—	—	78	—	—	78	6
RWAs as of last day of December 2022	**735**	**1,653**	**1,922**	**—**	**—**	**4,310**	**345**
Regulatory adjustments	1,230	2,424	288	—	—	3,943	315
RWAs December, 2022	**1,966**	**4,077**	**2,210**	**—**	**—**	**8,252**	**660**

In the fourth quarter of 2022, the capital requirements for market risk under the internal model are mainly affected by the decrease in VaR and Stressed VaR capital requirements in BBVA Mexico and the decrease in IRC capital requirements:

Capital requirements in BBVA S.A. decrease in December 2022 mainly as a result of the reduction in corporate positions, which leads to lower IRC capital requirements.

Capital requirements in BBVA Mexico decrease in December 2022, basically due to the decrease in VaR and SVaR capital requirements as a function of the reduction in government rate positions.

The IRC component remains subject to the additional surcharge of 1.60, following the internal model review process in 2019.

The full annual series of RWA flow of market risk under the IMA is available in the editable file “Pillar III 2022 – Tables & Annexes”.

4.3.4.2.3 Stress testing

All the tasks associated with stress, methodologies, scenarios of market variables or reports are undertaken in coordination with the Group’s Risk Areas.

A number of stress tests are carried out on the BBVA Group's trading portfolios. First, global and local historical scenarios are used that replicate the behavior of an extreme past event, such as for example the collapse of Lehman Brothers or the "Tequilazo" crisis. These stress tests are complemented with simulated scenarios, where the aim is to generate scenarios that have a significant impact on the different portfolios, but without being anchored to any specific historical scenario.

Finally, for some portfolios or positions, fixed stress tests are also carried out that have a significant impact on the market variables affecting these positions.

Historical scenarios

The historical benchmark stress scenario for the BBVA Group is Lehman Brothers, whose sudden collapse in September 2008 led to a significant impact on the behavior of financial markets at a global level. The following are the most relevant effects of this historical scenario:

- Credit shock: reflected mainly in the increase of credit spreads and downgrades in credit ratings.
- Increased volatility in most of the financial markets (giving rise to a great deal of variation in the prices of different assets (currency, equity, debt).
- Liquidity shock in the financial systems, reflected by a major movement in interbank curves, particularly in the shortest sections of the euro and dollar curves.

Table 61. Trading Book. Impact on earnings in Lehman scenario (Million Euros)

Impact on earnings in Lehman scenario	12-31-2022	12-31-2021
GM Europe, NY & Asia	(62)	(40)
GM Mexico	(62)	(107)
GM Argentina	—	(1)
GM Chile	—	—
GM Colombia	(3)	(3)
GM Peru	(6)	(3)
GM Venezuela	—	—

Simulated scenarios

Unlike the historical scenarios, which are fixed and therefore not suited to the composition of the risk portfolio at all times, the scenario used for the exercises of economic stress is based on resampling methodology. This methodology is based on the use of dynamic scenarios that are recalculated periodically depending on the main risks affecting the trading portfolios. On a data window wide enough to collect different periods of stress (data are taken from January 1, 2008 until the date of the assessment), a simulation is performed by resampling of historic observations, generating a distribution of losses and gains that serve to analyze the most extreme of births in the selected historical window.

The advantage of this methodology is that the period of stress is not predetermined, but depends on the portfolio maintained at each time, and making a large number of simulations (10,000 simulations) allows a greater richness of information for the analysis of expected shortfall than what is available in the scenarios included in the calculation of VaR.

The main features of this approach are:

a) the generated simulations respect the correlation structure of the data

b) there is flexibility in the inclusion of new risk factors

c) it allows the introduction of a lot of variability in the simulations (desirable for considering extreme events).

The impact of the stress tests by simulated scenarios (Stress VaR 95% at 20 days, Expected Shortfall 97,5 % at 20 days and Stress VaR 99% at 1 day) is shown below.

Table 62. Trading Book. Stress resampling (Million Euros. 12-31-2022)

	Europe	Mexico	Peru	Venezuela	Argentina	Colombia	Turkey
Expected impact	(86)	(42)	(7)	—	(8)	(4)	(22)

	Stress VaR	Expected Shortfall	Stress Period	Stress VaR 1D
	95 20 D	97.5 20 D		99% Resampling
Total				
GM Europe, NY and Asia	(58)	(86)	11/17/2010 - 10/17/2012	(22)
GM Mexico	(32)	(42)	05/09/2008 - 05/06/2010	(8)

4.3.4.2.4. Backtesting

Introduction

The ex-post or Backtesting validation is based on the comparison of the periodic results of the portfolio with the market risk measures from the established measurement system. The validity of a VaR model is particularly dependent on whether the empirical reality of the results does not enter into open contradiction with what is expected in the model. If the observed results were sufficiently adjusted to what was predicted by the model, it would be rated as good, and if the discrepancy were notable, revisions would be required in order to correct possible errors or modifications and to improve quality.

In order to determine whether the results have been sufficiently adjusted to the risk measurements, it is necessary to establish objective criteria, which are specified in a series of validation tests carried out with a given methodology. In establishing the most appropriate methodology, the criteria recommended by Basel have been largely followed as they are considered appropriate.

Validation test

In the comparison between results and risk measurements, a key element that is of interest is the confidence that the losses do not exceed the VaR risk measurements made more than a number of times according to the level of confidence adopted in the model. The validation test presented below, which focuses on contrasting this aspect, emphasizes that the risk measurement model is underestimating the risk that is actually being borne.

For the establishment of a hypothesis comparison test, we start from the observed results and try to infer whether there is enough evidence to reject the model (the null hypothesis that the trust of the model is established is not met).

In cases where the model functions properly, the VaR measurement indicates that the variation of the value of a portfolio in a given time horizon will not exceed the value obtained in a percentage of times determined by the level of confidence. In other words, the probability of having a loss that is higher than the VaR measurement, what we will call an exception, will be 1%, and the probability that the exception will not occur will be 99%.

GREEN Zone: model acceptance zone	It is characterised as being an area in which there is a high probability of accepting a suitable model and a low probability of accepting an unsuitable model. This is defined by the set for which the accumulated probability of less than 95%, with the null hypothesis proving correct. It covers a number between zero and four exceptions.
YELLOW zone: ambiguous zone	Possible results for both a suitable and inadequate model. It begins when the accumulated probability is greater than equal to 95% (it must be less than 99.99%), with the null hypothesis proving correct. It covers a number of between five and nine exceptions.
RED zone: model rejection zone	High probability that the model is unsuitable and unlikely to reject if suitable. It is defined by the fact that the level of significance is less than 0.1% or, which is the same, the accumulated probability is greater than or equal to 99.99%, with the null hypothesis proving correct. It corresponds to a number of exceptions equal to or greater than ten.

To carry out this test it is advisable to have, at least, a one-year historical series of both results and risk estimates on a daily basis.

The criterion used is perfectly adapted to the priority of supervisory, which is to avoid situations where excess risk for which the entity is not prepared jeopardizes its survival. However, the use of risk measurements as a tool for managing positions entails a concern that the risk measurements are adjusted to the real risk on both sides: not only is there concern that the risk is being underestimated, but also that It may be overestimating.

At the end of December 31, 2022, the model is in the green zone of acceptance of the model, both in BBVA SA and BBVA Mexico.

Backtesting results

Regulatory backtesting is made up of two types: Hypothetical Backtesting and Actual Backtesting:

- Hypothetical Backtesting is defined as the contrast of the Hypothetical P&L on the estimated VaR, the day before the performance of said result. Actual Backtesting is defined as the contrast with the Actual P&L on the same estimated VaR, the day before the performance of said result.
- Actual Backtesting was implemented and entered into force on January 1, 2013, as a result of the transposition in the national legal order through the Bank of Spain Circular 4/2011 of November 30, of the CRD III that introduces Basel 2.5 in the European Union. The results that are used for the construction of both types of Backtesting are based on the actual results of the management tools.

According to Article 369 of the CRR, the P&L used in Backtesting should have a sufficient level of granularity in order to be shown at the "top-of-house" level, differentiating between Hypothetical and Actual P&L. In addition to the above, the historical Backtesting series will include a minimum of one year.

Actual P&L

The Actual P&L contains the complete management results, including the intraday operation and the daily and non-daily valuation adjustments, discounting the results of the franchises and commissions of each day and each desk.

The valuation functions and the parameters of the valuation models used in the calculation of the Actual P&L are the same as those used in the calculation of the Economic P&L.

Hypothetical P&L

The Hypothetical P&L contains the management results without the P&L of the daily activity, it is said, excluding intraday operations, premiums, and commissions. The data is provided by the management systems and broken down by desk, in adherence with the Volcker Rule on desk distribution.

The valuation functions and the parameters assigned to the valuation models used in the calculation of the Hypothetical P&L are the same as those used in the calculation of the Actual P&L.

The P&L figures used in both Backtesting types exclude Credit Valuation Adjustments (CVA), Debt Valuation Adjustments (DVA) and Additional Valuation Adjustments (AVA). As well as any change in value resulting from migrations from rating to default, except those reflected in prices by the market itself, since the changes in value due to migration from rating to default are included in the Counterparty Credit Risk metrics.

Perimeter of the backtesting and internal model exceptions

The calculation scope of VaR and P&L (Hypothetical and Actual) is limited to the totality of the Trading Book portfolios of the Global Markets Internal Model of BBVA S.A. and BBVA Mexico.

All the positions belonging to the Banking Book, the portfolios under the Standardised Approach and the trading activity with Hedge Funds (this activity was excluded from the Internal Model in its original approval) are thus excluded from this scope of application.

It is considered that there is an exception at the Top of House level, when the two following circumstances concur in the same internal model and date:

- The Hypothetical P&L and/or the Actual P&L are negative.
- With an amount equal to or greater than the maximum between VaR without smoothing and VaR with smoothing calculated based on the previous day

For the purposes of calculating the number of exceptions of the Regulatory Backtesting, exceptions will only be taken into account within a mobile window of 250 consecutive Business Days at the Top of House level in each respective internal model.

At the end of December 31, 2022, there was not any exception in BBVA SA Backtesting and two exceptions in BBVA Mexico, which are listed below:

BBVA Mexico:

On March 22, 2022, the P&L at the entity or top-of-house level (ie BBVA Mexico) showed a negative result of €-10.1 million and €-9.2 million in terms of hypothetical P&L and actual, respectively; compared to a VaR figure for the previous business day (March 18, 2022) of €-7.9 million. Thus, there was an exception in the Hypothetical and Real backtesting at entity level on that date, 127% and 117 % above the VaR amount.

During the previous weeks, the domestic financial market was affected by two main factors: The global interest rate restrictive cycle, resulting from inflationary pressures; and the geopolitical pressures of the war in Ukraine and related economic sanctions and their impact on commodity prices. Both factors led to an interest rate increase in Mexico. As of March 18, rates had increased 41 basis points for the month. Monday, March 21 was a public holiday in Mexico. The international market continued trading, surrounded by speculation about the possible impact of economic sanctions on the pending monetary policy decisions of the FED and Mexico's central bank (Banxico). On March 22, the market followed the same trend. Mexico's local market that opened on the 22nd adjusted the impact of two sessions in one. The movement of the government curve on March 22 shifted an average of +19bp. However, the middle part of the curve moved up to +24bp. This movement, together with the Global Markets Mexico position, generated the loss.

On June 13, 2022, the entity-level or top-of-house P&L (i.e. BBVA Mexico) showed a negative result of € -10. 5 million and € -10.3 million in terms of Hypothetical and Actual P&L, respectively; compared to a VaR figure of € -8.04 million on the previous business day (June 10, 2022). Thus, there was an exception in the Hypothetical and Actual backtesting at entity level at that date, 131% and 129% above the VaR amount.

In the previous months, the mix of geopolitical trends (post-pandemic economy, Ukraine war, etc.), led to a global inflation increase. As a result, Central Banks started a restrictive cycle. On Friday, June 10, May’s inflation in the United States was published: 8.6%, the highest level in the last forty years. On Monday, June 13, the market started speculating on how this information would affect the FED and its next monetary policy announcement, scheduled for June 15. These concerns had a direct impact on the Mexican financial market, as Banxico had scheduled a monetary policy announcement a week after the FED's announcement, on June 23. In the last two years, Banxico maintained a spread of approximately 600 basis points in its benchmark rate, versus the FED’s rate, so prospects of a similar increase in local curves were adjusted. On June 13, local interest rate curves rose by an average of 19 basis points. This movement, together with the Global Markets Mexico position, generated the loss

Chart 16. Trading book. Market Risk Model Validation for BBVA S.A. Hypothetical Backtesting (EU MR4)

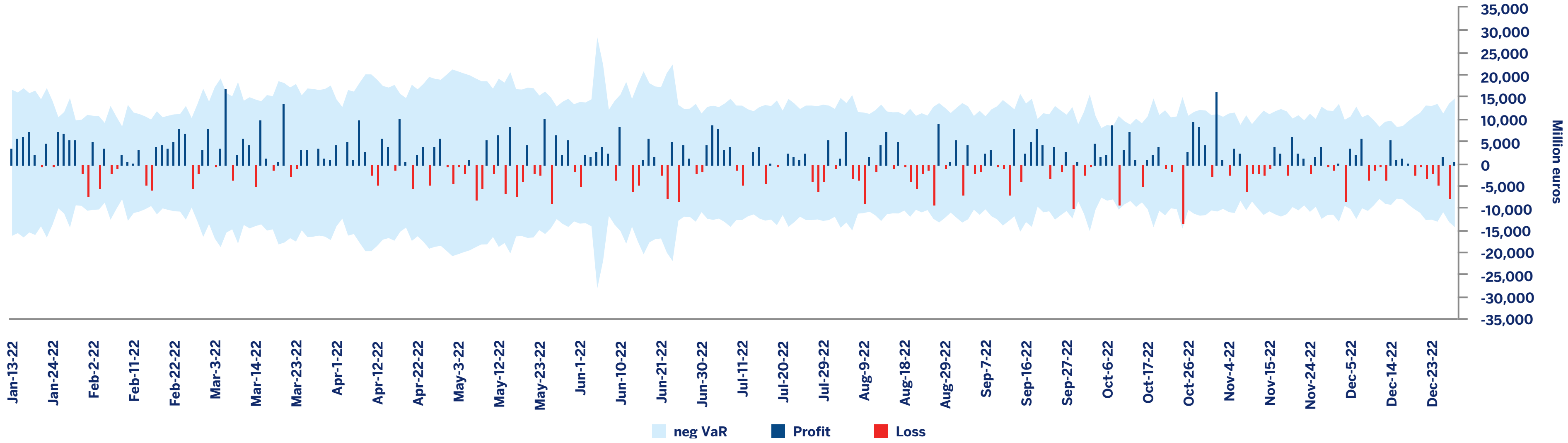


Chart 17. Trading book. Market Risk Model Validation for BBVA S.A. Real Backtesting (EU MR4)

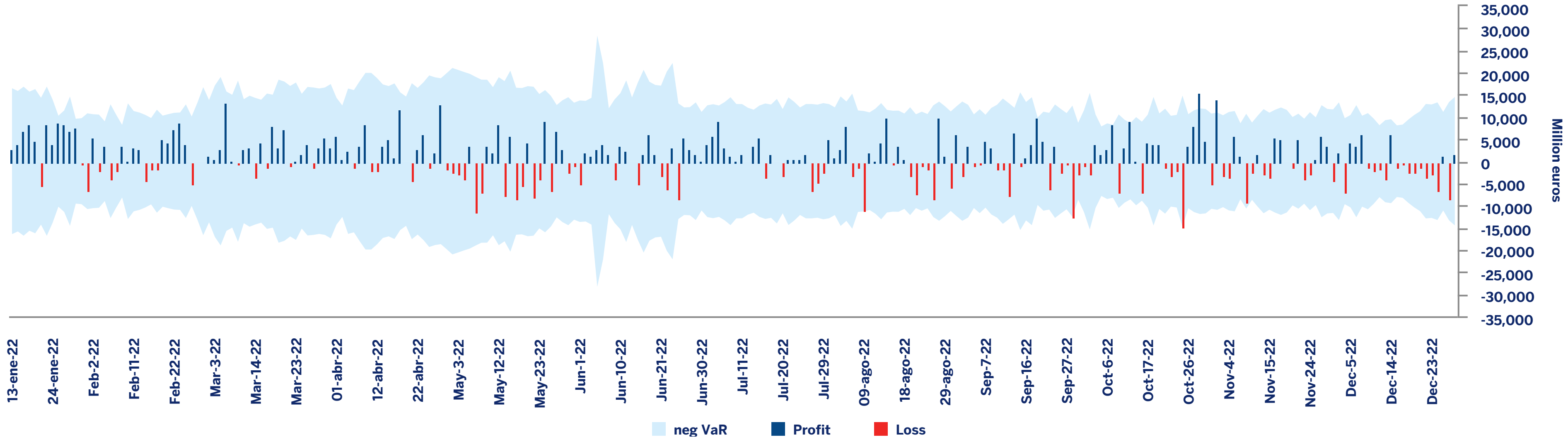


Chart 18. Trading book. Market Risk Model Validation for BBVA Mexico. Hypothetical Backtesting (EU MR4)

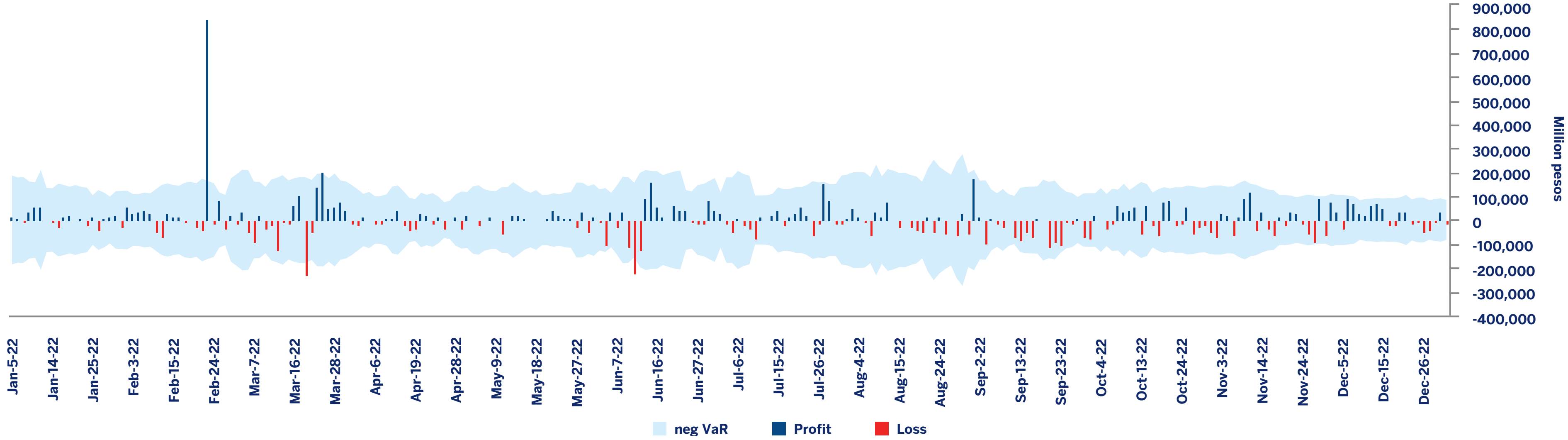
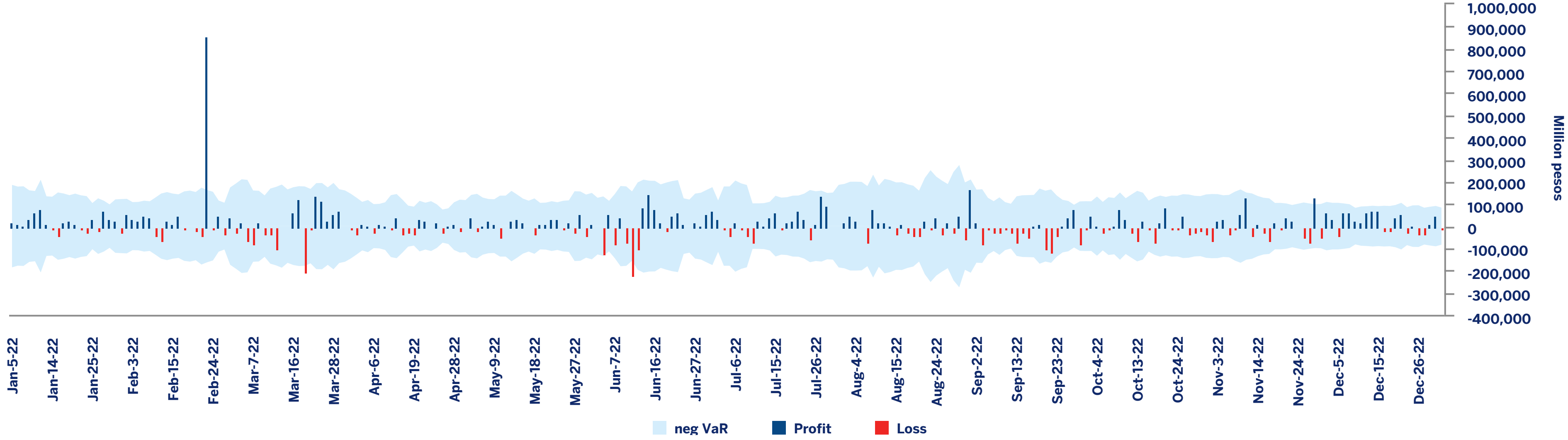


Chart 19. Trading book. Market Risk Model Validation for BBVA Mexico. Real Backtesting (EU MR4)



4.3.4.3. Characteristics of the risk management system

The Group has a risk management system in place which is appropriate for the volume of risk managed, complying with the functions set out in the Corporate Policy on Market Risk in Market Activities.

The risk units must have:

- A suitable organisation (means, resources and experience) in line with the nature and complexity of the business.
- Segregation of functions and independence in decision-making.
- Performance under integrity and good governance principles, driving the best practices in the industry and complying with the rules, both internal (policies, procedures) and external (regulation, supervision, guidelines).
- The existence of channels for communication with the relevant corporate bodies at local level according to their corporate governance system, as well as with the Corporate Area.
- All market risk existing in the business units that carry out trading activity must be adequately identified, measured and assessed, and procedures must be in place for its control and mitigation. On this point according to the Corporate Policy on Market Risk in Market Activities each business unit has established structured limits, sublimits and early alerts having a communication circuit that establishes the responsibilities of information at different levels and actions by the risk areas and business managers.
- The Global Market Risk Unit (GMRU), as the unit responsible for managing market risk at Group level, must promote the use of objective and uniform metrics for measuring the different types of risks.

4.4. Structural risk

The structural risks are defined, in general terms, as the possibility of suffering losses in the banking book due to adverse movements in market risk factors.

In the Group, the following types of structural risks are defined, according to their nature: interest rate risk, credit spread risk, exchange rate risk and equity risk.

The scope of structural risks in the Group excludes market risks in the trading book that are clearly delimited and separated and are part of the Market Risks category.

The Assets and Liabilities Committee (ALCO) is the main responsible body for the management of structural risks regarding liquidity/ funding, interest rate, credit spread, currency, equity and solvency. Every month, with the participation of the CEO and representatives from the areas of Finance, Risks and Business Areas, this committee monitors the structural risks and is presented with proposals with regard to action plans related with its management for its approval. These management proposals are made by the Finance area with a forward-looking focus, maintaining the alignment with the risk appetite framework, trying to guarantee the recurrence of results and financial stability, as well as to preserve the solvency of the entity. All balance sheet management units have a local ALCO, which is permanently attended by members of the Corporate Center, and there is a corporate ALCO where management strategies are monitored and presented in the Group's subsidiaries.

The GRM area acts as an independent unit, ensuring adequate separation between the management and risk control functions, and is responsible for ensuring that the structural risks in the Group are managed according to the strategy approved by the Board of Directors.

Consequently, GRM deals with the identification, measurement, monitoring and control of those risks and their reporting to the corresponding corporate bodies. Through the Global Risk Management Committee (GRMC), it performs the function of control and risk assessment and is responsible for developing the strategies, policies, procedures and infrastructure necessary to identify, evaluate, measure and manage the significant risks that the BBVA Group faces. To this end, GRM, through the corporate unit of Structural Risks, proposes a scheme of limits that defines the risk appetite set for each of the relevant structural risk types, both at Group level and by management units, which will be reviewed annually, reporting the situation periodically to the Group's corporate bodies as well as to the GRMC.

Additionally, both the management system and the control and measurement system for structural risks are necessarily adjusted to the Group's internal control model, complying with the evaluation and certification processes that comprise it. In this sense, the tasks and controls necessary for its scope of action have been identified and documented, supporting a regulatory framework which includes specific processes and measures for structural risks, from a broad geographical perspective.

Within the three lines of defense scheme in which BBVA's internal control model is based according to the most advanced standards in terms of internal control, the first line of defense is maintained by the Finance area, which is responsible for managing the structural risk.

As a second line of defense, GRM is in charge of identifying risks, and establishing policies and control models, periodically evaluating their effectiveness.

In the second line of defense, there are also the Internal Risk Control units, which independently review the Structural Risk control, and Internal Financial Control, which carries out a review of the design and effectiveness of the operational controls over structural risk management.

The third line of defense is represented by the Internal Audit area, an independent unit within BBVA Group, which is responsible for reviewing specific controls and processes.

4.4.1. Structural interest rate risk

4.4.1.1. Scope and nature of interest rate risk and credit spread risk

The structural interest-rate risk in the Banking Book (“IRRBB”) is defined as the potential change on an entity’s net interest income and/or economic value of the equity due to variations in market interest rates with an impact on structural balance sheet positions.

Furthermore, the credit spread risk (CSRBB) in the banking book arises from the potential impact on the value of fixed-income portfolios and credit derivatives classified as HtC&S produced by a variation in the level of credit spreads associated with those instruments/ issuers and that are not explained by default risk or by movements in market interest rates.

When managing structural interest rate risk, the effects of interest rate fluctuations are considered from a double perspective: Impact on the economic value of equity and Impact on the net interest income of the entity. In addition, it is assessed the impact on the market value of financial instruments of the banking book that, due to their accounting treatment, could affect P&L and/or equity, as a result of: Interest rate risk fluctuations and Credit spread risk changes.

The banking book instruments accounted for its market value (fair value) are subject to a specific monitoring, due to their impact on risk and on the capital, through OCI (Other Comprehensive Income) or profit and loss (P&L). So, the analysis of the impact of interest rates fluctuations on earnings is completed. Furthermore, the impact on earnings is added to the risk metrics, through the combination of the effect of interest rate shocks on the NII and the impact on the market value of the instruments accounted at fair value.

Likewise, within the evaluation of risk sources, climate change risks (ESG) is considered through the incorporation of their potential effect on structural interest rate risk factors. This risk materializes on IRRBB through the potential impact on the valuation of fixed income portfolios (reflected in their credit spread) due to their exposure to transition risk.

Structural interest rate risk perimeter is limited to the structural balance sheet (banking book), and includes all those entities whose structural balance sheet contributes to the banking book of the Group, as well as their banking subsidiaries. All trading activities (trading book), developed by the Global Markets unit, are excluded from the scope, as they are included in the market risk monitoring and control process.

The exposure of a financial entity to adverse interest rates movements is a risk inherent to the development of the banking business, which is also, in turn, an opportunity to create economic value. Therefore, interest rate risk must be effectively managed so that it is limited in accordance with the entity's equity and in line with the expected economic result.

In BBVA, the purpose of structural interest rate risk management is to maintain the stability of the net interest income and the long-term sustainability of the equity in the event of interest rate fluctuations. It contributes to a recurrent generation of earnings, limits the capital consumption due to structural interest rate risk and monitors potential mark-to-market (MtM) impacts on "held to collect and sell" (HtC&S) portfolios. Likewise, the spread risk management in banking book portfolios is aimed at limiting the impact on the valuation of fixed income instruments, which are used for balance sheet liquidity and interest rate risk management purposes in order to increase diversification, and at reducing the concentration of each issuer, maintaining the spread risk at levels aligned with the total volume of the investment portfolio and the equity of the Group.

In order to manage the structural interest rate risk so that it remains within the approved limits, Global ALM (Balance-sheet management) uses fixed-rate bond portfolios with a conservative risk profile, as they are mainly invested in the country's sovereign bonds, which can be classified for accounting under the HTC&S or HTC modality. Additionally, financial derivatives are also used, which have hedge accounting treatment of both Fair Value Hedge and Cash Flow Hedge. Derivative instruments (like swaps, forward agreements or interest rate options) may be used, always complying with the accounting requirements regarding their treatment as hedges minimizing the P&L impacts. Before being implemented, these tools have to be previously analysed and approved in the assets and liabilities committees (both at the local level and at the holding level) and are subsequently followed up in the next committees.

Structural interest rate risk is embedded in the economic capital adequacy process, in order to assure that it is adequately considered during the general allocation of capital of the entity.

IRRBB management is decentralized, and is carried out independently in each Group's entity, keeping the exposure to interest rates and credit spreads movements aligned with the strategy and the target risk profile of the Group, and in compliance with the regulatory requirements according to the EBA guidelines and the different local and supranational supervisory authorities. Besides, in order to preserve the capital position of the Group, the corporate unit of GRM-SSRR monitors the banking book exposure to interest rates at a consolidated level.

4.4.1.2. Nature of IRRBB and CSRBB

Structural interest rate risk may arise from different sources, which are part of the four types of risk faced by the entities:

- Repricing Risk: arises due to different maturity (fixed-rate products) or repricing (variable rate products) periods of assets, liabilities and off-balance sheet positions.
- Curve risk: arises from a change on the slope and/or curvature of the yield curve as a result of different fluctuations in each time slot.
- Basis risk: arises from imperfect correlation between changes on the reference interest rates for different instruments with similar repricing and maturity characteristics.
- Option risk: arises from the (implicit or explicit) options associated with certain balance sheet transactions that may change their future flows and generate mismatches in their maturities.

To monitor and control IRRBB and CSRBB, a comprehensive set of metrics is assessed on a regular basis, from a dual perspective of economic value (EVE) and net interest income (NII), including sensitivity and probabilistic measures.

Among others, EVE and NII sensitivity measures to parallel interest rate shifts are calculated, broken down by currency and yield curve. In addition, the aggregate cross-currency sensitivity is calculated in order to obtain a figure of the total sensitivity of the entity to parallel shifts in multiple interest rate curves (currencies), considering the volatility of the currencies and their correlation among each other.

Scenarios of parallel and sudden rate shifts of different magnitudes are evaluated. The general shift reference is +/-100 bps, as well as the specific shock size calibrated for each currency according to its volatility, which is used to obtain the aggregate sensitivity. Negative rates scenarios are allowed until plausible levels according to the observed volatility.

Likewise, MtM sensitivity to parallel interest rates shocks is monitored in isolation for the structural balance sheet assets accounted at fair value, including fixed-income portfolios and derivatives. Furthermore, credit spread sensitivities are also estimated by comparing the MtM of the baseline scenario with the MtM recalculated after applying a consistent shock to the credit spreads of the discount rates curve of each security (market spread).

These metrics are complemented by the sensitivity on earnings, which adds the impact of a parallel and instantaneous interest rate shock, on the net interest income and on the future market value of the instruments of the Banking Book accounted at fair value, at the end of the projection horizon, generally 12 months.

The probabilistic measures are the main monitoring metrics, and they are included in the Risk Appetite by type of risk metrics. These measures complete the sensitivity analysis metrics as they consider additional effects like changes on the slope and shape of the curve or the basis among interest rate yield curves ("risk free"), as well as ramp shocks (gradual) of interest rates and credit spread shocks. The simulation methodology is based on an analysis of the major IRs components, on the basis of which different scenarios are generated for each currency with a specific probability of occurrence, calculating then the impact in terms of value and income for each scenario.

The IRRBB probabilistic metrics are composed by the Economic Capital (EC), and the Earnings at risk (EaR), and they estimate the maximum negative impact for a given horizon and confidence level, on the Economic Value and the projected NII, respectively.

Additionally, the Economic Capital for credit spread risk, quantifies the maximum negative variation in the MtM of the fixed income portfolios, accounted at fair value, that would arise due to credit spread shocks, with a given confidence level, and time horizon.

The periodicity of the calculation of the main risk measures is monthly, except for the contribution of the fair value instruments which is monitored on a weekly basis.

These measures are complemented with the periodical calculation of other scenarios that complete the analysis of the entity risk, such as, changes of the slope/ curvature, gradual shifts (ramps), individual shifts by tenor, individual shocks by curve (basis), or changes in model assumptions.

In addition to the analysis under normal conditions, stress tests are regularly run to assess the level of exposure to interest rate risk under stress scenarios of market variables. The stress scenarios are simulated based on historical information, and consider directional movements, changes in the slope, curvature and basis of the yield curves according to market stress conditions. These scenarios are evaluated from the two risk perspectives, economic value and net interest income.

The stress exercise is completed with a reverse stress test whose objective is to identify those scenarios capable of producing a certain impact within a set range of values.

Likewise, the stress scenarios of the market variables are complemented with stress tests to the main assumptions of the model.

Finally, the analysis of IRRBB scenarios under the ICAAP (Internal Capacity Adequacy Assessment Process) and GRM Stress Program processes are carried out, which assess, on a regular basis, global stress situations under a comprehensive view for the set of financial risks.

4.4.1.3. Key assumptions of the model

In order to measure structural interest rate risk, the setting of assumptions on the evolution and behaviour of certain balance sheet items is particularly relevant, especially those related to products without an explicit or contractual maturity which characteristics are not established in their contractual terms and must be therefore estimated

The assumptions that characterize these balance sheet items must be understandable for the areas and bodies involved in risk management and control and remain duly updated, justified and documented. The modelling of these assumptions must be conceptually reasonable and consistent with the evidence based on historical experience, reviewed at least once a year and, if any, the behaviour of the customers induced by the business areas. These assumptions are regularly subject to a sensitivity analysis to assess and understand the impact of the modelling on the risk metrics.

In view of the heterogeneity of the financial markets, customers and products in the multiple jurisdictions, each one of the entities of the Group is responsible for determining the behaviour assumptions to be applied to the balance sheet items, always under the guidelines and the applicability of the corporate models existing in the Group.

To calculate IRRBB measures, internal models are used to set the behavioural assumptions. The key modelling assumptions applied are:

Treatment of balance sheet items without a contractual maturity date:

- Non-maturity Deposits (NMDs)

The NMDs internal model distinguishes between volatile and stable deposits.

The volatile portion of NMDs is stripped out using the moving average of the historical series, which is shifted down according to the volatility of the error of the regression. The volatile part of deposits is assumed that matures at short term (<1 Month).

Meanwhile, the stable amount of deposits is run off to long term following a decay distribution estimated according to the conditional probabilities of maturity during the life of the product. Besides, based on the observed data and applying a conservatism criterion, a maximum life of 25 years is assumed, preventing the maturing cash flows to extend beyond that time.

The following table shows the average maturities obtained by the NMDs internal model:

Table 63. Average Maturities for NMDs (Years. 12-31-2022)

	Core deposits(1)	Full amount of deposits
Retail transactional	2.40	2.00
Retail non-transactional	3.20	2.40
Wholesale	3.30	1.60

(1) For Retail transactional includes stable deposits in current conditions, that may migrate to a different type of deposits in a higher interest rate environment.

Furthermore, the model also estimates the evolution of the mix of customer deposits, considering the potential migration between different types of deposits (demand / time deposits) under different interest rates scenarios. The potential asymmetry between the behaviour of balance stability in interest rate increase and decrease scenarios is considered in the analysis.

Finally, for those deposits with administered rates, the model estimates the translation dynamic of interest rates shocks to these accounts' remuneration, based on the analysis of its relationship with the evolution of market interest rates. For retail accounts a general floor is set at 0% assuming that retail customer rate will never be negative.

- Revolving Credit cards

They mature gradually according to the monthly expected average repayment rate.

Expectations about the exercise of interest rate options (explicit and implicit), both purchased or sold, under different interest rate scenarios:

- Loans subject to prepayment risk

The balance is segmented into several categories based on the characteristics of the loan and/or the client (that is, loan rate, original face amount, original maturity, scoring. etc.)

The "prepayment" behaviour, understood as all extraordinary payments over those established in the regular payment schedule and that therefore changes the contractual payment scheme, is then analysed in order to be modelled. The model captures total and partial prepayments, if relevant.

The potential link with the interest rates evolution is also examined, and incorporated in the model when the incentive of the client to pre-cancel determines the prepayment speed.

- Customer deposits with early redemption optionality

An early cancellation assumption is established for those deposits with a redemption option before maturity. The cancellation rate is based on the economic incentive of the client, and linked to the level of market interest rates, if applicable.

- Treatment of Non performing exposures (NPEs)

The amount of NPEs, net of provisions, is considered interest rate sensitive, while the provisioned amount is considered non-earning, consistently with the treatment of the allowances in the liability side. A maturity ladder is assigned to the expected recovery flows of the NPEs. The future cash flows distribution is estimated according to the internal Loss Given Default recovery model.

The governance of structural interest rate risk models is subject to internal model risk regulation, under the scope of GRM-Analytics. In this way, they must be properly inventoried and catalogued and comply with the requirements for their development, updating and management of the changes included in the internal procedures. Likewise, they are subject to the corresponding internal validations and monitoring requirements established based on their relevance, as well as back-testing procedures against experience to confirm the validity of the assumptions applied.

4.4.1.4. Evolution of IRRBB and CSRBB

2022 has been characterized by a change in monetary policy cycle as a consequence of the high inflation levels observed in most western economies. The impacts coming from the high energy prices and from the lingering bottlenecks in the supply chain caused by the COVID-19 pandemic, were amplified in March with the outbreak of the conflict between Russia and Ukraine. In this context, many Central Banks resorted to a tightening monetary policy with an upward trend of interest rates, which is still ongoing and is expected to continue for most of 2023..

The European Central Bank decided in July to put an end to 8 years of negative levels in the Deposit Facility Rate, raising its reference rates by 50 basis points. Subsequently, in response to the high inflation projections, the ECB tightened its tone with two additional hikes in September and November, of 75 basis points each. Finally, they closed the year with a more contained increase of 50 basis points reaching the level of 2.50%, although stressing the message that this upward trend is set to continue in 2023.

Regarding Mexico, the Central Bank increases its efforts to contain inflation setting the monetary policy rate at 10.50% after 8 hikes in 2022 from a starting point of 5.50%.

In Turkey, the Central Bank cut interest rates by 500 basis points in several meetings throughout the second half of the year.

In South America, the monetary policy was restrictive, with Colombia and Peru raising their reference rates 900 and 500 basis points respectively, impacted by high inflation levels. With regard to Argentina, the reference rate increased by 3,700 basis points up to the 75% current level, also with the aim to curb inflation.

The BBVA Group, at an aggregate level, continues to maintain a moderate risk profile, in accordance with the established objective, showing a favourable position of net interest income to a rise in interest rates. Effective management of the balance sheet structural risk enabled the Group to mitigate the negative impact of the low interest rates in previous exercises, as well as to take advantage of the change in trend and benefit from the significant increases in 2022, which is reflected in the strength and recurrence of the net interest income:

The balance sheet in Spain is characterized by a high proportion of variable-rate loans (basically mortgages and corporate lending) and liabilities are composed mainly of demand customer deposits. The ALCO portfolio acts as a management lever and hedging for the balance sheet, mitigating its sensitivity to interest rate fluctuations. The balance sheet´s interest rate profile has remained stable during the year, whereas the net interest income sensitivity has decreased slightly as interest rates rose. Nevertheless, Spain remains the Group’s franchise with the highest positive sensitivity to rising rates.

Mexico, continues to show an equilibrium between balances referenced to fixed and variable interest rates.

Among the most sensitive assets to interest rate movements, the portfolio of corporate loans stands out, while consumer and mortgages are mostly at a fixed rate. With regard to liabilities, it is worth noting the relevant proportion of non-earning demand deposits, which are not sensitive to interest rates movements. The ALCO portfolio is mainly invested in fixed-rate sovereign bonds with limited durations. The sensitivity of the net interest income continues to be limited, with a positive impact of 100 basis points increases in Mexican pesos around 2.2%.

In Turkey, the sensitivity of loans, mostly fixed-rate but with relatively short maturities, and the ALCO portfolio, contribute to offset the sensitivity from the deposits on the liability side. In this way, the net interest income sensitivity remains limited, both in Turkish lira and in foreign currency. The economic value sensitivity though, increases in 2022 mainly driven by the mandatory purchases of bonds required by the local Supervisor.

In South America, the risk profile on interest rates continues to be low, as most of the countries in the area have a fixed-variable mix and a maturity profile very similar between assets and liabilities, resulting in a limited net interest income sensitivity. Likewise, in countries with where balances-sheets are denominated in several currencies, interest rate risk is also managed for each of the currencies, showing a very low level of risk.

The table below shows the profile of average structural interest rate risk and credit spread risk of fixed income portfolio in the banking book classified as HtC&S in terms of sensitivities of the main currencies for the BBVA Group in 2022:

Table 64. Sensitivity to interest-rate and credit spread analysis (12-31-2022)

	Interest rate				Credit spread
	Impact on net interest income (1)		Impact on economic value (2)		Impact on economic value (2)
	100 basis-point increase	100 basis-point decrease (3)	100 basis-point increase	100 basis-point decrease (3)	100 basis-point increase
EUR	[1,5% , 3,5%]	[-1,5% , -0,5%]	[0,5% , 1,5%]	[-1,5% , -0,5%]	[-1,5% , -0,5%]
MXN	[0,5% , 1,5%]	[-1,5% , -0,5%]	[-1,5% , -0,5%]	[0,5% , 1,5%]	[-0,5% , 0,5%]
USD	[0,5% , 1,5%]	[-1,5% , -0,5%]	[0,5% , 1,5%]	[-1,5% , -0,5%]	[-0,5% , 0,5%]
TRY	[-0,5% , 0,5%]	[-0,5% , 0,5%]	[-0,5% , 0,5%]	[-0,5% , 0,5%]	[-0,5% , 0,5%]
Other	[-0,5% , 0,5%]	[-0,5% , 0,5%]	[-0,5% , 0,5%]	[-0,5% , 0,5%]	[-0,5% , 0,5%]
BBVA Group	**[3,5% , 5,5%]**	**[-5,5% , -3,5%]**	**[0,5% , 1,5%]**	**[-1,5% , -0,5%]**	**[-3,5% , -1,5%]**

(1) Percentage of "12 months" net interest income for the BBVA Group.

(2) Percentage of CET1 (Fully Loaded) for BBVA Group.

(3) In EUR and USD (and GBP included in "Other"), negative interest rate scenarios are allowed up to plausible levels lower than current rates.

The key modelling and parametric assumptions used for internal calculations are the same as those used for the prescribed for the SOT(Supervisory Outlier Test) regulatory IRRBB metrics, except for the following settings:

- Multiple risk free discount curves are used in order to capture basis risk, instead of one single curve as for the SOT calculations.
- Floors applied to negative rates in the internal risk scenarios are different from the one prescribed for EBA SOT scenarios.
- Cross-currency aggregation methods, based on historical correlation among currencies, are used.

4.4.1.5. IRRBB SOT regulatory metrics

As described above, the structural interest rate risk in the banking book (IRRBB) is part of the entity's risk management framework and is included in the internal capital self-assessment process as part of Pillar 3.

The table below shows the changes in the economic value of equity (EVE) and in net interest income (NII):

Table 65. EU IRRBB1 - Interest rate risk in the banking book

Currency	Δ EVE 12-31-2022	Δ EVE 6-30-2022	Δ NII 12-31-2022	Δ NII 6-30-2022
Parallel up	(2.58)%	(1.97)%	3.31 %	5.47 %
Parallel down	(0.15)%	(3.62)%	(8.56)%	(13.01)%
Steepener	1.37 %	1.09 %		
Flattener	(3.40)%	(2.86)%		
Short rates up	(3.97)%	(3.09)%		
Short rates down	1.78 %	0.83 %		

The SOT regulatory metrics have been calculated as described in the guidelines.

IRRBB measures cover the four principal material currencies (EUR, USD, MXN and TRY) up to a cumulative percentage of the banking book above 90%.

Reported changes of the economic value of equity (EVE) are calculated as follows:

- Changes in EVE under the six supervisory interest rate shock scenarios
- The supervisory maturity-dependent post-shock interest rate floor has been applied for each currency
- Changes in EVE are expressed as a percentage of BBVA's TIER 1 fully loaded at the reporting date
- Aggregate EVE change for each interest rate shock scenario has been calculated by adding together any negative and positive changes to EVE occurring in each currency. Positive changes have been weighted by a factor of 50%.
- Run-off balance sheet assumption: existing positions mature and are not replaced
- Own equity has been excluded from the computation of the exposure level
- Commercial margins are included in the interest cash flows

- Cash flows have been discounted using a risk-free rate yield curve

Reported changes of the net interest income (NII) are calculated as follows:

- Changes in projected NII over a forward-looking rolling 12-month period under the two parallel supervisory interest rate shock scenario out of the six supervisory shock scenarios for EVE
- The supervisory maturity-dependent post-shock interest rate floor has been applied for each currency
- Instantaneous shocks are applied
- Changes in NII are expressed as a percentage of BBVA's Net Interest Income of the last 12 months
- Aggregate NII change for each interest rate shock scenario has been calculated by adding together any negative and positive changes to NII occurring in each currency. Positive changes have been weighted by a factor of 50%.
- Dynamic balance sheet assumption
- New exposures are repriced considering the margin of new productions at the reporting date.
- Commercial margins are included in the interest cash flows
- Fees and commissions attributable for interest rate changes are not included

SOT metrics significance and evolution

SOT IRRBB metrics at Group level maintain a medium-low risk level, maintaining the negative exposure to parallel down scenario for the NII approach, while in the case of the EVE, the worst scenario among the 6 prescriptive scenarios becomes the scenario of rising short-term rates.

From both perspectives, the most significant impacts in the worst-case scenario come mainly from the local currency balance sheet of BBVA Mexico, where larger shocks are applied in the prescriptive scenarios, and to a lesser extent from the euro balance sheet of BBVA S.A.. In addition, the dollar balance sheet of both entities contributes negatively to the impacts on NII.

When compared to June-22 results, risk remains at moderate levels, with a slight worsening in the most damaging EVE scenario, and an improvement from the NII point of view. The most significant change occurs in the scenario of parallel down shock, with a decrease in risk from both perspectives. Several factors contribute to this development, the main ones being: the rise in market interest rates in euro, mainly due to its effect on demand deposits, and the higher sensitivity of TLTRO III following the change in treatment as of November 24th. For the ratio levels, the increase in NII corresponding to the last 12 months compared to June-22 (+18%) is equally relevant.

4.4.2. Structural exchange rate risk

Structural exchange rate risk, is defined as the possibility of impacts on solvency, equity value and results driven by fluctuations in the exchange rates due to exposures in foreign currencies.

Structural exchange rate risk is inherent to the business of international banking groups, such as BBVA, that develop their activities in different geographies and currencies. At a consolidated level, structural exchange-rate risk arises from the consolidation of holdings in subsidiaries with functional currencies other than the euro. Its management is centralized in order to optimize the joint management of permanent foreign currency exposures, taking diversification into account.

The purpose of structural exchange rate risk management is protecting solvency by limiting volatility of the consolidated CET1 ratio and income to consolidate denominated in a currency other the euro in the Group, as well as to limit the capital requirements under exchange rate fluctuations to which the Group is exposed due to its international diversification. The ALM Global corporate unit, through the ALCO, is responsible for the management of this risk all through an active hedging policy, deliberately taken for each objective, and fully aligned with the management strategy.

At the corporate level, the risk monitoring metrics included in the limits framework are aligned with the Risk Appetite Framework, and are targeted to control the effects on the solvency through the economic capital metric and the fluctuations in the Common Equity Tier I fully loaded (CET1 fully loaded) consolidated ratio, as well as the maximum deviation in the Group's attributable profit. The probabilistic metrics make it possible to estimate the joint impact of exposure to different currencies taking into account the different variability in exchange rates and their correlations. These metrics are supplemented with additional assessment indicators.

The suitability of these risk assessment metrics is reviewed on a regular basis through backtesting exercises. The final element of structural exchange-rate risk control is the stress and scenario analysis aimed to assess the vulnerabilities of foreign currency structural exposure not contemplated by the risk metrics and to serve as an additional tool when making management decisions. The scenarios are based both on historical situations simulated by the risk model and on the risk scenarios provided by BBVA Research.

The purpose of the exchange rate risk management of BBVA's long term investments, which arises mainly from its foreign franchises, is to preserve the capital ratios of the Group and to maintain the stability of the profits. The year 2022 was characterized by the weakness of the euro, especially pronounced in the first nine months of the year. Thus, the US dollar, which for some part of the year was trading below parity, closed the year with an appreciation of 6.2% against the euro. Among the emerging currencies, the Mexican peso appreciated strongly (11.0% against the euro) on the back of the positive perception of the country's fundamentals and the aforementioned weakness of the euro. The lira was again penalized in 2022 (-23.7%) by an unorthodox economic policy in a context of high inflation. As for the performance of South American currencies, the Peruvian sol was solid (11.0%), while the Chilean peso, somewhat more volatile, managed to appreciate against the euro (4.4%). The Colombian peso (-12.1%) and the Argentine peso (-38.3%) depreciated against the euro.

BBVA maintains management policies for the main investments in emerging countries in respect of, in average terms, between 40% and 50% of the aggregate attributable profit in non-euro currencies expected to be generated by the group in the next twelve months and around 70% of the aggregate excess capital in non-euro currencies. In relation to the CET1 capital ratio, the estimated impact at the end of 2022 of a 10% depreciation in the relevant currency was as follows: Mexican peso (-5 basis points); Turkish lira (-5 basis points) and U.S. dollar (+19 basis points).

The evolution of the structural exchange risk requirements in 2022 is in section 4.3.3. of this Report.

For the years 2022 and 2021, the estimated sensitivities of the result attributable to the parent company are shown below, taking into account the coverage, against depreciations and appreciations of 1% of the average rate in the main currencies. To the extent that hedging positions are periodically modulated, the sensitivity estimate attempts to reflect an average (or effective) sensitivity in the year:

Table 66. Sensitivity to 1% change (Million euros)

Currency	2022	2021
Mexican peso	19.1	14.0
Turkish lira	3.5	4.7
Peruvian sol	0.7	0.3
Chilean peso	0.4	0.6
Colombian peso	0.9	1.1
Argentine peso	1.9	0.6
US Dollar	—	—

4.4.3. Structural equity risk

Equity risk in the banking book refers to the possibility of suffering losses in the value of positions in shares and other equity instruments held in the banking book with long or medium term investment horizons due to fluctuations in the value of equity indexes or shares.

BBVA Group's exposure to structural equity risk arises largely from minority shareholdings held on industrial and financial companies, and in new business (innovation). This exposure is modulated in some portfolios with positions held on derivative instruments on the same underlying assets, in order to adjust the portfolio sensitivity to potential changes in equity prices.

The structural equity risk management is aimed at increasing the income-generating capacity of those shares held by the Group, limiting the capital requirements for equity risk and narrowing the impact on the solvency level through a proactive management of the portfolio using hedges. The function of managing the main structural equity portfolios is a responsibility of the specialized units of the corporate areas of Global ALM, Strategy & M&A and Client Solutions (Banking for Growth Companies). Their activity is subject to the corporate structural equity risk management policy, complying with the defined management principles and Risk Appetite Framework.

The structural equity risk metrics, designed by GRM according to the corporate model, contribute to the effective monitoring of the risk by estimating the sensitivity and the capital necessary to cover the possible unexpected losses due to changes in the value of the shareholdings in the Group's investment portfolio, with a level of confidence that corresponds to the objective rating of the entity, taking into account the liquidity of the positions and the statistical behavior of the assets to be considered

In order to analyze the risk profile in depth, stress tests and scenario analysis of sensitivity to different simulated scenarios are carried out. They are based on both past crisis situations and forecasts made by BBVA Research. These analyses are carried out regularly to assess the vulnerabilities of structural equity exposure not contemplated by the risk metrics and to serve as an additional tool when making management decisions.

Backtesting is carried out on a regular basis on the risk measurement model used.

Equity markets in Europe and the United States were negatively affected in 2022 by the tightening of financial conditions carried out by the Central Banks due to the rise in inflation. In many cases, the adjustment in share prices is attributed mainly to a correction in the valuation metrics than to a significant deterioration in relation to the expectation of corporate profits. The Spanish stock market closed the year with smaller falls than those presented by the main indices of other geographies in the euro area.

Structural equity risk, measured in terms of economic capital, has raised during the last year due to the higher exposure taken. The aggregate sensitivity of the BBVA Group’s consolidated equity to a 1% fall in the price of shares of the companies making up the equity portfolio increased to €-24 million as of December 31, 2022, compared to €-27 million as of December 31, 2021. This estimation takes into account the exposure in shares valued at market prices, or if not applicable, at fair value (excluding the positions in the Treasury Area portfolios) and the net delta-equivalent positions in derivatives on the same underlyings.

4.4.3.1. Classification of equity exposure not included in the trading book

The Group distinguishes between equity exposures in investments in associates, capital instruments classified as financial assets at fair value through other comprehensive income and non-trading financial assets mandatory at fair value through profit or loss.

The investments in associates are the investments in entities over which the Group has a significant influence. It is presumed that there is significant influence when 20% or more of the voting rights of the subsidiary are held, directly or indirectly, unless it can be clearly demonstrated that such influence does not exist. There are certain exceptions to this criterion that do not constitute significant amounts for the Group. These investments in associates are valued using the equity method.

The remaining capital instruments not held for trading are classified as:

The financial assets recorded in the heading “Non-trading financial assets mandatorily at fair value through profit or loss” are derived from a business model which objective is to obtain the contractual cash flows and / or to sell those instruments but its contractual cash flows do not comply with the requirements of the SPPI test.

Financial assets are classified in “Financial assets designated at fair value through profit or loss” only if it eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from recognizing or measuring such financial assets on different bases.

Assets recognized under this heading in the consolidated balance sheets are measured at their fair value. This category of valuation implies the recognition of the information in the income statement as if it were an instrument valued at amortized cost, while the instrument is valued at fair value in the balance sheet, At the time of initial recognition of specific investments in equity instruments, the BBVA Group may make the irrevocable decision to present subsequent changes in fair value in other comprehensive income.

4.4.3.2. Risk-weighted assets of investments in associates and capital instruments

A breakdown of the RWAs to investments in associates and capital instruments by accounting portfolio and applicable method as of December 31, 2022 and as of December 31, 2021 is shown below:

Table 67. Breakdown of RWAs, equity investments and capital instruments by applicable approach (Million Euros)

		RWAs			
		Internal Models	**Simple Method**	**PD/LGD**	**Total**
12-31-2022	Investments in associates	—	8,389	1,012	9,401
	Financial assets at fair value through other comprehensive income	239	463	1,238	1,940
	Non - trading financial assets mandatorily at fair value through profit or loss	242	1,515	—	1,757
12-31-2021	Investments in associates	—	8,121	1,150	9,271
	Financial assets at fair value through other comprehensive income	54	415	1,409	1,878
	Non - trading financial assets mandatorily at fair value through profit or loss	379	1,707	—	2,086

The table below shows the main variations in RWA of equity credit risk during year 2022:

Table 68. Variation in RWAs for Equity Risk (Million Euros)

RWA as of December 31, 2021	**13,234**
Asset size[1]	27
Acquisitions and disposals	400
Foreign exchange movements	45
Other[2]	(609)
RWA as of December 31, 2022	**13,097**

[1] Asset size includes changes due to the revaluation of investments and the organic profit generation of Group's insurance companies.

[2] Other includes the effect of the deduction significant holdings value in financial sector entities exceeding the joint limit with DTAs of 17.65% of CET1 (see section 3.2 letter n).

The portfolio mainly includes the Group’s insurance companies, which for regulatory purposes are considered as investments in associates. It also includes stakes in real estate investment companies and equity holdings in other sectors, with a significant stake in Telefónica and Metrovacesa.

During 2022, the most significant movement corresponds to the agreement reached by BBVA to invest $300 million (about €263 million) in the acquisition of a stake in Neon Payments Limited, a digital bank that facilitates access to financial services among individuals, the self-employed, and small Brazilian companies. Within the "Other" caption, the reduction of 609 million is mainly explained by the reduction in the book value of the Group's insurance companies due to the payment of dividends.

4.5. Liquidity Risk

Liquidity and funding risk is defined as the incapacity of a bank in meeting its payment commitments due to lack of funds or that, to face those commitments, should have to make use of funding under burdensome terms.

4.5.1. Liquidity and Funding strategy and planning

Liquidity and Funding Risk Management main target is to maintain a solid balance sheet structure which allows a sustainable business model.

Liquidity and Funding Risk Management aims, in the short term, to prevent an entity from having difficulties in meeting its payment commitments in due time and form or that, to meet them, it has to resort to obtaining funds in burdensome conditions that deteriorate the image or reputation of the entity.

In the medium term, its objective is to ensure the suitability of the Group's financial structure and its evolution, within the framework of the economic situation, the markets and regulatory changes.

The Group’s liquidity and funding strategy is based on the following pillars:

- The principle of the funding self-sufficiency of its subsidiaries, meaning that each of the Liquidity Management Units (LMU) must cover its funding needs independently on the markets where it operates. This avoids possible contagion due to a crisis affecting one or more of the Group’s LMU.
- Stable customer deposits as the main source of funding in all the LMU, in accordance with the Group’s business model.
- Diversification of the sources of wholesale funding, in terms of maturity, market, instruments, counterparties and currencies, with recurring access to the markets.
- Compliance with regulatory requirements, ensuring the availability of ample liquidity buffers, of high quality, as well as sufficient instruments as required by regulations with the capacity to absorb losses.
- Compliance with the internal Liquidity Risk and Funding metrics, while adhering to the Risk Appetite level established for each LMU at any time.

This management of structural and liquidity funding is based on the principle of financial self-sufficiency of the entities that comprise it. This approach helps prevent and limit liquidity risk by reducing the Group’s vulnerability during periods of high risk. This decentralized management prevents possible contagion from a crisis affecting only one or a few Group entities, which must act independently to meet their liquidity requirements in the markets where they operate.

In addition, the policy for managing liquidity and funding risk is also based on the model’s robustness and on the planning and integration of risk management into the budgeting process of each LMU, according to the liquidity and funding risk appetite that it decides to assume in its business.

Liquidity and funding planning is part of the strategic processes for the Group’s budgetary and business planning. This objective is to allow a recurrent growth of the banking business with suitable maturities and costs within the established risk tolerance levels by using a wide range of instruments which allow the diversification of the funding sources and the maintenance of a high volume of available liquid assets.

A statement of the level of appropriateness of the liquidity risk management mechanisms is included as part of the Internal Liquidity Adequacy Assessment Process (ILAAP) approved by the Board of Directors in April 2022:

“From the internal assessment carried out, the Board of Directors concluded that the liquidity and funding management model is robust, with a medium-low liquidity and funding risk profile backed by the existing Risk Appetite Framework and the liquidity and funding planning. In the budget horizon, the impact of climate change risk on liquidity and funding is low.

Also, this liquidity and funding management model considers the liquid resources necessary and the ability to generate the additional measures to continue maintaining this profile over the planning horizon and to affront unexpected situations of tension.

The assessment reveals that BBVA Group entities maintain a robust funding structure and effective governance that enables the planning and management of liquidity and funding to be adapted to adverse situations.

In the context of the Ukraine conflict, no evidence has been found to date of relevant impacts on the liquidity position of the BBVA Group's LMUs. The solid starting position with the availability of ample liquidity buffers and the management capacity of the LMUs would allow to affront an eventual worsening and/or extension of this scenario.

All the processes described are subject to the BBVA Group internal control model, based on an organizational structure involving the 3 lines of defense that uses solid corporate methodologies and tools. The risks identified in these processes are sufficiently mitigated by controls that have been tested during the year and that have worked correctly."

4.5.2. Governance and monitoring

The responsibility for liquidity and funding management in the development of normal business activity lies with the Finance area as a first line of defense in managing the risks inherent to this activity, in accordance with the principles established by the EBA and in line with the most demanding standards, policies, procedures and controls in the framework established by the governing bodies. Finance, through the Balance-Sheet Management area, plans and executes the funding of the structural long-term gap of each LMU and proposes to the Assets and Liabilities Committee (ALCO) the actions to be taken on this matter, in accordance with the policies established by the Risk Committee in line with the metrics of the Risk Appetite Framework approved by the Board of Directors.

Finance is also responsible for preparing the regulatory reporting of liquidity, coordinating with the responsible areas in each LGU the necessary processes to cover the requirements at corporate and regulatory level, ensuring the integrity of the information provided.

GRM is responsible for ensuring that the liquidity and financing risk in the Group is managed in accordance with the framework established by governing bodies. It also deals with the identification, measurement, monitoring and control of such risks and their communication to the relevant corporate bodies. In order to carry out this task properly, the Risk function in the Group has been configured as a single, global function, independent of the management areas.

Additionally, the Group has, in its second line of defense, an Internal Risk Control unit, which performs an independent review of the control of Liquidity and Funding Risk, and a Financial Internal Control Unit that reviews the design and effectiveness of the controls operations on liquidity management and reporting.

As the third line of defense of the Group's internal control model, Internal Audit is in charge of reviewing specific controls and processes in accordance with a work plan that is drawn up annually.

The Group's fundamental objectives regarding the liquidity and funding risk are determined through the Liquidity Coverage Ratio (LCR) and through the Loan-to-Stable Customer Deposits (LtSCD) ratio.

The LCR ratio is a regulatory metric that aims to guarantee the resilience of entities in a scenario of liquidity tension within a time horizon of 30 days. Within its risk appetite framework and system of limits and alerts, BBVA has established a required LCR compliance level for the entire Group and for each individual LMU. The internal levels required are aimed at efficiently meeting the regulatory requirement, at a loose level above 100%.

The LtSCD ratio measures the relationship between net lending and stable customer funds. The aim is to preserve a stable funding structure in the medium term for each of the LMU which make up the BBVA Group, taking into account that maintaining an adequate volume of stable customer funds is key to achieving a sound liquidity profile. In geographical areas with dual-currency balances, the indicator is also controlled by currency to manage the mismatches that might occur.

Stable customer funds are considered to be the financing obtained and managed from the LMU among their target customers. Those funds are characterized by their low sensitivity to market changes and by their less volatile behavior at aggregated level per operation due to the loyalty of the customer to the entity. The stable resources are calculated by applying to each identified customer segment a haircut determined by the analysis of the stability if the balances by which different aspects are evaluated (concentration, stability, level of loyalty). The main source of stable resources arises from wholesale funding and retail customer funds.

In order to establish the target (maximum) levels of LtSCD in each LMU and provide an optimal funding structure reference in terms of risk appetite, the corporate Structural Risks unit of GRM identifies and assesses the economic and financial variables that condition the funding structures in the different geographical areas.

Additionally, liquidity and funding risk management aims to achieve a proper diversification of the funding structure, avoiding excessive dependence on short-term funding by establishing a maximum level for the short-term funds raised, including both wholesale financing and the least stable proportion of customer funds In relation to long-term financing, the maturity profile does not present significant concentrations, which makes it possible to adapt the schedule of the planned issuance plan to the best financial conditions in the markets. Lastly, concentration risk is monitored at LMU level, with the aim of ensuring a correct diversification of both the counterparty and type of instrument.

One of the fundamental metrics within the general management framework of the liquidity and funding risk is the maintenance of a liquidity buffer consisting of high quality assets free of charges which can be sold or offered as collateral to obtain funding, either under normal market conditions or in stress situations.

The Finance area is responsible for the collateral management and determining the liquidity buffer within the BBVA Group. According to the principle of auto-sufficiency of the Group's subsidiaries, each LMU is responsible for maintaining a buffer of liquid assets which complies with the regulatory requirements applicable under each jurisdiction. In addition, the liquidity buffer of each LMU must be aligned with the liquidity and funding risk tolerance as well as the management limits set and approved for each case.

In this context, the short-term resistance of the liquidity risk profile is promoted, ensuring that each LMU has sufficient collateral to deal with the risk of the closing of wholesale markets. Basic capacity is the internal metric for the management and control of short-term liquidity risk, which is defined as the relationship between the explicit assets available and the maturities of wholesale liabilities and volatile resources, at different time periods up to one year, with special relevance at 30 and 90 days, with the objective of preserving the survival period above 3 months with the available buffer, without considering the balance inflows.

As a fundamental element of the liquidity and financing risk monitoring scheme, stress tests are carried out. They enable to anticipate deviations from the liquidity targets and the limits set in the appetite, and to establish tolerance ranges in the different management areas. They also play a major role in the design of the Liquidity Contingency Plan and the definition of specific measures to be adopted to rectify the risk profile if necessary.

For each scenario, it is checked whether BBVA has a sufficient stock of liquid assets to guarantee its capacity to meet the liquidity commitments/outflows in the different periods analyzed. The analysis considers four scenarios: one central and three crisis-related (systemic crisis; unexpected internal crisis with a considerable rating downgrade and/or affecting the ability to issue in wholesale markets and the perception of business risk by the banking intermediaries and the entity’s clients; and a mixed scenario, as a combination of the two aforementioned scenarios). Each scenario considers the following factors: existing market liquidity, customer behavior and sources of funding, the impact of rating downgrades, market values of liquid assets and collateral, and the interaction between liquidity requirements and the development of BBVA's credit quality.

The stress tests conducted on a regular basis by GRM reveal that BBVA maintains a sufficient buffer of liquid assets to deal with the estimated liquidity outflows in a scenario resulting from the combination of a systemic crisis and an unexpected internal crisis, during a period of longer than 3 months in general for the different LMU (including Turkey closing the year above 6 months), including in the scenario of a significant downgrade of the Bank’s rating by up to three notches.

Together with the results of the stress tests and the risk metrics, the early warning indicators play an important role within the corporate model and the Liquidity Contingency Plan. They are mainly indicators of the funding structure, in relation to asset encumbrance, counterparty concentration, flights of customer deposits, unexpected use of credit facilities, and of the market, which help anticipate possible risks and capture market expectations.

Finance is the area responsible for the elaboration, monitoring, execution and update of the liquidity and funding plan and of the market access strategy to guarantee and improve the stability and diversification of the wholesale funding sources.

In order to implement and establish management in an anticipated manner, limits are set on an annual basis for the main management metrics that form part of the budgeting process for the liquidity and funding plan. This framework of limits contributes to the planning of the joint future performance of:

- The loan book, considering the types of assets and their degree of liquidity, as well as their validity as collateral in collateralized funding.
- Stable customer funds, based on the application of a methodology for establishing which segments and customer balances are considered to be stable or volatile funds based on the principle of sustainability and recurrence of these funds.
- Projection of the credit gap, in order to require a degree of self-funding that is defined in terms of the difference between the loan-book and stable customer funds.
- Incorporating the planning of securities portfolios into the banking book, which include both fixed-interest and equity securities, and are classified as financial assets at fair value through other comprehensive income and at amortized cost, and additionally on trading portfolios.
- The structural gap projection, as a result of assessing the funding needs generated both from the credit gap and by the securities portfolio in the banking book, together with the rest of on-balance-sheet wholesale funding needs, excluding trading portfolios. This gap therefore needs to be funded with customer funds that are not considered stable or on wholesale markets.

As a result of these funding needs, the BBVA Group plans the target wholesale funding structure according to the tolerance set in each LMU target.

Thus, once the structural gap has been identified and after resorting to wholesale markets, the amount and composition of wholesale structural funding is established in subsequent years, in order to maintain a diversified funding mix and guarantee that there is not a high reliance on short-term funding (short-term wholesale funding plus volatile customer funds).

In practice, the execution of the principles of planning and self-funding at the different LMU results in the Group’s main source of funding being customer deposits, which consist mainly of demand deposits, savings deposits and time deposits.

As sources of funding, customer deposits are complemented by access to the interbank market and the domestic and international capital markets in order to address additional liquidity requirements, implementing domestic and international programs for the issuance of commercial paper and medium and long-term debt.

The process of analysis and assessment of the liquidity and funding situation and of the inherent risks is a process carried out on an ongoing basis in the BBVA Group, with the participation of all the Group areas involved in liquidity and funding risk management. This process is carried out at both local and corporate level. It is incorporated into the decision- making process for liquidity and funding management, with integration between the risk appetite strategy and establishment and the planning process, the funding plan and the limits scheme.

4.5.3. Liquidity and funding performance

The BBVA Group maintains a robust and dynamic funding structure with a predominantly retail nature, where customer resources represent the main source of funding.

During 2022, in an environment of higher uncertainty, liquidity conditions have remained comfortable in all the countries where the BBVA Group operates. It should be noted that the war in Ukraine has not had a significant impact on the liquidity and funding situation of the BBVA Group units.

The performance of the indicators show that the robustness of the funding structure remained steady during 2022 and 2021, in the sense that all LMU held self-funding levels with stable customer resources above the requirements.

Table 69. LtSCD by LMU

	2022	2021
Group (average)	**96 %**	**95 %**
BBVA S.A.	98 %	98 %
BBVA Mexico	98 %	93 %
Garanti BBVA	83 %	81 %
Other LMU	96 %	93 %

With respect to LCR, the Group has maintained a liquidity buffer at both a consolidated and individual level in 2022. As a result, the ratio has remained comfortably above 100%, with the consolidated ratio as of December 31, 2022 standing at 159%.

Although this requirement is only established at a Group level, for banks in the Eurozone, the minimum level required is comfortably exceeded in all subsidiaries. It should be noted that the calculation of the Consolidated LCR does not allow the transfer of liquidity between subsidiaries, so no excess liquidity may be transferred from these entities for the purpose of calculating the consolidated ratio. If the impact of these highly liquid assets was considered, the LCR would be 201%, or 42 basis points above the required level.

Table 70. LCR main LMU

	2022	2021
Group	**159%**	**165%**
BBVA S.A.	186 %	190 %
BBVA Mexico	199 %	245 %
Garanti BBVA	185 %	211 %

One of the key elements in BBVA's Group liquidity and funding management is the targeted maintenance of large high quality liquidity buffers in all business areas where the group operates.

Each entity maintains a sound liquidity buffer at the individual level for BBVA, S.A. and for each of its subsidiaries, such as BBVA Mexico, Garanti BBVA and the Latin American subsidiaries.

The Net Stable Funding Ratio (NSFR), defined as the result between the amount of stable funding available and the amount of stable funding required, requiring banks to maintain a stable financing profile in relation to the composition of their assets and off-balance sheet activities. This ratio should be at least 100% at all times. The NSFR ratio of the BBVA Group, stood at 135% as of December 31, 2022.

The NSFR of BBVA Group and its main LMU at December 31, 2022 and 2021, was the following:

Table 71. NSFR main LMU

	2022	2021
Group	**135 %**	**135%**
BBVA S.A.	125 %	126 %
BBVA Mexico	143 %	149 %
Garanti BBVA	166 %	162 %

Below is a matrix of residual maturities by contractual periods based on supervisory prudential reporting as of December 31, 2022 and 2021:

Table 72. Inflows - Contractual maturities (Million Euros. 12-31-2022)

	Demand	Up to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
ASSETS											
Cash, cash balances at central banks and other demand deposits	9,227	66,497	—	—	—	—	—	—	—	—	75,724
Deposits in credit entities	—	3,870	319	433	434	468	242	183	6	83	6,040
Deposits in other financial institutions	3	2,199	1,012	746	516	344	971	816	551	830	7,988
Reverse repo, securities borrowing and margin lending	—	31,049	5,743	3,368	1,432	1,127	4,582	1,354	2,400	289	51,343
Loans and advances	99	24,622	32,009	25,622	14,827	16,766	41,049	32,510	43,828	96,201	327,534
Securities' portfolio settlement	1	4,031	4,107	8,200	4,305	4,746	18,417	8,744	23,307	31,480	107,338

Inflows - Contractual maturities (Million Euros. 12-31-2021)

	Demand	Up to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
ASSETS											
Cash, cash balances at central banks and other demand deposits	39,761	24,598	—	—	—	—	—	—	—	—	64,359
Deposits in credit entities	—	3,781	400	790	373	299	211	166	8	26	6,056
Deposits in other financial institutions	2	901	801	584	727	432	694	470	261	469	5,343
Reverse repo, securities borrowing and margin lending	—	33,856	11,611	2,945	1,063	1,692	2,188	2,239	1,118	739	57,451
Loans and advances	174	18,531	23,185	22,141	11,769	13,782	39,656	30,049	44,508	94,780	298,574
Securities' portfolio settlement	10	1,779	3,606	3,395	2,333	3,958	18,854	13,135	17,214	47,331	111,614

Table 73. Outflows - Contractual maturities (Million Euros. 12-31-2022)

	Demand	Up to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
LIABILITIES											
Wholesale funding	—	1,841	4,434	1,050	3,148	2,017	6,318	9,423	13,282	18,145	59,658
Deposits in financial institutions	2,176	7,885	628	806	56	694	648	211	396	399	13,899
Deposits in other financial institutions and international agencies	7,392	5,760	1,465	464	379	758	700	293	594	727	18,532
Customer deposits	302,667	38,951	18,542	6,776	2,575	2,870	1,476	1,276	798	273	376,203
Security pledge funding	—	51,638	14,543	17,736	866	1,503	8,136	1,524	3,493	575	100,013
Derivatives, net	—	(253)	24	(1,010)	(23)	175	40	(153)	(466)	(3,717)	(5,383)

Outflows - Contractual maturities (Million Euros. 12-31-2021)

	Demand	Up to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
LIABILITIES											
Wholesale funding	—	3,065	1,077	3,498	2,914	1,885	9,477	4,931	12,332	19,991	59,169
Deposits from financial institutions	1,936	4,257	415	825	183	924	496	146	146	579	9,907
Deposits from other financial institutions and international agencies	8,894	2,728	1,700	382	289	227	578	231	337	722	16,087
Customer deposits	281,812	28,806	11,814	4,867	1,717	1,520	1,740	578	863	416	334,132
Security pledge funding	—	52,437	6,858	2,485	1,513	8,252	29,954	5,527	4,755	1,490	113,269
Derivatives, net	(33)	(395)	(176)	(326)	(66)	(641)	100	(122)	(155)	(66)	(1,880)

With regard to the financing structure, the loan portfolio is mostly financed by retail deposits. The “demand” maturity bucket mainly contains the retail customer sight accounts whose behavior historically showed a high level of stability and little concentration. According to a behavior analysis which is done every year in every entity, this type of account is considered to be stable and for liquidity risk purposes receive a better treatment.

The most relevant aspects related to the main geographical areas are the following:

- BBVA, S.A. has maintained a sound liquidity position. Commercial activity has generated liquidity due to greater growth in customer deposits above loan growth, especially in the last quarter of the year. In December, the Bank began the repayment of the TLTRO III program for an amount of €12 billion, corresponding to approximately one third of the total drawdown amount. On the other hand, in order to maintain sufficient collateral available, mortgage coverage and territorial bonds have been issued for an amount of €2 billion, held in treasury shares. Likewise, mortgage securitizations held in treasury shares have been issued, generating collateral for an amount of €4.4 billion.

- In BBVA Mexico, commercial activity has drained liquidity during 2022, due to the growth in lending activity that exceeded the growth of customer funds. Despite this, BBVA Mexico continues to hold a comfortable liquidity position that is deemed to be adequate and has carried out a cost-efficient funding management in an environment of rising rates.

- In Turkey, in the year 2022, the lending gap in local currency has been reduced, due to a greater growth in Turkish lira-denominated deposits than in loans. The lending gap in foreign currency has increased due to reductions in foreign currency deposits as a result of the measures established to encourage Turkish lira deposits, partially offset by lower loans in foreign currency. Garanti BBVA continues to maintain a stable liquidity position which is considered to be adequate. For its part, the Central Bank of Turkey has continued to implement measures in order to reduce the dollarization of the economy.

- In South America, the liquidity situation remains adequate throughout the region. In Argentina, liquidity continues to increase in the system and in BBVA due to a higher growth in deposits than in loans in local currency. In BBVA Colombia, lending activity grew more than funds, though this did not compromise the liquidity position of the bank due to the increase in longer-term deposits. BBVA Peru maintained solid liquidity levels, thanks to the solid growth of deposits in an environment of reduced local currency lending due to the expiration of loans covered by COVID-19 programs. The recent political instability has not had a material impact on liquidity.

The main wholesale financing transactions carried out by the companies of the BBVA Group are listed below:

- In relation to BBVA, S.A. during the year 2022 it has made an issuance of senior non-preferred debt in an amount of €1,000 million, two series of senior non-preferred debt securities in an aggregate amount of USD 1,750 million, six series of senior preferred debt securities in an aggregate amount of €4,065 million, a senior preferred bond (green bond) issuance for €1,250 million and two senior preferred bond (green bond) issuances in an aggregate amount of 425 million Swiss francs. Additionally, in May 2022, the convertible preferred shares (CoCos) issued by BBVA in May 2017 were redeemed early and in June 2022 a loan securitization transaction was completed in connection with vehicle financing loans for an amount of €1,200 million.

- For its part, BBVA México issued a sustainable bond for 10,000 million Mexican pesos (approximately €480 million), consequently becoming the first private bank to carry out an issue of this type in Mexico, taking as reference the TIIE rate (Interbank Equilibrium Interest Rate used in Mexico).

- Garanti BBVA renewed 100% of a syndicated loan indexed to environmental, social and corporate governance criteria consisting of two separate tranches of USD 283.5 million and €290.5 million, respectively, both maturing in one year. It also renewed the second part of a syndicated loan (USD 155 million or €239 million) with a ratio of 65% in line with its strategy and in line with the banks of the peer group. Garanti BBVA also carried out a sustainable financing round of USD 75 million in 2022.

- BBVA Colombia closed a financing with International Finance Corporation (IFC) for USD 60 million over 3 years. A financing transaction of USD 200 million over 5 years and another of USD 40 million over 3 years was also carried out.

4.5.4. Liquidity and funding prospects

The Group faces 2023 with a comfortable liquidity situation in all the territories it operates in. The funding structure based on stable customer deposits and oriented towards the long term, as well as the proven capacity to access capital markets, allows to comfortably face the moderate volume of maturities expected for the coming quarters.

The following table is a breakdown of wholesale funding maturities of the most significant units of the Group according to their nature:

Table 74. Maturity of wholesale issuances of Balance Euro by nature (Million Euros)

Type of issuance	2023	2024	2025	After 2025	Total
Senior debt	2,808	965	3,718	5,071	12,562
Non preferred senior debt	1,650	2,000	1,938	4,255	9,843
Mortgage-covered bonds	2,350	1,000	2,371	2,055	7,776
Public-covered bonds	200	—	—	—	200
Preferred shares (1)	1,000	1,000	938	1,938	4,876
Subordinated debt(1)	150	750	1,183	2,321	4,404
Structured financing (2)	4,711	282	211	1,358	6,562
Total	**12,869**	**5,997**	**10,359**	**16,998**	**46,223**

(1) Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortisation option.

(2) Global Markets MTN programme amounts not eligible as MREL, classified according to their earliest repayment option.

Table 75. Maturity of wholesale issuances of BBVA Mexico by nature (Million Euros)

Type of issuance	2023	2024	2025	After 2025	Total
Senior debt	603	703	756	1,541	3,603
Subordinated debt(1)	—	188	—	1,641	1,829
Total	**603**	**891**	**756**	**3,181**	**5,431**

(1) Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortisation option.

Table 76. Maturity of wholesale issuances of BBVA Garanti by nature (Million Euros)

Type of issuance	2023	2024	2025	After 2025	Total
Senior debt	543	117	—	20	680
Mortgage-covered bonds	8	—	—	—	8
Subordinated debt(1)	—	—	—	703	703
Securitisations	119	124	39	32	313
Syndicated loans	941	—	—	—	941
Other long term financial instruments	254	126	116	1,591	2,087
Total	**1,864**	**367**	**155**	**2,346**	**4,731**

(1) Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortisation option.

Table 77. Maturity of wholesale issues of South America by nature (Million Euros)

Type of issuance	2023	2024	2025	After 2025	Total
Senior debt	311	298	153	37	799
Subordinated debt(1)	70	—	375	512	957
Total	**381**	**298**	**528**	**549**	**1,756**

(1) Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortisation option.

Going into 2023, one of the main objectives of the Group's funding strategy is maintaining the strength of the financing structure based on the growth of stable customer resources; diversifying the different sources of financing and ensuring the availability of sufficient levels of liquid assets; and optimizing the generation of collateral, for compliance with regulatory ratios, and other internal metrics to monitor liquidity and funding risk, including stress scenarios.

4.5.5. LCR disclosure

A breakdown of the LCR disclosure as of December 31, 2022 is shown below, according to Article 435 of Regulation (EU) No 575/2013. These figures are calculated as simple averages of end-of-month observations from the twelve months preceding each quarter. No transfer of liquidity is assumed between subsidiaries, and therefore no excess liquidity is transferred from the entities abroad to the consolidated figures displayed in the following table:

Table 78. EU LIQ1: Liquidity Coverage Ratio disclosure (Rounded Million Euros)

	Total unweighted value (average)					**Total weighted value (average)**				
	December	**September**	**June**	**March**	**December**	**December**	**September**	**June**	**March**	**December**
End of the quarter	**12-31-2022**	**9-30-2022**	**6-30-2022**	**3-31-2022**	**12-31-2021**	**12-31-2022**	**9-30-2022**	**6-30-2022**	**3-31-2022**	**12-31-2021**
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12	12	12
High-quality liquid assets										
Total high-quality liquid assets (HQLA)						108,648	105,293	104,585	106,449	110,132
Cash-outflows										
Retail deposits and deposits from small business customers, of which:	244,274	238,203	232,339	233,264	239,938	16,695	16,283	15,872	15,923	16,365
Stable deposits	163,188	160,342	157,401	158,420	162,692	8,159	8,017	7,870	7,921	8,135
Less stable deposits	74,160	71,703	69,414	69,318	71,068	8,535	8,266	8,002	8,002	8,231
Unsecured wholesale funding	125,126	119,827	114,458	114,411	119,110	50,786	48,161	46,063	45,853	47,971
Operational deposits (all counterparties) and deposits in networks of cooperative banks	59,408	57,838	55,522	55,470	56,173	13,738	13,409	12,888	12,837	12,930
Non-operational deposits (all counterparties)	64,649	60,817	57,984	57,972	61,809	35,979	33,580	32,223	32,047	33,913
Unsecured debt	1,069	1,172	952	969	1,128	1,069	1,172	952	969	1,128
Secured wholesale funding						3,174	2,818	2,936	3,026	3,297
Additional requirements	86,584	83,660	80,968	81,649	84,384	20,752	19,897	19,289	19,206	18,819
Outflows related to derivative exposures and other collateral requirements(1)	11,073	10,606	10,326	10,099	9,359	11,073	10,606	10,326	10,099	9,348
Outflows related to loss of funding on debt products	190	190	183	262	278	190	190	183	262	278
Credit and liquidity facilities	75,321	72,864	70,459	71,288	74,747	9,489	9,101	8,780	8,845	9,193
Other contractual funding obligations	16,193	15,340	13,784	12,753	12,153	2,702	2,278	2,163	2,009	1,617
Other contingent funding obligations	95,807	91,791	87,509	84,689	83,917	3,687	3,595	3,510	3,442	3,472
Total cash outflows						**97,796**	**93,032**	**89,833**	**89,459**	**91,541**
Cash - inflows										
Secured lending (e.g. reverse repos)	25,199	24,404	23,033	21,377	20,102	1,496	1,167	1,036	962	929
Inflows from fully performing exposures	34,390	32,212	29,987	28,141	27,362	23,280	21,709	19,903	18,532	17,770
Other cash inflows	6,576	6,335	6,060	6,675	6,010	6,576	6,335	6,060	6,675	6,010
transactions in third countries where there are transfer restrictions or which are										
(Excess inflows from a related specialised credit institutions)										
Total cash inflows	**66,165**	**62,951**	**59,080**	**56,193**	**53,474**	**31,352**	**29,211**	**26,999**	**26,169**	**24,709**
Fully exempt inflows										
Inflows subject to 90% cap										
Inflows subject to 75% cap	66,165	62,951	59,080	56,193	53,474	31,352	29,211	26,999	26,169	24,709
Total adjusted value										
Liquidity buffer						**108,648**	**105,293**	**104,585**	**106,449**	**110,132**
Total net cash outflows						**66,443**	**63,822**	**62,833**	**63,289**	**66,833**
Liquidity coverage ratio (%)						**164 %**	**165 %**	**167 %**	**169 %**	**166 %**
Liquidity buffer (including excess liquidity of subsidiaries)						**140,252**	**136,315**	**133,743**	**134,596**	**138,218**
Total net cash outflows						**66,443**	**63,822**	**62,833**	**63,289**	**66,833**
Liquidity coverage ratio (%)						**211.1 %**	**213.6 %**	**212.9 %**	**212.7 %**	**206.8 %**

(1) Includes the amount of the collateral that the entity would have to provide in case of a credit downgrade, according to CRR Article 439(d).

The BBVA Group's consolidated ratio is mainly determined by the ratio of the three largest units that make up the Group: BBVA SA, BBVA Mexico and Garanti BBVA. In addition, as no transferability of liquidity between the subsidiaries is assumed, no excess liquidity is transferred from the entities abroad to the consolidated metric, so the evolution of the consolidated ratio is closely linked to the evolution of BBVA SA's LCR. Throughout the series shown the table, the LCR has been at high levels, reflecting the Group's comfortable and comfortable liquidity situation.

As regards the numerator of the ratio, one of the key elements in the BBVA Group's management of liquidity and funding is the maintenance of large high-quality liquidity buffers in all geographic areas. In the last 12 months, the Group maintained an average volume of high quality liquid assets (HQLA) of €108.6 billion (€140.3 billion if we consider the excess liquidity of all the banks abroad), of which 95% corresponded to top quality assets (level 1).

As regards the composition of the denominator of the LCR, the main source of funding for all the Group's banks is retail deposits, liabilities of a stable nature which therefore produce fewer potential outflows in the LCR ratio. The Group also has sources of wholesale funding that are adequately diversified in terms of maturity, instrument, market, currency and counterparty, oriented towards the long term, which are considered less stable for the purposes of the LCR, generating greater potential outflows.

Regarding the sustainability of wholesale funding as a source of funding, this depends on the degree of diversification. In particular, in order to ensure adequate diversification by counterparties, specific concentration thresholds are set and must be met at all times by each LMU. As of December 31, 2022, except for the positions against central clearing houses and the secured funding operations with several Central Banks, the Group has no counterparties that maintain balances greater than 1,5% of the Group's total liabilities and the weight of the first 10 counterparties per balance represents 5%.

The establishment of an independent control framework for the Euro, USA, Mexico and Turkey LMUs, allows compliance with the Liquidity and Finance corporate requirements on the four main currencies in which the BBVA Group operates: Euro, Dollar, Mexican Peso and Turkish Lira.

With the exception of the dollar, significant currencies at the Group level are fully managed by entities resident in the jurisdictions of each of them, with their funding needs covered in the local markets in which they operate.

For those LMUs operating in dollarised economies (Argentina, Peru, Mexico and Turkey) there are specific regulatory requirements that limit the level of risk of each subsidiary. In addition, the LCR in US dollars in all of them exceeds 100%.

Finally, the Group's exposure to derivatives is limited (see section on counterparty risk exposure). In addition, the LCR of the different LMU's includes liquidity outflows arising from the need to post additional collateral, the most relevant cases being the deterioration of the entity's credit quality, the excess collateral to be returned to the counterparty, and the impact of an adverse market scenario. For the quantification of additional collateral in case of adverse market scenarios, a Historical Look Back Approach is used in accordance with the EBA RTS (Article 423(3) of the CRR).

4.5.6. Net Stable Funding Ratio

Within its risk appetite framework, BBVA has included the NSFR indicator within the limits scheme for both the Group as a whole and for each individual LMU, aimed at keeping this metric at a comfortable level above 100%.

A table including the main components of NSFR is shown below:

Table 79. EU LIQ2 - Net Stable Funding Ratio (NSFR) (Rounded Million euros. 12-31-2022)

	Unweighted value by residual maturity				Weighted value
	No Maturity	**< 6 months**	**6 months to <1 year**	**>= 1 year**	
Available stable funding (ASF) Items					
Capital items and instruments	51,732	—	—	7,711	59,443
Own funds	51,732	—	—	6,023	57,755
Other capital instruments		—	—	1,688	1,688
Retail deposits		247,403	3,616	1,979	236,427
Stable deposits		169,569	1,047	754	162,839
Less stable deposits		77,834	2,569	1,225	73,588
Wholesale funding:		235,805	10,888	52,247	118,679
Operational deposits		61,793	—	—	30,897
Other wholesale funding		174,012	10,888	52,247	87,783
Interdependent liabilities		—	—	—	—
Other liabilities:	2,023	19,467	2	10,690	10,691
NSFR derivative liabilities	2,023				
All other liabilities and capital instruments not included in the above categories		19,467	2	10,690	10,691
Total available stable funding (ASF)					**425,240**
Required stable funding (RSF) Items					
Total high-quality liquid assets (HQLA)					6,153
Assets encumbered for a residual maturity of one year or more in a cover pool		220	217	5,260	4,843
Deposits held at other financial institutions for operational purposes		137	—	—	68
Performing loans and securities:		131,773	36,356	244,616	254,250
Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		33,146	2,021	3,252	5,516
Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		14,951	1,368	9,231	11,171
Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		67,379	27,350	143,951	167,772
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		5,680	3,431	21,677	20,379
Performing residential mortgages, of which:		2,902	2,909	80,714	60,085
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		2,226	2,268	58,560	40,559
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		13,395	2,707	7,468	9,707
Interdependent assets		—	—	—	—
Other assets:	—	24,139	1,801	36,512	42,778
Physical traded commodities				190	161
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		—	—	853	725
NSFR derivative assets		3,630	—	—	3,630
NSFR derivative liabilities before deduction of variation margin posted		11,337	—	—	567
All other assets not included in the above categories		9,172	1,801	35,469	37,695
Off-balance sheet items		6,551	2,085	118,888	7,003
Total RSF					**315,094**
Net Stable Funding Ratio (%)					**135 %**

EU LIQ2 - Net Stable Funding Ratio (NSFR) (Rounded Million euros. 12-31-2021)

	Unweighted value by residual maturity				Weighted value
	No Maturity	< 6 months	6 months to <1 year	>= 1 year	
Available stable funding (ASF) Items					
Capital items and instruments	51,522	—	—	9,477	60,999
Own funds	51,522	—	—	7,283	58,805
Other capital instruments		—	—	2,194	2,194
Retail deposits		226,717	2,287	1,902	215,961
Stable deposits		158,159	954	552	151,709
Less stable deposits		68,558	1,334	1,350	64,252
Wholesale funding:		184,057	16,699	78,957	139,857
Operational deposits		57,873	—	—	28,937
Other wholesale funding		126,183	16,699	78,957	110,921
Interdependent liabilities		—	—	—	—
Other liabilities:	4,111	16,623	9	13,938	13,942
NSFR derivative liabilities	4,111				
All other liabilities and capital instruments not included in the above categories		16,623	9	13,938	13,942
Total available stable funding (ASF)					**430,759**
Required stable funding (RSF) Items					
Total high-quality liquid assets (HQLA)					10,862
Assets encumbered for a residual maturity of one year or more in a cover pool		1,882	1,328	21,228	20,773
Deposits held at other financial institutions for operational purposes		143	—	—	71
Performing loans and securities:		111,432	28,309	224,063	233,874
Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		35,693	1,369	3,224	5,129
Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		13,410	2,221	7,861	10,073
Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		50,012	19,186	127,762	203,902
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		2,900	1,993	19,576	49,224
Performing residential mortgages, of which:		2,756	2,633	71,260	—
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		1,469	1,431	40,117	—
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		9,561	2,900	13,956	14,770
Interdependent assets		—	—	—	—
Other assets:	—	33,379	939	39,959	47,428
Physical traded commodities				295	251
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		—	—	729	620
NSFR derivative assets		5,359	—	—	5,359
NSFR derivative liabilities before deduction of variation margin posted		13,480	—	—	674
All other assets not included in the above categories		14,540	939	38,935	40,524
Off-balance sheet items		4,736	1,547	103,934	6,009
Total RSF					**319,017**
Net Stable Funding Ratio (%)					**135 %**

The table shows a balanced funding structure that maintains a significant volume of retail deposits as the main source of funding for investment activity. This type of funds is characterised by a more favourable treatment for NSFR purposes, given its low sensitivity to market fluctuations and its low volatility in aggregate balances per transaction, as a result of customer linkage. This results in a level of NSFR that comfortably exceeds the regulatory requirement of 100%, with a stable evolution over time.

4.5.7. Encumbered assets in funding operations

In relation to the management of encumbered liquid assets[5], all LMUs maintain adequate positions not only to cover the minimum survival periods in a stress situation, but also uncollateralised wholesale liabilities, which are ultimately the most affected by the ratio of encumbered assets.

All of the Group's LMUs have implemented procedures and controls to ensure that the risk associated with the management of guarantees and asset assessment are properly identified, controlled and managed in compliance with the Corporate Liquidity and Financing Risk Policy, highlighting: i) monitoring and control scheme for encumbered assets risk indicators, ii) periodic evaluation of stress scenarios as a result of the risk levels achieved, and iii) a contingency plan with action measures based on the degree of criticality and immediacy of the situation.

The impact on the business model of the level of the asset pledging, as well as the importance in the Group's funding model is low because the funding is based on stable customer deposits, the dependence on short term funding is reduced, and a robust funding structure is maintained, with a moderate level of encumbered assets.

The ratio of encumbered assets to total assets for the main LMUs as of December 31, 2022 is:

Table 80. Encumbered assets over total assets ratio (12-31-2022)

BBVA Group	**18 %**
LMU Euro	22 %
LMU Mexico	11 %
LMU Garanti	8 %

The Group mainly has the following sources of encumbrance:

- **Assets sold under repurchase agreement**

Collateralized financing transactions through repurchase agreements are among the the short-term sources of funding. These transactions play an important role in the Group's encumbered assets, with debt securities being the main asset used.

- **Assets pledged with Central Banks**

The role of central banks as ultimate liquidity providers is one of the key contingent funding resources in the event of stress in the financial markets. In this regard, and in accordance with the principles established for collateral management, the Group's strategy is to maintain extensive credit facilities with the respective central banks by pledging assets as collateral in those geographical areas where these instruments exist as part of monetary policy.

Additionally, a relevant element is, in the case of the ECB, the non-standard monetary policy measures related to the “Targeted Longer-Term Refinancing Operations” (TLTRO) to provide long-term financing with the aim of easing credit conditions for the private sector and stimulating financing for the real economy. In this regard, BBVA S.A. maintained at the end of December 2022 an amount drawn down under the TLTRO III program of 26,411 million euros.

- **Management of collateral agreements**

The use of collateral is one of the most effective techniques to mitigate credit risk exposure arising from derivatives, repo transactions or securities lending. The assets currently used as collateral are: cash and debt securities.

- **Securitisation**

The issuance of securitisation represents one of the main potential sources of risk of assets pledged on the balance sheet. Depending on the type of assets backing the securitisation, the following classes are issued: residential mortgage-backed securities (RMBS), consumer loans and loans to SMEs. The impact of this pledging source is very low for the Group.

- **Covered bonds**

The issuance of covered bonds is one of the main sources of secured funding with a high degree of protection for bondholders. The issuances are backed by on-balance sheet assets that can be pooled and and have a joint guarantee by the entity that will back the issuance in the event that the underlying assets are unable to meet payments. The products through which this type of funding is implemented are mortgage covered bonds, public covered bonds and internationalisation covered bonds.

Mortgage covered bonds are issued with first-rank mortgage loan collateral constituted in favour of the bank. These represent the majority of the Group's covered bond issuances. Public covered bonds are backed by loans and credits granted by the issuer to the State, to central and regional governments, local authorities and autonomous bodies dependent on them, as well as other analogous entities of the European Economic Area. Finally, internationalization bonds are issued to guarantee credits and loans linked to the funding of contracts for the export of goods and services

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[5] An asset is considered encumbered if it is subject to any form of agreement with the objective of ensuring, collateralizing or improving the credit quality of a transaction, and it cannot be freely removed.

In any case, the consideration of a committed asset is not based on an explicit legal definition, such as the transfer of a title, but on an economic criterion, so any asset that is subject to any restriction to be used or to replace another asset, is considered pledged.

or for the internationalization of companies. As of December 2022, there are no internationalization covered bond issuances in the Group.

Regarding the specific overcollateralization applied to these issuances:

Royal Decree-Law 24/2021 transposing Directive (EU) 2019/2162 on covered bonds with effect from July 8, 2022 establishes that mortgage, public and internationalization covered bonds must have the minimum level of legal over-collateralization foreseen in the first paragraph of Article 129.3a of Regulation (EU) No. 575/2013 of June 26, 2013 (CRR), which is established at 5% over the nominal value.

This regulation establishes that the cover pool must include at all times an additional liquidity buffer consisting of high quality liquid assets available to cover the maximum accumulated net liquidity outflow in the 180 days following the covered bond program. As of December 2022, this liquidity buffer is formed by level 1 debt securities.

Within the Group there are units responsible for the execution, monitoring and control of this type of issuances, as well as the calculation of the additional capacity issuances, with the aim of ensuring that the entity is not over-issued and that it complies with the established limits of the Asset Encumbrance Ratio.

The following table shows assets pledge as collateral (loans) underlying the issuance of covered bonds, as well as the total issued and excess capacity to issue as of December 31, 2022:

Table 81. Covered bonds (Million Euros. 12-31-2022)

Retained	
Retained used	21,540
Retained not used	—
Placed on market	7,976
Total covered bonds issued	**29,516**
Eligible collateral to consider	**57,616**
Maximum to issue	54,872
Capacity to issue	**25,356**

The carrying amount, both encumbered and unencumbered, of the pool of assets underlying the retained securitization and covered bonds, as well as the carrying amount of the related issued liabilities as of December 31, 2022, is shown in the following table:

Table 82. Covered bonds and securitisations issued and retained (Million Euros. 12-31-2022)

	Carrying amount of underlying assets		**Carrying amount of liabilities issued retained**	
	Unencumbered	**Encumbered**	**Unencumbered**	**Encumbered**
Covered bonds and securitisation issued and retained	**19,217**	**29,383**	**18,083**	**29,076**
Covered bonds issued and retained	16,169	6,448	15,399	6,141
Securitisation issued and retained	3,048	22,935	2,684	22,935

The assets on the balance sheet and the collaterals received that, as of December 31, 2022, are encumbered (provided as collateral or guarantee with respect to certain liabilities), as well as the collateral that is unencumbered, are shown below. It should be noted that the value used for the purpose of this disclosure is the carrying amount and fair value, for both the assets on the balance sheet and the encumbered and unencumbered guarantees received. The balances are calculated as annual medians using as a sample the four quarters of the last year.

Table 83. EU AE1 - Encumbered and unencumbered Assets (Million Euros. 12-31-2022)

	Carrying value of encumbered assets		Fair value of encumbered assets		Carrying value 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
Institution's assets	**117,158**	**35,293**			**570,694**	**107,525**		
Equity instruments	496	195	496	385	7,108	3,669	7,108	3,669
Debt securities	37,179	34,888	36,503	34,956	70,133	37,473	70,810	36,941
Of which: covered bonds	23	19	23	23	101	96	101	95
Of which: ABSs	6	—	6	—	131	—	129	—
Of which: issued by general governments	32,252	32,053	31,234	30,936	59,724	36,511	60,754	36,151
Of which: issued by financial corporations	1,723	759	1,859	1,543	4,062	240	3,923	240
Of which: issued by non- financial corporations	3,329	2,118	3,322	3,066	2,130	556	2,138	550
Of which: Other assets	77,766	—			496,440	68,548		

EU AE1 - Encumbered and unencumbered Assets (Million Euros. 12-31-2021)

	Carrying value of encumbered assets		Fair value of encumbered assets		Carrying value 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
Institution's assets	**117,018**	**34,599**			**521,374**	**108,160**		
Equity instruments	1,740	1,313	1,740	1,740	14,297	6,799	14,297	6,799
Debt securities	34,773	33,286	32,558	32,049	75,278	48,441	77,008	49,542
Of which: covered bonds	39	30	38	38	258	254	258	254
Of which: ABSs	15	—	15	—	172	—	171	—
Of which: issued by general governments	30,201	30,099	27,829	27,610	65,454	45,906	67,322	46,990
Of which: issued by financial corporations	1,304	749	1,430	1,149	4,274	551	4,143	551
Of which: issued by non- financial corporations	2,961	2,096	2,967	2,767	2,601	779	2,594	793
Of which: Other assets	81,379	—			434,127	55,565		

The encumbered assets included in the "Other Assets" row of the EU AE1 table correspond to demand loans and loan advances mainly backing central bank financing, collateral deliveries for derivative transactions and the issuance of mortgage bonds and securitization bonds.

The fair value of collateral received , as well as the own securities issued as of December 31, 2022 and December 31, 2021 is below:

Table 84. EU AE2 - Collateral received (Million Euros. 12-31-2022)

	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
Collateral received	**36,524**	**32,741**	**11,466**	**4,916**
Loans on demand	—	—	—	—
Equity instruments	99	61	160	72
Debt securities	36,424	32,685	11,360	4,861
Of which: covered bonds	1,022	238	136	16
Of which: ABSs	69	—	234	—
Of which: issued by general governments	32,993	32,130	7,860	4,719
Of which: issued by financial corporations	2,869	607	2,115	44
Of which: issued by non- financial corporations	1,403	157	1,385	70
Loans and advances other than loans on demand	—	—	—	—
Other collateral received	—	—	—	—
Own debt securities issued other than own mortgage-covered bonds or ABSs	—	—	90	—
Own mortgage-covered bonds and ABSs issued and not yet pledged			12,981	—
Total assets, collateral received and own debt securities issued	**152,580**	**69,484**		

EU AE2 - Collateral received (Million Euros. 12-31-2021)

	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
Collateral received	**33,832**	**31,025**	**12,833**	**5,644**
Loans on demand	—	—	—	—
Equity instruments	247	90	257	169
Debt securities	33,585	30,903	12,565	5,407
Of which: covered bonds	472	122	262	3
Of which: ABSs	—	—	159	—
Of which: issued by general governments	30,491	30,155	8,516	5,326
Of which: issued by financial corporations	2,233	526	2,792	48
Of which: issued by non- financial corporations	901	178	1,257	46
Loans and advances other than loans on demand	—	—	—	—
Other collateral received	—	—	—	—
Own debt securities issued other than own mortgage-covered bonds or ABSs	9	—	66	—
Own mortgage-covered bonds and ABSs issued and not yet pledged			15,288	—
Total assets, collateral received and own debt securities issued	**154,453**	**66,375**		

The off-balance sheet collateral received mostly reflects reverse repurchase agreements of debt securities, mostly sovereign.

The sources of encumbrance with the associated collateral as of December 31, 2022 and December 31, 2021 are below:

Table 85. EU AE3 - Sources of encumbrance (Million Euros)

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own securities issued other than mortgage-covered bonds, public-covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities 2022	**134,817**	**147,486**
Carrying amount of selected financial liabilities 2021	**134,418**	**150,689**

There are assets without associated liabilities that correspond mainly to security lending operations, and in a lesser extent to guarantees granted as collateral to be able to operate in certain markets.

4.6. Operational Risk

BBVA defines operational risk ("OR") as any risk that could result in losses caused by human error; inadequate or flawed internal processes; undue conduct with respect to customers, markets or the institution; antimoney laundering and financing of terrorist activities; failures, interruptions or flaws in systems or communications; theft, loss or wrong use of information, as well as deterioration of its quality, internal or external fraud, including in any case those derived from cyberattacks; theft or harm to assets or persons; legal risks; risks derived from staff management and labor health; and defective service provided by suppliers; as well as damages from extreme climate events, pandemics and other natural disasters.

Operational risk management is oriented towards the identification of the root causes to avoid their occurrence and mitigate possible consequences. This is carried out through the establishment of control framework and monitoring and the development of mitigation plans aimed at minimizing resulting economic and reputational losses and their impact on the recurrent generation of results, and contributing the increase the quality, safety and availability of the provided service. Operational risk management is integrated into the global risk management structure of the BBVA Group.

4.6.1. Operational risk management principles

The BBVA Group is committed to preferably applying advanced operational risk management models, regardless of the capital calculation regulatory model applicable at the time. Operational risk management at the BBVA Group shall:

- Be aligned with the Risk Appetite Framework ratified by the BBVA Board of Directors.
- Address BBVA's management needs in terms of compliance with legislation, regulations and industry standards, as well as the decisions or positioning of BBVA's corporate bodies.
- Anticipate the potential operational risk to which the Group may be exposed as a result of the creation or modification of products, activities, processes or systems, as well as decisions regarding the outsourcing or hiring of services, and establish mechanisms to assess and mitigate risk to a reasonable extent prior to implementation, as well as review the same on a regular basis.
- Establish methodologies and procedures to enable regular reassessment of the significant operational risk to which the Group is exposed, in order to adopt appropriate mitigation measures in each case, once the identified risk and the cost of mitigation (cost/benefit analysis) have been considered, while safeguarding the Group's solvency at all times.
- Promote the implementation of mechanisms that support careful monitoring of all sources of operational risk and the effectiveness of mitigation and control environments, fostering proactive risk management.
- Examine the causes of any operational events suffered by the Group and establish means to prevent the same, provided that the cost/benefit analysis so recommends. To this end, there are procedures in place to evaluate operational events and mechanisms that allow recording the operational losses that may be caused by the same.
- Evaluate key public events that have generated operational risk losses at other institutions in the financial sector and support, where appropriate, the implementation of measures as required to prevent them from occurring at the Group.
- Identify, analyze and attempt to quantify events with a low probability of occurrence and a high impact, which by their exceptional nature may not be included in the loss database; or if they are, feature with impacts that are not very representative for the purpose of valuing possible mitigation measures.
- Have an effective system of governance in place, where the functions and responsibilities of the corporate areas and bodies involved in operational risk management are clearly defined.
- Operational risk management must be performed in coordination with management of other risk, taking into consideration credit or market events that may have an operational origin.

4.6.2. Operational risk management model

The operational risk management cycle at BBVA is similar to the one implemented for the rest of risks. Its elements are:

Chart 20. Operational Risk Management Processes

Operational risk management parameters

Operational risk forms part of the risk appetite framework of the Group and includes three types of metrics and limits:

- Economic capital calculated with the operational losses database of the Group, considering the corresponding diversification effects and the additional estimation of potential and emerging risks through stress scenarios designed for the main types of risks. The economic capital is regularly calculated for the main banks of the Group and simulation capabilities are available to anticipate the impact of changes on the risk profile or new potential events.
- ORI metrics (Operational Risk Indicator: operational risk losses vs. gross income) broken down by geography.
- Indicators by risk type: a more granular common scheme of metrics (indicators and limits) covering the main types of operational risk is being implemented throughout the Group. These metrics make it possible to intensify the anticipatory management of risk and objectify the appetite to different sources. These indicators are regularly reviewed and adjusted to fix the main risks in force at any time.

Operational risk admission

The main purposes of the operational risk admission phase are the following:

- To anticipate potential operational risk to which the Group may be exposed due to the release of new, or modification of businesses, products, activities, processes or systems or in relations with third parties (e.g. outsourcing).
- To ensure that implementation and the roll out of initiatives is only performed once appropriate mitigation measures have been taken in each case, including external assurance of risks where deemed appropriate.

The Corporate Non-Financial Risk Management Policy sets out the specific operational risk admission framework through different Operational Risk Admission and Product Governance Committees, both at a corporate and Business Area level, that follow a delegation structure based on the risk level of proposed initiatives.

Operational risk monitoring

The purpose of this phase is to check that the target operational risk profile of the Group is within the authorized limits. Operational risk monitoring considers 2 scopes:

- Monitoring the operational risk admission process, oriented towards checking that accepted risks levels are within the limits and that defined controls are effective.
- Monitoring the operational risk "stock" mainly associated with processes. This is done by carrying out a periodic re-evaluation in order to generate and maintain an updated map of the relevant operational risks in each Area, and evaluate the adequacy of the monitoring and mitigation environment for said risks. This promotes the implementation of action plans to redirect the weaknesses detected.

Operational risk monitoring is mainly supported by the following processes:

Risk and Control Self Assessment (RCSA)

The RCSA is the process implemented in the Group to systematize the periodic updating of the risks to which the Group is exposed; for this purpose, different sources of information are taken into account, both internal and external (emerging risks in the industry, events occurring in other entities or in the BBVA Group itself, new regulations applicable to the entity, weaknesses identified by internal or external auditors and supervisors, etc.).

The risks identified are evaluated in order to focus monitoring and management efforts on those whose impacts may generate negative consequences for the Group beyond those that are reasonable in the course of its ordinary activities.

For the most relevant risks, an evaluation is made of the existing mitigating elements, in order to determine their sufficiency for the adequate mitigation of the risks or their eventual consequences; if the mitigating elements are considered insufficient or their operation is not adequate, the definition and implementation of mitigation measures is promoted.

This process is supported by a corporate Governance, Risk & Compliance tool that monitors the operational risk at a local level and its aggregation at a corporate level.

Monitoring of management parameters

The monitoring of management parameters allows the Group to identify sources of risk that behave abnormally, exceeding the established appetite levels, as well as relevant sources of risk not previously identified or underestimated; in these situations, the Group activates mechanisms to identify the root causes of these situations and to reinforce the mitigation environment, thus contributing to the Group's RCSA process.

The RCSA, together with the operational risk admission process and the management derived from the monitoring of forward-looking parameters, make up the main structure of the Group's operational risk proactive management processes.

Operational loss collection

In addition, and in line with the best practices and recommendations provided by the Bank for International Settlements (hereinafter, BIS), BBVA has procedures to collect the operational losses occurred both in the different entities of the Group and in other financial groups, with the appropriate level of detail to carry out an effective analysis that provides useful information for management purposes and to contrast the consistency of the Group's operational risks map. To that end, a corporate tool of the Group is used.

The analysis of operational losses and their trends may reveal the materialization of risks that have not been adequately identified, evaluated or mitigated, thus allowing feedback to the RCSA exercise while promoting mitigation measures to prevent their future occurrence.

The Group ensures continuous monitoring by each Area of the due functioning and effectiveness of the control environment, taking into consideration management indicators established for the Area, any events and losses that have occurred, as well as the results of actions taken by the second line of defense, the internal audit unit, supervisors or external auditors.

Operational risk mitigation

The Group promotes the proactive mitigation of the non-financial risks to which it is exposed and which are identified in the monitoring activities.

In order to rollout common monitoring and anticipated mitigation practices throughout the Group, several cross-sectional plans are being promoted related to focuses from events, lived by the Group or by the industry, self-assessments and recommendations from auditors and supervisors in different geographies, thereby analyzing the best practices at these levels and fostering comprehensive action plans to strengthen and standardize the control environment.

Assurance of operational risk

Assurance is one of the possible options for managing the operational risk to which the Group is exposed, and mainly has two potential purposes:

- Coverage of extreme situations linked to recurrent events that are difficult to mitigate or can only be partially mitigated by other means.
- Coverage of non-recurrent events that could have significant financial impact, if they occurred.

The Group has a general framework that regulates this area, and allows systematizing risk assurance decisions, aligning insurance coverage with the risks to which the Group is exposed and reinforcing governance in the decision-making process of arranging insurance policies.

4.6.3. Operational risk governance

BBVA Group's operational risk governance model is based on two components:

- Three-line defense control model, in line with industry best practices, and which guarantees compliance with the most advanced operational risk internal control standards.
- Scheme of Corporate Assurance Committees and Internal Control and Operational Risk Committees at the level of the different business and support areas.

Three lines of defense control model

1.- First line of defense: composed of the Business and Support Areas in charge of managing operational risks in their products, activities, processes and systems, including those present in activities that may have been outsourced.

The Areas must integrate operational risk management into their day-to-day activities, identifying and evaluating operational risks, carrying out controls, assessing the adequacy of their control environment and executing mitigation plans for those risks in which control weaknesses are identified.

2.- Second line of defense: composed of:

(i) the Non-Financial Risk Units, in charge of designing and maintaining the Group's Operational Risk management model, and assessing the degree of application within the scope of the different Areas; and.

(ii) the Specialized Control Units, in different risk areas, define the General Mitigation, Control and Monitoring Framework for the risks in their respective areas, and carry out an independent assessment of the adequacy of the control environment implemented by the first line of defense.

The Non-Financial Risk Units and the Specialist Units are located in the Regulation and Internal Control area in order to ensure a coordinated action of the second line of defense and to preserve their independence with respect to the first line of defense.

3.- Third line of defense: performed by BBVA Internal Audit, which:

- Performs an independent review of the control model, verifying compliance with and effectiveness of established general policies.
- Provides independent information on the control environment to the Corporate Assurance Committees.

Corporate Assurance Committee Scheme

Corporate Assurance establishes a structure of committees, both at local and corporate level, to provide senior management with a comprehensive and homogeneous vision of the main non-financial risks and significant situations of the control environment.

(1) CA: Corporate Assurance

Each geographical area has a Corporate Assurance Committee chaired by the Country Manager and whose main functions are:

- Facilitate agile and anticipatory decision-making for the mitigation or assumption of the main risks.
- Monitoring the changes in the non-financial risks and their alignment with the defined strategies and policies and the risk appetite.
- Analyzing and assessing controls and measures established to mitigate the impact of the risks identified, should they materialize.
- Making decisions about the proposals for risk taking that are conveyed by the working groups or that arise in the Committee itself
- Promoting transparency by promoting the proactive participation of the three lines of defense in discharging their responsibilities and the rest of the organization in this area

At the holding level there is a Global Corporate Assurance Committee, chaired by the Group's Chief Executive Officer. Its main functions are similar to those already described but applicable to the most important issues that are escalated from the geographies and the holding company areas.

The business and support areas have an Internal Control and Operational Risk Committee, whose purpose is to ensure the due implementation of the operational risk management model within its scope of action and drive active management of such risk, taking mitigation decisions when control weaknesses are identified and monitoring the same.

Additionally, the Non-Financial Risk unit periodically reports the status of the management of non-financial risks in the Group to the Board's Risk and Compliance Committee.

4.6.4. Methods used for calculating capital

All Group entities apply the standard method for calculating their capital requirements for operational risk, except for Bolivia and the international subsidiaries of Garanti Bank, where the basic method is applied.

BBVA maintains its maximum commitment to effective and anticipatory management of operational risks as a key tool to contribute, not only to minimizing the economic impact of operational events in the Group, but also as an instrument to increase the quality of the service provided and contribute to the achievement of the strategic objectives of the Entity.

Both the basic and standardised approaches use fixed parameters to calculate regulatory capital for operational risk:

- Basic method: according to Chapter 2 of Title III of the CRR, the capital requirement for operational risk using the basic method is calculated as the three-year average of relevant income multiplied by a single factor established by the Regulator, which amounts to 15%. The sum of the following elements of the profit and loss account is defined as relevant income:
  - Income from interest and other similar income
  - Interest expense and other similar charges
  - Return on equities and other fixed- or variable-income securities
  - Fees receivable
  - Fees payable
  - Net trading income
  - Other operating income
- Standardised and alternative standardised approaches: according to Chapter 3 of Title III of the CRR, capital requirement for operational risk using the standard method is calculated as the three-year average of relevant income multiplied by a factor established by the Regulator for each business line.

The following table shows the operational risk capital requirements broken down according to the calculation models used and the relevant indicator as of last three years:

Table 86. EU OR1 - Regulatory capital for Operational Risk (Million Euros. 12-31-2022)

Banking activities	Relevant indicator			Own funds requirements	Risk weighted exposure amount
	Year-3	Year-2	Last year		
Banking activities subject to basic indicator approach (BIA)	296	576	641	76	946
Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	12,735	14,205	19,784	2,088	26,103
Subject to TSA:	10,009	11,375	16,651		
Subject to ASA:	2,726	2,830	3,132		
Banking activities subject to advanced measurement approaches AMA	—	—	—	—	—
Total				**2,164**	**27,049**

EU OR1 - Regulatory capital for Operational Risk (Million Euros. 12-31-2021)

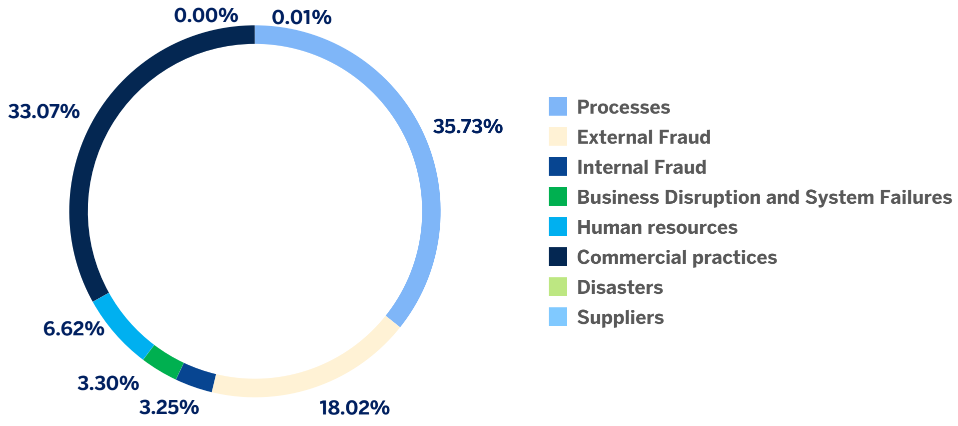
Banking activities	Relevant indicator			Own funds requirements	Risk weighted exposure amount
	Year-3	Year-2	Last year		
Banking activities subject to basic indicator approach (BIA)	327	636	233	60	748
Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	18,352	20,386	17,633	2,467	30,841
Subject to TSA:	18,352	20,386	17,633		
Subject to ASA:	—	—	—		
Banking activities subject to advanced measurement approaches AMA	—	—	—	—	—
Total				**2,527**	**31,589**

In 2022 the BBVA Group received authorization from the ECB to apply the alternative standardized approach in BBVA Mexico and BBVA Peru for the purpose of measuring the capital requirements for operational risk on a consolidated basis, which explains the reduction of the requirement with respect to December 2021 at Group level.

4.6.5. Group's operational risk profile

BBVA's operational risk profile by risk type in 2022 is as follows:

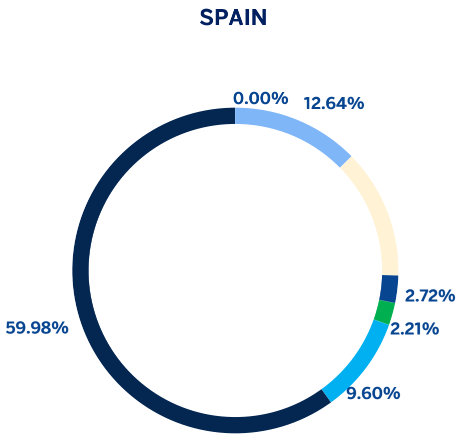
Chart 21. Operational Risk Profile of BBVA Group



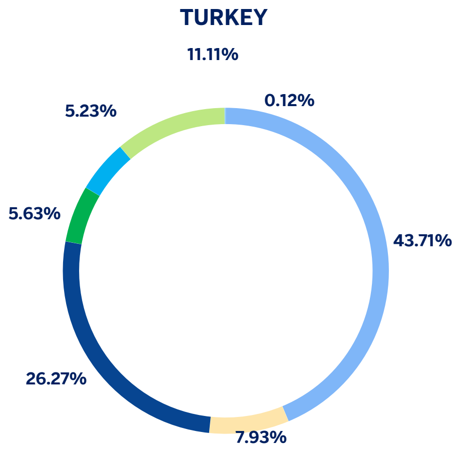
During 2022, there was recoveries in Disasters. There is no percentage for these categories

The following charts reflect the distribution of operational losses by risk class and country for 2022.

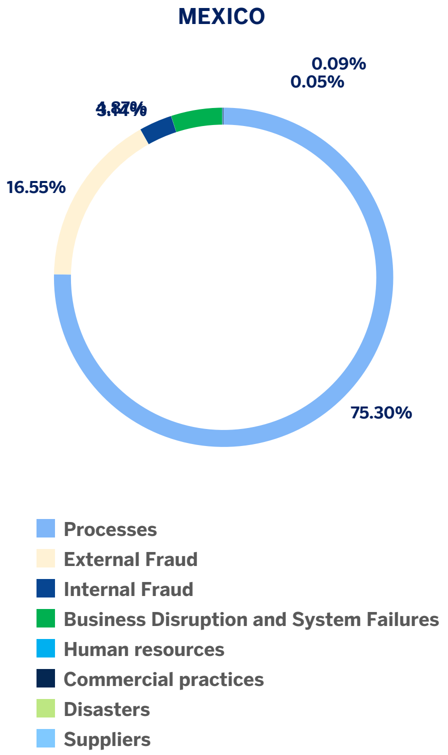
Chart 22. Operational Risk by risk and country

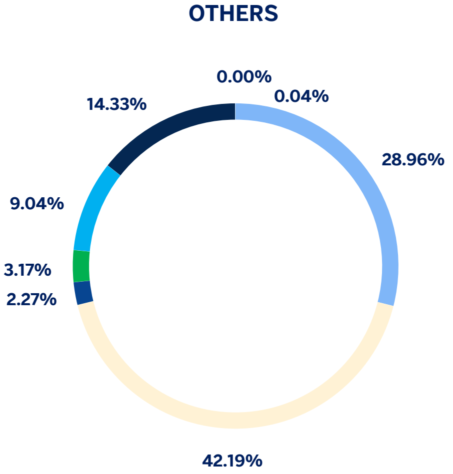


* During 2022, there was recoveries in Disasters. There is no percentage for these categories.



* In the year 2022, in Turkey there has been a release of provisions for Commercial practices in excess of total operational losses. Therefore, the category does not indicate any percentage value.





*During 2022, there was recoveries in Disasters. There is no percentage for these categories

5. Leverage ratio

5.1. Leverage Ratio definition and composition

The leverage ratio (LR) is a regulatory measure (not risk-based) complementing capital designed to guarantee the soundness and financial strength of institutions in terms of indebtedness.

CRR II introduces a mandatory minimum leverage ratio requirement, set at 3% of Tier 1 capital over the total exposure measure.

However, institutions that decide to exclude central bank exposures from the total exposure measure must recalibrate upwards this 3% minimum requirement such that only recently accumulated central bank exposures (only the increase in central bank exposures since the end of 2019) effectively benefit from leverage ratio relief. This exclusion has applied until March 31, 2022.

Described below are the elements making up the leverage ratio, in accordance with CRR II:

- Tier 1 capital (letter i in the following table): Section 3.2. of this Document presents details of the eligible own funds, calculated based on the criteria defined in the CRR.
- Total Exposure: As set out in Article 429 of the CRR, the total exposure measure generally follows the book value subject to the following considerations:
    - On-balance sheet exposure other than derivatives is included net of allowances and accounting valuation adjustments.
    - The measure of the Group's total exposure is composed of the total assets as per financial statements adjusted for reconciliation between the accounting perimeter and the prudential perimeter.

Total exposure for the purpose of calculating the leverage ratio is composed by the sum of the exposure values of:

- Assets: the exposure value of an asset item will be its accounting value remaining after the application of specific credit risk adjustments. In general terms, securities financing transactions will not be compensated except for certain conditions.
- Derivatives contracts: the Entity calculates the exposure value of derivatives contracts in accordance with the standard method of counterparty risk (SA-CCR). When calculating the exposure value, the effects of compensation agreements (netting) will be taken into account. For the purposes of calculating the exposure value, collateral received will not be included, except under certain conditions.
- Add-ons for counterparty credit risk of securities financing transactions (SFTs): in addition to the calculation of the exposure value of securities financing transactions, included in the first point, the total exposure measure shall include an add-on due to counterparty credit risk in accordance with article 429e of the CRR II
- Off-balance sheet items: these correspond to risk and contingent liabilities and commitments, mainly collateral and undrawn balances. A minimum floor is applied to conversion factors (CCFs) of 10% in line with the provisions of the Article 429f (3) of CRR II.
- Regular-way purchases or sales awaiting settlement.

The exposures excluded from the total exposure measure are:

- Tier 1 deductions: all those amounts of assets that have been deducted in the determination of the eligible Tier 1 capital are deducted, in order not to duplicate exposure. The main deductions are intangible assets, loss carry forwards and other deductions defined in Article 36 of CRR II and indicated in section 3.2 of this report.
- Additionally, as of December 31, 2021, the temporary exemption of certain exposures to central banks was included. This exemption ceased to be into force in March 2022.

The table below shows a breakdown of the items making up the leverage ratio as of December 31, 2022, June 30, 2022 and as of December 31, 2021.

Table 87. EU LR1 - Summary reconciliation of accounting assets and exposure corresponding to the Leverage Ratio (Million Euros)

	12-31-2022		6-30-2022		12-31-2021	
	Phased-In	**Fully Loaded**	**Phased-In**	**Fully Loaded**	**Phased-In**	**Fully Loaded**
(a) Total assets as published financial statements	713,140	713,140	715,294	715,294	662,885	662,885
(b) Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(24,189)	(24,189)	(22,734)	(22,734)	(21,373)	(21,373)
(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	(1,995)	(1,995)	(1,460)	(1,460)	(1,899)	(1,899)
(Adjustment for temporary exemption of exposures to central bank (if applicable))	—	—	—	—	(33,747)	(33,747)
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429a(1)(i) of Regulation (EU) No 575/2013)	—	—	—	—	—	—
Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	—	—	—	—	—	—
Adjustment for eligible cash pooling transactions	—	—	—	—	—	—
(c) Adjustments for derivative financial instruments	(18,618)	(18,618)	(13,432)	(13,432)	(6,311)	(6,311)
(d) Adjustments for securities financing transactions "SFTs"	6,659	6,659	7,492	7,492	12,686	12,686
(e) Adjustment for off-balance sheet items(1)	67,971	67,971	72,244	72,244	64,107	64,107
(Adjustment for prudent valuation adjustments and general credit risk adjustments which have reduced Tier 1 capital)	—	—	—	—	—	—
(f) (Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	—	—	—	—	—	—
(g) (Adjustment for exposures excluded from the total exposure measure corresponding to the leverage ratio under Article 429(14) of Regulation (EU) No 575/2013)	—	—	—	—	—	—
(h) Other adjustments	(4,979)	(5,232)	(5,387)	(5,770)	(4,558)	(5,323)
Leverage ratio total exposure measure	**737,990**	**737,736**	**752,016**	**751,634**	**671,790**	**671,025**
i) Capital Tier 1	**47,931**	**47,677**	**46,828**	**46,445**	**45,687**	**44,922**
Leverage ratio	**6.49 %**	**6.46 %**	**6.23 %**	**6.18 %**	**6.80 %**	**6.69 %**

(1) Corresponds to the off-balance sheet exposure after applying the conversion factors obtained in accordance with Article 429(10) of the CRR.

The full series of the reconciliation of the leverage ratio exposure, during the year 2022, is available in the editable file "Pillar 3 2022 - Tables & Annexes".

The table below includes the breakdown of on balance sheet exposures, excluding derivatives and securities financing transactions.

Table 88. EU LR3 - Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (Millon euros)

	12-31-2022		6-30-2022		12-31-2021	
	Phased-In	**Fully Loaded**	**Phased-In**	**Fully Loaded**	**Phased-In**	**Fully Loaded**
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	595,477	599,631	599,631	599,631	516,179	516,179
Trading book exposures	28,199	35,968	35,968	35,968	41,234	41,234
Banking book exposures, of which:	567,278	563,663	563,663	563,663	474,945	474,945
Covered bonds	35	35	35	35	405	405
Exposures treated as sovereigns	163,963	172,882	172,882	172,882	117,682	117,682
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	10,190	8,829	8,829	8,829	8,396	8,396
Institutions	18,630	20,545	20,545	20,545	16,856	16,856
Secured by mortgages of immovable properties	114,849	103,257	103,257	103,257	100,550	100,550
Retail exposures	83,332	79,095	79,095	79,095	71,193	71,193
Corporates	138,715	129,508	129,508	129,508	118,158	118,158
Exposures in default	4,057	4,796	4,796	4,796	4,937	4,937
Other exposures (eg equity, securitisations, and other non-credit obligation assets)	33,508	44,716	44,716	44,716	36,769	36,769

5.2. Evolution of the ratio

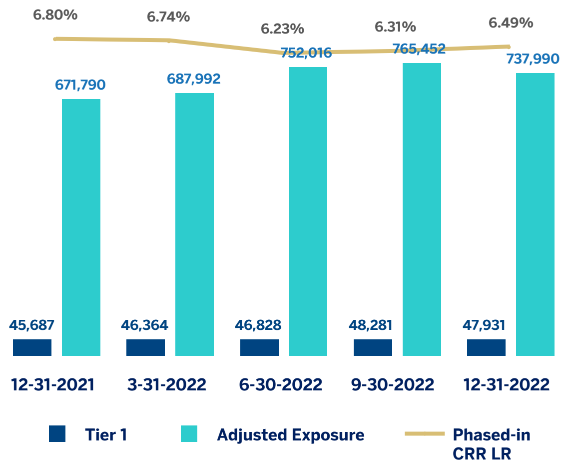
As of December 31, 2022, the leverage ratio stands at 6.49% (6.46% in fully loaded terms), increasing by 19 basis points compared to September 2022. This increase is mainly due to the decrease in the exposure measurement, impulsed by the evolution of currencies in the last quarter of 2022, which contributed to a negative impact of 23 basis points on the leverage ratio.TheTier1 decrease represents a negative impact of 5 basis points on the leverage ratio.

Additionally, during the year, it is worth highlighting the completion on March 31, of the transitional period for the exclusion of certain exposures to central banks from the total exposure measure, in accordance with Regulation (EU) 2019/876. This effect have contributed to the leverage ratio decreasing by 31 basis points compared to December 31, 2021 (6.80% phased-in).

The complete series of exposures to the leverage ratio, during the year 2022, is available in the editable file "Pillar 3 2022 - Tables & Annexes".

On the following chart, it is showed the leverage ratio evolution along the year, as well as its components:

Chart 23. Trends in the leverage ratio



5.3. Governance

The activities making up the Group’s regulatory reporting include monthly measurement and control of the leverage ratio by assessing and monitoring this measure, to guarantee comply with the regulatory minimum levels and intern objectives. Additionally, the Group have identified measures to ensure the restoration of its levels given unexpected events which could affect the compliance of this objectives.

In line with the risk appetite framework and structural risk management, the Group operates by establishing limits and operational measures to achieve a sustainable development and growth of the balance sheet, maintaining tolerable risk levels at all times. This can be seen in the fact that the regulatory leverage level itself is well above the minimum required levels.

6. Information on remuneration

In accordance with the provisions of article 85 of Act 10/2014 of June 26, on the regulation, supervision and solvency of credit institutions ("Act 10/2014") and article 93 of Royal Decree 84/2015 of February 13, implementing said Act ("Royal Decree 84/2015"), and pursuant to the provisions of the Bank of Spain Circular 2/2016 of February 2, to credit institutions on supervision and solvency, completing the adaptation of the Spanish legal system to Directive 2013/36/EU and Regulation (EU) nº.575/2013 (the "Bank of Spain Circular 2/2016"), credit institutions shall provide the public with and update periodically, and at least once a year, inter alia, information concerning their remuneration policies and practices established in section eight of Regulation 575/2013/EU, in relation to those categories of staff whose professional activities have a significant impact on the risk profile of the institution and/or its consolidated group (the "Identified Staff" or "Risk Takers").

6.1. Information on the decision-making process used to establish the remuneration policy for the Identified Staff

In accordance with the provisions contained in the Bylaws of BBVA ("BBVA", the "Institution" or the "Bank"), the BBVA Board of Directors Regulations grant the Board the powers, among others, to approve the remuneration policy for directors, for submission to the General Shareholders' Meeting, that of senior management and the rest of the Identified Staff, as well as the determination of the remuneration of non-executive directors; and, in the case of executive directors, the corresponding remuneration for their executive functions and the remaining conditions to be respected in their contracts.

In addition, among the Committees constituted to support the Board in carrying out its duties, the Remuneration Committee is the body which assists it in remuneration matters related to its directors, senior management and the rest of the Identified Staff, ensuring observance of the remuneration policies established.

Thus, in accordance Article 5 of the Remuneration Committee Regulations, and without prejudice to any other functions assigned to it by law, the internal rules of the Bank or assigned to it by decision of the Board of Directors, the Remuneration Committee performs, on a general basis, the following functions:

1. Propose the directors' remuneration policy to the Board of Directors, for submission to the General Shareholders' Meeting, likewise submitting the corresponding report, in the terms established by applicable law at any time.
2. Determine the remuneration of non-executive directors, as provided for in the directors' remuneration policy, submitting the corresponding proposals to the Board.
3. Determine the extent and amount of individual remunerations, rights and other economic rewards, as well as the remaining contractual conditions for executive directors, so that these can be contractually agreed, in line with the directors' remuneration policy, submitting the corresponding proposals to the Board of Directors.
4. Determine the objectives and criteria for measuring the variable remuneration of the executive directors and assess their degree of achievement thereof, submitting the corresponding proposals to the Board.
5. Analyse, where appropriate, the need to make ex ante or ex post adjustments to variable remuneration, including the application of reduction or recovery clauses for variable remuneration, submitting the corresponding proposals to the Board of Directors, prior report of the relevant committees in each case.
6. Propose on an annual basis to the Board of Directors the annual report on the remuneration of the Bank's directors, which will be submitted to the Annual General Shareholders’ Meeting as set out in applicable legislation.
7. Propose to the Board of Directors the remuneration policy for senior managers and other employees of the Identified Staff; and, oversee its implementation, including the supervision of the process for the identification of the aforementioned Staff.
8. Submit to the Board of Directors the Group's remuneration policy, which may include that of the senior managers and the rest of the Identified Staff, as indicated in the previous paragraph, and oversee its implementation.
9. Submit to the Board of Directors the proposed basic contractual conditions for senior managers, including their remuneration and severance in the event of termination.
10. Directly supervise the remuneration of senior managers and determine, within the framework of the remuneration model applicable to Senior Management at any given time, the objectives and criteria for measuring variable remuneration of the heads of the Regulation & Internal Control area and the Internal Audit area, submitting the corresponding proposals to the Board of Directors, based on proposals submitted to it in turn by the Risk and Compliance Committee and the Audit Committee.
11. Ensure compliance with the remuneration policies established by the Institution and review them periodically, proposing modifications, where appropriate, to ensure, among other things, that they are adequate to attract and retain the best professionals, so that they contribute to the creation of long-term value and adequate control and management of risks, and that they attend to the principle of pay equality; in particular, ensure that the remuneration policies established by the Institution are subject to internal, central and independent review at least once a year.

12. Verify information on the remuneration of directors and senior managers contained in the various corporate documents, including the annual report on the remuneration of directors.

13. Oversee the selection of external advisers, whose advice or support is required for the performance of their functions in matters of remuneration, ensuring that any potential conflicts of interest do not impair the independence of the advice provided.

At the end of 2022 financial year, the Remuneration Committee was composed of five members; all of them had the status of non-executive directors, with the majority being independent, including the Chair. The names, positions and status of the members of the Remuneration Committee are detailed in the following table:

Table 89. Composition of the Remuneration Committee

Name and surname(s)	Position	Status
Dª. Belén Garijo López	Chair	Independent
Dª. Lourdes Máiz Carro	Member	Independent
Dª. Ana Peralta Moreno	Member	Independent
D. Carlos Salazar Lomelín	Member	External
D. Jan Verplancke	Member	Independent

The members of the Remuneration Committee who held such position at the end of 2022 have received a total amount of 278 thousand euros for their membership. The Annual Report on BBVA Directors' Remuneration referred to said financial year includes the individual remuneration of each director, broken down by remuneration items.

The Remuneration Committee performs its functions with full autonomy of operation, meeting as often as necessary to carry out its duties, headed by its Chair. In 2022 financial year it met on a total of 7 occasions.

In order to adequately perform its functions, the Committee uses advice provided by the Bank's internal services, and may also make use of any external advice it needs to establish criteria on matters within its remit. Thus, during 2022 the Committee has relied on information provided by the leading global consulting firm on compensation of directors and senior managers, WTW, and has received legal advice from the law firm J&A Garrigues S.L.P.

In addition, the Board's Risks and Compliance Committee also participates in the process of establishing a remuneration policy, ensuring that it is compatible with adequate and efficient risk management and does not offer incentives to take risks that may exceed the level tolerated by the Group.

Since 2011, the Bank has a specific remuneration system applicable to the members of the Identified Staff, among whom are members of the Board of Directors and senior management of BBVA. It has been designed within the framework of the regulations applicable to credit institutions, considering best practices and recommendations at the local and international level in this matter.

In this sense, BBVA has a specific remuneration policy applicable to members of the Board of Directors (the “BBVA Directors' Remuneration Policy”), which, in accordance with BBVA's Bylaws, distinguishes between the remuneration system applicable to non-executive directors and executive directors.
As stated in this policy, the remuneration system for executive directors corresponds, generally, with the system applicable to the rest of the Identified Staff, incorporating some particularities of its own derived from their status as directors. The remuneration system for non-executive directors is based on the criteria of responsibility, dedication and incompatibilities inherent to their position, consisting only of fixed items and no variable remuneration.

The BBVA Directors' Remuneration Policy applicable during the 2022 financial year was approved by BBVA's General Shareholders' Meeting held on April 20, 2021. This policy is available on the Bank's corporate website (www.bbva.com).

On February 9, 2023, the Board of Directors, upon the proposal of the Remuneration Committee, has approved a new director’s remuneration policy, which will be submitted for approval at the BBVA's Annual General Shareholders’ Meeting to be held, foreseeably, on March 17, 2023 and which, if approved, will apply to the remuneration for the financial years 2023, 2024, 2025 and 2026.

This new policy incorporates as the main novelty a change in the annual variable remuneration scheme for executive directors, which now consists of a short-term incentive and a long-term incentive. The indicators that will be used to calculate the long-term incentive in 2023 will include, among others, indicators related to the degree of compliance with the decarbonisation objectives of a series of sectors for which the Bank publishes specific objectives and the evolution of the percentage of women in executive positions in the BBVA Group.

Furthermore, BBVA has a general remuneration policy for BBVA Group, which is applicable, in general, to all the employees of BBVA and the companies in its Group (the "BBVA Group General Remuneration Policy" or the "Policy", and the "Group Entities", respectively). This Policy includes the specific rules applicable to the Identified Staff, including the members of the senior management (excluding the executive director’s, whose remuneration is governed by the BBVA Directors' Remuneration Policy), as well as the procedure for their identification.

The BBVA Group General Remuneration Policy applicable during the 2022 financial year was approved by the Board of Directors on June 30, 2021, upon the proposal of the Remuneration Committee.

In 2023, a new update of this policy is foreseen in order to incorporate into the variable remuneration model for the Identified Staff, including senior management of BBVA, the new features applicable to them introduced in the new directors' remuneration policy submitted for approval by the BBVA's Annual General Shareholders' Meeting.

The duties of the Remuneration Committee include submitting these policies to the Board of Directors for approval and, in the case of the BBVA Directors' Remuneration Policy, additionally for submission to the BBVA's Annual General Shareholders' Meeting, and submitting the corresponding report, all in accordance with the terms established at any given time by applicable legislation.

The BBVA Group General Remuneration Policy, is coordinated at the corporate level by BBVA's global Talent and Culture area. The supervisory functions of the Group actively and regularly cooperate in its design and oversight, in accordance with the powers conferred to them by applicable legislation.

The Board of Directors periodically reviews the general principles of the Policy and oversees its implementation, based on the information and report received by the Talent & Culture area and the various corresponding control functions, thus guaranteeing that this Policy is applied properly and in a manner consistent with BBVA's Corporate Governance System.

In this way, the Bank employs a decision-making system for remuneration featuring the Remuneration Committee as its central element, which, as stated, is in charge of proposing to the Board of Directors both the BBVA Group General Remuneration Policy, which includes the specific rules applicable to the Identified Staff, and the BBVA Directors' Remuneration Policy, for its subsequent submission to the General Shareholders' Meeting in the latter case.

In the course of implementing the remuneration policies approved by the Bank's corporate bodies, in 2022 the Remuneration Committee analysed the remuneration proposals needed for the development and implementation of these remuneration policies.

Thus, at the beginning of the financial year, the Remuneration Committee determined the Annual Performance Indicators used for the calculation of the 2022 Annual Variable Remuneration of the executive directors and their corresponding weights, together with the performance targets and achievement scales associated with the indicators, submitting the corresponding proposals to the Board for approval.

The Remuneration Committee has also determined the minimum thresholds of Attributable Profit and Capital Ratio established as ex ante adjustments for the generation of Annual Variable Remuneration in the financial year 2022 for the executive directors and rest of the Identified Staff, submitting the corresponding proposals to the Board for approval.

In addition, the Remuneration Committee determined, for their proposal to the Board, the Multi-Year Performance Indicators that will be used as ex post adjustments to determine the Deferred Portion of the Annual Variable Remuneration for the financial year 2022 of the executive directors and the rest of the members of the Identified Staff, together with their corresponding weights, counting for this with the prior analysis of the Risks and Compliance Committee, to ensure their adequacy for the Bank's risk profile.

Moreover, in 2022, the Remuneration Committee submitted to the Board for its submission in turn to the General Shareholders' Meeting held in 2022 the proposed resolution regarding the increase of the maximum level of variable remuneration up to 200% of the fixed component of the total remuneration of a certain number of members of the Identified Staff, also proposing to the Board the report accompanying this resolution, which was made available to the Bank's shareholders.

Likewise, in accordance with the proposal submitted by the Remuneration Committee, the Board approved the Annual Report on the Remuneration of BBVA Directors for financial year 2021, developed in accordance with Circular 4/2013 of the National Securities Market Commission (CNMV), which was submitted to an advisory vote at the General Shareholders' Meeting held in 2022, pursuant to article 541 of the Corporate Enterprises Act, and which was made available to the Bank's shareholders through the corporate website (www.bbva.com).

The Annual Report on the Remuneration of Directors of BBVA includes a description of the basic principles of the Bank's remuneration policy for the members of the Board, whether executive or non-executive, as well as a detailed presentation of the different elements and amounts making up their remuneration.

Moreover, within the framework of the function attributed to the Remuneration Committee for the oversight and periodic review of the established remuneration policies, the Committee reviewed their application in 2021, in accordance with applicable law and recommendations. For this purpose, the review covered the BBVA Group General Remuneration Policy, which includes the special provisions for the Identified Staff, as well as the procedure for their identification, and the BBVA Directors' Remuneration Policy in force in that financial year, based on an internal, central and independent review carried out by the Bank's Internal

Audit area. The result of all this was submitted to the Board.

Additionally, the Committee has received information on the application of the procedure for identification of Identified Staff in 2022 financial year from the global Talent and Culture area, both at individual level for BBVA and for BBVA Group at consolidated level, in accordance with the qualitative and quantitative criteria established in the applicable regulations and internal criteria established by the Bank. In particular, it was informed of the number of persons included in the Identified Staff and that no exclusions would be requested in 2022, the foregoing being duly reported to the Board.

Lastly, with the support of the Talent and Culture area and the external experts WTW and J&A Garrigues, S.L.P., the Committee has carried out a strategic reflection to continue making progress in the progressive improvement of the variable remuneration model for the Identified Staff, including executive directors, which, as of the date of this report, has resulted in the proposal to the General Shareholders' Meeting in 2023 of a new BBVA directors’ remuneration policy.

All of the issues discussed above, along with other matters within its remit, are detailed in the Remuneration Committee Activity Report for 2022 financial year, published on the Bank's corporate website on the occasion of the calling of the 2023 General Shareholders' Meeting (www.bbva.com).

6.2. Description of the different types of employees included in the Identified Staff

In accordance with BBVA Group's General Remuneration Policy, the selection of the persons who make up the Identified Staff within BBVA and/or its Group is part of an annual process based on the qualitative and quantitative criteria established under Article 32.1 of Act 10/2014 and (EU) Delegated Regulation 2021/923/EU of the Commission of March 25, 2021, supplementing CRD IV (the "Delegated Regulation 2021/923/EU"). This process also includes internal criteria established by BBVA complementary to those indicated in said Regulation, in compliance with Rule 38 of Bank of Spain Circular 2/2016 (hereinafter, the "Identification Process").

The qualitative criteria established in the Identification Process are defined based on the level of responsibility of the position (for example, members of the BBVA Board of Directors, members of BBVA Senior Management, staff responsible for control functions and other key functions or significant business units within the Group), as well as on the basis of the staff's capacity or responsibility to assume or manage risk.

The quantitative criteria establish that employees have a significant impact on the risk profile based on the total remuneration awarded, unless BBVA determines that, in fact, the activity of such staff has no significant impact on the risk profile. The application of these criteria takes into account the total remuneration awarded in the previous financial year, or the remuneration established by the applicable rules at all times.

The Identification Process is updated during the year and takes all BBVA and BBVA Group personnel into consideration, respectively, allowing the inclusion of personnel in the Identified Staff who meet or are likely to meet the qualitative criteria established under applicable law for at least three months out of a given financial year.

The Group Entities actively participate in the Identification Process carried out by BBVA, providing all the information necessary in order to adequately identify the personnel having a significant impact on the Group's risk profile.

In accordance with the Identification Process previously indicated, at the year-end 2022 a total of 320 Risk Takers, of which:

- 157 were identified both at BBVA Group level and at individual level in BBVA,
- 141 are only identified at BBVA Group level, and
- 22 are only identified at individual level in BBVA.

These include:

- Members of the BBVA Board of Directors[6].
- Members of BBVA Senior Management.
- Risk Takers by function: comprised by those members that carry out the functions that correspond to the qualitative criteria established under Article 32.1 of Act 10/2014 and Delegated Regulation 2021/923/EU, as well as those Risk Takers identified according to internal Bank criteria based on Rule 38 of Bank of Spain Circular 2/2016.
- Risk Takers by remuneration: composed of those employees who meet the quantitative criteria of Article 32.1 of Act 10/2014 and Delegated Regulation EU 2021/923/EU.

The total number of Risk Takers identified in 2022 financial year, which, as indicated above, was 320 people, fell with respect to the total number of members identified in 2021, which was 332 people, due mainly to the application of quantitative criteria, that in 2022 has taken into consideration the total remuneration awarded in the previous financial year, which includes the annual variable remuneration for the 2020 financial year, which certain members of the Identified Staff waived, in whole or in part, as a gesture of responsibility and commitment in view of the exceptional circumstances arising from the COVID-19 crisis.

Notwithstanding the foregoing, BBVA will adapt the composition of the Identified Staff, including the categories of professionals deemed necessary at any time, in accordance with the requirements established for that purpose under the terms of applicable regulations.

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[6] In the remuneration policy for non-executive directors, they are identified as Risk Takers under article 32.1 of Act 10/2014, although as specified in section 6.3 of this document, they have a specific system of remuneration, different from that applicable to executive directors, and do not receive variable remuneration.

6.3. Key features of the remuneration system

As stated in section 6.1, at the proposal of the Remuneration Committee, the Board of Directors approved, in 2021 financial year, the update of the BBVA Group General Remuneration Policy applicable in 2022 financial year, in which the remuneration system applicable to the Identified Staff, as well as the Identification Process referred to in section 6.2 above is included.

The BBVA Group General Remuneration Policy is geared toward the recurring generation of value for the Group, the alignment of the interests of its employees and shareholders with prudent risk management, and the development of the strategy defined by the Group.

This policy is one of the elements devised by the Board of Directors, as part of the Bank's Corporate Governance System, to promote proper management and oversight of the Institution and its Group, and is based on the following principles:

- long-term value creation;
- results attained through sound and responsible risk-taking;
- attracting and retaining the best professionals;
- rewarding the level of responsibility and professional career;
- ensuring internal equity and external competitiveness;
- ensuring equal pay for men and women; and
- ensuring transparency of the remuneration model.

Based on the general principles above, BBVA has defined the Group's General Remuneration Policy, taking into account both compliance with the legal requirements applicable to credit institutions and to the different sectors in which the Group operates, and alignment with best market practices, including arrangements devised to reduce exposure to excessive risks and align remuneration with the Group's strategy, objectives, values and long-term interests.

Thus, according to these principles, the Policy:

- contributes to the business strategy of BBVA and its Group, and to the achievement of its objectives, values, interests, value creation and long-term sustainability;
- is compatible with and promotes sound and effective risk management and does not provide incentives to assume risks that exceed the level tolerated by the Institution or the BBVA Group, in a manner that is consistent with the BBVA Group's risk strategy and culture;
- is clear, comprehensible and transparent, with a simple wording that enables the understanding of the different components making up remuneration and the conditions for the award, vesting and payment thereof. To that end, it distinguishes clearly between the criteria for determining fixed remuneration and variable remuneration;
- is gender neutral, as it reflects equal compensation for the same duties or duties of equal value and does not establish any difference or discrimination on the basis of gender;
- includes measures to avoid conflicts of interest, promoting the independence of judgement of persons involved in decision-making and in the oversight and control of management and the establishment of remuneration systems; and
- pursues that remuneration is not based solely or primarily on quantitative criteria, taking into account appropriate qualitative criteria, which reflect compliance with applicable regulations.

In accordance with the above, the remuneration system generally applicable to all BBVA Group staff comprises the following:

a) A fixed remuneration, which takes into account the level of responsibility, the functions carried out and the professional career of each employee, under the principles of internal equity and the market value of the function, constituting a significant portion of the total pay. The award and amount of fixed remuneration are based on predetermined objective and non-discretionary criteria.

b) A variable remuneration, consisting of payments or allowances in cash or in kind, in addition to fixed remuneration, which depend on variable parameters. In no case will variable remuneration limit the ability of the Group to strengthen its capital base in accordance with regulatory requirements and it shall consider current and future risks as well as the costs of the necessary capital and liquidity, reflecting a performance that is sustainable and adapted to risk.

   Guaranteed variable remuneration will only be awarded on an exceptional basis, in accordance with the terms established under applicable regulations, only for newly hired staff, and limited to the first year of employment.

Within this remuneration model for general application, the BBVA Group General Remuneration Policy includes certain special provisions, applicable, on the one hand, to staff exercising control functions and, on the other hand, to staff exercising functions related to the sale of products and the provision of services to clients. Thus:

i. Staff who perform control functions are independent from the units they supervise, have the necessary authority and are remunerated according to the achievement of targets associated with their duties, regardless of the results of the areas they supervise, thereby avoiding potential conflicts of interest.

   In order to strengthen the independence and objectivity of these functions, the fixed components of their remuneration have a greater weight than the variable components,with the variable components being mainly related to objectives specific to their function.

   In addition, the remuneration of BBVA senior managers in independent control functions, including compliance and risk management functions, is directly supervised by the Remuneration Committee, as is the case with the rest of the members of BBVA's Senior Management, as the Board of Directors is the body responsible for establishing the basic conditions of their contracts.

   Moreover, the Board of Directors, on the proposal of the BBVA Remuneration Committee following prior analysis by the Audit Committee and the Risk and Compliance Committee, respectively, is responsible for determining the targets and performance evaluation of the global heads of the Internal Audit and Regulation & Internal Control functions.

ii. The design and implementation of the remuneration of the Group staff involved in the provision of services to clients, watches for the protection of their interests and the quality of the services provided, so that:

   - responsible business conduct and fair treatment of clients is fostered;
   - incentives are not established in a way that may induce staff to put their own interests or those of BBVA Group first, to the possible detriment of the interests of their clients;
   - remuneration is not primordially or exclusively linked to the sale of a product, or a category or specific type of product, such as products that are more lucrative for the institution or employee, when there are others more in line with client needs; and that this objective is not set as that with the greatest weight in the remuneration package; and
   - an appropriate balance is maintained between the fixed and variable elements of the remuneration.

   Moreover, BBVA and the Group Entities directly subject to the customer protection regulations must comply with the specific remuneration requirements established at any time.

Pursuant to the legal requirements established by Act 10/2014 and its regulatory implementation, the BBVA Group General Remuneration Policy defines specific rules applicable to the Identified Staff, in accordance with the regulations and recommendations applicable to remuneration schemes for these employees.

The result is a remuneration system for Identified Staff focused specifically on aligning their remuneration with the risks, and also the long-term objectives and interests of BBVA and its Group, whose fundamental characteristics are the following:

- Balance between the fixed and variable components of the total remuneration, in line with that established in the applicable regulations, allowing a fully flexible policy regarding the payment of variable components, which may cause them to be reduced, even in their entirety, where appropriate.
- The proportion between the two components has been established taking into account the type of functions carried out by each beneficiary (business, support or control) and, consequently, their impact on the risk profile, adapted in each case to the reality of the different Group Entities or functions.
- The variable element of remuneration for a financial year (understood as the sum of all the variable components of remuneration) shall be limited to a maximum amount of 100% of the fixed element of total remuneration (understood as the sum of all the fixed components of remuneration), unless the BBVA General Shareholders' Meeting resolves to increase this percentage to a maximum of 200%. As explained in detail in section 6.7 of this report, the BBVA General Shareholders' Meeting held on March 18, 2022, authorized the increase in the maximum limit to 200% for a maximum of 270 Risk Takers.
- No personal hedging strategies or insurance may be used in connection with variable remuneration or liability that may undermine the effects of alignment with prudent risk management.
- Within the framework of the corporate variable remuneration model of BBVA Group, the members of the Identified Staff receive an annual variable remuneration, which reflects their performance on the basis of the level of achievement of targets that are in line with the risk incurred, calculated on the basis of:

i. group, area and individual annual performance indicators (financial and non-financial) that take into account current and future risks, as well as the strategic priorities defined by the Group (the "Annual Performance Indicators");

ii. the scales of achievement established where appropriate according to the weight assigned to each Annual Performance Indicator and based on the targets set for each of them; and

iii. a "target" annual variable remuneration that represents the amount of annual variable remuneration if 100% of the targets were met, which is a single amount for each function (the "Target Annual Variable Remuneration" or "Target Bonus").

The amount of annual variable remuneration, in accordance with the corresponding scales of achievement, can range between 0% and 150% of the Target Annual Variable Remuneration.

The resulting amount constitutes the annual variable remuneration ("Annual Variable Remuneration" or "AVR") of each beneficiary.

The financial Annual Performance Indicators are related to the Bank's most relevant management metrics, while the non-financial indicators are related to the strategic targets defined at Group, area and individual level for each beneficiary.

Each function within the organization has an assigned weight or slotting which determines the percentage of Annual Variable Remuneration which is linked to the performance of the Group, the area and individual; and which depends on the extent that the function is linked to the global strategy and the area or with its own individual results.

The AVR Annual Performance Indicators approved for 2022 financial year for the Identified Staff are as follows:

Table 90. 2022 AVR Annual Performance Indicators

Indicator	Weight		
	Chair	**Chief Executive Officer**	**Rest of Identified Staff**
Financial indicators			
Net Attributable Profit without corporate transactions	10%	15%	10%
Tangible Book Value per share	15%	10%	10%
RORC	10%	10%	10%
Efficiency ratio	10%	15%	10%
Gross Margin	—	—	10%
Non-financial indicators			
Net Promoted Score (NPS)	10%	15%	10%
Mobilization of sustainable financing	10%	10%	10%
Digital Sales	10%	10%	10%
Target Customers	—	—	10%
Enterprise Transactionality Engagement	—	—	10%
Own indicators(1)	25%	15%	—

(1) Own indicators consider the strategic dimensions to be fostered by the Chair and Chief Executive Officer, associated with their responsibilities and functions.

In 2022, as in 2021, among the non-financial Annual Performance Indicators used for the calculation of the Annual Variable Remuneration of all employees, the indicator of Mobilization of sustainable finance has been included, directly associated with the activity carried out by the Group in compliance with its climate change commitments to the market and which strengthens BBVA's commitment to achieve its sustainable development objectives.

- To ensure alignment with results and long-term sustainability, the Annual Variable Remuneration for Identified Staff members for each financial year will be subject to ex ante adjustments, so that it shall be reduced at the time of the performance assessment in the event of negative performance of the Group's results or other parameters such as the level of achievement of budgeted targets; and it will not accrue, or will accrue by a reduced amount, should a certain level of profit and capital ratios not be achieved, as established at the start of each financial year by the Board of Directors.

- The Annual Variable Remuneration of members of Identified Staff shall be subject to the following rules for award, vesting and payment:

  – Once the Annual Variable Remuneration has been awarded, at an amount determined by applying the above rules, a percentage of the Annual Variable Remuneration of the Identified Staff -40% for executive directors, members of Senior Management and members of the Identified Staff with particularly high levels of remuneration, and 60% for the rest of the Identified Staff- will be vested and paid, if the conditions are met, in the first four months of the financial year following that to which the Annual Variable Remuneration corresponds (the "Upfront Portion" of the Annual Variable Remuneration).

- The remaining part -60% for executive directors, members of Senior Management and members of Identified Staff with particularly high remuneration, and 40% for the rest of the Identified Staff-, will be deferred over time (the "Deferred Portion" of the Annual Variable Remuneration, or the "Deferred Annual Variable Remuneration"). For BBVA's executive directors and members of Senior Management, the deferral period shall be five years, and for the remaining members of the Identified Staff, four years.

  The Deferred Annual Variable Remuneration will be paid, if the conditions are met, on a pro rata basis, after each of the years of deferral, in an amount equivalent to 25% in the case of the Identified Staff and 20% in the case of BBVA's executive directors and members of Senior Management.

- 50% of the Annual Variable Remuneration, both the Upfront and Deferred Portion, will be established in BBVA shares or in instruments linked to BBVA shares.. For executive directors and members of Senior Management, both 50% of the Upfront Portion and 60% of the Deferred Portion will be determined in BBVA shares.

- The shares or instruments awarded as Annual Variable Remuneration, both in the Upfront and Deferred Portion, will be withheld for a one-year period after delivery, except for those shares or instruments whose sale would be required to honour the payment of taxes accruing on their shares delivery.

- In order to ensure that the assessment process of the results to which the Annual Variable Remuneration is linked within a multi-year framework, considering long-term results, and that the effective payment is made over a period which takes into account the institution's economic cycle and its risks, the Annual Variable Remuneration of the Identified Staff shall be subject to ex post risk adjustments, linked to the result of the multi-year performance indicators.

  For this purpose, the Deferred Portion of the Annual Variable Remuneration of members of the Identified Staff may be reduced, but never increased, based on the result of multi-year performance indicators aligned with the Group's core risk management and control metrics ("Multi-Year Performance Indicators"), related to solvency, liquidity, profitability and value creation.

  The Multi-Year Performance Indicators for all Identified Staff are approved every year by the Board of Directors, at the proposal of the Remuneration Committee, and subsequent to analysis by the Risk and Compliance Committee, which ensures that they are compatible with adequate and effective risk management.

  The Multi-Year Performance Indicators and their weights approved for 2022 financial year are as follows:

  Table 91. Multi-year Performance Indicators

Indicator	Weight
Common Equity Tier (CET) 1 fully loaded	40%
Liquidity Coverage Ratio (LCR)	20%
Return On Tangible Equity (ROTE)	30%
Total Shareholder Return (TSR)	10%

  Once the financial year corresponding to the third year of deferral of the Annual Variable Remuneration has ended, the result of the Multi-Year Performance Indicators established for each financial year will determine any ex post reduction adjustments to be made, if appropriate, on the amount pending payment of the Deferred Portion of the Annual Variable Remuneration.

  For this purpose, the Multi-Year Performance Indicators have associated scales of achievement of the objectives established for each of them, which are determined by the Board of Directors, at the proposal of the Remuneration Committee and with a prior analysis by the Risk and Compliance Committee, once the amount of Annual Variable Remuneration for each financial year has been determined. In this way, if the pre-established thresholds set for each of the Multi-Year Performance Indicators are not achieved, the amount pending payment of the Deferred Portion of the Annual Variable Remuneration will be adjusted, and may be reduced, in the terms indicated in the above paragraph, but never increase.

- Moreover, all the Annual Variable Remuneration of each member of the Identified Staff corresponding to each financial year will also be subject to reduction (malus) and recovery of remuneration already paid (clawback) arrangements, both linked to a downturn in financial performance of the Bank as a whole or of a specific unit or area, or of exposures generated by a member of Identified Staff, when such downturn in financial performance arises from any of the following circumstances:

a) Misconduct, fraud or serious infringement of the Code of Conduct and other applicable internal regulations by an Identified Staff member.

b) Regulatory sanctions or judicial convictions due to events that could be attributable to a specific unit or to personnel responsible for such events.

c) Significant failure of risk management committed by the Bank or by a business or risk control unit, to which the wilful misconduct or gross negligence of an Identified Staff member was a contributing factor.

d) Restatement of the Bank's annual financial statements, except where such restatement is due to a change in applicable accounting legislation.

For this purpose the Bank shall compare the performance assessment carried out for the Identified Staff member with the ex post behaviour of some of the criteria that contributed to achieve the targets. Both malus and clawback arrangements will apply to the Annual Variable Remuneration corresponding to the financial year in which the event giving rise to application of the arrangement occurred, and will remain in force during the deferral and withholding period applicable to said Annual Variable Remuneration.

Nevertheless, in the event that the above circumstances give rise to a dismissal or termination of contract of the Identified Staff member due to serious and guilty breach of duties, malus arrangements may apply to the entire Deferred Annual Variable Remuneration from previous financial years pending payment at the date of the dismissal or termination of contract, in light of the extent of the damage caused.

Moreover, if the above circumstances, regardless of the financial impact caused, create a relevant reputational damage to the Bank, the malus and clawback arrangements may also apply to the Annual Variable Remuneration, including the amounts deferred from previous financial years, whose payment corresponds to or has taken place in the financial year in which the damage is revealed.

In any case, the Annual Variable Remuneration will only vest or be paid if it is sustainable according to the Group's situation as a whole, and justified based on the results of the Bank, the business unit and the Identified Staff member concerned.

- The resulting cash amounts of the Deferred Annual Variable Remuneration finally vested will be updated by applying the year-on-year change in prices given by the Consumer Price Index (CPI).
- In the event of the termination of the contractual relationship of an Identified Staff member before the award of Annual Variable Remuneration, the member will be entitled, if conditions are met, to receive the proportional part of such Annual Variable Remuneration, calculated pro rata for the length of service in the said financial year; subject, in all cases, to the same award, vesting and payment system that would be applicable if the member had remained working, in accordance with the rules described above. The above shall not be applicable to cases where the termination of the contractual relationship is due to a voluntary resignation or lawful dismissal, in which cases the right to the Annual Variable Remuneration will not accrue.

- If the members of the Identified Staff have the right to receive any type of remuneration other than Annual Variable Remuneration considered to be variable remuneration, this remuneration will be subject to the rules for award, vesting and payment applicable in accordance with the type and nature of the remuneration component itself and, in any case, shall comply with the applicable regulations in force at any given time.
- In particular, any retention bonuses to which Identified Staff members may be entitled in accordance with their contracts shall be considered to be variable remuneration and subject to the conditions established with respect thereto in applicable regulations. Thus, they shall comply with requirements in respect of payment in shares, deferral rules, ex post risk adjustments, and malus and clawback arrangements established for Annual Variable Remuneration in the Policy, and shall be considered to be variable remuneration for the purposes of calculating the ratio between fixed and variable remuneration. In any case, retention bonuses shall be properly justified and will be awarded upon conclusion of the retention period.
- The BBVA Directors' Remuneration Policy includes additional restrictions to the transfer of shares

derived from the variable remuneration of executive directors. Specifically, it establishes that once the BBVA shares have been received, the executive directors shall not be able to transfer their ownership until a period of at least three years has elapsed, except if the director in question has, at the time of the transfer, a net economic exposure to the variation in the price of the shares for a market value equivalent to an amount of at least twice their Fixed Annual Remuneration through the ownership of shares, options or other financial instruments. The foregoing shall not apply to the shares that the director needs to sell to meet the costs related to their acquisition or, upon favourable assessment of the Remuneration Committee, to address an extraordinary situation.

- Moreover, in accordance with the provisions of BBVA Group General Remuneration Policy and in line with applicable regulations, payments to members of the Identified Staff due to early termination of a contract will be based on the results obtained over time. In no case shall bad results or inappropriate conduct be rewarded, and payments may not be awarded in cases where there have been clear and serious infringements that justify the immediate termination of the contract or the dismissal of the Identified Staff member. With regard to BBVA directors, the Bank has no commitments to make severance payments.

As regards the pension policy, this shall remain compatible at all times with the Group's long-term business strategy, objectives, values and interests. To this end, BBVA has a pension system which is arranged on the basis of geographic areas and coverage offered to different groups of employees. These groups have been formed according to parameters that, among others, include, origin (meaning the Entity of the Group in which the employees initiated the employment relationship); date of entry; and the level or category of responsibility within the organization.

In general, BBVA's pension schemes to cover the retirement contingency are defined-contribution. Contributions to the Group's employee pension schemes are made within the framework of relevant labour law and individual or group agreements applicable to each Group Entity, sector or geographic area.

The scope of the system (cover for retirement, death and disability) for each group is defined in consideration of the three factors mentioned above.

The basis for the calculation of the benefits (commitments for retirement, death and disability) are established using fixed annual amounts; there are no temporary fluctuations derived from variable components or Individual results.

However, in accordance with Bank of Spain Circular 2/2016, 15% of the agreed annual contributions covering the retirement contingency of executive directors and the rest of members of Senior Management shall be considered "discretionary pension benefits" and shall therefore be based on variable components and be subject to the conditions established for these instruments in the aforementioned Circular.

To comply with the above, the annual amount of the "discretionary pension benefits" will be determined by reference to the result of the Annual Variable Remuneration awarded in each financial year and the following rules will apply:

- They shall form part of the total amount of variable remuneration for the purposes of the maximum limit between fixed and variable remuneration;

- They shall be paid in full in BBVA shares;

- They shall be subject to a five-year withholding period from the date on which the beneficiary ceases to render services to the Bank for any reason; and

- During the aforementioned five-year withholding period, the Bank may apply, if the corresponding conditions are met, the malus and clawback arrangements applicable to Annual Variable Remuneration.

Detailed information on the implementation of the obligations contracted in terms of pensions for executive directors and the rest of members of Senior Management during the financial year can be found in Note 54 of BBVA Group Consolidated Financial Statements for 2022, which are available on the Bank's corporate website (www.bbva.com).

A detailed description of the remuneration system for BBVA’s executive and non-executive directors in 2022 is included in the BBVA Directors' Remuneration Policy, and its implementation in the financial year is outlined in the Annual Report on the Remuneration of BBVA Directors for 2022. Both documents are available on the Bank's corporate website (www.bbva.com).

As set out in those documents, in the case of the non-executive directors, they do not receive variable remuneration; they receive a fixed annual amount in cash as members of the Board and of the various committees, where applicable, as well as for the performance of any other functions or responsibilities that may be attributed to them in the framework of the Bank's Corporate Governance System. The amount of annual fixed allowance for each of the above positions or functions is set by the Board of Directors, at the proposal of the Remuneration Committee, depending on the nature of the assigned functions and the dedication and responsibility required from each director.

In addition, the Bank has a remuneration system in BBVA shares with deferred delivery to non-executive directors, which has been approved by BBVA General Shareholders' Meeting. This system comprises the annual allocation to non-executive directors of a number of theoretical shares of the Bank, which are to be effectively delivered on the date of their removal as directors for any reason except for a serious breach of their duties.

The annual number of theoretical shares allocated to each non-executive director shall be equivalent to 20% of their annual fixed allowance in cash received by each in the previous financial year, according to the average closing prices of the BBVA share during the 60 trading sessions prior to the General Shareholders' Meetings approving the corresponding financial statements for each financial year.

The shares delivered by BBVA to directors and employees as part of variable remuneration or other remuneration systems form part of its treasury stock, so their delivery does not entail any dilution for shareholders.

6.4. Information on the connection between the remuneration of the Identified Staff and the Group's performance

As explained in the preceding sections, the BBVA Group General Remuneration Policy provides for the payment to the members of the Identified Staff of an Annual Variable Remuneration, whose accrual is subject to ex ante adjustments, and the amount of which is calculated on the basis of the achievement of the targets established at the beginning of the year for each of the Annual Performance Indicators, according to the scales and weights associated with each of them. In this way, the amount of variable remuneration received by the members of the Identified Staff is directly linked to the results of the BBVA Group and varies depending on them.

In addition to the results of the Group's Annual Performance Indicators, determined by the pre-established performance scales, and according to the weight of each indicator, the amount of the Annual Variable Remuneration of the members of the Identified Staff also takes into account the level of achievement of strategic objectives (both financial and non-financial) set at Area level and for each individual, as well as the associated weight in each case to the aforementioned Group, Area and Individual indicators (slotting), which are established according to the extent that the function is linked to the objectives of the Group, the Area and the individual, respectively.

The level of achievement of the Group's financial and non-financial indicators for incentive purposes is detailed below:

Table 92. Financial indicators - 2022 Level of achievement

Annual Evaluation Financial Indicators	Weight (%) (1)	Results 2021 (2)	Results 2022 (3)	Target 2022 (4)	Level of achievement (%)
Net Attributable Profit without corporate transactions (millions of euros)	10	5,028	6,381	4,661	150
Tangible Book Value per share (TBV per share) (euros) (5)	10	6.55	7.64	7.28	115
RORC (%)	10	14.03	15.26	12.56	150
Efficiency Ratio (%)	10	45.51	43.23	45.33	131
Gross margin (million euros)	10	—	24,890	20,182	150

(1) Fixed weight for the 2022 Annual Variable Remuneration of the BBVA Group staff, with the exception of executive directors.

(2) Results approved for incentive purposes (not including the results generated until June 2021 by BBVA USA and the rest of the companies sold to PNC, nor the impact of BBVA's restructuring plan in Spain).

(3) Results approved for incentive purposes (does not include the impact generated by the takeover bid in Turkey or by the office repurchase operation in Spain).

(4) The targets for the 2022 annual evaluation indicators were set above the consensus of analysts at that time and were in line with the existing economic outlook: (i) negative interest rates in the Eurozone and slightly rising in most emerging countries in which the Group is present; (ii) low levels of activity, as a consequence of supply problems in the production and distribution chains; and (iii) depreciation of emerging currencies against the Euro, impacting both the Attributable Result in current euros and profitability.

(5) For TBV per share there are two targets: one linked to growth (budget target) and the other linked to value creation, which is the one used for incentive purposes (shown in the table). In 2022, the budget target is 6.80 euros per share.

In the 2022 financial year, the BBVA Group obtained an attributable profit of € 6,420 million, an increase of 38% compared to 2021.

The figure for profit taken into account for incentive purposes was the referred profit excluding corporate transactions (the impact generated by the takeover bid in Turkey and the repurchase of BBVA branches in Spain); thus achieving an attributable profit, for incentive purposes, of € 6,381 million in 2022, which compares very positively with the € 5,028 million taken in 2021 for incentive purposes. This profit figure (€ 6,381 million) has been used to calculate the rest of the financial indicators for incentive purposes.

The good performance of attributable profit was mainly due to the strong increase in recurring revenues, the control of operating expenses and the good evolution of impairment charges on financial assets.

These good results have been accompanied by the creation of shareholder value, with the Group's TBV indicator (tangible book value per share) growing by 16.64% compared to 2021.

Likewise, the result of the Annual Financial performance indicators RORC and Efficiency Ratio, have performed positively in 2022 with respect to the previous financial year and compared to the target set at the beginning of the year. Finally, the Gross Margin indicator, which was included for the first time in 2022 in the grid of financial indicators for the Identified Staff (with the exception of executive directors), also performed very well.

Table 93. Non financial indicators - 2022 Level of achievement

Annual Evaluation Non-financial Indicators	Weight (%) (1)	Results 2021	Results 2022	Target 2022 (2)	Level of achievement (%)
Customer satisfaction (IReNe)	10	101	108	—	108
Mobilization of sustainable financing (million euros)	10	30,615	40,643	32,146	150
Digital sales	10	99	110	—	110
Target customers	10	115	111	—	111
Transactional linking of company clients	10	129	112	—	112

(1) Fixed weight for the 2022 Annual Variable Remuneration of the BBVA Group staff, with the exception of executive directors.

(2) The IReNe financial indicators, digital sales, target customers and transactional linkage of business customers, do not have a target at Group level, the targets are established at country level. The achievement of the Group for said indicators will be calculated as the average weighted by the operating income of the achievements obtained by the countries.

With respect to the non-financial Annual Performance Indicators, the Bank mobilized a total of €40,643 million in 2022 of finance allocated to sustainable projects related to climate change, which puts the results of the indicator of “Mobilization of sustainable financing” above the pre-established target. With regard to Digital Sales, Target Customers and Enterprise Transactionality indicators, their levels of achievement have also remained above the target.

With regard to NPS non-financial indicator its level of achievement has been aligned with the target established by the Board to calculate the Annual Variable Remuneration for 2022 financial year.

Thus, accordingly, the Annual Variable Remuneration of the members of the Identified Staff is linked to factors such as the Group's financial and non-financial results, all within the framework of and in accordance with the rules of the remuneration system detailed in Section 6.3 of this report.

6.5. Description of the criteria used to take into consideration present and future risks in the remuneration processes

BBVA Group promotes the development of a risk culture at all levels in the organization through its Corporate Governance System. Thus, BBVA's Corporate Bodies have provided the Group with a set of general policies and management and control basic guidelines, that allow for integrated and consistent management and supervision across the Group, highlighting among these guidelines the Risk Appetite Framework and the general policies on risk management by risk type.

The BBVA Group General Remuneration Policy forms part of the elements designed by the Board of Directors, as part of the Corporate Governance System, to promote adequate management and supervision of remuneration in the BBVA Group. Among the principles inspiring it, is the achievement of the results based on a prudent and responsible risk assumption.

Thus, in line with what has been set out in section 6.3 of this report, the remuneration policy applicable to executive directors, the rest of members of Senior Management and the rest of the Identified Staff features a number of specific elements which make their remuneration take into account current and future risks for the Bank, promoting their prudent and effective management, and not offering incentives to assume risks that exceed the level tolerated by the Institution or the Group, consistently with the risk strategy and culture of the BBVA Group.

In particular, the Bank's remuneration policies establish:

- Balance between the fixed and variable components of total remuneration;
- Ex ante adjustments, compliance with which is verified prior to the accrual and award of the Annual Variable Remuneration;
- Financial and non-financial indicators to evaluate the results, which take account both current and future risks, and the strategic priorities defined by the Group;
- Consideration, in the measurement of performance, of financial and non-financial measures that value both the individual management aspects and the objectives of the area and the Group;
- Greater weight assigned to the objectives related to specific functions in the measurement of the performance of the members with control functions, to reinforce the independence and objectivity of these functions;
- Establishment of at least 50% of the Annual Variable Remuneration in BBVA shares or instruments linked to BBVA shares;
- Deferral rules, designed so that a substantial portion of the Annual Variable Remuneration - 60% in the case of executive directors, rest of the members of Senior Management and Risk Takers with particularly high variable remuneration; and 40% in all other cases - is deferred over time, thus taking into account the economic cycle and business risks;
- Incorporation of possible ex post risk adjustments related to the result of the Multi-Year Performance Indicators, measured over a period of three years from the beginning of the deferral period, to which weights have been assigned and for which scales of achievement have been established; so that, in the event that the thresholds set for each indicator are not achieved, the Deferred Portion of the Annual Variable Remuneration pending payment may be reduced, but never increased. These indicators are aligned with the core metrics for the Group's risk control and management, and in particular, are related to solvency, liquidity, profitability and value creation;
- Mandatory retention periods of any shares or financial instruments delivered as Annual Variable Remuneration, so that the beneficiaries cannot freely dispose of them until one year after their delivery date, except for those whose sale would be required to honour the payment of taxes accruing on their delivery;
- Prohibition of carrying out personal hedging strategies or insurance related to the remuneration and liability;
- Limitation of the variable component of the remuneration for the year to 100% of the fixed component of total remuneration, except the BBVA General Meeting authorizes the application of a maximum ratio of 200% for a certain group of Risk Takers, as explained in detail in section 6.7 of this report.
- Subjection of the entire Annual Variable Remuneration to malus and clawback arrangements during the whole deferral and retention period, under the terms indicated in Section 6.3.

6.6. Main parameters and the motivation of any component of possible variable compensation plans and other non-cash advantages

The main parameters and motivation behind the components of the variable remuneration plans of the Identified Staff have been set out in the previous sections of this report.

6.7. Ratios between fixed and variable remuneration of the Identified Staff

As set forth in section 6.3 above, the fixed and variable components of the overall remuneration of the Identified Staff are appropriately balanced, in line with applicable regulations, to ensure a policy that is fully flexible with regard to payment of the variable components, allowing for such components to be reduced in their entirety, where appropriate.

The proportion between both components is established taking into account the type of functions carried out by each beneficiary (business, support or control) and, consequently, their impact on the risk profile, adapting to the reality existing in the different Group Entities or functions in which the members of the Identified Staff carry out their activity.

To this end, the Bank has defined target ratios between the main components of fixed and variable remuneration, which take into account both the function performed by each member of the Identified Staff as well as their impact on the risk profile.

Notwithstanding the foregoing, the variable element of the remuneration of the Identified Staff corresponding to a financial year (understood as the sum of all the variable components of remuneration) shall be limited to a maximum amount of 100% of the fixed element of total remuneration (understood as the sum of all the fixed components of remuneration), unless the BBVA General Shareholders' Meeting resolves to increase this percentage up to a maximum of 200%, as set forth under applicable legislation.

In this regard, the General Meeting held on March 18, 2022 resolved to increase the maximum level of the variable component of remuneration up to a maximum of 200% of the fixed component of total remuneration for certain members of the Identified Staff, in the terms indicated in the report issued for this purpose by the Board of Directors dated February 9, 2022. Thus, the BBVA's Board of Directors submitted the following proposed resolution to the General Meeting:

> *"For the purposes of the provisions of Article 34.1 g) of Act 10/2014 of June 26 on the regulation, supervision and solvency of credit institutions, to approve a maximum level of variable remuneration of up to 200% of the fixed component of total remuneration for a group of employees whose professional activities have significant impact on the risk profile of Banco Bilbao Vizcaya Argentaria, S.A. (the "Bank") or its Group, enabling subsidiaries of to likewise apply said maximum level to their professionals, pursuant to the Report issued in this regard by the Board of Directors of the Bank, on February 9, 2022, and which has been made available to shareholders as of the date on which the General Meeting was convened."*

This resolution was approved by the BBVA General Shareholders' Meeting for a maximum of 270 Risk Takers, with a favourable vote of 97.87% of the capital present or represented at said General Shareholders' Meeting.

The proposal submitted to the General Shareholders' Meeting included the detailed recommendation of the Board, explaining the reasons and scope of the resolution proposed to the General Meeting, and included the number of persons affected, their positions, as well as the expected effect on maintaining a solid capital basis, taking into account the considerations established by the competent authority as regards dividend distribution policies.

As reflected in the Board's Report, the persons for whom approval of the higher level of remuneration for 2022 financial year was requested performed one of the following functions:

- Members of the BBVA Board of Directors.
- Members of BBVA Senior Management.
- Members of the Identified Staff who perform their functions in the business areas of Spain, the United

States, Mexico, Turkey, countries of South America, and Corporate and Investment Banking (CIB).

- Identified Staff members who perform their functions in corporate support areas, working globally for the Group as a whole, without being attached to a business area, including activities focused on digital transformation.

6.8. Quantitative information on remuneration of the Identified Staff

After year-end 2022, the Annual Variable Remuneration corresponding to the members of the Identified Staff for said financial year was calculated in accordance with the results obtained (described in Section 6.4 above).

In accordance with the award, vesting and payment system of the Annual Variable Remuneration for 2022 financial year applicable to members of the Identified Staff:

- The Upfront Portion will be paid, if the conditions are met, in 2023 financial year, at 40% in the case of the executive directors, members of Senior Management and members of the Identified Staff with particularly high variable remuneration amounts, and 60% for the remaining members of the Identified Staff.
- The Deferred Portion will be paid, if conditions are met, on a pro-rata basis, once each of the deferral years has elapsed, at an amount equivalent to 20% in the case of the executive directors and members of Senior Management, and 25% in the case of the rest of the members of the Identified Staff. The amount pending payment once the third year of deferral has concluded will be subject to the result of the Multi-Year Performance Indicators to which reference has been made in section 6.3 of this report.

  Thus the Deferred Portion will be paid, if appropriate, under the following payment schedule: (i) in the case of executive directors and members of Senior Management, 20% in 2024, 20% in 2025, 20% in 2026, 20% in 2027 and the remaining 20% in 2028; and (ii) in the case of the rest of the members of the Identified Staff, 25% in 2024, 25% in 2025, 25% in 2026 and the remaining 25% in 2027.

This gives rise to the amounts presented in the following table, broken down by types of employees:

Table 94. EU REM1 - Remuneration awarded for the financial year (Thousand euros)

		MB Supervisory function (1)	MB Management function (1)	Other senior management (1)	Other identified staff
Fixed remuneration	**Number of identified staff**	**14**	**2**	**16**	**288**
	Total fixed remuneration(2)	**5,269**	**6,795**	**19,242**	**116,707**
	Of which: cash-based	4,300	6,357	18,149	108,638
	(Not applicable in the EU)				
	Of which: shares or equivalent ownership interests	—	—	—	—
	Of which: share-linked instruments or equivalent non-cash instruments	—	—	—	—
	Of which: other instruments(3)	859	—	—	—
	(Not applicable in the EU)				
	Of which: other forms	110	438	1,093	8,069
	(Not applicable in the EU)				
Variable remuneration	**Number of identified staff**	**—**	**2**	**16**	**281**
	Total variable remuneration(4)	**—**	**8,280**	**11,346**	**69,433**
	Of which: cash-based	—	3,606	4,689	41,744
	Of which: deferred	—	*1,967*	*2,558*	*11,891*
	Of which: shares or equivalent ownership interests(5)	—	4,589	5,968	25,438
	Of which: deferred	—	*2,950*	*3,837*	*10,988*
	Of which: share-linked instruments or equivalent non-cash instruments	—	—	—	2,251
	Of which: deferred	—	—	—	*1,126*
	Of which: other instruments	—	—	—	—
	Of which: deferred	—	—	—	—
	Of which: other forms(6)	—	85	689	—
	Of which: deferred	—	*85*	*689*	—
Total remuneration (2 + 10)		**5,269**	**15,075**	**30,588**	**186,140**

(1) Each of these columns includes remuneration for non-executive directors, executive directors and other members of Senior Management who held such position as of December, 31 2022. Information on remuneration and other benefits to the Board of Directors and members of the Bank's Senior Management is detailed in Note 54 of the Consolidated Financial Statements for 2022.

(2) Fixed remuneration received in 2022, both in cash and in kind, except for pension commitments. In the case of executive directors and Senior Management, the contributions made by the Bank in 2022 in relation to the pension commitments assumed with regard to social welfare are detailed in Note 54 of the Consolidated Financial Statements.

(3) Non-executive directors have a fixed remuneration system with deferred delivery of shares after they case to hold office, approved by the General Shareholders' Meeting. The number of theoretical shares allocated to each non-executive director in 2022 is equivalent to 20% of the fixed annual cash allocation received in 2021 by each of them, based on the average of the closing prices of BBVA shares during the 60 trading sessions prior to the General Shareholders' Meeting of March 18, 2022, which was €5.47 per share.

(4) Total variable remuneration corresponding to financial year 2022, which includes both the Annual Variable Remuneration and, for the purposes of this report, other payments considered variable under applicable regulations. Deferred variable remuneration is not vested and is subject to multi-year performance indicators related to the Risk Appetite Framework and shareholder return, which may reduce (but never increase) such deferred amounts, as well as to malus clauses.

(5) The total variable remuneration in shares of the identified staff granted in respect of the financial year 2022 represents 0.10% of BBVA's share capital.

(6) Discretionary pension benefits (15% of the annual contribution agreed to cover the retirement contingency of the Chair and members of Senior Management), are included for the financial year 2022, as established in the Guidelines on the remuneration comparison exercise, gender pay gap and higher ratios authorized under Directive 2013/36/EU (EBA/GL/2022/06), adopted as its own by the Bank of Spain on December 21, 2022.

Table 95. EU REM2 - Special payments to staff whose professional activities have a material impact on institutions' risk profile (identified staff) (Thousand euros)

	MB Supervisory function	MB Management function	Other Senior Management	Other Identified Staff
Guaranteed variable remuneration awards				
Guaranteed variable remuneration awards - Number of identified staff	—	—	—	—
Guaranteed variable remuneration awards -Total amount	—	—	—	—
Of which guaranteed variable remuneration awards paid during the financial year, that are not taken into account in the bonus cap	—	—	—	—
Severance payments awarded in previous periods, that have been paid out during the financial year				
Severance payments awarded in previous periods, that have been paid out during the financial year - Number of identified staff	—	—	—	**11**
Severance payments awarded in previous periods, that have been paid out during the financial year - Total amount	—	—	—	**1,357**
Severance payments awarded during the financial year				
Severance payments awarded during the financial year - Number of identified staff	—	—	—	**14**
Severance payments awarded during the financial year - Total amount(1)	—	—	—	**15,881**
Of which paid during the financial year	—	—	—	15,150
Of which deferred	—	—	—	731
Of which severance payments paid during the financial year, that are not taken into account in the bonus cap	—	—	—	14,054
Of which highest payment that has been awarded to a single person	—	—	—	3,618

(1) Includes the amount of the statutory severance payment under labor regulations, as well as, if applicable, the amount in addition to this legal severance payment.

Additionally, non-competition agreements have been signed with some beneficiaries for a total amount of 6,278 thousand euros, that will be paid periodically from the moment the member of the Identified Staff leaves, during the non-competition period.

In addition, in accordance with Rule 40.1 of Circular 2/2016 of the Bank of Spain, it is stated that of the 14 cases of payments for early termination of contract, 7 of them have exceeded two annuities of the fixed remuneration.

Payments were also made in 2022 for amounts deferred from previous years whose payment corresponded in said financial year. The following table shows the amounts of deferred remuneration from previous years awarded in 2022, distinguishing between the amounts of such remuneration that have been paid in the year and the amounts that, as of December 31, 2022 remain deferred.

Table 96. EU REM3 - Deferred remuneration (Thousand euros)

Deferred and retained remuneration(1)	Total amount of deferred remuneration awarded for previous performance periods	Of which due to vest in the financial year[4]	Of which vesting in subsequent financial years	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in future performance years	Total amount of adjustment during the financial year due to ex post implicit adjustments (i.e.changes of value of deferred remuneration due to the changes of prices of instruments)	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year	Total of amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention periods
MB Supervisory function	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Cash-based	—	—	—	—	—	—	—	—
Shares or equivalent ownership interests	—	—	—	—	—	—	—	—
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—
MB Management function(2)	**11,829**	**1,795**	**10,034**	**(14)**	**(5)**	**70**	**1,851**	**1,076**
Cash-based	4,386	781	3,605	(6)	(2)	—	775	—
Shares or equivalent ownership interests	6,422	1,014	5,408	(8)	(3)	70	1,076	1,076
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms(3)	1,021	—	1,021	—	—	—	—	—
Other senior management(2)	**17,019**	**1,865**	**15,154**	**(16)**	**(7)**	**74**	**1,923**	**1,130**
Cash-based	6,635	800	5,835	(7)	(3)	—	793	—
Shares or equivalent ownership interests	8,759	1,065	7,694	(9)	(4)	74	1,130	1,130
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms(3)	1,625	—	1,625	—	—	—	—	—
Other identified staff	**116,256**	**34,421**	**81,835**	**(334)**	**(18)**	**2,348**	**36,435**	**19,677**
Cash-based	57,697	16,923	40,774	(165)	(7)	—	16,758	—
Shares or equivalent ownership interests	56,608	17,498	39,110	(169)	(11)	2,348	19,677	19,677
Share-linked instruments or equivalent non-cash instruments	1,052	—	1,052	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms(3)	899	—	899	—	—	—	—	—
Total amount	**145,104**	**38,081**	**107,023**	**(364)**	**(30)**	**2,492**	**40,209**	**21,883**

(1) Includes deferred remuneration awarded in respect of previous performance periods already reported at the time of grant, as established in the Guidelines on the remuneration comparison exercise, gender pay gap and higher ratios authorized under Directive 2013/36/EU (EBA/GL/2022/06), adopted as its own by the Bank of Spain on December 21, 2022.

(2) Each of these columns includes remuneration for executive directors and other members of Senior Management who held such position as of December, 31 2022. Information on remuneration and other benefits to the Board of Directors and members of the Bank's Senior Management is detailed in Note 54 of the Consolidated Financial Statements for 2022.

(3) Includes "Discretionary pension benefits" (15% of the annual contribution agreed to cover the retirement contingency of the Chair and members of Senior Management) corresponding to the 5 years previous to 2022, as established in the Guidelines on the remuneration comparison exercise, gender pay gap and higher ratios authorized under Directive 2013/36/EU (EBA/GL/2022/06), adopted as its own by the Bank of Spain on December 21, 2022.

(4) In addition, the cash portion of the deferred remuneration awarded in respect of previous performance periods that has been vested in 2022 has been updated in accordance with the year-on-year CPI. These amounts are as follows: 67 thousand euros for executive directors, 62 thousand euros for other members of Senior Management and 1,481 thousand euros for the rest of the Identified Staff.

The number of employees receiving remuneration of €1 million or more is as follows:

Table 97. EU REM4 - Remuneration of €1 million or more per year

EUR	Identified staff that are high earners as set out in Article 450(i) CRR
1 000 000 to below 1 500 000	23
1 500 000 to below 2 000 000	17
2 000 000 to below 2 500 000	8
2 500 000 to below 3 000 000	2
3 000 000 to below 3 500 000	2
3 500 000 to below 4 000 000	2
4 000 000 to below 4 500 000	—
4 500 000 to below 5 000 000	—
5 000 000 to below 6 000 000	—
6 000 000 to below 7 000 000	—
7 000 000 to below 8 000 000	2

(*) Includes the sum of the fixed remuneration received in 2022 and the total variable remuneration corresponding to 2022. Of the Annual Variable Remuneration 2022, 60% has been deferred and therefore is not vested, being subject to multi-year performance indicators related to the Risk Appetite Framework and shareholder return that may reduce its amount (never increase it) and to malus clauses.

The table below gives the total remuneration of the Identified Staff for the year 2022, broken down by area of activity:

Table 98. EU REM5 - Information on remuneration of staff whose professional activities have a material impact on institutions' risk profile (identified staff) (Thousand euros)

	Management body remuneration			Business areas						Total
	MB Supervisory function	MB Management function	Total MB	Investment banking(3)	Retail banking(4)	Asset management(5)	Corporate functions(6)	Independent internal control functions(7)	All other(8)	
Total number of identified staff										320
Of which: members of the MB(1)	14	2	16							
Of which: other senior management(1)				1	3	—	9	3	—	
Of which: other identified staff				47	61	2	102	76	—	
Total remuneration of identified staff(2)	5,269	15,075	20,344	46,684	52,168	1,765	82,129	33,982	—	
Of which: variable remuneration	—	8,280	8,280	21,537	20,707	416	29,019	9,100	—	
Of which: fixed remuneration	5,269	6,795	12,064	25,147	31,461	1,349	53,110	24,882	—	

(1) Each of these columns includes remuneration for non-executive directors, executive directors and other members of Senior Management who held such position as of December, 31 2022.

(2) Includes the sum of the fixed remuneration received in 2022 and the total variable remuneration corresponding to financial year 2022, which includes both the Annual Variable Remuneration and, for the purposes of this report, other payments considered variable under applicable regulations. Deferred variable remuneration is not vested and is subject to multi-year performance indicators related to the Risk Appetite Framework and shareholder return, which may reduce (but never increase) such deferred amounts, as well as to malus clauses.

(3) Includes trading and other investment banking activities.

(4) Includes Retail, Business, Corporate and Insurance Banking activities.

(5) Includes Asset Management and Private Banking activities.

(6) Includes support areas for the BBVA Group and business support areas (Finance, Legal, Human Resources, etc.).

(7) Includes Risk Management, Internal Audit and Compliance activities.

(8) Other activities not included in the previous categories.

7. Information on the Corporate Governance System

BBVA has a solid and effective corporate governance system, which is constantly evolving to adapt to the Bank's strategy and to its particular circumstances and needs, in line with the Corporate Culture and Values that define BBVA's identity.

This system is geared towards promoting BBVA's objectives and long-term interests and has taken shape on the basis of the following pillars:

1. An appropriate composition of the corporate bodies
2. A clear distribution of functions and interaction among them and with senior management
3. A sound decision-making process and a robust informational model
4. A comprehensive monitoring, oversight and control system
5. A parent-subsidiary relationship model that allows for a coherent and well-integrated internal governance at Group level

The information regarding Entity's corporate governance of this Report is complemented by the 2022 Annual Corporate Governance Report which forms part of the Management Report by reference, and which has been submitted to the General Shareholders' Meeting held on March 17, 2023; the "Corporate Governance Overview in BBVA 2022"; and the BBVA Board of Directors selection, suitability and diversity policy; which are all of them available on the BBVA corporate website (www.bbva.com), in the "Shareholders and Investors" – "Corporate Governance and Remuneration Policy" section.

7.1. Members of the Board of Directors of BBVA

Below is the composition of BBVA's Board of Directors for the year ended December 31, 2022, along with information on their profiles:

- Carlos Torres Vila has been Chair of the BBVA Board of Directors since December 2018 and he is also Chair of the Executive Committee and the Technology and Cybersecurity Committee of the Board of Directors. He is also non-executive director at the following entities of the BBVA Group: Grupo Financiero BBVA México, S.A. de C.V. and BBVA México, S.A., Institución de Banca Múltiple, Grupo Financiero BBVA México. Previously, he was Chief Executive Officer of BBVA from May 2015 to December 2018. He joined the BBVA Group in 2008 and has held various high-ranking roles since then, which include: Head of Digital Banking from March 2014 to May 2015 and Head of Strategy and Corporate Development from January 2009 to March 2014. In addition, he previously held positions of responsibility in other companies, such as Chief Financial Officer and Corporate Director of Strategy and member of the Executive Committee of Endesa, as well as elected partner at McKinsey & Company. He holds a degree in Electrical Engineering (BSc) and in Business Administration from the Massachusetts Institute of Technology (MIT) and a degree in Law from the National Distance Education University (UNED). He also completed a master's degree in Management (MS) at the MIT Sloan School of Management.

Count of positions in accordance with banking regulations*	1 executive position** (executive director of BBVA and non-executive director of BBVA Group entities**)

- Onur Genç has been Chief Executive Officer of BBVA since December 2018. Furthermore, he is non-executive director at the following entities of the BBVA Group: Grupo Financiero BBVA México, S.A. de C.V. and BBVA México, S.A., Institución de Banca Múltiple, Grupo Financiero BBVA México. He was Chair and CEO of BBVA USA and Country Manager of BBVA in the United States between January 2017 and December 2018, Deputy CEO of Garanti BBVA between 2015 and 2017 and Executive Vice President of retail and private banking at Garanti BBVA between 2012 and 2015. He has also held positions of responsibility in different McKinsey & Company offices, having previously been a Senior Partner and Manager of its Turkish office. He holds a degree in Electrical Engineering (BSc) from the University of Bogaziçi in Turkey and a master's degree in Business Administration (MSIA/MBA) from Carnegie Mellon University in the USA.

Count of positions in accordance with banking regulations*	1 executive position** (executive director of BBVA and non-executive director of BBVA Group entities**)

- José Miguel Andrés Torrecillas has been independent director of BBVA since March 2015 and Deputy Chair of the Board of Directors since April 2019. Additionally, he is Chair of the Appointments and Corporate Governance Committee of the Board of Directors of BBVA. His professional career is linked to Ernst & Young, where he has held other positions, including partner since 1987, Managing Partner of the Banking Group (1989-2004), General Managing Partner of Audit and Advisory Services (2001-2004) and Chair of Ernst & Young Spain until 2014. He has also been a member of the Board of Directors of Zardoya Otis, S.A. until 2022. He has been a member of various organisations such as the ROAC (Official Registry of Auditors), the REA (Registry of Economic Auditors), the Governing Board of the Spanish Institute of Financial Analysts, Empresa y Sociedad Foundation, Spanish Institute of Chartered Accountants, Advisory Board of the Institute of Internal Auditors, and of the Institute of Chartered Accountants in England & Wales (the ICAEW). He holds a degree in Economic and Business Sciences from Complutense University of Madrid and completed post-graduate studies in Management Programmes from IESE, Harvard and IMD.

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA)

- Jaime Félix Caruana Lacorte was appointed independent director of BBVA in March 2018 and is Chair of the BBVA Audit Committee of the Board of Directors of BBVA. He currently develops activities in various international forums and in foundations as member of Group of 30 (G-30), member of the board of trustees of Spanish Aspen Institute Foundation, Chair of the Foundation Board of the International Center for Monetary and Banking Studies (ICMB) and member of the China Banking and Insurance Regulatory Commission's (CBIRC) International Advisory Committee. He was General Manager of the Bank for International Settlements (BIS) between 2009 and 2017; between 2006 and 2009 he was Director of the Monetary and Capital Markets Department and Financial Counsellor to the Managing Director of the International Monetary Fund (IMF); between 2003 and 2006 he was Chair of the Basel Committee on Banking Supervision; and between 2000 and 2006 he was Governor of the Bank of Spain and member of the Governing Council of the European Central Bank. He holds a degree in Telecommunications Engineering from the Escuela Técnica Superior de Ingenieros de Telecomunicación (ETSIT) of the Universidad Politécnica de Madrid and he is a Commercial Technician and State Economist.

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA)

- Raúl Catarino Galamba de Oliveira has been independent director of BBVA since March 2020 and Lead Director since April 2022. He is independent Chair of the Board of Directors of CTT – Correios de Portugal, S.A. and non-executive director in companies of José de Mello Group (José de Mello Capital and José de Mello Saúde). His career path has been mainly linked to the firm McKinsey & Company, where he was appointed partner in 1995 and Director of the Portugal office in 2000. In this firm he has held other senior positions, including Managing Partner of Spain and Portugal between 2005 and 2011, Managing Partner of Global Risk practice between 2013 and 2016, member of the Global Shareholders' Council from 2005 to 2011, member of the Global Partner Election and Evaluation Committees between 2001 and 2017, member of the Remuneration Committee from 2005 to 2013 and Chair of the Global Learning Board from 2006 to 2011. He is a graduate in Mechanical Engineering from the Instituto Superior Técnico (IST) in Portugal, holds a master's degree (MS) in Mechanical Engineering-Systems from IST and an MBA from the Nova School of Business Economics in Portugal.

Count of positions in accordance with banking regulations*	3 non-executive positions** (BBVA, CTT-Correios de Portugal, S.A. and companies of José de Mello Group**)

- Belén Garijo López has been independent director of BBVA since March 2012 and she is Chair of the BBVA Remuneration Committee of the Board of Directors of BBVA. She is Chair of the Executive Board and CEO of Merck Group, member of the Board of Directors of L'Oréal and, since 2011, she Chairs the International Senior Executive Committee (ISEC) of Pharmaceutical Research and Manufacturers of America (PhRMA). She has held various positions of responsibility at Abbot Laboratories (1989-1996), Rhône-Poulenc (1996-1999), Aventis Pharma (1999-2004), Sanofi Aventis (2004-2011), and Merck (since 2011). She is graduated in Medicine from the University of Alcalá de Henares in Madrid and a specialist in Clinical Pharmacology at Hospital de La Paz – Autonomous University of Madrid. She also holds a master's degree in Business and Management from the Ashridge Management School (UK).

Count of positions in accordance with banking regulations*	1 executive position (Merck Group) and 2 non-executive positions (BBVA and L'Oréal)

- Connie Hedegaard Koksbang has been independent director of BBVA since March 2022. She is independent director at Danfoss A/S and non-executive director at Cadeler A/S. She participates on an ongoing basis in international forums and organizations and in foundations such as member of the Supervisory Board at the European Climate Foundation, Chair of the OECD's Round Table on Sustainable Development, member of the Climate and Environment Advisory Council of the European Investment Bank (EIB), Chair of the Board of Trustees at the KR Foundation, Chair of CONCITO, Chair of the European Commission's Mission Adaptation to Climate Change, including Social Change, Chair of the Board at Aarhus University, and member of the Sustainability Council at Volkswagen and advisor to the Board of Gazelle Wind Power. She has been non-executive director of Nordex SE from 2016 to 2022. She has held various positions in the public sector in Denmark and the European Union, such as EU Commissioner for Climate Action, Danish Minister for Climate and Energy, Minister for Environment, and Minister for Nordic Cooperation. She holds a Master's Degree in Literature and History from the University of Copenhagen.

Count of positions in accordance with banking regulations*	3 non-executive positions (BBVA, Danfoss A/S and Cadeler A/S)

- Lourdes Máiz Carro has been independent director of BBVA since March 2014. She was Secretary of the Board of Directors and Director of Legal Services at Iberia, Líneas Aéreas de España from 2001 to 2016. She has also been a director of several companies, including Renfe, GIF (Gerencia de Infraestructuras Ferroviarias – Railway Infraestructure Administrator, now ADIF), the ICO (Instituto de Crédito Oficial – Official Credit Institution), Aldeasa and Banco Hipotecario. In 1992, she became Attorney for the State and held various senior positions in the Public Administration, including Director of the Cabinet of the Assisstant Secretary of Public Administration, Director of the Cabinet of the Assistant Secretary of Education; General Director of Administrative Organization, Personnel and IT, General Director of the Sociedad Estatal de Participaciones Patrimoniales (SEPPA) within the Ministry of Economy and Finance and Technical General Secretary of the Ministry of Agriculture, Fisheries and Food. She holds a bachelor's degree in Law and Philosophy and Educational Sciences from Complutense University of Madrid, and a doctorate in philosophy.

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA)

- José Maldonado Ramos has been director of BBVA since January 2000, with the status of other external. Over the course of his professional career, he has held the positions of Secretary of the Board of Directors at a number of companies, must notably as Corporate General Secretary of Argentaria, before taking up the position of Director and General Secretary and Secretary of the Board of Directors of BBVA until December 2009, when he stepped down from his executive duties continuing as a member of the Board. Also, he has been Board Secretary and Director of Legal Services for Empresa Nacional para el Desarrollo de la Industria Alimentaria, S.A. (Endiasa); Astilleros Españoles, S.A.; and Iberia Líneas Aéreas de España, S.A. He holds a Law degree from Complutense University of Madrid and in 1978, he passed State exams and became an Attorney for the State.

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA)

- Ana Cristina Peralta Moreno has been independent director of BBVA since March 2018. She is currently independent director of Grenergy Renovables, S.A. and of Inmobiliaria Colonial, SOCIMI, S.A. She has been Director of Risks and member of the Management Committee at Banco Pastor, S.A. and held different positions at Bankinter, S.A., including Chief Risk Officer and member of the Management Committee between 2004 and 2008. She has also held various positions at financial entities, notably independent director at Deutsche Bank SAE (2014-2018) and independent director at Banco Etcheverría, S.A. (2013-2014); as well as independent director at Grupo Lar Holding Residencial, S.A.U. and Senior Advisor at Oliver Wyman Financial Services. She is a graduate in Economic and Business Sciences from Complutense University of Madrid. She also completed a Master's programme in Economic-Financial Management at CEF, a Programme for Management Development (PMD) at Harvard Business School and PADE (Programa de Alta Dirección de Empresas - senior management programme) at IESE.

Count of positions in accordance with banking regulations*	3 non-executive positions (BBVA, Grenergy Renovables, S.A. and Inmobiliaria Colonial SOCIMI, S.A.)

- Juan Pi Llorens has been independent director of BBVA since July 2011. He is also Chair of BBVA's Risk and Compliance Committee of the Board of Directors of BBVA. In addition, he is non-executive Chair of the Board of Directors of Ecolumber, S.A. and non-executive director of the following companies at Oesía Group: Oesía Networks, S.L., Tecnobit, S.L.U., UAV Navigation, S.L. and Inster Tecnología y Comunicaciones, S.A.U. He has had a professional career at IBM holding various senior positions at the national and international level, including Vice President of Sales at IBM EMEA from 2005 to 2008, Vice President of Technology & Systems at IBM EMEA from 2008 to 2010 and Vice President of the Financial Services Sector in the Growth Markets Units (GMU) in China from 2009 to 2011. He has also served as Executive Chair of IBM Spain between 1998 and 2001. He holds a degree in Industrial Engineering from the Universidad Politécnica de Barcelona and completed the PDG (Programa en Dirección General – general management programme) at IESE.

Count of positions in accordance with banking regulations*	3 non-executive positions ** (BBVA, Ecolumber, S.A. y Oesía's group entities**)

- Ana Leonor Revenga Shanklin has been independent director of BBVA since March 2020. She is currently Chair of the ISEAK Foundation Board of Trustees and Senior Fellow at The Brookings Institution since 2018, and Associate Professor at the Walsh School of Foreign Service at Georgetown University from 2019 to 2021. She is also a member of the Board of Trustees of the BBVA Microfinance Foundation and a member of the Advisory Board of ESADE EcPol - Center for Economic Policy and Political Economy since 2019. Her career path has been mainly linked to the World Bank, where she has held various senior positions, including Senior Global Director of Poverty and Equity between 2014 and 2016 and Deputy Chief Economist between 2016 and 2017. She is a graduate (BA) in Economics and Mathematics from Wellesley College in the United States, she completed a graduate programme (MA) and a PhD in Economy at Harvard University, and holds a Certificate in Human Rights from the Faculty of Law at the University of Geneva (Switzerland).

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA)

- Susana Rodríguez Vidarte has been director of BBVA since May 2002, with the status of other external. She is Professor Emeritus of Strategy at the Faculty of Economics and Business Sciences at Universidad de Deusto. She has been Professor of Strategy of the Faculty of Economics and Business Administration at the University of Deusto and a non-practising member of the Institute of Accounting and Accounts Auditing. She was Dean of the Faculty of Economics and Business Administration at the University of Deusto from

1996 to 2009, Director of the Instituto Internacional de Dirección de Empresas (INSIDE) from 2003 to 2008 and Director of the Postgraduate Area from 2009 to 2012. She holds a PhD in Economic and Business Administration from the University of Deusto.

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA)

- Carlos Vicente Salazar Lomelín has been director of BBVA since March 2020, with the status of other external. He was Chair of Mexico's Business Coordinating Council from 2019 to 2022, and is independent director of Sukarne, S.A. de C.V. since 2017, Alsea, S.A.B. de C.V. since 2019, and CYDSA Corporativo S.A. de C.V. since 2022. Furthermore, he is non-executive director at the following entities of BBVA Group: Grupo Financiero BBVA México, S.A. de C.V., BBVA México, S.A., Institución de Banca Múltiple, Grupo Financiero BBVA México, BBVA Seguros México, S.A. de C.V., Grupo Financiero BBVA México, BBVA Pensiones México, S.A. de C.V., Grupo Financiero BBVA México and BBVA Seguros Salud México, S.A. de C.V., Grupo Financiero BBVA México. His career path has also been linked to the Grupo Fomento Económico Mexicano S.A.B. de C.V. (Femsa) until 2019, in roles such as General Manager of Cervecería Cuauhtémoc-Moctezuma, Manager of Coca Cola Femsa and General Manager of Femsa. He holds a bachelor's degree in Economics and postgraduate studies in Business Administration from the Monterrey Institute of Technology and Higher Education.

Count of positions in accordance with banking regulations*	4 non-executive positions** (entities of BBVA Group**, Sukarne, S.A. de C.V., Alsea, S.A.B. de C.V. and CYDSA Corporativo, S.A. de C.V.)

- Jan Paul Marie Francis Verplancke has been independent director of BBVA since 2018. He is an advisor to the internal advisory board at Abdul Latif Jameel and CEO of Vestraco, S.à.R.L. In his professional career he has served as Chief Information Officer (CIO) and Group Head of Technology and Banking Operations at Standard Chartered Bank from 2004 to 2015, Vice President of Technology and Chief Information Officer (CIO) at Dell from 1999 to 2004, as well as Vice President and Chief of Architecture and Vice President of Information of the Youth Category at Levi Strauss between 1994 and 1999. He holds a bachelor's degree in Sciences, specialising in Computer Science, from the Programming Centre of the North Atlantic Treaty Organization (NATO) in Belgium.

Count of positions in accordance with banking regulations*	1 non-executive position (BBVA) and 1 executive position (Vestraco, S.à.R.L.)

* The applicable banking regulation (Act 10/2014 on the regulation, supervision and solvency of credit institutions and the Circular 2/2016 on the supervision and solvency) stipulates that directors of credit institutions may not simultaneously hold more positions tan those provided for in the following combinations: a) one executive position and two non-executive positions; or b) four non-executive positions.

** In accordance with Rule 34.2 of Circular 2/2016, on the supervision and solvency, executive or non-executive positions held within the same group will count as a single position; and the existence of an executive position in the joint count of several positions will determine the classification of the position resulting from the set as executive.

Moreover, in accordance with Rule 34.3 of this Circular, positions held in non-profit organizations or entities or companies pursuing non-commercial purposes will not count when determining the maximum number of positions provided in the previous star "*".

The Board of Directors has submitted to the General Shareholders' Meeting held on March 17, 2023, the reelection of Mr. Galamba, Ms. Máiz, Ms. Revenga y Mr. Salazar, for the statutory period of three years, as well as the appointment of Ms. Sonia Lilia Dulá, for the statutory period of three years, as independent director, to fill in the vacancy arisen from Ms. Rodríguez's departure, whose appointment expires on the occasion of the 2023 General Meeting. Ms. Dulá has an extensive professional career in the banking and financial sector, having held various high-ranking positions at international financial institutions, such as Head of Capital Markets for Latin America at Goldman Sachs and head of Wealth Banking and of Corporate and Investment Banking for Latin America in Bank of America Merrill Lynch. She also has experience as a board member of various companies and boasts a remarkable entrepreneurial profile, particularly in the sector of telecommunications, where she had founded and managed several companies in the sector.

She is currently an independent director of Huntsman Corporation, Acciona and Acciona Energía and a life member of the Council on Foreign Relations. She is also the chair of the Board of Directors of asset manager firm Bestinver and member of the Latin advisory board of Banco Itaú (Brazil), positions that she will relinquish before taking up her duties as director at the Bank.

7.2. Selection, sustainability and diversity policy

The Bank has a Policy on the selection, suitability and diversity of BBVA's Board of Directors (the Selection Policy), approved by the Board of Directors at the end of the 2020 financial year, that sets out the principles and criteria governing the process for the selection, appointment and renewal of BBVA Board members, as well as the legal requirements that directors must meet, including those relating to suitability. The Policy also provides for elements and objectives concerning the composition of the corporate bodies, including diversity, the purpose of which is to ensure that the corporate bodies properly and effectively exercise their functions; all of this in the Bank's best corporate interest.

In this sense, the Selection Policy states that BBVA's Board of Directors will promote diversity in the composition of the Bank's corporate bodies by encouraging the inclusion of people with different profiles, qualities, knowledge, training and experience.

In addition, to ensure that the corporate bodies have an adequate and balanced composition, the Policy provides that directors' refreshment and selection processes will encourage diversity of their members, based on the needs of the Bank at all times.

In particular, efforts will be made to ensure that the Board of Directors has a balanced representation of men and women. To this end, the Appointments and Corporate Governance Committee has set a target for representation of the lesser-represented gender, namely that female directors should represent at least 40% of the Board of Directors by the end of the 2022 financial year and beyond.

Additionally, the aim is for the composition of the Board of Directors to feature an appropriate balance between the different types of director, for non-executive directors to represent an ample majority over executive directors and for the number of independent directors to account for at least 50% of the total seats.

The corporate bodies will also be assessed to ensure that they have a mix of individuals who have experience and knowledge of the Group, its businesses and the financial sector in general, as well as others who have training, skills, knowledge and experience in other areas and sectors relevant to the Bank.

In addition, BBVA's corporate bodies may take any other diversity factor into consideration that is relevant at any given moment to adapt the composition of the corporate bodies to the needs of the Bank. They may take into account criteria such as gender diversity, academic profile, professional experience, knowledge, disability, origin or age, thus being able to achieve an adequate balance aimed at ensuring that the corporate bodies can properly and effectively exercise their functions.

Furthermore, within the framework of the continuous Board refreshment process, the Appointments and Corporate Governance Committee, in performing its duties, has in recent financial years put in place different selection processes for directors aimed at identifying the most suitable candidates at all times, based on the needs of the corporate bodies, and that these favour diversity in the manner specified in preceding sections.

As a result, the Board currently has a diverse composition, combining people with extensive experience and knowledge in different areas that are of interest to the Bank and its Group, such as banking, accounting and auditing, risk management, innovation and information technologies, strategy and the macroeconomic environment, human resources and remuneration, institutional, legal and regulatory fields and corporate governance and sustainability, all of this at both the domestic and international levels.

In particular, as part of the of progressive refreshment process of the Board, at the end of the 2021 financial year, the Committee conducted a selection process for directors, as a result of which the appointment of Ms. Connie Hedegaard Koksbang as independent director was proposed to the General Meeting held in March 2022. This appointment has contributed to the achievement of the objectives set out in the Selection Policy, in particular, the 40% target of women on the Board and the strengthening of the Board's knowledge and experience in areas as relevant for the Bank as sustainability and climate change and the institutional and regulatory area.

Therefore, the Board's composition complies with the objectives envisioned in applicable legislation, in its own Regulations and in the Selection Policy, highlighting the appropriate balance between the different categories of directors, with a broad majority of non-executive directors (86.67%) and independent directors (two thirds, meeting the target of having at least 50% independent directors); and with a level of gender diversity that meets the targets set by the Board and is in line with best practices (women account for 40% of total directors); and also has a diversity of skills, knowledge and experience, both national and international, which has been strengthened in recent years.

Furthermore, in the context of the Board's continuous refreshment process and taking into account the periodic analysis of the structure, size and composition of the Board of Directors, the Committee developed a director selection process in 2022, inspired by the principles of the Board of Directors' Regulations and Selection Policy, as a result of which it is proposed to the General Meeting held in March 2023 the appointment of a new director with independent status, and the re-election of four directors, three as independent directors and one as other external director.

This, provided that corresponding approvals are granted, will allow to strengthen the knowledge and experience in areas of great relevance to the strategy, business and current activities of the Bank and its Group, a gradual increase in diversity on the Board in matters such as gender or international background, and in the representation of independent directors on the Board.

In conclusion, the Board, as a whole, has an adequate and diverse composition with a deep knowledge of the environment, strategy, activities, business and risks of the Bank and its Group, resulting in a balanced composition and adapted to the needs of the moment, thus contributing to ensuring that the functions of the corporate bodies are developed in the best corporate interest.

7.3. Committees of the Board of Directors

BBVA's Bylaws provides that the Board of Directors may, for the better performance of its functions, establish such committees as it deems necessary to assist it on matters within its remit.

Thus, the Board of Directors has established the following committees: Executive Committee, Audit Committee, Appointments and Corporate Governance Committee, Remuneration Committee, Risk and Compliance Committee and Technology and Cybersecurity Committee.

The committees of the Board of Directors, except the Executive Committee, are composed by majority of independent directors (the Audit Committee is composed exclusively by independent directors).

Below is the composition of each committee as of December 31, 2022:

Table 99. Committes of the Board of Directors

Directors	Executive Committee	Audit Committee	Appointments and Corporate Governance Committee	Remunerations Committee	Risk and Compliance Committee	Technology and Cybersecurity Committee
Carlos Torres Vila	X					X
Onur Genç	X					
José Miguel Andrés Torrecillas	X	X	X			
Jaime Caruana Lacorte	X	X			X	
Raúl Galamba de Oliveira					X	X
Belén Garijo López		X	X	X		
Connie Hedegaard						
Lourdes Máiz Carro		X		X		
José Maldonado Ramos	X		X			
Ana Peralta Moreno		X		X		
Juan Pi Llorens			X		X	X
Ana Revenga Shanklin					X	X
Susana Rodríguez Vidarte	X		X		X	
Carlos Salazar Lomelín				X		
Jan Verplancke				X		X

The Board of Directors holds monthly ordinary meetings in accordance with the annual meeting schedule drawn up, and extraordinary meetings as often as deemed necessary. The committees will meet whenever they are convened by their chair, in accordance with the provisions established in the specific Regulations of each committee.

Below is detailed the meetings held by the Board of Directors and by its committees in 2022 financial year:

Table 100. Number of meetings held by the Board of Directors and by its Committees

Governing body	No. meetings in 2022
Board of Directors	14
Executive Committee	19
Audit Committee	13
Risk and Compliance Committee	22
Appointments and Corporate Governance Committee	6
Remunerations Committee	7
Technology and Cybersecurity Committee	6

All the committees of the Board of Directors have their own regulations, approved by the Board of Directors, which include their compositions, organisational and operational rules, available on the Bank's corporate website, www.bbva.com, under "Shareholders and Investors", "Corporate Governance and Remuneration Policy", in the "Board Committees" section.

The information regarding the activity carried out by each committee in 2022 financial year is included in the 2022 Annual Corporate Governance Report (sections C.2.1 and H); as well as in the report detailing the activity carried out by each committee in the exercise of their functions during the 2022 financial year. Both the Annual Corporate Governance Report and the report of each committee are available on the Bank's corporate website, www.bbva.com, under "Shareholders and Investors", "Corporate Governance and Remuneration Policy" section.

7.4. Information flow on risk

In accordance with BBVA's corporate governance system, the Board of Directors of the Bank has certain reserved functions in risk-related matters, concerning both the management dimension — specifically, in connection with the adoption of the corresponding most relevant decisions — as well as to the monitoring and supervision of the adopted decisions and the management of the Bank.

In particular, the Board of Directors is responsible for establishing the Group's risk strategy and, in the exercise of this function, for determining the risk control and management policy, which is materialized in the General Risk Management and Control Model (the "Model"), the BBVA Group's Risk Appetite Framework and in the framework of the policies for the management of the different types of risks (financial and non-financial) to which the Bank is or may be exposed, and which contain the basic guidelines for managing and controlling risks uniformly across the Group, in a consistent manner with the Model and the Risk Appetite Framework.

Furthermore, in parallel with the function of defining the risk strategy and within the scope of its risk monitoring, supervision and control functions, the Board of Directors monitors the evolution of BBVA Group risks as well as the risks affecting each one of its main geographical and/or business areas, ensuring that they comply with the BBVA Group's Risk Appetite Framework, and is also responsible for overseeing internal information and control systems.

To guarantee an adequate performance of its management and supervision functions, the Board relies on the work carried out by the different committees, in accordance with the matters within the scope of their remit and as established in the Regulations of the Board and in their own regulations, as well as on the information and documentation submitted by the executive areas responsible for managing and controlling risks within the Group (the Global Risk Management area and, as regards non-financial risks and the internal control model, the Regulation and Internal Control area).

Thus, for the adequate performance of its duties, the Board of Directors of BBVA, as a credit institution, is assisted by the Risk and Compliance Committee, which provides support mainly, in all matters related to the management and supervision of risks, and the Executive Committee, which helps ensure its alignment with the established strategy.

In general, the Risk and Compliance Committee meets twice a month, in order to carry out a permanent and adequate monitoring of the evolution of the risks of the Group.

This Committee is made up of non-executive directors, and a majority of independent directors, including its Chair, all of them with sufficient knowledge, capacity and experience to understand and control the risk strategy of the Bank and its Group.

The Risk and Compliance Committee's main task is to support the Board of Directors in determining and monitoring the Group’s risk control and management policy, which includes both financial and non-financial risks; by submitting to the Board a Model and Group’s Risk Appetite Framework proposal, based on the strategic-financial approach determined by the Board of Directors or the Executive Committee, thus ensuring its alignment with the Group's Strategic Plan in force at all times. In addition, the Risk and Compliance Committee proposes, in a manner consistent with the Group's Risk Appetite Framework approved by the Board, the Group's financial and non-financial risk control and management policies; and also participates in the decision-making process regarding the strategic corporate projects or transactions presented to the Board of Directors or the Executive Committee, assessing the associated risks.

On the other hand, the Risk and Compliance Committee monitors the evolution of the risks faced by the Group and their level of adequacy with regard to the Group's Risk Appetite Framework and the established general policies, with greater frequency and with a sufficient degree of granularity, which enables the adequate performance of its functions. Therefore, the Risk and Compliance Committee obtains a holistic and global vision of all risks of the Group. In order to complement the holistic view of risks by the Risk and Compliance Committee, the Board of Directors has also assigned oversight functions on certain types of non-financial risks to other Committees (such as the Audit Committee for accounting, tax and reporting risks, or the Technology and Cybersecurity Committee for IT and cybersecurity risks), and coordination mechanisms have been implemented among the different Board committees through different reports and cross-composition.

This monitoring by the Risk and Compliance Committee of the different types of risks, financial and non-financial, is carried out through three types of reports: (i) a general overview of the Group's risks, provided monthly by the Head of Global Risk Management, supplemented, with respect to non-financial risks, with the monthly report from the Head of Regulation & Internal Control; (ii) an overview on the most relevant risks of the main geographical areas in which the Group develops its activity, through six-monthly reports from the Heads of Risks in each relevant geographical area; and (iii) an update by type of risk, provided by means of the regular reports from the executives responsible for each type of risk (financial and non-financial) within the Group, and on a more frequent basis in credit risk matters (retail and wholesale), as well as in the different non-financial risks (including, among others, the compliance risk).

On top of the risk monitoring function performed by the Risk and Compliance Committee, the Executive Committee monitors the evolution of the Group's risk profile through the monthly reports provided by the Head of Global Risk Management.

Besides the activity of both committees on risk-related matters, the Board of Directors itself is informed on a regular basis about the evolution of the Group's main risks, both financial and non-financial, through the monthly activity reports of the Risk and Compliance Committee, as well as the quarterly reports of the Head of Global Risk Management, the Head of Regulation & Internal Control and the Chair of the Risk and Compliance Committee.

Thus, the Board, with support from its committees, establishes the Group's risk strategy and oversees and controls the evolution of the risks in the Group and its main geographical or business areas.

For more details on the activity of the Board of Directors' committees in risk-related matters in 2022, please refer to BBVA's 2022 Annual Corporate Governance Report and the report on Board committees’ activity in 2022, both available on BBVA's corporate website (www.bbva.com), under the "Shareholders and Investors”, “Corporate Governance and Remuneration Policy” section.

8. Environmental, social and governance risk

8.1. Introduction and regulatory framework

8.1.1. Compromise with sustainability

Decarbonization is one of the greatest challenges facing humanity. Climate change and the transition to a low-carbon economy have significant implications for the value chains of most productive sectors, since they require significant investments in many industries. As a financial institution, BBVA has an indirect impact on the environment and society through its lending activity and the projects it finances.

The investment needed to make the world go zero emissions has to be attractive, economically viable and profitable. In this sense, investment in renewables, energy efficiency or electric cars already has a profitable alternative for families and companies, compared to fossil fuels. However, most activities do not have an emission-free version that is economically viable.

BBVA aspires to gradually align its activity to a scenario of zero net emissions by 2050 and to use its role as a bank to help its clients with financing, advice and innovative solutions, in the transition towards a more sustainable future inspired by the Sustainable Development Goals. In addition to the intermediate decarbonization targets that it published in 2021 in five sectors (electricity generation, automobiles, cement, steel, and coal), in 2022 it has published decarbonization targets for the Oil and Gas sector[7].

Likewise, customers, markets and society as a whole not only expect large companies to create value, but also expect them to contribute positively to society and that the economic development to which they contribute with their financial activity is inclusive. contributing to a just transition.

BBVA has a governance model at the highest level that has incorporated sustainability as one of its six strategic priorities, integrating it transversally into the executive sphere. BBVA has carried out an analysis of risks and opportunities associated with climate change and has a risk management model as described below. Likewise, BBVA has an additional objective to the decarbonization objectives mentioned above of channeling 300,000 million euros into sustainable business between 2018 and 2025.

Climate change presents short-, medium- and long-term risks to the Group and its customers, and these risks are expected to increase over time. The Group's activities or those of its customers and/or counterparties could be adversely affected by, among others, the following risks:

- Transition risks: these are those risks linked to the transition to a low-carbon economy in response to climate change, and arising from changes in legislation, the market, consumers, etc., to mitigate and address the requirements arising from climate change. Transition risks include:

    a. Legal and regulatory risks: Legislative or regulatory changes related to how banks manage climate risk or otherwise affect banking practices or climate-related disclosures may lead to increased compliance, operational and credit costs and risks. The Group's customers and counterparties may also face similar challenges.

    b. Technology risks: These include risks arising from the costs of transitioning to or not adapting to low-emission technologies, which could eventually reduce the creditworthiness of the Group's customers.

    c. Market risks: BBVA is exposed to the risk of a significant increase in the cost of financing customers with greater exposure to climate change risk, which could affect their creditworthiness or credit rating. BBVA is also exposed to risks arising from changes in demand, changes in supply or the cost of energy, among others.

    d. Reputational risks: The perception of climate change as a risk by society, shareholders, customers, governments and other stakeholders continues to increase, encompassing the operations and strategy of the financial sector. This may lead to increased scrutiny of climate change activities, policies, objectives and the way in which climate change issues are disclosed. The Group's reputation may be damaged if its efforts to reduce environmental and social risks are deemed insufficient.

- Physical risks are those arising from climate change that may result from increased frequency and severity of extreme weather events or long-term weather changes, which may lead to physical damage to the Group's or its customers' assets, disruption to operations, disruption to the supply chain or increased costs to deal with them, thereby impacting asset value or customer creditworthiness.

Any of these factors could have a material adverse impact on the Group's business, financial condition and results of operations.

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[7] For upstream financing.

8.1.2.Regulatory framework

8.1.2.1. Law 7/2021 on climate change

Under Law 7/2021, of May 20, on climate change and energy transition (hereafter Law 7/2021), BBVA has submitted a report (hereafter, Climate Change Report), which includes, among others, the following matters: the organization's governance structure, the strategic focus, both in terms of adaptation and mitigation of the entity to manage the financial risks associated with climate change, the real and potential impacts of the risks and opportunities associated with climate change, the processes of identification, evaluation, control and management of the risks related to the climate and the metrics, scenarios and objectives used to evaluate and manage the relevant risks and opportunities associated with climate change.

Table 101. Contents index of the Law 7/2021, of May 20, about climate change and energetic transition

Topic	Reporting criteria
Govern	Governance structure of organization, including the role that its various bodies perform, in relation to the identification, evaluation and management of risks and opportunities related to climate change.
Strategy	Strategic approach, in terms of adaptation and mitigation of the entities to manage the financial risks associated with climate change, taking into account the current risks at the time of writing the report, and those that may arise in the future, identifying the actions necessary at that time to mitigate such risks.
Impacts	The real and potential impacts of risks and opportunities associated with climate change on the organization's activities and its strategy, as well as on its financial planning.
Risk management	The processes for identifying, evaluating, controlling and managing climate-related risks and how these are integrated into its global business risk analysis and its integration into the organization's global risk management.
Metrics and goals	Metrics, scenarios and objectives used to assess and manage important risks and opportunities related to climate change and, if calculated, the scope 1, 2 and 3 of its carbon footprint and how its reduction is addressed .

8.1.2.2. Instructions on Technical Standards on ESG risk

The European Banking Authority has published on 24 January 2022 its final draft implementing technical standards (ITS) amending the CRR on Pillar 3 disclosures on environmental, social and governance (ESG) risks. The final draft ITS proposes comparable disclosures to show how climate change may exacerbate other risks within institutions' balance sheets, how institutions are mitigating those risks, and their ratios, including ESG, on exposures that fund taxonomy-aligned activities, such as those consistent with the objectives of the Paris Agreement.

These ITS were subsequently incorporated into the body of European Union regulations in Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards disclosure of information on environmental, social and governance risks.

In this report BBVA presents quantitative information on the ESG risks of the BBVA Group's main companies: BBVA S.A., BBVA Mexico, BBVA Turkey, BBVA Peru, BBVA Colombia, BBVA Argentina and BBVA Uruguay[8]. These portfolios account for 96.3% of the total balance sheet.

8.1.2.3. Article 8 of the EU Taxonomy

Article 8 of the Regulation (EU) 2020/852 of the European Parliament and of the Council, of June 18, 2020 (hereinafter, the Taxonomy Regulation), regarding the establishment of a framework to facilitate sustainable investments, establishes certain obligations of disclosure of non-financial information to companies subject to the Non-Financial Information Directive (hereinafter NFRD). Based on this, financial institutions must include in their Non-Financial Information Report certain information on their exposure to the economic activities included in the EU taxonomy by virtue of the aforementioned article 8.

At present, Delegated Act 2021/2139, which completes the Taxonomy Regulations, covers the objectives of climate change mitigation (known by the acronym CCM or Climate Change Mitigation) and adaptation to it (known by the acronym CCA or Climate Change Adaptation).

The rest of the environmental objectives foreseen by the Taxonomy, such as the protection of water and marine reserves, the transition to a circular economy, the prevention of pollution and the protection of the ecosystem, as well as other social objectives have not yet been developed. As the regulation develops, BBVA will publish the sustainability information as appropriate at all times.

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[8] There are no available ESG metrics for BBVA Uruguay in templates ESG3, ESG5 and ESG10

Based on the above, the ratios as of December 31, 2022 and 2021 for BBVA Group in accordance with the provisions of Delegated Regulation 2121/2178 of July 6, 2021 and the clarifications of the European Commission are as follows[9]:

Table 102. Exposure ratios regarding Taxonomy

	2022	2021
% exposure to economic activities included in the Taxonomy (Taxonomy-elegible) (1) (2)	45.2	45.6
% exposure to economic activities not included in the Taxonomy (Taxonomy-non-elegible) (1) (2)	9.4	10.5
% exposure to central governments and central banks	28.7	28.5
% exposure of non accredited to NFRD. (1)(3)	37.2	35.2
% trading portfolio exposure	15.5	18.6
% inter-bank demand loans portfolio exposure	1.4	1.6
% derivatives exposure	5.9	4.9

(1) The ratios have been prepared with data from the most representative BBVA Group entities that include 96.5% of total assets. The financial assets analysed correspond to the categories of financial instruments valued "At amortized cost", "Fair Value with Changes in Other Comprehensive Income (FVOCI)", "Fair Value with Changes in P&L" and "Non-negotiable at Fair Value with changes in results". These ratios represent the best estimates available to date.

(2) Regarding the eligibility of an asset, the economic activities of the clients are classified as eligible according to the Delegated Regulations that complement Regulation (EU) 2020/852 of the European Parliament and of the Council. Economic activities covered by the Delegated Acts of Climate Change Mitigation and Climate Change Adaptation are considered eligible. EU regulation has not been developed for the other environmental goals, therefore eligibility does not cover a wide range of potentially sustainable economic activities and exposures. The modifications implemented by Commission Delegated Regulation (EU) 2022/1214 of March 9, 2022, by which nuclear energy and gas are included in the Taxonomy, were taken into account for the ratios as of December 31, 2022.

(3) BBVA considers Not Subject to the NFRD those counterparties within the category of “Non-Financial Corporations” that are considered SMEs located in the EU for regulatory reporting purposes, as well as counterparties with registered offices outside the EU. Exposure to individuals includes self-employed workers, in which case the activity code (NACE) is reviewed to determine their eligibility. The rest of the exposure corresponding to the retail segment is considered eligible, for example, in the case of housing loans, regardless of their energy rating or efficiency.

The following have been considered when preparing the ratios: ratios number 3, percentage exposure to central governments and central banks, number 5, percentage exposure to the trading portfolio, and number 7, derivative exposure percentage, are calculated on the Group's total assets. The other ratios are calculated using the same methodology as in the definition provided by the European Commission for the Green Asset Ratio (hereinafter, the GAR), which enters into force on January 1, 2024. Thus the percentages are calculated on the total assets covered in the GAR, which are all the exposures on the balance sheet, except for the exposures to central governments, central banks and the trading portfolio.

Since 2022, to determine eligibility, BBVA Spain is using information from the adjusted Statistical Classification of Economic Activities in the European Community (adjusted NACE). This is information generated internally by GRM and used for internal risk management and represents the best internally available information. For the rest of the geographical areas, information has continued to been use on the economic activities of customers applying equivalent local standards in the geographies where the Group operates. These local classifications by activity have an equivalence to NACE. This information is also available in the computer systems and is used to assess the specific economic activities of customers, both in internal management (origination, risk assessment) and in the regulatory area (FINREP).

As of 2023, companies subject to the Non-Financial Information Directive (NFRD) will make public the information corresponding to the economic activities they carry out in relation to the Taxonomy. The BBVA Group will incorporate this information into its analysis of the economic activities that comply with the regulation (alignment), thereby allowing greater precision in the measurement of the economic activities that it finances based on the Taxonomy.

The information related to the alignment of the objectives, financed economic activities, description of the strategy, the products developed and marketed as well as the integration of ESG aspects in the relationship with customers are included in the chapters "Report on climate change and other issues environmental and social aspects” and “Integration of ESG aspects in customer relationships” within “Additional information” of this report. The information regarding the weight of the financing of economic activities aligned with the Taxonomy in the global activity of the BBVA Group is broken down in the chapter "Metrics and goals: Sustainable business channelling" of this report. The application of the European Taxonomy in the framework of the sustainable mobilization of the Group is described in the chapter “Additional information on the Group’s sustainability standards and frameworks” of the Consolidated Management Report..

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[9] Sustainable-finance-taxonomy-article-8-report-eligible-activities-assets-faq_en” published on December 20, 2021 (update for the last time on October 2022)

8.2. Business processes and strategy

8.2.1. Paris Agreement alignment of the loan portfolio

The Net Zero 2050 commitment (zero net emissions in 2050) also includes emissions from customers who receive financing from the Bank. For this reason, in order to accompany its clients in the transition towards a more sustainable future, with specific plans and objectives, BBVA undertook to publish alignment objectives for the sectors defined in the Guide to set the Net Zero Banking Alliance objectives.

BBVA's commitment to alignment involves establishing a framework comprising objectives and commitments for the different sectors considered to be the greatest emitters. These objectives, as defined in the aforementioned Guide, must be set at the sectoral level. In this sense, BBVA announced its objective of phase-out of activities related to coal, ceasing to finance companies involved in these activities before 2030 in developed countries and before 2040 in the rest of the countries in which BBVA is present. (under the terms of the Environmental and Social Framework).

Under the PACTA methodology, BBVA published intermediate decarbonization targets for 2030 for the electricity generation, automobile, steel and cement sectors, which, together with coal, account for 60% of global CO_2 emissions. The Net Zero scenario of the International Energy Agency (IEA) has been used as a benchmark.

In 2022, BBVA published its alignment target for the Oil & Gas sector. BBVA is participating in the definition within the NZBA of a specific guideline for this sector. However, given its relevance in global emissions, it was decided to publish a metric that would include the largest amount of emissions given the information available. The PCAF[10] methodology has been used for the calculation and a scope 1, 2 and 3 absolute emission reduction target has been established for oil exploration and production.

The Group is working on sectoral strategic plans for all sectors for which a portfolio alignment target or exit commitment has been defined. The content of these plans includes an analysis of the sector's risks and opportunities, the long-term vision of the sector's role in the decarbonisation of the economy and the strategic responses of stakeholders across the sector.

In addition, the plans include an analysis of the current state of the portfolio and positioning with respect to the Group's objective for the sector, as well as the identification of drivers to manage portfolio transition risk, including portfolio alignment metrics. This is reflected in the formulation of a commercial plan, which includes the identification of opportunities with existing and potential customers, and a tiered approach to define the appetite for customers in the sector. These business plans allow the definition of projected decarbonisation curves for each sector to monitor progress in the alignment exercise.

During 2022, a series of multidisciplinary working groups, consisting of teams from GRM, CIB, Sustainability and Strategy, called Climate and Environmental Sectoral Panels, have been launched. These groups have developed Sector Strategic Plans in the Oil & Gas and Power (including electricity generation) sectors. This work has made it possible to define strategies and business plans aimed at meeting the alignment objectives established in the medium term as well as mitigating the risks related to decarbonisation in the balance sheet.

The following table shows, for the sectors in which alignment targets have been defined, the summary of the emission intensity metrics, the exposure amount, the detail of the metrics and the expected distance with respect to the 2030 scenario. BBVA sets the 2030 portfolio alignment targets in line with industry practices, and prepares a year-by-year Net Zero scenario to meet these targets. One of the requests of the EBA is to draw up short-term targets (3 years). In this regard, there is a roadmap to Net Zero each year that could represent the aforementioned target, but this is internal information that does not constitute a target officially communicated by the Group.

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[10] Partnership for Carbon Accounting Financials (PCAF):This initiative was born in 2019 and its objective is to establish an international methodology to measure and disclose greenhouse gas emissions financed by banks and investors.

Table 103. ESG3: Banking book - Climate change transition risk: Alignment metrics

Sector	NACE Sectors	Portfolio gross carrying amount (Million euros)	Alignment metric	Description	Year of reference	Distance to IEA NZE2050 in the year 2030
Power	See Annex for detail	9,115	0.215722	Average tonnes of CO2 per MWh	2022	66 %
Automotive	See Annex for detail	716	0.000194	Average tonnes of CO2 per passenger-km	2022	94 %
Aviation	See Annex for detail	320	0.000104	Average tonnes of CO2 per passenger-km	2022	48 %
Cement, clinker and lime production	See Annex for detail	741	0.691848	Average tonnes of CO2 per tonne of output	2022	42 %
Iron and steel, coke, and metal ore production	See Annex for detail	2,127	1.142109	Average tonnes of CO2 per tonne of output	2022	26 %

(*) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-tradable at Fair Value through Profit or Loss". Instruments: loans and advances, fixed income and equities. Sectors: non-financial corporations. Special features: principal activity code (NACE) information used for internal management and reporting purposes. The figures may vary slightly from the calculations made on the PACTA portfolio alignment, because this methodology takes into account the committed available while the figures shown in the table above correspond to transactions with a gross book balance.

8.2.1.1. Methodological notes on alignment calculation

8.2.1.1.1. Scope

The analysis was carried out for BBVA S.A., BBVA Mexico, BBVA Peru, BBVA Argentina, BBVA Colombia and Garanti. In order to obtain the customers for which the metric has been calculated, a selection has been made of those whose activity is considered to form part of the value chain responsible for emissions in the sector. However, it has been considered that a high percentage of the emissions of each sector is covered. In addition to the selection made by economic activity code (NACE), an additional selection has been carried out to identify those customers who, despite having a main activity that was not included in the analysis, could have part of their activity within the sectors included in the alignment. The analysis does not include fixed income and equity balances, which will be incorporated in 2024.

The metric for the fossil fuels sector (Oil & Gas) has been defined based on the absolute emissions financed by the three scopes (1, 2 and 3) of the sector's upstream[11] and parent companies, and emission reduction targets have been set. The figure for absolute emissions financed is 14 million tonnes of CO2e and the reduction target for 2030 is 30%.

During 2023, BBVA plans to continue incorporating more sectors into the alignment calculation, including Maritime Transport and Commercial Real Estate.

8.2.1.1.2. Metric calculation

The metrics used are emissions intensity per unit of output for each sector, following NZBA recommendations. The key provider of emissions intensity information is Asset Resolution, which provides asset information for the portfolio included in the calculation perimeter. The coverage percentage is between 95% and 100% depending on the sector under analysis. To calculate the metric, each client is assigned an emissions intensity figure, based on production capacity. This figure is obtained by weighting the different intensities that a customer may have depending on the different technologies used in its economic activity. The intensity metric is calculated as the average intensity per customer, weighted by the production with each technology.

Once the intensity per client is obtained, the portfolio intensity is calculated as the average weighted by the weight of each client's exposure over the total exposure under analysis. In this calculation, the client's total exposure (drawn plus undrawn committed) is used.

8.2.1.1.3. Scenario calculation

For the calculation of alignment, BBVA uses the IEA Net Zero scenario as a reference, except in the case of aviation, where the ISF NZ scenario developed by the University of technology Sydney for UNPRI has been used. However, the data used as a reference in 2030 for the distance calculation may differ from the data published by the scenarios. The PACTA methodology uses the scenario as a reference for emission decreases to meet a 1.5° scenario, but applies a different starting point than the scenario. The starting point applied is the result of aggregating all customers in the database used, taking this aggregation as a market reference. This database covers, according to data from the external supplier, 87% of the assets in the Power sector, 96% of the auto assets, 91% of the steel assets, 73% of the cement assets, and with information on more than 47,000 aircraft. This figure, however, does not differ significantly from the scenario and is more ambitious in most cases.

8.2.1.2. Alignment objectives and metrics

It is important to emphasize that the baseline of these metrics may change, since the sources of information used and the methodology are constantly changing. BBVA's commitment is to maintain the level of ambition for reduction despite the fact that the baselines may change.

In this sense, the baseline of the electricity generation, steel and cement sectors has been modified and the objectives have been adjusted maintaining the level of ambition. These changes have been due to improvements in the calculation methodology and in the databases used. The primary provider of emissions intensity information is Asset Resolution, which provides asset information for the portfolio included in the calculation perimeter. The coverage percentage is between 95% and 100% depending on the sector under analysis.

In order to follow up on these objectives and supervise their compliance, the Bank has tested a governance framework that includes the creation of a Sustainability Alignment Steering Group (SASG) made up of the heads of the Business, Risk, Sustainability and Strategy areas, with the following functions:

- Approval of the sectoral alignment objectives and intermediate objectives, as well as the methodologies used in their calculation.
- Evaluation of the fulfillment of these objectives and the promotion of initiatives to facilitate their management.
- Analysis and understanding of the best practices in the sector, promoting the

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[11] Oil & Gas companies with activities in exploration, drilling and extraction

integration of sustainable criteria in day-to-day business.

After having passed through the SASG, the monitoring of compliance with the objectives, including the explanation of possible deviations and measures to redirect them (if applicable), will be submitted for review to the highest executive level and subsequently to the corporate bodies, at least twice a year.

To facilitate effective management and compliance with the alignment objectives, BBVA has developed a series of internal tools that allow it to integrate the management of these objectives into the day-to-day risk and business processes. These tools include:

- Alignment dashboard with PACTA methodology.
- TRi (Transition Risk Indicator), a tool for assessing each customer's current emissions profile and decarbonization strategies.
- Sustainability Client Toolkit, which compiles ESG information from large corporations and/or entities with public information that is required at management level in a single repository for use from the front end.

During 2022, a series of multidisciplinary working groups, consisting of teams from GRM, CI&B, Sustainability and Strategy, were launched, under the name Climate and Environmental Sectoral Panels. These groups have developed Sector Strategic Plans in the Oil & Gas and Utilities sectors (including power generation). This work made it possible to define strategies and business plans aimed at meeting the alignment objectives established in the medium term, as well as mitigating the risks related to decarbonization on the balance sheet.

This work is a fundamental part of portfolio alignment management and input for the definition of the risk appetite included in the Sector Frameworks. In 2023, plans will be implemented for the rest of the sectors for which an alignment objective has been defined.

8.2.2. Climate change opportunities for BBVA

As well as the risks described above, a number of associated opportunities have arisen which BBVA is considering to use and position itself correctly with respect to the major disruption represented by climate change.

Table 104. Climate change opportunities for BBVA

Sector	Opportunity	Time Horizon [1]
Oil & Gas	Possibility of reusing oil & gas transport assets for biofuels and hydrogen	MT
	Electrification of the oil and gas industry, and use of hydrogen	MT
Chemicals	Carbon capture and storage through chemical separation of carbon dioxide for later reuse	ST
Electricity	Strong boost to renewable energy, electricity storage	ST
	Energy efficiency services and hydrogen development	MT
	Development of nuclear fusion	LT
	Boostering the distribution of solar panels	ST
Construction & infrastructures	Renovation of buildings (headquarters, housing, premises, etc.) as well as industrial plants in need of energy-efficiency improvements because of the increased regulatory impact and self-consumption	ST
	Infrastructures to improve climate change adaptation: changes in cities, development of a smart grid, charging infrastructure for electric vehicles	ST
Transportation	Efficient low-emission and mobility services (electrical, Liquefied natural gas -LNG- and hydrogen)	ST
Mining & metals	Production of metals to manufacture electric vehicles (copper, lithium, cobalt and nickel among others)	ST
Agriculture	Efficient irrigation systems, use of waste as a source of biogas	ST
	Renewable energy use (solar) in agricultural plants	MT
	Development of new anti-drought products	MT
Carbon markets	Creation of carbon credit markets	ST
Other sectors	Circular economy, recycling, waste and water treatment, tree planting, food industry, tourism industry conversion to carbon neutrality (fossil fuel change, etc) and natural capital	ST

(1) ST: Short Term, <4 years; MT: Medium Term, 4-10 years; LT: Long Term, >10 years.

8.2.3. Sustainable finance

BBVA's approach to the origination of sustainable financing includes the channeling of financial flows towards activities or customers considered sustainable under certain criteria, basically following the following formats:

- Finalist financing: the use of the funds is allocated to a sustainable activity or purpose in accordance with:

  - The EU taxonomy developed so far (climate change mitigation and adaptation objectives);

  - Internal standards inspired by said taxonomy (or by the reports available on the objectives and categories not yet developed - environmental objectives other than adaptation or mitigation, social objectives or certain transition activities-) that may, additionally, present a certain degree of flexibility when applied in non-European geographic areas in order to reflect their different national circumstances and avoid excluding emerging markets. If a local taxonomy is developed locally, the latter will be applied;

  - Other market standards such as the SDGs or the LMA and ICMA principles for green and social loans and bonds.

- Generalist financing: in general, linked to a series of indicators or KPIs related to ESG aspects, thus trying to encourage positive behavior in terms of sustainability, in accordance with market standards such as the principles for loans and bonds linked to sustainability of LMA and ICMA.

8.2.3.1. Framework for sustainable bond issuance

BBVA has extensive experience in the green bond issuance market, an activity that began in 2007 when it took part in the issuance of the first green bond by the EIB. Since then, the Group has led, structured, advised and placed green and social bonds for its customers in Europe, Turkey, the United States, Mexico and South America.

In April 2018, BBVA published its framework for issuing own sustainable bonds, linked to the United Nations Sustainable Development Goals (SDGs). Under this framework, BBVA can issue three types of bonds:

- Green bonds: debt instruments whose funds will be used to finance new and/or existing green projects;
- Social bonds: debt instruments whose funds will be used to finance new and/or existing social projects;
- Sustainable bonds: debt instruments whose funds will be used to finance new and/or existing green and social projects.

It is a framework aligned with the International Capital Market Association (ICMA) Green and Social Bond Principles and the 2018 Sustainable Bond Guide, backed by strong governance and strict management and monitoring. of net funds earned and has an independent verification assessment by an independent third party. The framework is public and is available on the BBVA shareholders and investors website.

In 2022, the new Framework for the issuance of sustainable debt instruments was published (which replaces -except for current issuances- the 2018 Bond Framework). The new Framework has been updated to align it with the eligibility criteria for the environmental and of social growth provided for in the internal standards of the Bank inspired by the EU Taxonomy and extend it to other debt instruments in addition to bonds.Like the previous framework, it takes into account the best practices of the bond market, being aligned with the Green Bond Principles, Social Bond Principles and the ICMA Sustainability Bond Guidelines, and the possibility of adapting it to the future EU Green Bond Standard when it comes into force opens up.It also has the independent verification of the company DNV.The new Framework is public and it is also available on the BBVA shareholders and investors website.

The issuance of green and social bonds is part of BBVA's climate change and sustainable development strategy. In the sustainable bonds market, the Group has carried out, since its inaugural issue in 2018, eight public issues divided between green bonds for an amount of €4,680 million and social bonds for an amount of €2,000 million. BBVA publishes an annual monitoring report on its own green and social bonds issued. In 2022, BBVA published its fourth report, which includes the impacts of the bonds issued from 2018 to 2021 and is available on the BBVA shareholders and investors website. In relation to the environmental loans and projects financed with the green bonds issued by BBVA, since 2018 a total of 3,666,415 tons of CO_2 emissions have been avoided into the atmosphere, which is equivalent to the annual emissions of 1,451,471 cars. Additionally, the volume of treated water has been equivalent to the annual consumption of 412,965 citizens in Spain. 906,864 tons of waste have been treated, equivalent to the waste generated by 2,051,729 people in one year.

In relation to the social bonus issued in 2021, within the health subcategory, the bonus has enabled 1,044 beds in hospitals and clinics and 184 places in nursing homes, with up to 2,159,014 potential beneficiaries. In the area of education, 53,815 students have been helped. In the affordable basic infrastructure section, the social bond has contributed to extending broadband telecommunications services to more than 200,206 facilities, 303,275 homes and 4,975 companies. Altogether, 814,580 people have potentially benefited. Likewise, more than 814,580 people have benefited from the funds that have been allocated to socioeconomic advances and empowerment, through financing for vulnerable or low-income groups. Finally, 31 families have benefited in the category of affordable housing. In total, almost four million people have potentially benefited from the social destination of the funds raised by the BBVA bond issued in 2021.

8.2.3.2. CIB framework for sustainable products

BBVA considers that sustainable financing is an important strategy to help its customers on their path towards sustainability and to increase corporate responsibility. In this way, BBVA is committed to developing innovative financial solutions. The Sustainable Products Framework, applicable to the products of BBVA's Corporate & Investment Banking (CIB) activity, is aligned with this strategy, with the SDGs and with the Paris Agreement.

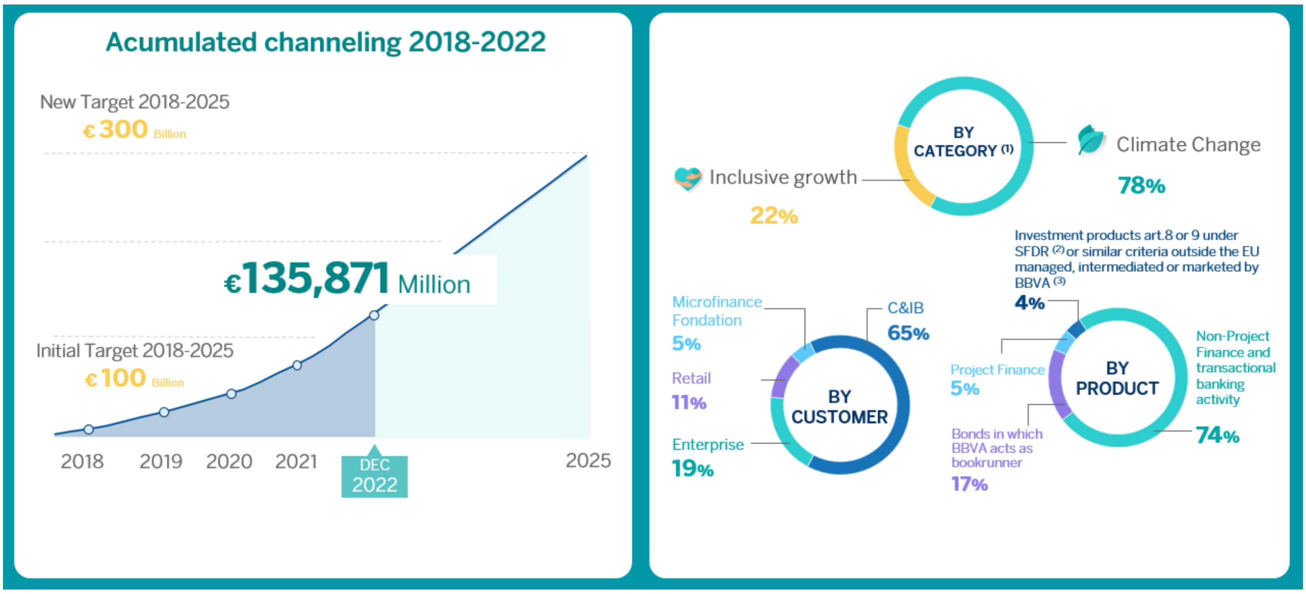
The framework is divided into two types of products:

- SDG-linked: SDG-linked products consist of customer project finance solutions that directly contribute to one or more SDGs. These projects can be considered as green, social or sustainable depending on the use of the funds.
- Linked to sustainability: products linked to sustainability consist of financial solutions that are not based on the use of funds and that will be eligible based on sustainability criteria defined in the Framework itself.

The framework is public and is available on the BBVA shareholders and investors website. It is certified by an independent third party.

BBVA[12] has once again increased its 2025 Goal, tripling its initial target for channeling sustainable business by setting it at €300,000 million for the period 2018 - 2025. Between 2018 and 2022, BBVA mobilized a total of €135,871 million in sustainable business, distributed as follows:

Chart 24. Accumulated channeling of sustainable business 2018-2022



(1) In those cases where it is not feasible or there is not enough information available to allow an exact distribution between the categories of climate change and inclusive growth, internal estimates are made based on the information available.
(2) Sustainable Finance Disclosure Regulation (SFDR).
(3) Includes, in CIB and Enterprise: structured deposits, mainly; and in Retail: structured deposits, insurance policies for electric vehicles and self-renting of electric vehicles, mainly.

The sustainable business channeling data for the year 2022 is detailed below (in € billion):

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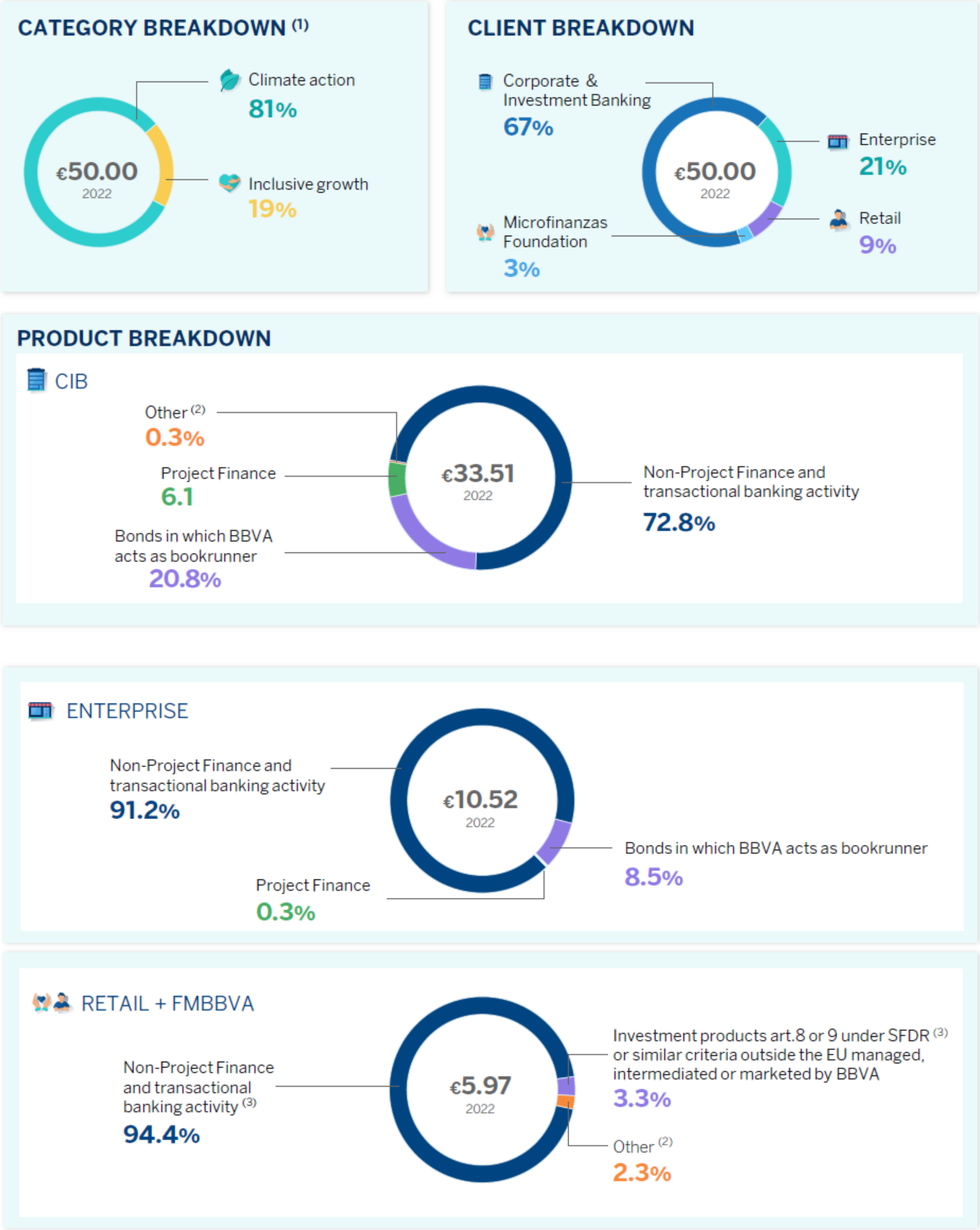
[12] For the purposes of the Goal 2025, it is included the channeling of sustainable business of the entities that are part of BBVA Group as of 12/31/2022 as well as the BBVA Microfinance Foundation.

Chart 25. Sustainable business channeling data during 2022



(1) In those cases where it is not feasible or there is not enough information available to allow an exact distribution between the categories of climate change and inclusive growth, internal estimates are made based on the information available.

(2) Includes, in CIB and Enterprise: structured deposits, mainly; and in Retail: structured deposits, insurance policies for electric vehicles and self-renting of electric vehicles, mainly.

(3) Sustainable Finance Disclosure Regulation (SFDR).

In addition to the figures on channelling sustainable business for climate change and inclusive growth, with the aim of generating a positive impact on society, through the Community Commitment 2021-2025, BBVA and its foundations will allocate 550 million euros to social initiatives to support inclusive growth in the countries in which it is present. The programmes will reach 100 million people over this period. Between 2021 and 2022, BBVA allocated 237 million euros to social initiatives to support inclusive growth in the countries where it is present, reaching 62 million people.

For the purposes of the Goal 2025, channeling is considered to be any mobilization of funds, cumulatively, towards activities or clients considered to be sustainable in accordance, fundamentally, with existing regulations, internal standards inspired by existing regulations, market standards such as the Green Bond Principles, the Social Bond Principles and the Sustainability Linked Bond Principles of the International Capital Markets Association, as well as the Green Loan Principles, Social Loan Principles and the Sustainability Linked Loan Principles of the Loan Market Association and best market practices. The foregoing is understood without prejudice to the fact that said mobilization, both at an initial stage or at a later time, may not be registered on the balance sheet. To determine the funds channeled to sustainable business, internal criteria is used based on both internal and external information, either from public sources, provided by customers or by a third party (mainly data providers and independent experts).[13].

The aforementioned sustainable business pipeline is a metric that may differ from other metrics of a regulatory nature. In particular, this metric differs from the amount of exposure to sustainable business disclosed under the technical standards of execution (ITS) on the information of Pillar 3 related to environmental, social and governance (ESG) risks[14], whose objective is the measurement of exposure to mitigation and adaptation actions[15] against climate change. The reasons for these differences come from the different calculation criteria used in both concepts, highlighting the following: (i) while channelling includes mobilization of financial flows that may not be recorded on the balance sheet (e.g. transactional banking activity, investment funds, investment or bonds in which BBVA acts as bookrunner, etc), the regulatory metric only includes exposures within the balance sheet assets; (ii) while the concept of channelling is cumulative (reflects accumulated balances since 2018), the regulatory metric only includes exposure for the year in question; (iii) while the channelling reflects the total mobilization of flows, the regulatory metric only includes outstanding balances on the balance sheet in the fiscal year in question; (iv) while the concept of channelling also includes the mobilization of flows that contribute to a purpose of a social nature such as inclusive growth and other environmental objectives, the regulatory metric only contemplates the contribution to a climate purpose.

Table 105. ESG10. Climate change mitigating actions

Type of financial instrument	Type of counterparty	Gross carrying amount (million EUR)
Bonds (e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Financial corporations	152
	Non-financial corporations	362
	Other counterparties	0
Loans (e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Financial corporations	935
	Non-financial corporations	16,446
	Of which Loans collateralised by commercial immovable property	1,494
	Households	2,574
	Of which Loans collateralised by residential immovable property	2,057
	Of which building renovation loans	53
	Other counterparties	356

(*) Book portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L", "Non-tradable at Fair Value through Profit or Loss" and "Trading". Instruments: loans and fixed income, and additionally loans secured by commercial and residential real estate. Sectors: Central banks and governments have been included as "other counterparties", credit institutions and other financial institutions as "financial corporations". Exposures include both transactions aligned with the European Taxonomy and those under the institution's internal standard. Fixed Income issues that comply with widely accepted environmental market standards. The detail of these actions is developed in the following sections of the report.

8.2.3.3. Qualitative information on the nature of the mitigation measures

The loans and bonds considered as environmentally sustainable financing presented in the table above correspond to all those operations that BBVA has considered to meet the requirements defined according to the internal standards for climate change mitigation activities. These standards are inspired by the EU taxonomy developed to date and also take into account local taxonomies, standards and best practices in the market where the Group operates. Likewise, BBVA has developed internal standards on objectives and categories not developed in the European Taxonomy for the time being (environmental objectives other than adaptation or mitigation, social objectives or certain transition activities) which may, in addition, present a certain degree of flexibility when applied in non-European geographical areas in order to reflect their different national situations and avoid excluding emerging

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[13] BBVA does not assume any responsibility for the opinions expressed by third parties or for any errors or omissions in the information coming from external sources.

[14] Included in the Implementing Regulation (EU) 2022/2453 of the Commission of 30 November 2022, amending the implementing technical standards laid down in the Implementing Regulation (EU) 2021/637.

[15] According to the regulatory definition (FINREP) of exposure: outstanding risk of loans and advances, as well as bonds in the investment portfolio.

markets. If a local taxonomy is developed locally, this will be applied and also inspired by other market standards such as the SDGs or the LMA and ICMA principles for green and social lending and bonds.

8.2.3.3.1. Type of risk mitigated: climate change transition risk

BBVA supports counterparties by facilitating the flow of funds towards activities included in the internal standards mentioned above, which mainly refer to climate change mitigation objectives.

Likewise, in relation to "transition" activities, a term widely used when talking about the economy, specific sectors, financial portfolios or companies, it is used to describe the changes in the economies necessary to meet the European Union's environmental objectives.

The BBVA standard of sustainable activities includes, among others, activities considered as transition activities by the European taxonomy, such as nuclear energy, the manufacture of plastics in their primary form, building renovation and gas-related activities, where other transition activities contemplated in the Taxonomy will be incorporated. Beyond the European Taxonomy, other activities such as the extraction of strategic minerals and activities related to energy efficiency are considered under strict criteria, which can be reviewed within a certain time horizon.

On the other hand, decreasing GHG emission pathways of activities that do not yet meet the technical selection criteria of the European Taxonomy, but adhere to internationally recognised frameworks such as the Science Based Target Initiative, where the success of the transition is assessed by the average emissions change over time, are also considered as a transition.

The same philosophy is applied for geographies where market maturity is not comparable to more developed countries, therefore the same metrics are used but with a pathway over time to reach the same environmental target.

8.2.3.3.2. Type of risk mitigated: climate change physical risk

For the time being, BBVA focuses all its efforts on supporting the customer in mitigation measures and supporting the ecological transition, although initial standards have also been developed for certain adaptation activities mainly for activities related to the primary sector, such as efficient agriculture, eco-schemes or drought-resistant seeds.

8.2.4. Sustainable investment solutions

In 2022, BBVA Asset Management (BBVA AM), the Group's investment management unit that brings together all asset management activities worldwide, continued with its sustainability integration plan. The plan took specific form, among others, in the following developments:

- Incorporation of the ESG extra-financial criteria in the process of investment and risk control decision-making for vehicles and portfolios they manage, both in the investment process and voting policy. Once this model was developed for assets under management in Europe, during 2022 BBVA AM worked towards its incorporation into assets under management in Mexico.
- Commitment to sustainable investment best practices such as adherence to the Principles for Responsible Investment promoted by the United Nations and the Net Zero Asset Managers Commitment to reach 2050 with net zero emission portfolios. In 2022, regarding the latter commitment, BBVA AM announced some initial targets for decarbonization of portfolios, including 22% of total assets under management, with the following intermediate targets for 2030:
    - Reduction of 50% of emissions in the equity and corporate fixed-income portfolio, and
    - Improved CCPI (Climate Change Performance Index) for eurozone sovereign debt. The CCPI is an index that annually monitors climate protection performance by country.
- Exclusion policies. An exclusions rule was approved for the entire BBVA AM business that includes:
    - Exclusion of companies in breach of international standards and treaties related to good practices in labor rights, human rights and anti-corruption policies,
    - Exclusions of certain activities, such as controversial armament, coal, and oil and gas linked to tar sands and the Arctic, and
    - Additional sectoral exclusions for sustainable products.

This policy already applies to all assets under management in Europe and Mexico.

During 2022, BBVA AM continued to expand its offering of sustainable products, i.e. products that follow sustainability targets or metrics in their investment policy. BBVA AM now markets 9 new investment funds (8 in Spain, 1 in Mexico), bringing the total number of investment vehicles using sustainability targets and metrics to 33. Assets under management in sustainable solutions at the end of 2022 amounted to €7,020 million euros (€5,598 million in 2021), and net acquisition of new funds was 976 million euros (€1,559 million in 2021).

In the retail banking segment, it is worth noting that 3,133 million euros correspond to funds that promote ESG characteristics, that 108 million euros correspond to funds with a sustainable investment objective and that 2,593 million euros correspond to pension plans that promote ESG characteristics.

The assets managed under the criteria described above at year-end 2022 and 2021 are shown below:

Table 106. Assets under management with SRI criteria (BBVA Asset Management. Million Euros)

	2022	2021
Total assets under management	**124,601**	**119,307**
Europe	74,599	80,981
Mexico	35,614	30,179
South America	7,384	4,252
Turkey	7,005	3,895
SRI strategy applied		
Exclusion (1)	110,213	119,307
Vote (2)	110,213	111,160
Integration (3)	110,213	80,981

(1) The exclusion strategy, with the exclusion policy approved in 2021, applies to assets managed in Europe and Mexico.

(2) The voting strategy is applied to 100% of the assets under management in Europe for those instruments, in BBVA AM portfolios, that generate voting rights and their issuers are in the European and US geographical areas and in the business of AM México for those issuers that generate voting rights and their issuers are in the Mexican geographic area.

(3) The integration strategy is applied in SRI pension plans and mutual funds of the Europe business and, since 2022, AM Mexico.

8.3. Governance model

8.3.1. Corporate bodies

BBVA's corporate bodies have defined and promoted that the Group has a strategy that incorporates sustainability as one of its priorities. Sustainability was embedded in the Group's strategic plan in 2019.

For the Board of Directors, an essential element of this strategic approach is the integration of sustainability into the Group's businesses and activities, managing the risks associated with these areas, and considering them a great business opportunity to support its growth strategy. Combined with this is the establishment of targets which facilitate their execution, supervision and monitoring. This approach allows the Group's corporate bodies to define the basic lines of action for BBVA as regards the management of opportunities and risks arising from sustainability and oversee their execution by the executive areas in all spheres of the Entity's operations.

For this role, the Board is assisted by its committees on matters within their respective areas of concern. The Executive Committee plays an active role in promoting this strategy and monitoring the integration of sustainability into the Group's business processes and activities.

Also important is the role of the Risk and Compliance Committee, which assists the Board of Directors in the integration of sustainability in the analysis, planning and management of the Group's risks, and in supervising their execution; that of the Audit Committee, in supervising the public information on sustainability reported to the market; and the Remuneration Committee, in driving the integration of indicators related to sustainability in the Group's variable remuneration model.

In the exercise of these functions, in 2022 the Board approved the update of the General Sustainability Policy, which integrates the previous Corporate Social Responsibility Policy and the General Sustainability Policy. The new policy sets out the general principles and the key management and control objectives and guidelines to be followed by the Group in terms of sustainable development with a focus on climate change, natural capital and inclusive growth.

In addition to this, there is the role of the corporate supervisory and monitoring bodies for the implementation of the Group's sustainability strategy and activity, and compliance with the organization's objectives, which is carried out based on the reports received by the Sustainability Area and the different areas of the Bank which incorporate sustainability into their daily businesses and activities. The reports are submitted to the corporate bodies according to their area of concern along the lines described in the preceding paragraphs, on a scheduled or ad hoc basis.

To achieve the best performance of its functions in this area, the Board of Directors believes it necessary to have suitable knowledge and experience in sustainability matters. To this end, it continues to conduct initiatives that involve the recruitment, within the process of gradual replacement its members, of directors with extensive knowledge and experience in these matters, and in the extension of the continuous training program of its members to matters related to sustainability.

8.3.2. Cross-cutting integration of sustainability into the executive sphere

BBVA incorporates sustainability as part of its daily activities, encompassing not only relations with customers but also internal processes. The definition and execution of the strategy, which includes sustainability and climate change as one of its priorities, has a transversal nature, being the responsibility of all areas of the Group to incorporate it progressively into their strategic agenda and their work dynamics. This is also reflected in the remuneration policy of the Group, as stated in the corresponding chapter of this document.

In 2021, BBVA gave a fresh impetus to its strategy by elevating sustainability to the highest executive level of the organization, reporting directly to the CEO and Chair (in this case, in areas linked to strategy and transformation) by creating the Global Sustainability business area.

In a context in which all the Group employees and areas integrate sustainability into their day-to-day activity, the new global area designs the strategic sustainability agenda, defines and promotes the lines of work in this area of the different global and transformation units (including Finance, Talent and Culture, Data, Engineering, and Organization among others) and develops new sustainable products.

In addition, BBVA has established a network of experts, comprising sustainability specialists from different areas of the Group (Client Solutions, Corporate & Investment Banking, Asset Management, Global Risk Management and Global Sustainability), coordinated as a network by the global Sustainability area. These experts are responsible for building knowledge in the field of sustainability at the Group. This knowledge is then used to provide customer guidance, support areas in developing new value propositions in the sphere of sustainability, make climate change risks part of risk management, and draw up a public agenda and set of sustainability standards.

The Group's sustainability governance model integrates a suitable structure of corporate bodies with a robust executive structure that reports to them. It combines the cross-cutting reach of the global sustainability area with the execution of the strategic priority in the various business areas, which allows the Board and its Committees to have the necessary information to make suitable decisions and perform their supervisory and control function.

8.3.3. Progress in the execution of the strategy

BBVA incorporates sustainability in its day-to-day business, both in customer relations and in internal processes, including its management control and reporting processes.

BBVA in Spain is integrating sustainability in its financial reporting to senior management and business areas. These reports on sustainable operations include both financial plans and budgets, from which some internal resource allocation decisions are derived.

On a recurring basis, financial reports are used for decision-making based on the sustainability pillar, including data on sustainable business channelling, profitability, percentage penetration of sustainable activity, as well as balance sheets and income statements that enable monitoring of sustainable operations for each of the business segments.

8.4. Sustainability Risks management

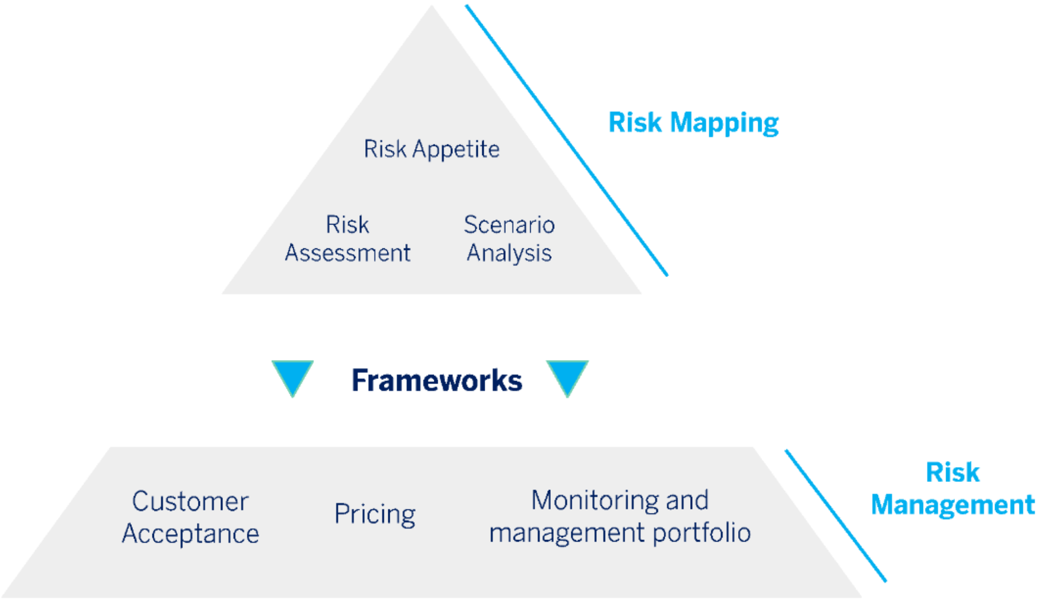
8.4.1. Integrating climate change into risk planning

The risks associated with climate change (transitional and physical) are considered as an additional factor affecting the risk categories already identified and defined in the BBVA Group and are therefore managed through the Group's risk management frameworks (credit, market, liquidity, operational and other non-financial risks). As a result, the integration of climate-change related risks into the BBVA Group's risk management framework is based on their incorporation into the governance and processes currently in place, taking into account regulatory and supervisory trends.

Correct planning requires reliable, complete and up-to-date data. Accordingly, in 2022 work continued on the deployment of the sustainability data strategy, based on the Principles for effective risk data aggregation and risk BCBS 239, in which sustainability data needs have been identified, data gaps have been assessed and a conceptual model and implementation plan have been developed. All this is geared to guaranteeing a comprehensive vision of the Group's climate change risks to ensure their correct control and management. In response to both regulatory and management needs, and so on, the data considered include data related to customer climate scorings, real estate energy efficiency certificates, ESG ratings, greenhouse gas emissions, asset and collateral location and sector-specific metrics, etc.

Climate change risk management in BBVA Group is based on the risk planning process which is marked by the defined risk appetite and makes use of management frameworks which establish how these risks are to be addressed in day-to-day business activities.

Chart 26. Integrating climate change into risk management and planning



8.4.2. Risk planning

8.4.2.1. Risk appetite Framework (RAF)

BBVA's Risk Appetite Framework, approved by the corporate governance bodies and applicable to all the Group's material geographic areas, determines the risk levels that BBVA is willing to assume to achieve its targets, considering the organic evolution of the business. It is organized under a pyramidal structure that starts from the thresholds of the core metrics and the metrics by type of risk and declines in a framework of management limits. The Framework has a general statement that sets out the general principles of the risk strategy and the target risk profile. The statement includes a commitment to sustainable development as one of the elements defined by the BBVA business model, focusing on supporting the customer in the transition toward a sustainable future, and incorporating the climate factor in risk management. This statement is complemented and detailed by a quantification of the appetite through metrics and thresholds that provide a clear and concise guide to the maximum acceptable risk profile.

A quantitative transition risk metric has been incorporated into the framework since 2021. This High Transition Risk metric measures Exposure at Default (EAD) in relation to capital of the activities most exposed to transition risk in accordance with the Taxonomy defined internally (High Transition Risk), focusing on activities classified as High or Very High risk. With respect to this metric, the Board of Directors of BBVA has approved thresholds at a Group and geographic area level, which determine the maximum appetite for this risk.

Furthermore, a new metric has been included in the 2023 management limits, called High Market Misalignment. This metric is defined as the percentage of the capital base of exposure to customers whose issuance intensity is above 30% of the market average. This metric takes a transition risk management approach by focusing on customers with a clear level of misalignment with respect to the emissions intensity trajectories established by the International Energy Agency, The Net Zero Emissions scenario for each of the sectors. The calculation scope is the loan portfolio of the automotive, power generation, steel and cement sectors.

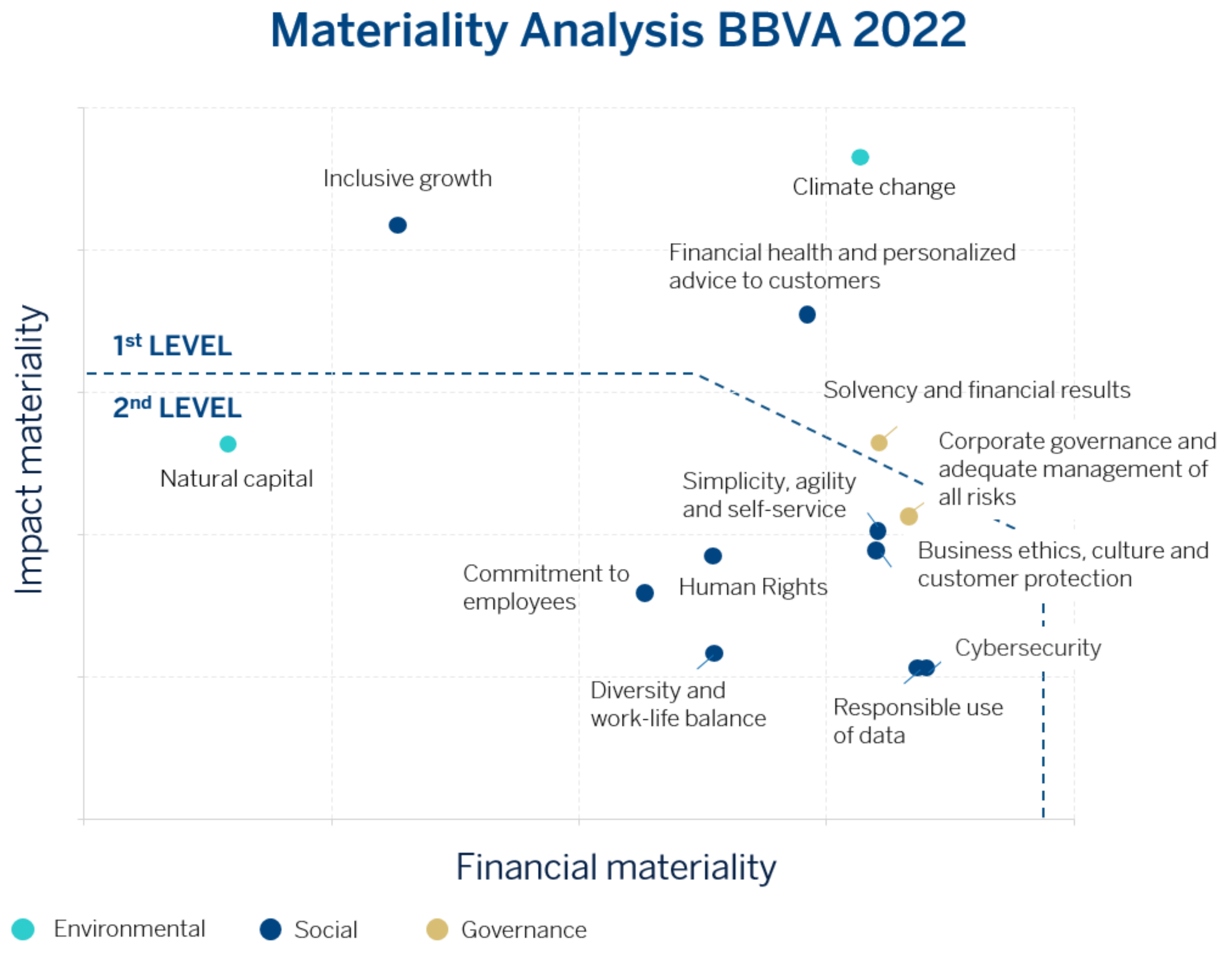
The definition of the levels of tolerance established in the Risk Appetite Framework are based on the Risk Assessment and Scenario analyses described below. These are further developed in 8.4.2.3 Risk Assessment.

8.4.2.2. Materiality analysis

BBVA periodically prepares a materiality analysis to identify those environmental, social and governance issues that are most relevant to the Group and its stakeholders. In 2022, this analysis has been carried out following the new GRI requirements (December 2021 version) and the proposal of the new European Corporate Sustainability Reporting Directive (CSRD), which has implied the incorporation of the double materiality approach, which analyzes, both, the impact that BBVA's activity has on the environment and its stakeholders (impact materiality) and the impact that the environment and its stakeholders have on BBVA's activity (financial materiality).

As a result of this analysis, the material issues for BBVA's stakeholders are the ones shown in the following matrix:

Chart 27. Materiality matrix



As a result of the double materiality analysis for the year 2022, the most outstanding material issues are:

- Climate change: Stakeholders have climate change among their main concerns and expect BBVA to contribute to an orderly transition towards a low-emissions economy. This requires proper risk and opportunity management.
- Inclusive growth: Stakeholders expect the bank's business model to support the financial inclusion of people in the countries in which it operates, entrepreneurs, and the development of inclusive infrastructures.
- Financial health and personalized advice to customers: Stakeholders expect the bank to get to know its customers and propose personalized solutions and recommendations to better manage their finances and achieve their life goals. All this in a proactive and increasingly automated way.
- Solvency and financial results: Stakeholders expect BBVA to be a bank with ample capital and liquidity, thus contributing to the stability of the system. In addition, they expect BBVA to generate good results over time. That is, they demand a sustainable business model in the current ecosystem.

It should be noted that, with respect to the materiality analysis published in 2021, a total of thirteen material issues remain, although the "COVID-19" issue has been disregarded as its degree of importance has decreased and "Natural Capital" has been included.

These issues materialize in three of the six strategic priorities: "Helping customers in the transition towards a sustainable future", "Improving the financial health of customers" and "searching operational excellence", as well as in ambitious objectives in terms of efficiency, profitability, value creation for the shareholder, customer growth and sustainable business channelling for the coming years.

The information regarding the performance of these most relevant matters and the rest of the material matters for the BBVA Group in the year 2022 is developed in the different chapters of this report.

The scope of this analysis includes the main geographical areas in which BBVA operates (Spain, Mexico, Turkey, Argentina, Colombia and Peru) and short, medium and long-term time horizons have been taken into account. For more details on the sources used, the methodology, as well as the objectives and degree of progress of these material issues for BBVA and its stakeholders, see the section "Additional information on materiality analysis" in the chapter "2.4. Additional information" of the Consolidated Management Report.

8.4.2.3. Risk Assessment

This section firstly provides a self-assessment of how the different climate-change related risk factors impact on the main types of risk currently existing (credit, market, liquidity, etc.); secondly, an analysis of the sectors that are most sensitive to this risk (under the so-called “internal risk taxonomy”); and, finally, the methodology used to assess the climate vulnerability of the relevant geographic areas where the BBVA Group operates. These last two aspects are integrated into the management through processes such as admission frameworks or the establishment of risk limits.

As part of its General Risk Management and Control Model, the Group develops periodic risk identification and assessment processes to identify material risks that could have a negative impact on its risk profile and to manage those risks actively and proactively. These processes cover all types of risks faced by the Group in its daily activity, including those risks that are more difficult to quantify. Since 2022, the General Risk Management and Control Model specifically considers sustainability as an essential part of the Group's strategy.

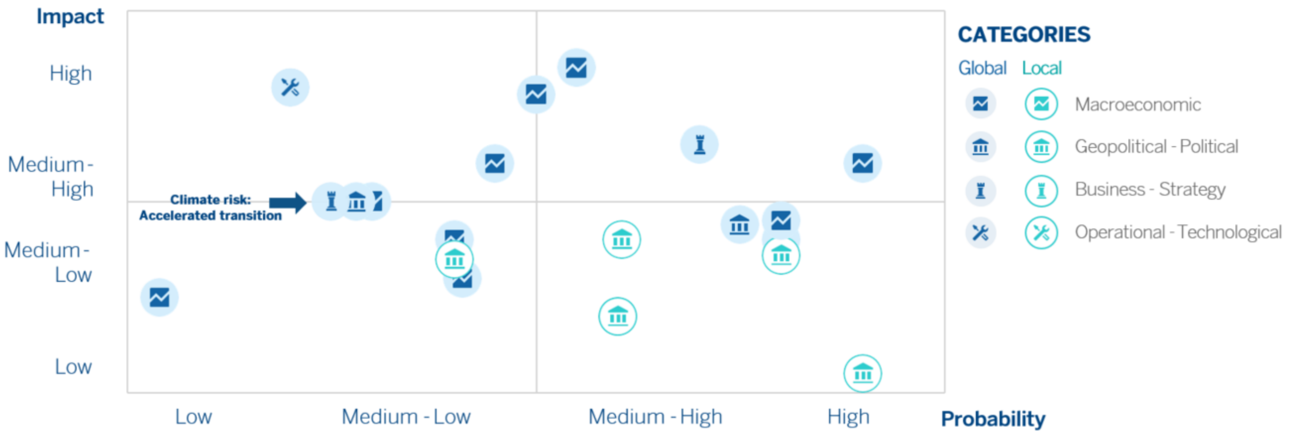
The Global Risk Assessment is a prospective exercise which updates at least twice a year, and allows a comparison between risk types, business activities and moments in time, facilitating the understanding of the Bank's positioning and its development, and identifying the material risks to cover with capital. Since 2020 the Group has carried out a climate assessment, mainly of a qualitative nature, which assesses BBVA's vulnerability to transition and physical risk. As in the case of the global assessment, the climate assessment process is of a participative and global nature in the GRM area. The results of the assessment are submitted to the highest executive risk committee (GRMC), as well as the corporate bodies, as this assessment is integrated in key corporate processes such as the Risk Appetite Framework and the Internal Capital Adequacy Assessment Process (ICAAP).

The climate change risk assessment process runs parallel to the Group's global risk assessment, although there are two major differences. First, there are still no mature indicators to assess the different risks quantitatively and second, the time horizon of the analysis is much more extensive. The analysis is carried out for a short-term horizon coinciding with the planning horizon (4 years), medium term (4-10 years) and long term (over 10 years). The climate change risk assessment, like the other risks, is carried out from two perspectives of the global assessment:

1. Identification of risk events: transition risk and physical risk are included in the identification of risk events that may have a material impact on the Group. Below is the matrix of risk events identified in 2022 that are graphically represented according to their estimated

impact on the BBVA Group and their assigned probability.

Chart 28. Risk materializing in the short term: time horizon 12-18 months



Climate change risk is included as a material event in this inventory since 2019. The assessment in the analysis of climate change risk events classifies physical and transition risks. In the short term (12-18 months), it is considered that an accelerated transition to a low-carbon economy would entail a medium-impact risk event, although the probability currently given to this type of scenario is medium low. At a medium/long-term time horizon, the risk of physical climate change is included in the inventory of emerging risks (those that may have an impact on a longer horizon) and is assigned a medium risk.

2. Risk level assessment: The second approach followed in risk assessment is based on an assessment of the profile of each type of risk expressed in a heat map. In 2022, the analysis was extended to the six relevant geographical areas of the BBVA Group (Spain, Mexico, Turkey, Argentina, Peru and Colombia). The financial year incorporates risk factors, such as the carbon footprint of customers, the energy efficiency of real estate collateral and the emissions financed, to name a few. Work has also been done on the preliminary inclusion of quantitative metrics for certain risk factors, especially exposures to activities that are sensitive to transition risk (include table of indicators).

8.4.2.3.1. Assessment conclusions

The conclusions of the assessment for 2022 suggest that the main risks emerge in medium- and long-term loan portfolios, with an earlier impact on transition risk in Spain given the speed of this geographic area in adopting decarbonization policies. In contrast, there has been a reduction in risk due to regulatory pressure in emerging geographies. The factor that has the greatest impact in the long term on credit risk is that derived from the investments in technological change that companies will have to carry out in order to decarbonise. With respect to the impact of physical risk on loan portfolios, the greater frequency/severity of extreme meteorological events and structural changes in climate patterns explains the deterioration shown in the assessment over longer-term horizons. Also noteworthy is the increase in medium-term insurance risk associated with the increase in reinsurance premiums, which may have an impact in the medium term, although the level of risk remains at a medium-low level.

The impact of transition risk on liquidity risk is low due to the stability of the retail deposit base and the high asset quality of the liquid asset buffer. Market risk is equally low, due to the diversification of the equity portfolio and low exposure to sectors sensitive to transition risk in the fixed-income portfolio.

As for operational risk, there is a difference in the perceived risk in Spain (medium-low) and in the rest of the geographic areas (medium-high), due to the greater exposure of the latter to physical risk in the medium and long term.

Table 107. Risk Assessment Climate Change 2022

	Spain			Rest of geographical areas		
	ST	**MT**	**LT**	**ST**	**MT**	**LT**
Transition risk						
Credit	▒	▓	▓	░	▒	▓
Liquidity and funding	░	▒	▒	░	▒	▒
Structural equities risk	░	░	░	░	░	░
Credit spread risk	░	░	░	░	░	░
Markets (trading)	░	░	░	░	░	░
Insurance	░	░	░	░	░	░
Operational	▒	▒	░	▒	▒	▒
Reputational	▒	▒	▒	▒	▒	▒
TOTAL	▒	▒	▓	░	▒	▒
Physical risk						
Credit	░	▒	▓	░	▒	▓
Liquidity and funding	░	▒	▒	░	▒	▒
Structural equities risk	░	░	░	░	░	░
Credit spread risk	░	▒	▒	░	▒	▒
Markets (trading)	░	░	░	░	░	░
Insurance	░	▒	▒	░	▒	▒
Operational	░	░	▒	▒	▓	▓
TOTAL	░	▒	▓	░	▒	▓

Temporary horizons definitions:

ST: short term; up to 4 years (planning horizon)
MP: medium term from 4 to 10 years
LP: long term; more than 10 years

░	Low risk
▒	Moderate-low risk
▓	Moderate-high risk
█	High risk
☐	Not applicable

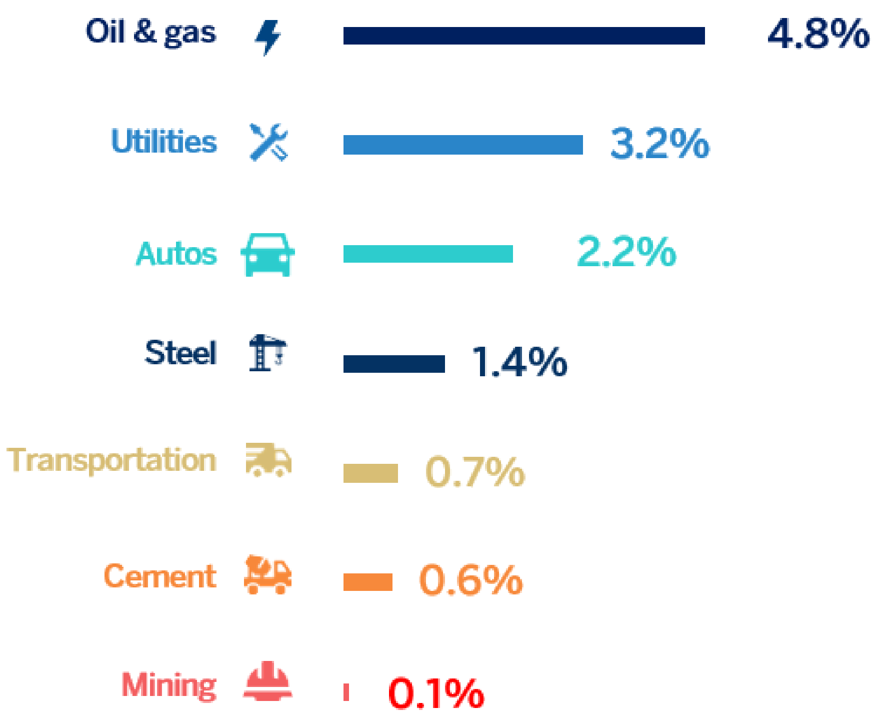
Within the scope of preparing and defining its industry frameworks governing the credit admission process, BBVA has developed an internal Taxonomy of transition risk in order to classify industries according to their sensitivity to transition risk. In addition, metrics are identified at the customer level to assess their vulnerability and to integrate this aspect into risk and customer support decisions.

The estimation of the transition risk-sensitivity level is based on the qualitative analysis of the amount of exposure to regulatory, technological and market changes caused by decarbonization that may have a financial impact on the companies of the industry and on the estimation of the time horizon impact of these effects.

Therefore, industries are categorized according to their level of sensitivity to transition risk: very high, high, moderate or low. The industries identified as most sensitive to transition risk are energy or fossil fuel generation sectors (energy, utilities and coal mining); emission-intensive basic industries (steel, cement); and activities that are final users of energy and generators of emissions through their products or services (vehicles manufacturers, air and sea transportation).

As a result of this exercise, with data as at December 31, 2021, 12.95% of the exposure (measured by EAD) of the wholesale portfolio (equivalent to 6.69% of the Group's portfolio) has been identified as corresponding to sectors defined as "high transition risk", with a high or very high level of exposure to this risk. This calculation was made on a portfolio of €209,759 million (of the Group's total EAD of €406,097 million), corresponding to the EAD of the wholesale lending portfolio.

Chart 29. Financing distribution to high transition risk sectors



Prepared by BBVA. Includes the percentage of exposure at default of activities internally defined as "transition risk sensitive" over the EAD of the wholesale portfolio as of December 31, 2021 (not including the subsidiaries of Garanti, Forum Chile, Uruguay, Venezuela and BPI). The "transition risk sensitive" portfolio includes activities that generate energy or fossil fuels (energy, utilities, excluding renewable generation and water, waste treatment and coal mining), basic industries with emission-intensive processes (steel and cement), final activities users of the energy through their products or services (vehicles manufacturers, air and sea transportation) and mining, with a high or very high level of sensitivity to this risk.

During 2022, this calculation was introduced for the small business sector (SMEs and the self-employed). The results obtained 2022 indicate that the EAD associated with high or very high transition risk in this portfolio is limited, at around 3%, and focused in mainly in Spain and in the automotive (components) sector.

In addition, climate change and environmental risk impact has been incorporated into country risk analysis since 2019, as an additional input for establishing risk policies affecting exposures to private or sovereign administrations of all the countries with which the Bank has some type of risk (+100 countries).

8.4.3. Analysis of scenarios and stress testing

8.4.3.1. Scenarios and internal stress tests

The climate scenarios have been integrated into the governance of the BBVA Group's internal scenarios, with initiatives being developed in several areas:

1. The climate reflection is presented together with the preparation of the budget baseline scenario. It reviews the climate policies in place in each relevant geographic area, their effective relevance within the overall economic policy framework, their consistency with the transition to a decarbonized economy and whether there may be any bias on the economic growth of the budget baseline scenario due to its potential development.
2. The climate driver has been integrated into the high-level risk scenarios (HLRS) which are monitored and assessed continuously in the Group by the Scenario Working Group. They serve as a basis for choosing the scenario which is used in the Group's internal capital adequacy assessment process (ICAAP).

In 2022 different physical risk events in Spain were assessed in order to consider them as input in the ICAAP. Among the events taken into account, drought is considered relevant for the design of physical climate change risk scenarios due to its presence in recent history, its persistence over time and its impact on the economy.

8.4.3.2. Regulatory and supervisory scenarios and stress tests

In October 2021, the ECB published the methodology for the stress tests on climate change risk scheduled for 2022 in the months March to July. 104 entities participated fully or partially in this exercise, and of these, 41 entities, including BBVA, participated in the whole exercise. The exercise was based on three different modules, with the following contents:

1. Module 1: qualitative questionnaire about the internal framework of climate stress testing including 11 blocks with topics related to governance, RAF, integration with the strategy, ICAAP and future plans
2. Module 2: analysis of the current portfolio of entities with respect to revenue dependence on polluting[16] sectors as well as emissions financed in such sectors
3. Module 3: Bottom-up stress testing and loss projections with different types of risks and horizons considered:
    - Transition risks:
        - Short-term (3-year projection) including both credit risk and market risk, based on the Network for Greening the Financial System Disorderly scenario (NGFS)
        - Long term (2030-2040-2050), including only credit risk and considering dynamic balance sheet projections based on both the macro situation and the Entity's strategy covering three NGFS scenarios (Hot House, Orderly and Disorderly)
    - Physical risk (credit risk): two one-year projections each, considering a flood scenario and a drought and heat wave scenario
    - The exercise covered operational risk and reputational risk by means of qualitative questionnaires

In order to comply with the methodology required by the ECB in this exercise, a sectoral layer has been incorporated into the loss projection models. These models, together with the sectoral scenarios published by the ECB, have made it possible to make projections reflecting the idiosyncrasies of each sector. In this way, the possible differences in sensitivities to climate change risk in each of them are adequately reflected through differentiated impacts.

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[16] The exercise focused on a list of 22 NACE sectors published by the ECB.

8.5. Transition risk

These are the risks pertaining to the transition to a low-carbon economy, and which arise from changes in legislation, the market, consumers, etc., to mitigate and address the requirements derived from climate change.

Table 108. Transition Risks

Risk subtype	Risks associated with climate change	Risk description	Time horizon (1)
Legal and regulatory	Increase in the cost of CO_2 emissions	Financial risk to BBVA customers whose liquidity or earnings could be harmed from having to face higher costs or, alternatively, higher investments in emission neutralization, resulting from regulatory changes	ST
		Increased cost of direct emissions from the Bank in its operations	ST
	Increase in monitoring and tracking requirements	Increased staffing and economic resources for the study and monitoring of the Group's clients, and tracking of their compliance with environmental requirements	ST
	Changes in the regulation of existing products and services	Uncertainty for financial agents regarding changes and their implementation	ST
		Impairment of client asset positions due to the generation of stranded assets (assets that prior to the end of their economic life are no longer able to earn an economic return)	MT
		Sales drop due to adjustments to offerings, to align with new legal specifications for a product	MT
	Increase in regulatory capital requirements due to risk associated with climate change	Possibly different prudential treatment of financial assets in terms of riskweighted assets based on their exposure to physical and transition risks	MT
		Adverse regulatory changes that may cause certain exposures on BBVA's climate change balance sheet to have higher capital consumption	MT
	Risks of environmental lawsuits	Possible lawsuits against BBVA for not complying with environmental regulations in its business or supply chain	ST
	Risk of lawsuits against third parties	Potential lawsuits for environmental crimes against BBVA clients. BBVA could be impacted by its clients' loss of solvency resulting from an increase in litigation costs	ST
Technological	Replacement of existing products and services with lower-emission alternatives	BBVA clients with a position in sectors that are outperformed by alternative technologies could suffer solvency problems and their ability to cope with their credit commitments could be diminished	ST
	Failed investment in new technologies	Clients that invest in failed technology may go through solvency difficulties and be unable to meet their credit commitments	ST
	Cost of transitioning to low-emission technology	The necessary investments to be made by BBVA clients to change their production models and in R&D can have a negative impact on the balance sheet structure or profitability of said clients if they are not made properly and reduce the ability to meet their credit commitments	ST
		Costs of investing in remodelling and adapting BBVA-owned buildings	ST

Risk subtype	Risks associated with climate change	Risk description	Time horizon (1)
Market	Changes in (market) trends, financial agent and consumer preferences	Changes in demand caused by changes in consumer preferences can lead to falls in sales for BBVA clients and result in loss of profits and solvency	ST
		Reduction in demand for certain products can cause price falls that affect the valuation of companies' assets (crude oil reserves, fossil fuel cars, etc.)	ST
		Increased demand for certain products or services may impact on the price of certain raw materials. While this may be reflected in prices, it may lead to lower profits or the loss of BBVA's clients' market share	ST
		Risk of change in the Bank's client preferences for not considering the Bank well positioned in the sustainable segment	ST
	Uncertainty in market signals	Difficulty or impediments to proper price formation or allocation of financing or investment sums	ST
		Forecasts made by research agencies or services to dictate the strategy of entities may not be fulfilled due to abrupt changes in the market caused by changes in regulations or demand	ST
	Increased cost of raw materials	Sharp changes in the price of raw materials, resulting in changes in supply or energy cost, can lead to deteriorating liquidity and declining profits for clients. It can be mitigated with end-product price increases	ST
		BBVA's energy supply cost could also be affected	ST
	Financial risks	Risk of a significant increase in the cost of financing clients with higher exposure to climate change risks, in a way that affects their solvency by making it more difficult for them to cope with their credit commitments	ST
		Risk of worsening the credit rating of clients with exposure to climate change risks, with the associated adverse effects for BBVA	ST
Reputational	Change in consumer preferences	Direct risk of client loss for not meeting what various stakeholders expect from BBVA as regards the climate change challenge and fostering a more inclusive world	ST
		Indirect risk of our clients losing business, which affects their solvency, because they engage in an activity that is not considered sustainable	ST
		Demand from clients to limit our operations' direct impacts	ST
	Stigmatization of a sector	Risk of assets stranded by a sharp change in the perception of a sector, with significant loss of sales	ST
	Investment exclusions in certain sectors due to market pressures	Withdrawal from profitable deals due to reputational risk or a sectoral ban	ST
	Policy implementation	Risk derived from greater scrutiny of activities, policies, objectives and the way in which aspects related to climate change are disclosed. The Group's reputation may be damaged if its efforts to reduce environmental and social risks are considered insufficient.	ST

(1) ST: Short Term, <4 years; MT: Medium Term, 4-10 years; LT: Long Term, >10 years.

8.5.1.Measurement and integration of transition risk

In 2022, sustainability factors continued to be included as one of the analysis axis in the Action Frameworks of all the sectors included in the taxonomy as High transition risk. In these Action Frameworks, the risks and opportunities of the climate transition are incorporated as an additional factor in the definition of the risk portfolio view, which is carried out annually and where the risk appetite is defined at sector level.

In sectors classified as High transition risk, transition risk assessment criteria have begun to be defined at customer level based on their alignment with the objectives of the Paris Agreement or the ambition and credibility of their transition plans. In some cases, this analysis leads to the definition of specific risk policies with the customer or to the definition of credit risk mitigants.

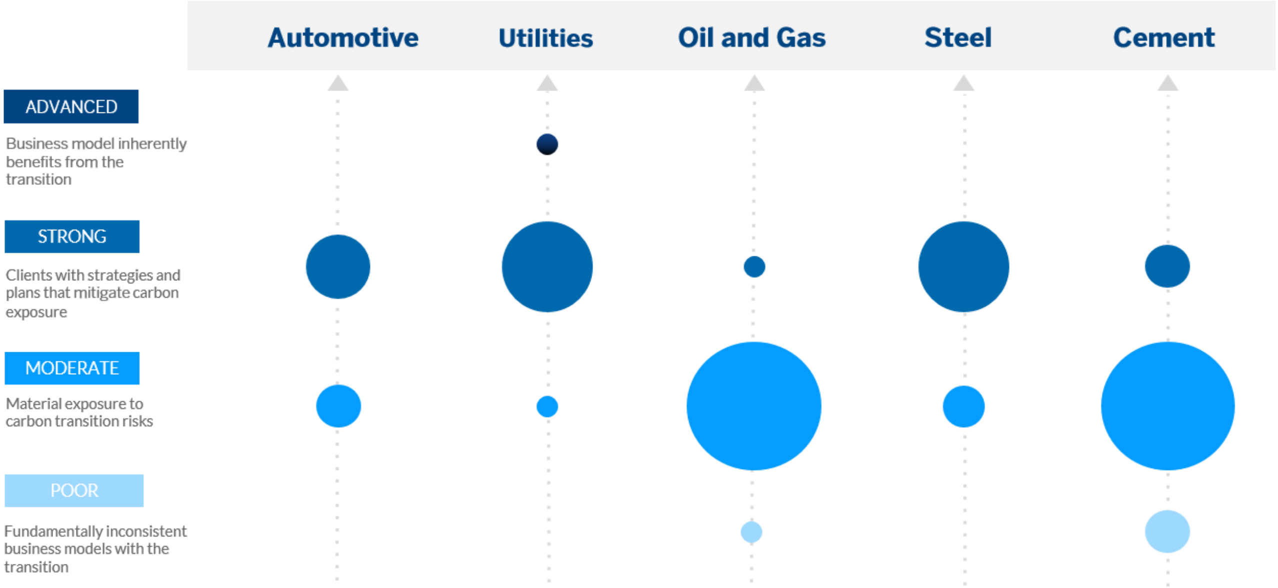
In addition to the integration into the sectoral frameworks, in 2022, sustainability factors also continued to be systematically integrated into the customer analysis processes for credit origination, enabling their incorporation into decision making.

This analysis is performed in an environment integrated in BBVA's systems, called ESG Client Toolkit, which presents a common interface for the Risk and Business teams where the customers' sustainability information is viewed. This interface provides insight into climate transition strategies, governance and climate change risk and opportunity management practices, decarbonization metrics and targets, as well as progress in the management of other ESG aspects material to the customer's sector of activity, its compliance with BBVA's Environmental and Social Framework, existence of social, environmental and ethical controversies and its level of alignment with the objectives of the Paris Agreement and level of emissions financed. This environment integrates the calculation of the transition risk scorecard, known as the Transition Risk indicator.

Moreover, for those sectors classified as high transition risk, an advanced transition risk scorecard has been developed to incorporate transition risk dimensions in the customer's profile. The scorecard evaluates the company's current low-carbon profile; the levels of regulatory pressure in the geographic areas where it is present; its level of disclosure on climate management in line with TCFD recommendations; and the ambition and maturity of its decarbonization objectives. The result of the scorecard is a valuable tool to better identify the strengths and weaknesses of customers and to define concrete products to help them in the transition to low-carbon business models.

In 2022, versions of the transition scorecard were developed for the steel and cement sectors to join those previously defined for Automotive, Power Generation and Oil & Gas. The number of customers for whom the transition scorecard is available has been significantly expanded and work has begun on integrating it into standard risk management processes. The following image shows the results of the transition scorecard of the main customers in BBVA's Automotive, Oil & Gas, Power Generation, Steel and Cement manufacturing portfolio (the size of the circles represents the number of customers in each category):

Chart 30. Classification of the transition scorecard of main customers



In the retail area the transition risk analysis was focused on the mortgage, auto loan and SME portfolios. In all of them, one of the main aspects that determines the transition risk are carbon emissions associated with each of them. These emissions are associated with the use of fossil fuels or electricity, or dependence on them for the correct operation of the asset or customer. Therefore, the calculation of financed emissions serves as a lever to identify the portfolios that are most sensitive to changes in regulation, fuel prices or depreciation of certain types of "unsustainable" assets. In turn, to mitigate risk, BBVA also acts as a financing facilitator to address the investments required for climate change mitigation and adaptation to climate change with more sustainable forms of life and products.

In the case of mortgages, during 2022 we worked on the correct collection of consumption and emissions data associated with mortgage guarantees, both from real and estimated Energy Efficiency Certificates (EEC), and in Spain we are promoting the standardized and homogeneous collection of these estimates and real EEC data at sector level. Based on the definition made in 2021 of sustainability criteria to classify when a collateral asset is considered sustainable, BBVA has applied differentiated pricing to loans with sustainability content, such as in the Efficient Home Mortgage, for homes with consumption letter A or B.

In the case of vehicle loans, as well as the type of fuel, mechanisms are being implemented to have information available associated with average emissions of each vehicle based on its make, model and version. As with mortgages, financing with sustainable products is encouraged when the sustainability criteria are met, in this case, for electric or plug-in hybrid cars.

8.5.1.1. Financed emissions calculation

Sustainability and the risks derived from climate change have become particularly important at all levels in the banking sector. The new obligation to disclose prudential information on environmental, social and governance (ESG) and climate change risks has led BBVA to follow the EBA's recommendation and use the PCAF methodology for the measurement and analysis of greenhouse gas (GHG) emissions financed by the entity.

Measuring the amount of greenhouse gases emitted by BBVA's customers is a challenge due to the lack of public information and the complexity of the methodology. The main source of information used for data on emissions and fossil fuel production by customers is Trucost, a subsidiary of S&P Dow Jones Indices LLC. In the absence of available emissions data at the customer level, the PCAF database has been used to obtain the emission factors.

The results presented include BBVA SA (Portugal is not included due to low materiality). A project was opened in the BBVA Group in 2022 and a road map has been established to cover the valuation of all the asset classes defined in the standard and to extend the scope of the geographies over 2022 and 2023. So far the portfolios valued in BBVA Group are: (1) corporate loans, (2) project finance, (3) mortgages, (4) commercial real estate and (5) cars in Spain.

Direct and indirect emissions have been classified into the three scopes (1, 2 and 3) as indicated in the PCAF 'Standard' document according to the source of emissions and the activity in the organisation's value chain in which the emissions occur.

The main metrics used in the analysis of the results include: (i) The volume of investment financed by the entity subject to PCAF, (ii) The emissions in tonnes of carbon dioxide or equivalent produced by the financed activity, (iii) The economic intensity, which measures the emissions financed by the volume of investment, and (iv) The quality score defined by PCAF, which refers to the level of granularity and quality of the data.

The sectors with the greatest weight in issues financed for the BBVA, S.A. perimeter are detailed below:

Table 109. Financed emissions (BBVA S.A., 2022)

Sector	Emissions financed ($MtCO_2e$)	Intensity (tCO_2e/€M)	Score
Agriculture, forestry and fishing	2.0	1116	4.4
Mining and quarrying	4.4	2264	4.9
Manufacturing	16.4	756	4.6
Power generation, gas, steam and air conditioning	5.4	671	4.9
Transport and storage	2.4	448	4.5

(*) BBVA SA, excluding Portugal branches, which have not been included due to low materiality

PCAF offers various levels of quality scores when calculating financed emissions. The criterion takes into account the availability and reliability of the data used in the calculation by the entities and is measured based on a scale from 1 to 5. This means, that the score is situated at a higher level if the quality of the data is lower (estimates by sector or trends by industry, for example), tending to 5. On the contrary, the best score is obtained when the calculation of financed emissions is based on data on emissions reported and verified at the individual counterparty level (score 1).

In 2023 the BBVA Group is focusing on improving data and increasing its granularity in order to improve the score defined by the PCAF standard. Lines of work are being opened with tactical solutions with a view to 2023 and defining strategic solutions for capturing relevant data in BBVA's systems and defining data quality rules.

The difficulties arising from the scarcity and quality of information for the valuation of financed issues is an issue that the BBVA Group and other entities in the financial sector share in the regular quarterly meetings with the PCAF Global Core Team. Challenges and difficulties are discussed and best practices are shared between the financial industry and the PCAF team with the aim of increasing the homogeneity, transversality and comparability of the calculations of financed issues in the financial system.

8.5.2. Sector breakdown

The table below shows the figures associated with transition risk broken down by sector.

Table 110. ESG1. Banking book- Climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity (Million euros)

Sector/subsector	Gross carrying amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)		GHG emissions percentage derived from company-specific reporting (3)	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
		Of which excluded from Paris Agreement (2)	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						
Exposures towards sectors that highly contribute to climate change (1)	**145,396**	**14,034**	**12,114**	**5,548**	**(4,249)**	**(705)**	**(3,196)**	**34,517,926**	**17,585,884**	**0.12 %**	**111,336**	**22,114**	**7,149**	**4,797**	**3**
A - Agriculture, forestry and fishing	**4,972**	**1**	**591**	**182**	**(150)**	**(53)**	**(84)**	**2,039,757**	**484,441**	**—**	**3,859**	**924**	**118**	**71**	**3**
B - Mining and quarrying	**5,530**	**3,295**	**103**	**188**	**(112)**	**(7)**	**(99)**	**4,416,295**	**725,846**	**—**	**4,816**	**526**	**112**	**76**	**3**
B.05 - Mining of coal and lignite	124	52	1	1	(1)		(1)	306,324	9,839	—	114	9	—	1	3
B.06 - Extraction of crude petroleum and natural gas	2,924	2,800	21	4	(6)	(2)	(2)	2,636,167	564,002	—	2,386	389	111	38	3
B.07 - Mining of metal ores	1,565	40	31	149	(79)	(2)	(76)	239,352	70,296	—	1,551	9	—	5	2
B.08 - Other mining and quarrying	360	—	19	13	(6)	(1)	(5)	77,371	31,297	—	283	69	1	7	3
B.09 - Mining support service activities	557	403	31	21	(20)	(2)	(15)	1,157,081	50,412	—	482	50	—	25	3
C - Manufacturing	**47,726**	**3,018**	**2,782**	**1,042**	**(871)**	**(128)**	**(640)**	**16,449,674**	**11,313,615**	**0.03 %**	**40,434**	**5,580**	**266**	**1,446**	**3**
C.10 - Manufacture of food products	8,584	—	448	208	(155)	(16)	(122)	3,379,252	2,992,671	—	7,336	963	58	227	3
C.11 - Manufacture of beverages	1,836	—	83	22	(13)	(1)	(9)	242,968	182,684	—	1,513	151	15	157	4
C.12 - Manufacture of tobacco products	734	—	—	—	—	—	—	229,081	122,777	—	732	1	—	1	2
C.13 - Manufacture of textiles	1,711	—	172	39	(46)	(21)	(20)	354,616	275,842	—	1,538	145	12	16	2
C.14 - Manufacture of wearing apparel	602	—	70	42	(34)	(5)	(25)	54,234	34,731	—	542	37	5	18	2
C.15 - Manufacture of leather and related products	431	—	43	25	(19)	(3)	(15)	113,332	98,442	—	396	27	2	6	1
C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	406	—	50	17	(15)	(2)	(12)	147,630	79,083	—	336	51	8	11	3
C.17 - Manufacture of pulp, paper and paperboard	1,550	—	86	20	(16)	(2)	(11)	642,275	220,115	—	1,146	374	4	26	3
C.18 - Printing and service activities related to printing	340	—	43	27	(17)	(2)	(13)	52,898	34,678	—	268	43	13	16	4
C.19 - Manufacture of coke oven products	2,495	2,417	342	46	(44)	(15)	(28)	3,487,989	2,186,533	—	1,292	1,070	12	121	4
C.20 - Production of chemicals	4,501	201	124	38	(36)	(3)	(24)	1,475,614	930,598	—	4,023	315	13	150	2
C.21 - Manufacture of pharmaceutical preparations	1,497	—	43	16	(14)	(1)	(11)	267,369	170,358	0.86 %	1,169	294	1	33	3
C.22 - Manufacture of rubber products	1,741	1	110	35	(28)	(4)	(20)	295,555	234,457	—	1,456	203	20	62	3
C.23 - Manufacture of other non-metallic mineral products	2,624	—	151	45	(42)	(8)	(30)	1,096,669	311,717	—	2,135	426	11	52	3
C.24 - Manufacture of basic metals	3,636	101	219	77	(79)	(8)	(47)	1,225,841	687,528	—	3,276	253	5	102	2
C.25 - Manufacture of fabricated metal products, except machinery and equipment	2,219	1	166	191	(153)	(5)	(142)	634,161	514,552	—	1,747	342	31	99	3

	Gross carrying amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)		GHG emissions percentage derived from company-specific reporting [(3)]	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
Sector/subsector		**Of which excluded from Paris Agreement [(2)]**	**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**						
C.26 - Manufacture of computer, electronic and optical products	3,190	—	24	28	(23)	(2)	(20)	508,048	418,426	—	3,122	44	6	18	1
C.27 - Manufacture of electrical equipment	2,027	—	146	11	(20)	(11)	(6)	417,445	357,639	—	1,708	245	14	60	3
C.28 - Manufacture of machinery and equipment n.e.c.	2,542	297	118	48	(37)	(3)	(30)	596,778	504,772	—	2,377	113	10	42	2
C.29 - Manufacture of motor vehicles, trailers and semi-trailers	2,936	—	166	28	(18)	(4)	(12)	712,630	615,761	—	2,460	304	2	170	3
C.30 - Manufacture of other transport equipment	780	—	68	7	(9)	(4)	(4)	213,453	138,391	—	733	17		30	2
C.31 - Manufacture of furniture	306	—	34	28	(21)	(2)	(17)	79,841	44,279	—	222	62	10	12	4
C.32 - Other manufacturing	690	—	48	30	(23)	(5)	(15)	100,926	65,531	—	603	68	6	13	3
C.33 - Repair and installation of machinery and equipment	348	—	28	14	(9)	(1)	(7)	121,069	92,050	—	304	32	8	4	3
D - Electricity, gas, steam and air conditioning supply	**16,870**	**6,522**	**1,007**	**651**	**(523)**	**(78)**	**(431)**	**5,434,559**	**1,053,718**	**0.15 %**	**12,051**	**2,530**	**1,300**	**989**	**4**
D35.1 - Electric power generation, transmission and distribution	14,488	4,501	919	648	(515)	(73)	(430)	4,674,665	740,308	0.01 %	10,549	2,067	895	977	4
D35.11 - Production of electricity	10,558	3,960	763	526	(418)	(67)	(342)	4,042,720	497,372	—	7,577	1,880	841	260	3
D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	2,375	2,021	87	1	(7)	(5)	—	751,655	312,471	1.00 %	1,498	460	405	12	5
D35.3 - Steam and air conditioning supply	7	—	1	2	(1)	—	(1)	8,239	939	—	4	3	—	—	5
E - Water supply; sewerage, waste management and remediation activities	**1,027**	**—**	**56**	**20**	**(15)**	**(1)**	**(12)**	**420,181**	**165,073**	**—**	**634**	**194**	**166**	**33**	**6**
F - Construction	**9,331**	**4**	**888**	**855**	**(563)**	**(50)**	**(484)**	**1,257,567**	**1,055,824**	**0.27 %**	**6,355**	**880**	**1,748**	**348**	**5**
F.41 - Construction of buildings	6,029	1	645	615	(406)	(42)	(343)	433,899	346,565	0.41 %	3,874	526	1,448	181	6
F.42 - Civil engineering	1,654	3	74	124	(87)	(3)	(80)	301,660	264,290	—	1,169	161	243	81	3
F.43 - Specialised construction activities	1,648	—	169	116	(70)	(5)	(61)	522,008	444,969	—	1,312	193	57	86	4
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	**30,137**	**846**	**2,518**	**1,163**	**(883)**	**(112)**	**(661)**	**1,585,359**	**1,092,283**	**—**	**25,857**	**2,494**	**374**	**1,412**	**3**
H - Transportation and storage	**11,927**	**340**	**1,791**	**309**	**(329)**	**(129)**	**(172)**	**2,431,780**	**1,390,695**	**1.00 %**	**8,246**	**2,096**	**1,285**	**300**	**4**
H.49 - Land transport and transport via pipelines	4,603	308	598	173	(129)	(27)	(84)	649,855	526,735	—	3,927	497	42	137	3
H.50 - Water transport	547	—	12	80	(64)	(3)	(59)	459,132	123,542	—	428	115	1	3	3
H.51 - Air transport	587	—	283	11	(12)	(9)	(3)	730,992	220,649	—	397	22	146	22	5
H.52 - Warehousing and support activities for transportation	6,015	32	884	42	(122)	(90)	(24)	585,128	514,386	1.97 %	3,337	1,449	1,095	134	4
H.53 - Postal and courier activities	175	—	14	3	(2)	—	(2)	6,673	5,383	—	157	13	1	4	2
I - Accommodation and food service activities	**8,149**	**—**	**1,694**	**453**	**(307)**	**(97)**	**(190)**	**385,059**	**288,311**	**—**	**4,108**	**3,331**	**654**	**56**	**5**
L - Real estate activities	**9,727**	**8**	**684**	**685**	**(496)**	**(50)**	**(423)**	**97,695**	**16,078**	**—**	**4,976**	**3,559**	**1,126**	**66**	**6**

	Gross carrying amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)		GHG emissions percentage derived from company-specific reporting [3]	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
Sector/subsector		Of which excluded from Paris Agreement [2]	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						
Exposures towards sectors other than those that highly contribute to climate change [1]	24,235	9	2,647	653	(1,023)	(252)	(527)				17,921	2,801	657	2,856	5
K - Financial and insurance activities	2,213	—	50	37	(24)	(1)	(20)				1,936	161	24	92	2
Exposures to other sectors (NACE codes J, M - U)	22,022	9	2,597	616	(999)	(251)	(507)				15,985	2,640	633	2,764	5
TOTAL	169,631	14,043	14,761	6,201	(5,272)	(957)	(3,723)	34,517,926	17,585,884	0.12 %	129,257	24,915	7,806	7,653	4

(*.1) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-tradable at Fair Value through P&L". Instruments: loans and advances, fixed income and equities. Sectors: non-financial corporations.

(*.2) Specific details:

- Information on customers' economic activities has been used based on the local economic classifications of each geography, in the case of Spanish companies, the National Classification of Economic Activities (CNAE), or other equivalent standards in the other geographies where the Group operates. These local classifications by activity are equivalent to the Statistical Classification of Economic Activities of the European Community (NACE). In addition, information provided by risk analysts who review the NACE for individual customers is being used when it does not accurately reflect the main economic activity. This information on customer economic activity is used for the BBVA Group's internal risk management.
- Calculation of GHG emissions only for scope BBVA S.A. loans and advances (excluding Portugal branches, whose emissions have not been measured due to low materiality). For a better understanding of the figures, the appendix includes the same table only for scope BBVA S.A.
- Operational marking excluded from the Paris Agreement(1). The thresholds considered for exclusion from the Paris Agreement on the basis of the Delegated Regulation (EU) 2020/1818 are:
  - Companies deriving 1 % or more of their revenues from the exploration, mining, extraction, distribution or refining of anthracite, hard coal and lignite.
  - Companies deriving 10 % or more of their revenues from the exploration for, extraction, extraction, distribution or refining of liquid fuels.
  - Companies deriving 50 % or more of their revenues from the exploration for, extraction, production or distribution of gaseous fuels.

(*.3) Revenues from customer activities are obtained from S&P data. Revenues from activities indicated in the supplier's "S&P Paris-Aligned & Climate, Transition (PACT) Indices Methodology" are considered. For those cases where no information is available on the client's activity revenues, it is assumed that its revenues come from the main activity (NACE) used for internal management and reporting.

(*.4) Companies engaged in electricity generation take into account the emissions intensity estimated under the PACTA methodology in the logic to be considered as companies excluded from the Paris Agreement.

(*.5) Exposures computed in the numerator of column k ("GHG emissions") are estimated under the PCAF methodology with approach 1a or 1b.

(1) 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.

(2) 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

(3) GHG emissions (column i, "GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty)"): gross carrying amount percentage of the portfolio derived from company-specific reporting

8.5.3. Wholesale (corporate and institutional) and business customers banking

In 2022, in the sphere of corporate financing related to sustainability, the Group mobilized globally a total of €14,055 million in financed linked to the achievement of certain environmental and social indicators (KPI-linked) and linked to the customer's ESG rating (ESG-linked) among which are pioneering operations in the food sector.

BBVA continues to work to offer innovative solutions to its customers. For this reason, it has launched a new finance KPI-linked product that focuses on reducing our customers' water footprint (Water Footprint Loan). Transactions have already been formalized with two clients in Spain and Italy. In Spain, BBVA has assumed the role of sustainable coordinator in various landmark operations. Outside Spain, BBVA has participated in several landmark operations, including a few the main syndicated finance deals in Germany, the UK, Belgium, Mexico, Peru and Colombia. The Group continues to work on formats that try to promote positive behaviour from its customers in terms of sustainability, in line with the objectives of the Paris Agreement.

Furthermore, BBVA remained extremely active in the financing of sustainable projects throughout 2022, participating in the channelling of €2,098 million (BBVA participation) of sustainable finance in the following main areas:

- €1,092 million in projects related to climate change (renewable energy, energy efficiency, sustainable mobility, etc.),
- €848 million in projects related to inclusive growth (health sector, telecommunications sector as facilitators of access to new technologies, etc.),
- €158 million in sustainable infrastructure projects.

BBVA has also acted as bookrunner in issues of green (€3,241 million), social (€419 million) and sustainable bonds (€2,489 million) and bonds linked to environmental indicators (€1,710 million) for clients in the United States, Mexico, South America, Asia and Europe, including Spain. The issues have accounted for an estimated total volume handled by BBVA of €7,860 million, where the activity of European customers in 2022 stood out. BBVA continues to support the development of the green bond market in Mexico, Colombia, Argentina and Asia, leading inaugural bond issues in these regions.

In the transactional banking area, BBVA has participated in transactions for an amount of €8,852 million issued under its "CIB framework for sustainable products", available on the Bank's corporate website. It continues to innovate with new solutions for its customers that try to promote an improvement in aspects related to sustainability. For example, sustainability-linked reverse factoring ('confirming' in Spain) based on a service to evaluate and rank their suppliers based on sustainability criteria. This enables better discounted prices suppliers with a higher score in relation to these criteria, as well as being able to support customers in reducing their scope 3 emissions.

8.5.3.1. Opportunities and risks analysis

BBVA has developed a "Guide to the integration of ESG factors in credit analysis", which identifies the most relevant environmental and social aspects by industry and presents metrics for monitoring the performance of our large corporate customers in these aspects.

In addition, BBVA has defined an internal taxonomy of transition risk in order to classify sectors according to their sensitivity to this type of risk. In the preparation and definition of its sectoral frameworks used in credit approval, metrics are identified that enable the vulnerability of each customer to transition risks to be assessed and this aspect to be integrated into risk and support decisions. Additional information on this point is provided in the chapter "Integrating climate change into risk planning" of this report.

Progress is also being made in developing internal capabilities to classify customers based on their public information, low-carbon business profile and decarbonisation plans.

In the Corporate and Business Banking (CBB) area, BBVA has pioneered the use of data analytics to calculate the carbon footprint of companies and use it to offer valuable solutions to our customers. The carbon footprint calculator for companies provides information on the ESG profile of customers (calculation of the footprint, evolution over time, comparison with the average for the sector and similar companies, etc.), which enables us to categorise our customers and implement advisory actions and targeted commercial actions, personalised and adapted to the profile of each customer.

It has recently evolved with the incorporation of functionalities that make it possible to define energy saving targets, alerts that warn when the target is being reached and a comparison of consumption against other companies in the same sector of activity (CNAE), similar turnover and number of employees on the payroll, indicating the monthly expenditure percentile against other comparable companies.

In addition, BBVA uses natural language processing techniques for large-scale ESG categorization of customers based on public information such as customers' corporate websites, official records, news, etc. This leadership in digital transformation enriches the business information provided and helps customers to improve their environmental performance.

In addition to promoting sustainability in the businesses it finances, the BBVA Group has joined numerous sustainability initiatives, as detailed in section "2.3.7 Participation in international initiatives" in the chapter "Report on climate change and other environmental and social issues" in the Management Report.

8.5.3.2. Direct support to wholesale customers (corporate and institutional) and other enterprises

To complete the sustainable offer, the ESG Advisory service was created in 2020 to assist global customers in their transition toward a sustainable future in all sectors of activity. This involves data-driven assessments and guidance to assist customers in undertaking commitments to align with the Paris Agreement and make progress in terms of the United Nations 2030 Sustainable Agenda.

Dialogue with customers on ESG aspects is based on:

- General description of how sustainability is evolving in the political and financial context, explaining the principal regulatory issues, reporting needs, developments in the financial markets, ESG classifications, etc.
- Industrial specialization in industries which are facing the biggest challenges for a transition to a low-carbon economy. oil and gas, energy, automobile manufacturers and auto parts, as well as other industries such as infrastructures, processed food, beverages, cement, fintechs and pharmaceuticals. Customers are informed on the main challenges and opportunities for the industry and the dialogue is focused on a roadmap for each industry to align with the Paris Agreement commitment. To do that, BBVA provides information for its customers on regulation, technological improvements and the best practices of each industry. The Group also provides a comparative analysis on how similar companies are performing in terms of ESG, different alternatives to improve their sustainable profile, and how to establish specific short- and medium-term objectives.
- Description of sustainable finance products. BBVA offers customers a list of sustainable products and finance (bonds, loans, global transactional banking, global markets, equities, mergers and acquisitions).

BBVA directly supports its global and non-global customers to incorporate ESG practices in their business strategies and transactions by carrying out one-on-one visits, invitations to events, advice on projects with technology and consulting firms and other information services.

SME banking customers also have publicity information and a catalogue of sustainable products on the transactional banking website. The Group makes available to its customers product information and sustainability advice and explains their impact on the environment (savings in electricity consumption with an energy efficiency loan, fuel savings when arranging a loan to renew the vehicle fleet, etc.).

8.5.3.3. Support metrics

Since 2020, CIB bankers have visited close to 500 large global customers and made more than 300 pitches, with the aim of maintaining a dialogue and discussion focused on sustainability (they represent approximately 15% of the client base corporate and institutional). In total, visits have been made to customers from 42 different countries and of these, close to 20% have been visited in more than one geographical area in which BBVA is present.

In 2022, 30 global customers have been contacted through the ESG Advisory service.

Furthermore, in 2022, close to 350 commercial and ESG advisory visits were made to Corporate and Business Banking (CBB) customers, who have been presented with a value proposition with ESG features adapted to their needs and profile (sector, activity, maturity, relationship with BBVA, risk profile, proposed use of funds, product and price). BBVA has a network of sustainable finance experts (fully fledged throughout Spain and under development in other countries) to support our customers in their transition to a greener future.

The development of sustainable business in customers' companies, focused on promoting sustainable mobility, energy efficiency and renewable energy has led to agreements with third parties for the distribution of electric cars, to enhance energy saving projects and the installation of solar panels. Agreements with energy companies and automotive dealerships stand out.

Likewise, events with sustainability-related content have been organized: trends, sustainable finance, risks, opportunities, energy efficiency, renewable energy, clean transportation and agriculture.

Finally, BBVA, in partnership with a company specializing in managing European funds from the Next Generation EU program approved by the European Commission, offers an information service to customers promoting Spanish business projects related to the environmental transition and sustainable mobility, among other topics. More than 65,000 visits were generated on the aid portal created for this purpose, resulting in more than 2,500 opportunities to provide information in this area.

8.5.3.4. Financed emissions concentration

The main global companies with the highest volume of greenhouse gas emissions have a responsibility to reduce their impact on the environment and must contribute to the transition to more sustainable activities. BBVA Group has analysed its exposure to the world's most carbon-intensive companies, which is used as a complement to the sectoral analysis (NACEs) in other sections of this report. To analyse exposure to the top 20 most polluting companies, the financing granted to any of the companies belonging to their group is taken into account. The relationship between corporate groups and companies belonging to them is based on the principles of supervisory reporting on large exposures (COREP Large Exposures) and connected clients.

Reporting on the world's top 20 carbon-intensive companies, according to the EBA's ITS, should be based on accurate and publicly available information. Examples of data sources for identifying the top carbon-emitting companies include the Carbon Majors database, which includes reports from the Carbon Disclosure Project (CDP) and the Climate Accountability Institute, as well as Thomson Reuters.

However, these reports use different criteria to determine the most polluting companies, as they are based on different perimeters within the value chain to measure greenhouse gas emissions. One of the public lists uses annual Scope 1 and 2 emissions to establish the ranking of the most polluting companies, while another one adds Scope 3 emissions to the above. Therefore, the results are not equivalent, due to the different emission perimeter considered by each of them.

BBVA has information from several recognised data providers[17] in the sector with which it collaborates in order to have the best information on climate issues. This information is based on the questionnaires sent to companies by the Carbon Disclosure Project, an organisation that the EBA[18] mentions as valid for determining a list of the most polluting companies.

Based on this information, a list of the most polluting companies has been drawn up, whose emissions perimeter includes the three scopes (1, 2 and 3 upstream). BBVA understands that this scope is the one that companies can directly manage within their value chain, where they can carry out mitigation actions, accelerate their transition to production processes or improve energy efficiency.

Below are the Group's exposure data for the 20 most carbon-intensive companies worldwide, where it can be seen that there are 6 customers with a grouped balance of 1,384 million euros, representing 0.79% of the exposure to non-financial companies and whose weighted average maturity is 0.39 years.

Table 111. ESG4. Banking book - Climate change transition risk: Exposures to top 20 carbon-intensive firms (Million euros)

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
1,384	0.79 %		0.39	6

(*) For counterparties among the top 20 carbon emitting companies in the world, exclusively considering non-financial corporates in the investment portfolio of the entity

(**) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-tradable at Fair Value through Profit or Loss". Instruments: loans, fixed income and equities. Sectors: non-financial corporations.

8.5.4. Retail banking

BBVA has developed data-based tools and solutions that help retail customers estimate CO_2 emissions that they can generate in their daily activities, with the aim of promoting more sustainable habits that try to contribute to the reduction of their emissions.

Since 2021, BBVA in Spain has used data analytics to calculate the carbon footprint of its private customers, obtaining an approximate estimate of CO_2 emissions into the atmosphere, based on gas and electricity bills and fuel expenses. During 2022, this analysis has been completed with new functionalities such as the list of CO_2 emissions by transaction and category, including the purchase of tickets for additional means of transport, such as planes, trains, taxis, transport vehicles with drivers or public transport. as well as information on possible sustainable solutions such as the installation of solar panels through the alliance with a large Spanish company in the energy sector. In Turkey there is also a tool for private customers to calculate their carbon footprint and in Mexico it was launched reusing global components to reduce time to market.

The Group is working to make various products available to retail customers, both investment and financing, that seek to encourage a positive behavior in terms of sustainability, adapting to the situation of the

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[17] For emissions information, information from Trucost —a subsidiary of S&P Dow Jones Indices LLC— has been used.

[18] In any case, BBVA has analysed the public lists of CDP and Thomson Reuters in order to include the most complete information possible in this exercise of analysing the most polluting companies. According to the CDP list, there are 9 customers with a grouped balance of 3,833 million euros, representing 2.18%, with an average maturity of 2.63 years. According to the Thomson Reuters list there are 8 clients with a bundled balance of 2,997 million euros, representing 1.71%, with an average maturity of 1.64 years.

geographical areas in which the Group operates. Thus, the offer of sustainable solutions in the different countries seeks, among others, to support energy efficiency and the decarbonisation of the economy, with products such as financing lines for the acquisition of hybrid and electric vehicles, or with green mortgages for homes with high energy ratings or loans to improve the energy efficiency of homes.

In 2021, BBVA in Spain already made sustainable formats available to its private customers for a large part of the products it markets. In 2022, specifically, €198.9 million were channelled for the acquisition of hybrid and electric vehicles and €870 million in green mortgages. Also, products have been incorporated in various geographical areas of its footprint that offer sustainable alternatives for financing electric cars and mortgages for housing with a high energy rating (in the latter case, except in some jurisdictions such as Argentina). Also, the first green financing for SMEs has been launched, especially in Colombia, where this segment is financed from solar panels to sustainable agro projects. Likewise, alliances have been developed to promote energy efficiency in homes, such as the alliance with a large company in the energy sector in Spain to finance solar panels and alliances with a retail chain in Mexico and household appliance chains in Argentina and Colombia for the financing of household appliances with an efficient label.

In 2022, BBVA Group contributed to channelling sustainable business through solutions for retail customers in a total of €5,970 million in the following geographical areas: €2,921 million in Spain; €767 million in Mexico; €564 million in Turkey; €81 million in Colombia; €121 million in Peru; €50 million in Argentina, €1,466 million through the BBVA Microfinance Foundation.

8.5.4.1. Opportunities and risks analysis

BBVA has been pioneer in Spain to offer the calculation of the carbon footprint to its individual customers thanks to its digital and data analytics capabilities. This service raises the awareness of the Bank's individual customers on the impact its actions have on the environment and help them transition to a more sustainable world. When the characteristics of the property (surface area, energy certification, etc.) are added, BBVA can assess energy efficiency improvements and offer information, for example, about simple and sustainable changes in habits that allow a reduction of utility bills. The cost of an electric vehicle can be compared to a gasoline vehicle so that the user can see the economic advantages of opting for a more sustainable transport solution. Customers will also be able to view and/or subscribe to any of the sustainable products offered by BBVA. The Bank provides its customers with the Valora tool, which allows them to have an estimated automatic appraisal of their real estate and transportation assets.

8.5.4.2. Direct support to retail customers

BBVA supports its customers in incorporating ESG practices through one-on-one meetings and visits, mass participation events or project advice with technology and consulting firms. BBVA provides information to its customers through digital channels and through the commercial branch network. A comprehensive service model that ranges from awareness raising, project design and public aid management.

The managers, mobile banking and the commercial website offer a wide catalogue of sustainable investment and financing products, suitable for each of the geographies in which they operate and with a focus, mainly, on sustainable mobility, home renovation with energy efficiency and mortgage associated with energy efficiency. In Spain, a sustainable alternative is already offered for most of the existing traditional products for SMEs and individuals.

BBVA makes information on sustainability available to customers in different digital media. On the corporate website they can find news and articles, on the website and in the mobile banking app they can find information about the sustainable products offered by the bank and even hire them. In addition, numerous tips are included on how to reduce carbon emissions and also achieve economic savings by reducing energy consumption, also offering different savings simulators when using different sustainable goods, an electric car, efficient appliances, condensing boilers or small changes in day-to-day habits such as changing the room temperature or installing LED lights.

8.5.4.3. Support metrics

In 2022, the carbon footprint calculator received 867,535 visits. 34 events have been organized in various formats (webinars, writing tables, forums, breakfasts, meetings, etc.) that have impacted 33,872 people: 1,643 in-person attendees (5%), 1,691 online (5%), 28,039 streaming (83 %) and 2,499 views of the post-event video (7%). They include content related to sustainability: trends, sustainable finance, achievement of SDGs, risks, opportunities, gender equality and diversity and inclusion policies, energy efficiency, renewable energy, sustainable transport and agriculture.

8.5.4.4. Mortgage loans detail

EPC (Energy Performance Certificate) labelling is a classification of buildings according to their energy performance. It must be calculated in accordance with the methodology adopted by Directive 2010/31/EU - Energy Performance of Buildings Directive-EPBD.

The BBVA Group's exposures secured by real estate, as well as those from foreclosure processes or received in payment of debts, are distributed according to their geographical diversification, and due to the same, it has a presence in countries outside the scope of application of said Directive. Therefore, the standards for assessing the energy consumption intensity or energy efficiency of real estate in each region have different levels of maturity, which adds complexity when trying to provide a uniform view from a global perspective.

Most of the buildings are business-related in Spain, where the EPC is the standard approach for assessing energy efficiency. According to the applicable regulations in Spain, the assessment and generation of an energy certificate in the sale and purchase of a residential property has been mandatory since 2013. BBVA S.A. has implemented in recent years the necessary changes to collect information on energy certificates for new mortgage loans in the business in Spain and, in addition, it has a process for obtaining information on the pre-existing portfolio through EPC data provided by an independent appraisal company approved in Spain, thus covering most of the exposure. In this regard, the EPC information was obtained from existing public registers and, if the information was not available, on the basis of a model developed by this appraisal company to estimate the intensity of energy consumption based on the nearest neighbourhood, geographical area, year of construction and floor of the building. This model has been analysed and approved by BBVA's Internal Validation team.

It should be noted that due to the type of property in question, the issuing of EPC labels is not compulsory, as is the case for building plots, storage rooms or independent garages, for which no information or estimated energy consumption (kWh/m^2/year) has been obtained.

For properties within the banking business in Spain, information on estimated energy consumption (kWh/m^2/year) has been included whenever an EPC label is available and in those cases where the external model calculates an estimated EPC.

In Turkey, energy certificates have been collected from existing property valuation documents in the country since 2017. Since January 2023, the procurement process has been modified to automatically collect label and consumption information.

In Mexico, two projects are underway to obtain energy efficiency information. On the one hand, the contracting process will be modified to automatically collect information on new operations and, on the other hand, the most optimal procedure for rating the current portfolio is being analysed. In both cases, the objective is to have information on energy consumption (kWh/m^2).

In Colombia, an initiative is expected to be launched during the first half of 2023, with the aim of managing the collection of the emissions metric (kgCO2/m^2/year) for each guarantee and from this, to be able to generate the consumption metric (kWh/m^2/year) applying the country's energy mix. In Peru, a diagnosis is being carried out to incorporate energy efficiency metrics in the local guarantee application.

BBVA is actively working to identify key local factors to determine the degree of sustainability of buildings. Some of these factors are associated with the water resources required or waste management, as the energy efficiency of the buildings is of different importance depending on the climate of the countries in which it operates.

Table 112. ESG2. Banking book - Climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral (Million euros)

	Total gross carrying amount amount															
		Level of energy efficiency (EP score in kWh/m² of collateral)						**Level of energy efficiency (EPC label of collateral) [1]**							**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**
Total EU area	**82,682**	**8,935**	**27,231**	**18,171**	**3,995**	**1,150**	**588**	**1,023**	**1,421**	**1,978**	**6,026**	**34,792**	**5,357**	**8,231**	**23,855**	**5 %**
Of which Loans collateralised by commercial immovable property	10,645	1,188	1,534	950	310	104	56	245	418	686	693	1,340	313	392	6,559	1 %
Of which Loans collateralised by residential immovable property	71,318	7,747	25,697	17,221	3,685	1,046	532	778	1,003	1,292	5,333	33,452	5,044	7,839	16,577	7 %
Of which Collateral obtained by taking possession: residential and commercial immovable properties	719	—	—	—	—	—	—	—	—	—	—	—	—	—	719	—
Of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	1,248	260	447	417	102	19	3								1,248	100 %
Total non-EU area	**36,863**	**—**	**—**	**—**	**—**	**—**	**—**	**5**	**174**	**428**	**14**	**6**	**1**	**—**	**36,234**	**—**
Of which Loans collateralised by commercial immovable property	14,291	—	—	—	—	—	—	4	94	191	2	3	—	—	13,997	—
Of which Loans collateralised by residential immovable property	22,259	—	—	—	—	—	—	1	80	237	12	3	1	—	21,924	—
Of which Collateral obtained by taking possession: residential and commercial immovable properties	313	—	—	—	—	—	—	—	—	—	—	—	—	—	313	—
Of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	—	—	—	—	—	—	—								—	—

(*) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-marketable at Fair Value through Profit or Loss". Loans secured by real estate are in the "At amortised cost" portfolio. Instruments: loans secured by residential real estate, commercial real estate and foreclosed real estate collateral. Sectors: non-financial corporations and households. Data on the Group's prudential perimeter, where energy efficiency information is available mainly in the Spanish and Turkish business.

[1] The EPC labels included are the certified labels obtained from the client, from the registry, provided by the appraiser and estimated by methodology based on certified homes belonging to the same building.

8.6. Physical risk

Physical risks arise from climate change and can be caused by more frequent and severe extreme weather events or long-term weather changes, and can lead to physical damage to company assets, disruptions in the supply chain or increased costs to cope with them.

Physical risk is associated with the location of assets and vulnerability based on their activity and can materialize in credit risk through different transmission channels, having an impact in multiple ways such as, for example, on the purchasing power of customers, business productivity, market demand or the value of assets. In 2022, BBVA learnt a great deal in this field and its level of maturity and knowledge of the different methodologies for the assessment of physical risk has advanced considerably. However, these advances represent a first approximation due to the complexity of carrying out an assessment of the exposure and impacts of physical risks.

Table 113. Physical Risks

Risk subtype	Risks associated with climate change	Risk description	Time horizon (1)
Acute risks	Increased severity of extreme weather events, such as cyclones and flooding	Reduced revenue from decreased production capacity (e.g. transport difficulties and supply chain disruptions)	MT
		Direct losses from asset damage (BBVA and clients)	MT
		Increased cost of insurance	MT
	Business continuity problems	Damage to BBVA facilities from environmental catastrophes that hinder normal service provision	MT
Chronic risks	Changes in precipitation patterns and extreme variability weather patterns	Loss of value of clients' assets (guarantees) because they are located in areas with water supply problems (desertification)	MT
		Increases in clients' operating costs (investments in agriculture)	MT
		Lower renewables production (hydro and wind)	MT
	Rising average temperatures	Population movements that can lead to depression in certain areas, accompanied by loss of business	LT
	Sea level rise	Threats to client assets that can lead to loss of profits and their solvency	LT

(1) ST: Short Term, <4 years; MT: Medium Term, 4-10 years; LT: Long Term, >10 years.

8.6.1. Physical risk classification and measurement

BBVA has continued to make progress in assessing the materiality of chronic and acute risks in the different portfolios. The analysis of physical risk is articulated around three pillars: threat, exposure and vulnerability.

In terms of hazard, ThinkHazard methodology of the World Bank has been used. This tool indicates the risk levels of different natural hazards, both acute and chronic, at a global level and provides a different level of detail depending on the geographical area of the planet. These risk levels are calculated using historical data based on the frequency of occurrence and intensity of different natural hazards. For this first assessment of physical risks, four acute hazards (extreme heat, cyclone, flood and fire) and two chronic hazards (sea level rise and drought) have been considered.

Importantly, the information used is provided by a range of private, academic and public organisations. In addition, work has been done to increase the granularity of the risk levels provided by ThinkHazard, using scientific and technical criteria, for the most relevant hazards in Spain, Peru, Mexico and Colombia. Specifically, the level of risk provided for tropical cyclones, coastal and river flooding and forest fires has been adjusted based on historical information on frequency of occurrence and severity.

For the vulnerability component, the sectoral granularity of the analysis for Wholesale Banking and SMEs has been increased for 2022. This analysis is based on 8 indicators that capture the level of vulnerability of assets and processes, labour productivity, energy supply, transport routes, and natural resources, as well as indirect vulnerability due to the use of raw materials and changes in demand as a result of physical risks. In this way, the sensitivity of each sector to climate hazards is assessed indirectly by analysing its sensitivity to these indicators, resulting in a vulnerability score for each sub-sector. This methodology follows the best practices identified by the Taskforce on Climate-related Financial Disclosure (TCFD) and UNEP-FI. As a result, a qualitative classification of (sub)sectors is generated according to the potential impact on their business model and incidence of chronic or acute changes in climate.

Threat and vulnerability scores are applied at the contract level based on the location to identify prone exposure to physical risk.

Geographically, Mexico and Argentina are the countries with the highest exposure to physical risks, both collateral and non-financial companies. On the other hand, the sectors with the highest exposure to physical risks are Agriculture, Mining and extractive activities with average maturity periods of less than 5 years and Electricity where two thirds of the portfolio has a maturity period of less than 10 years.

The advances achieved during 2022 have allowed a first approximation, based on international tools and methodologies, of the exposure prone to chronic and acute risks. The implementation of an action plan has also begun, the objective of which is to have the analytical capabilities and data necessary to integrate physical risks into risk policies and processes.

As of 2023, work will be done to have precise and standardized information on the locations of the guarantees and assets of our clients from all portfolios, to analyze the exposure of the wholesale and retail portfolios to the different chronic and acute hazards based on climate scenarios. and in calculating the financial impacts of perils at the customer and asset level.

8.6.2. Exposure towards physical risk

The table below shows the figures of exposures subject to potential physical risk associated with climate change.

Table 114. ESG5. Banking book - Climate change physical risk: Exposures subject to physical risk (Million euros)

	Gross carrying amount													
		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		
Total		<= 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
A - Agriculture, forestry and fishing	4,972	2,850	625	13	68	3	194	1,428	1,934	498	111	-109	-46	-54
B - Mining and quarrying	5,530	2,628	69	—	48	2	202	2,368	175	60	165	-91	-3	-84
C - Manufacturing	47,726	8,164	1,332	21	370	3	5,282	3,960	645	831	261	-210	-30	-165
D - Electricity, gas, steam and air conditioning supply	16,870	5,187	1,167	831	727	5	1,147	2,201	4,564	625	134	-142	-42	-93
E - Water supply; sewerage, waste management and remediation activities	1,027	2	—	—	—	4	1	1	—	—	1	—	—	—
F - Construction	9,331	1,447	142	53	61	3	49	1,544	110	157	132	-85	-4	-75
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	30,137	431	53	44	1	4	46	383	100	74	50	-39	-4	-35
H - Transportation and storage	11,927	78	11	8	2	4	5	84	10	34	3	-4	-3	-1
L - Real estate activities	9,727	1,187	1,233	112	10	6	79	2,202	261	121	16	-29	-11	-11
Loans collateralised by residential immovable property	93,577	506	1,370	7,627	2,713	17	2,643	8,104	1,469	1,334	595	-200	-31	-156
Loans collateralised by commercial immovable property	24,936	2,851	2,873	455	22	5	751	4,476	974	728	214	-180	-40	-128
Repossessed colalterals	1,032	—	—	—	158	20	27	113	18	—	—	—	—	—
I - Accommodation and food service activities	8,149	2,024	1,876	166	40	5	384	3,029	693	802	213	-136	-36	-89
J - Information and communication	9,952	15	1	—	2	2	1	16	1	1	—	—	—	—
K - Financial and insurance activities	2,213	6	—	1	1	3	—	4	4	—	—	—	—	—
Other relevant sectors	12,070	347	89	19	13	4	29	348	91	83	34	-24	-8	-15

(*) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-tradable at Fair Value through Profit or Loss". Instruments: loans, fixed income and equities. In addition, loans secured by residential real estate, commercial real estate and foreclosed real estate collateral. Sectors: non-financial corporations and households (only for the part of loans secured by residential real estate). Specific details: Main activity code (NACE) information used for internal management and reporting purposes. In other relevant sectors all other NACE activities are included until the perimeter is complete.

8.7. Other climate and environmental risks

The General Sustainability Policy includes the protection of natural capital as one of its main focuses of action. Specifically, BBVA recognises the need to protect eco-systemic services and natural assets as well as natural ecological species and processes, and considers biodiversity and natural capital in its relationship with its customers.

The Environmental and Social Framework includes a series of general exclusions and prohibited activities in relation to biodiversity loss and the fight against deforestation:

- Projects that would put at risk UNESCO World Heritage sites, Ramsar-listed wetlands, and Alliance for Zero Extinction sites and International Union for Conservation of Nature category I-IV sites.
- Projects involving resettlement or infringement of the rights of indigenous or vulnerable groups without their free, prior and informed consent.
- Projects related to deforestation: burning of natural ecosystems for the development of agricultural or livestock projects, removal of forests with high conservation value and high carbon content, palm oil farms not certified or not in the process of certification by the Roundtable for Sustainable Palm Oil (RSPO), palm oil farms in swamps and peat-rich areas, and from 2022, projects in International Union for Conservation of Nature (IUCN) key biodiversity areas of the Brazilian Amazon and Cerrado.

If BBVA concludes that any of the circumstances described in the prohibited activities or general exclusions apply to a project, it will not participate in that project.

In the case of natural capital, BBVA has identified the levels of impact and dependencies by sector following the methodology of the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) tool developed by the Natural Capital Finance Alliance in collaboration with UNEP-WCMC. This tool provides information on how the activity of the sub-sectors that BBVA finances depends on nature and provides environmental information by sector. BBVA has carried out an impact analysis using UNEP-FI's Impact Tool Analysis, which assesses the impacts related to natural capital in most of the countries in which BBVA is present.

Following international reference frameworks such as the SASB Materiality Map and rating agencies, BBVA has identified the sub-sectors of activity it finances and the most relevant environmental and social factors of each one, including aspects such as pollution and waste, biodiversity and land use or water resource management. This exercise is included in the "Sector Guide for the integration of sustainability factors in credit analysis", which defines the most common metrics and reference thresholds in relation to environmental aspects and is used as a support tool in the admission process.

As a member of the TNFD Forum (Task Force on Nature-related Financial Disclosures or TNFD) since 2022, BBVA is following the publication of the different versions of the framework for the management and disclosure of nature-related risks and opportunities and the guidelines published for market participants to start pilot testing for reporting under the TNFD reporting framework that is scheduled to be published in 2023.

As solutions, BBVA has developed a series of financing products aimed at generating positive impacts on the assets that make up natural capital. In 2022, BBVA has formalised the first syndicated credit line linked to indicators related to the reduction of the water footprint (Water Footprint Loan), for an amount of 2,500 million euros and with a total of 24 financial institutions where BBVA has acted as a sustainable coordinator (key indicators: water consumption in energy generation and CDP Water Score). Also in 2022, BBVA and an Italian company signed a Water Footprint Loan for 50 million euros (key indicators: water extraction and water leakage). BBVA has also been financing companies through sustainability-linked loans that include water-related KPIs in some key sectors that are highly dependent on this natural resource. In 2020, BBVA Mexico signed the first loan linked to KPIs with a cement company in Latin America and in 2021, with a data centre, applications and services company.

BBVA has developed internal standards to promote the financing of sustainable fishing activities with the MSC and ASC (sustainable blue finance) labels and also supports reforestation projects to offset its environmental footprint.

Table 115. Natural capital dependency. Heat mapping of portfolios

	Natural capital dependency	EAD (billions of euros)
Agribusiness	█	2.2
Paper & forest products	█	1.3
Integrated Oil & Gas	█	4
Water utilities	█	3.2
Other Food, beverage and tobacco	▓	16
Mining	▓	3.2
Marine transportation	▓	0.4
Road and rail transportation	▓	2.7
Transportation infrastructure operators	▓	3.1
Textiles, apparel and luxury goods	▓	2.9
Power generation	▓	16.2
Air transportation	▓	1.1
Steel & Processed Metals	▓	4.7
Other	░	91.3
Total		**152.3**

█	High
▓	Medium
░	Low or very low

The activities with the most significant dependencies on natural capital are agoindustry, oil & gas, forestry and paper products, food, beverages and tobacco, and mining. While water, flood and storm protection and climate regulation are the most important ecosystem services on which our loan portfolio depends, confirming our current environmental priorities.

Given the importance to BBVA's loan portfolio and the dependence on water resources in the Power Generation sector, the Group has built a framework for conducting detailed water stress risk assessments at the customer level. This assessment was carried out using the locations of its customer's power generation plants, the Aqueduct Water Risk Atlas tool of the World Resources Institute (WRI), which identifies water risk at asset locations, and the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) tool developed by the Natural Capital Finance Alliance, which details water impacts and dependencies.

The results of the assessment are a water stress risk scorecard of the customer and of the assets. The results of this assessment lead to the conclusion that water is a key parameter when assessing the credit risk of customers, considering that their activity may be negatively affected by the physical effects of climate change in the coming years.

8.8. Social risk

8.8.1. Management of indirect environmental and social impacts

BBVA addresses environmental, natural capital and social risks from the perspective of impact prevention and mitigation. To do this, it uses tools such as its Environmental and Social Framework or the Equator Principles, which have an environmental and social focus.

8.8.2. Environmental and social framework

In 2020, the Environmental and Social Framework for the mining, agribusiness, energy, infrastructure and defense sectors (hereinafter the Framework) was approved.

The Framework, which is reviewed annually, provides a series of rules and exclusions in relation to transactions and clients operating in these five sectors, as they are considered to have a greater social and environmental impact. The Framework is public and available on the BBVA shareholders and investors website.

To carry out its effective implementation, BBVA receives advice from an independent external expert who performs due diligence on the clients covered by the Framework in order to mitigate the risks associated with these sectors.

For the annual Framework review, new market trends, the expectations of stakeholders and the strengthening of the implementation procedures are considered.

In the last review, dated October 2022, the main new features were as follows:

- Elimination of exceptions to coal bans for countries with high energy dependence and no viable alternatives.
- New restriction in the energy sector, with a prohibition to finance "new projects or expansion of existing oil and gas exploration, drilling and extraction projects (conventional and non-conventional)."
- New restriction in the agribusiness sector, with the prohibition to finance "projects in key biodiversity areas of the International Union for Conservation of Nature (IUCN), the Brazilian Amazon and the Cerrado."
- Inclusion of new biodiversity and anti-deforestation best practices for clients, such as benchmark standards.

8.8.3. Due diligence

8.8.3.1. Due diligence process on wholesale (corporate and institutional) and business customers banking

In the area of customer knowledge and assessment, known as Know Your Customer (hereinafter KYC) and based on the information provided by an external ESG expert advisor, BBVA has implemented a process to check that new wholesale customers covered by the Environmental and Social Framework do not incur in any of the general exclusions or specific prohibitions defined for certain sectors. In the event of any controversy or non-compliance, a specific analysis of the situation would be carried out, with the possibility of adopting a customer dialogue and support plan with measures aimed at correcting the situation.

In addition, specific sustainability questionnaires have been created for each industry, so that risk managers and specialists can gain greater knowledge of the environmental, social and governance performance of large corporate and institutional customers, linked to the time of preparation or renewal of the customer's Financial Programme, and enable them to make the best decisions based on data.

8.8.3.1.1. Exclusions

As part of the corporate strategy, BBVA includes in its Environmental and Social Framework the general exclusions and prohibited activities applicable to the mining, agribusiness, energy, infrastructure and defense sectors. BBVA will not support the provision of financial services to customers covered by the Framework when it verifies the existence of sufficient evidence that they or their transactions are involved in the prohibited activities provided for in the Framework for the defense sector. In the rest of the sectors (mining, energy, agribusiness and infrastructure), a specific analysis of the situation will be carried out, which may mean not starting the relationship, or adopting a plan for dialogue and customer support with measures aimed at understand and try to correct the situation.

Since 2021, more than 300 business groups under this framework were analysed. BBVA initiated a dialogue and accompaniment plan with 17 groups. A review process has been carried out, based on best efforts, of the stock of customers for the progressive implementation of the measures provided for therein.

8.8.3.2. Due diligence process on retail banking

BBVA identifies, accredits and documents the activity carried out by our customers through the Know Your Customer process known as KYC. This KYC process, which is renewed periodically, has been designed and implemented through a risk approach and allows a better knowledge of customers, their transactions and segmentation, channels, jurisdictions and transaction monitoring.

The retail segment is also promoting the inclusive growth line, mobilizing resources for the investment needed to build infrastructure and support inclusive economic development. This line includes financing (via cards, loans, credits or mortgage financing) to individuals who meet the income thresholds and/or vulnerability criteria established for each country. The social mortgage, which is aimed at segments of the population with lower purchasing power and in which the State subsidizes part of the total amount of the mortgage financing, stands out.

Lastly, as mentioned in previous sections, the BBVA Group is committed to sustainable development, which is one of the defining elements of BBVA's business model. In this regard, the General Retail Credit Risk Policy establishes that one of the general principles governing retail credit risk management in the BBVA Group is respect for equality and diversity, avoiding unfair bias in access to financial products for reasons such as gender, color, ethnic origin, disability, religion, sexual orientation or political opinion.

Additionally, the General Risk Management Model Policy establishes that in order to avoid unfair bias in access to financial products based on gender, color, ethnic origin, disability, religion, sexual orientation or political opinion, none of these variables will be included in the admission and pricing models.

BBVA also has financing formulas for entrepreneurs, individuals or legal entities, including micro-enterprises, that meet certain conditions, such as deadlines for starting up economic activity or certain turnover thresholds. In this segment, BBVA's programme for financing women entrepreneurs in Turkey is relevant, so that women with small and medium-sized businesses can access loans under preferential conditions subject to the terms set out in the programme.

8.8.4. Equator Principles

Energy, transport and social service infrastructures, which drive economic development and create jobs, can have an impact on the environment and society. BBVA, evaluates the financing of projects to reduce and avoid negative impacts and, in this way, enhance their economic, social and environmental value.

All decisions to finance projects are based on the criterion of principle-aligned returns. This implies meeting stakeholder expectations, considering the social demand for the fight against climate change and respect for human rights.

Since 2004 BBVA has adhered to the Equator Principles (EP), which include a range of standards for managing environmental and social risk in project finance, which were developed on the basis of the International Finance Corporation’s (IFC) Policy and Performance Standards on Social and Environmental Sustainability and the World Bank’s General Guidelines on Environment, Health and Safety.

The EPs apply globally to all industrial sectors and to five financial products under the terms set forth in the principles: (I) project finance advisory; (II) project finance; (III) project-related corporate loans; (IV) project-related bridge loans; and (V) project-related refinancing and project-related acquisition.

Project assessment consists of subjecting each transaction to an environmental and social due diligence process, including potential human rights impacts. The first step is the allocation of a category (A, B or C), which reflects the project’s level of risk.

- Category A: projects with potentially significant adverse social or environmental impacts that are irreversible or unprecedented.
- Category B: projects with potentially limited adverse social and environmental impacts that are few in number, site-specific, reversible and readily addressed through mitigation measures.
- Category C: projects with minimal or no social or environmental impacts.

Reviewing the documentation provided by the customer and independent advisers is a way to assess compliance with the requirements established in the EPs, according to the project category. Finance agreements include the client’s environmental and social obligations. The application of the EPs at BBVA is integrated into the internal processes for structuring, acceptance and monitoring of transactions.

BBVA has due diligence procedures associated with the financing of projects whose execution affects indigenous peoples. When this circumstance occurs, the prior free and informed consent is required from these communities, irrespective of the geographic location of the project, including for projects in countries where a robust legislative system is presupposed, which ensures the protection of the environment and the social rights of its inhabitants. When identifying potential risks, the operation must include an effective form of management of these risks, as well as operational mechanisms to support claims management.

The data of the financed transactions that were analyzed under the EP criteria during 2022 and 2021 are shown below:

Table 116. Operational data analysed according to the Equator Principles criteria

Category A			Category B			Category C		
	2022	**2021**		**2022**	**2021**		**2022**	**2021**
Number of transactions	4	2	Number of transactions	12	23	Number of transactions	9	17
Total amount (millions of euros)	15,776.0	2,227.6	Total amount (millions of euros)	14,280.8	10,954.5	Total amount (millions of euros)	15,937.7	5,466.1
Amount financed by BBVA (millions of euros)	604.1	109.4	Amount financed by BBVA (millions of euros)	1,219.0	1,714.1	Amount financed by BBVA (millions of euros)	993.7	756.3

Note: In 2021, the number of financed operations analysed reached 42, including 20 analysed under the scope of the Equator Principles, and the remaining 22 were voluntarily analysed by BBVA under the same criteria. In 2022, only operations under the scope of application of the Equator Principles are analysed.

8.8.5. Commitment to Human Rights

BBVA is committed to respecting internationally recognized human rights. This commitment applies to the relationships that BBVA establishes with its customers, suppliers, employees and with the communities in which it carries out its business and activities.

BBVA has had a commitment to human rights since 2007, which has been updated in 2022, framed in the Group's General Sustainability Policy and which is aligned with its Code of Conduct. This commitment takes the United Nations Guiding Principles on Business and Human Rights as a point of reference.

In 2022, BBVA has adopted an active role in the field of future community legislative initiatives. Within the framework of its participation in the Working Groups on Sustainable Finance of the European Banking Federation (EBF), in the Association of European Financial Markets and in the European Financial Services Roundtable, BBVA contributes to the preparation of sectoral positions on various community initiatives. In this context, it is worth noting the work of dialog and support with the European regulator in relation to the proposal for a directive on due diligence of companies in terms of sustainability. In addition, BBVA is also part of the EBF's advisory group on diversity and inclusion.

BBVA identifies the social and labor risks that derive from its activity in the different areas and countries in which it operates in order to manage its possible impacts through processes specifically designed for this purpose or through existing processes that integrate the human rights perspective. For additional information regarding the Equator Principles, see the chapter “Management of indirect environmental and social impacts” of this report.

On the other hand, the methodology for evaluating BBVA's reputational risk, which is mentioned in the “Reputational risk” section of the “Risk management” chapter, is an essential complement to this impact management.

In 2018, BBVA carried out a first human rights due diligence process. In 2021, a new due diligence process was carried out in order to prevent, mitigate and remedy potential impacts on human rights in line with the United Nations Guiding Principles on Business and Human Rights. The main objectives of this exercise were:

- Updating and inclusion of new topics compared to the previous year.
- Assessment of the adequacy of the claim measures and mechanisms to manage these risks (according to the United Nations Guiding Principles on Business).
- Renewal of the Human Rights Action Plan to prevent and/or mitigate potential negative impacts that arose from the due diligence process carried out in 2018.
- Alignment of the process with the current Operational Risk Management Model and regulatory recommendations so that this process constitutes a continuous and dynamic process. For more information, see the “Operational Risk” section in the “Risk Management” chapter of this report.

This global due diligence process has been carried out in the global areas of BBVA and replicated in Spain, Mexico, Turkey, Argentina, Colombia, Peru, Uruguay[19] and Venezuela. For each country, the issues with the greatest impact and frequency were prioritized as a result of the social and governmental practices of the country and of the interviews held with the management areas and the global Risk Control Specialists and as a result, each country has prepared its own action plan.

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[19] At the end of 2022, in the absence of completing the preparation of the action plans.

8.8.5.1. Identification, assessment and testing

Taking as a starting point the issues analyzed in the previous due diligence process of 2018, and incorporating recommendations and expectations from analysts and investors and other emerging issues, in 2021 an internal taxonomy of 28 issues grouped into 6 topics that cover, among others, aspects of forced labor, child labor, freedom of association and collective bargaining, equal pay or discrimination, has been elaborated:

1. Employment condition
2. Projects and products: impact on human rights derived from lending activity
3. Supply chain
4. Customer well-being
5. Respect for communities
6. Cross-cutting issues: data protection and the impact of new technologies on human rights

For each of these 28 issues, an assessment was made of:

- Inherent risk: based on the of seriousness of impact and frequency of occurrence for each issue.
- Residual risk: to assess the mitigating aspects available to BBVA to manage each issue. In this identification and evaluation phase, the potential negative impacts on stakeholders were taken into account, such as the employees themselves (with a focus on women), suppliers or subcontractors, customers, as well as the indigenous population and local communities.

Subsequently, within the framework of the current Non-Financial Risks Model, the global Risk Control Specialists for each issue checked the results of the assessment and the adequacy of the action plans as mitigants. This test had a twofold objective: first, to move steadily toward an alignment of the two models (due diligence of human rights and the Non-Financial Risk Model); and second, achieve a greater systemization of the process.

8.8.5.2. Prevention and mitigation: Action Plan

The results of the global due diligence process determined that there is, in general, a medium-high effectiveness of the management and mitigation measures for each of the issues. However, areas for improvement were detected around four areas that have been documented in a document called the Human Rights Action Plan 2021-2022 that is available on the shareholders and investors website and that includes 25 action plans:

1. Strategy. One of the areas for improvement detected was to strengthen the structure of management, monitoring and control of the risks associated with human rights. Throughout 2021 and 2022 we reinforced the alignment with the Non-Financial Risk Model by working on the gradual integration of the management of these risks in the ordinary processes. In addition, we carried out a half-yearly monitoring system of the implementation of the 2021-2022 Action Plan.
2. Stakeholders. In 2021, the active participation of key stakeholders in the due diligence process was identified as an area to be enhanced. In 2022 we conducted a consultation process with key stakeholders. The results were integrated into the Human Rights Action Plan 2021-2022.
3. Reporting and disclosure. In addition to GRI, BBVA discloses information on human rights in accordance with two of the most advanced standards: Measuring Stakeholder Capitalism of the International Business Council (IBC) of the World Economic Forum (WEF) and the Sustainability Accounting Standards Board (SASB).
4. Processes Action plans were established in each of the 6 thematic areas:
    - Employment conditions. In 2022, the commitment to non-discrimination between employees was strengthened. The non-discrimination variable was included in the internal analytical model of existing data to contribute to the Group's selection and recruitment processes. Moreover, work continued on global labor disconnection guidelines which will include express measures on digital disconnection, methods and contact times in calls, emails and other channels.
    - Projects and products. Within the scope of the BBVA Environmental and Social Framework, the possibility of initiating a dialogue and support plan with the clients covered by said Framework is foreseen. This protocol specifically includes the requirements relating to human rights.
    - Supply chain. In 2022, work has continued in order to reinforce the integration of ESG issues and specifically human rights in the supplier evaluation process.

- Customer well-being. In 2022, the development of a vulnerable customer protection framework has continued to develop criteria and good practices to adequately protect these customers.

- Respect for communities. Work has been done to define a global framework for sustainable mobility, which will contribute to reducing the environmental footprint in the places and local communities where the Group is present. For more information, see the chapter "Management of direct environmental impacts" of this report.

- Cross-cutting issues. In September 2022, a general privacy and data protection policy was approved for the entire BBVA Group. Additionally, a global personal data protection monitoring tool has been launched.

8.8.5.3. Claims methods[20]

BBVA has a whistleblowing channel that allows any interest group to report confidentially and anonymously if they wish, any behavior that is directly or indirectly linked to human rights. In the complaints received through this channel in 2022, there are no human rights violations attributable to the Group entities as of December 31, 2022. For more information, see the "Compliance and conduct" section of this report.

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[20] A complaints mechanism is a formalized way established or facilitated by the company, through which individuals or groups can raise their concerns with respect to any impact of the company on their lives, including, among others, the consequences for their human rights.

8.9. Governance

BBVA considers the corporate governance performance of customers by analysing their compliance with the Group's Environmental and Social Framework and integrates the assessment of their management and governance practices within the risk analysis.

Some of our clients operate in sectors with potential impact, and we have therefore developed a specific Environmental and Social Framework (hereinafter, the Framework) as part of our commitment to promote sustainable development and human rights in the Mining, Agribusiness, Energy, Infrastructure and Defence sectors.

In addition to the sectoral standards and recommendations mentioned in the Framework, BBVA takes into consideration the following declarations, conventions and initiatives, within its responsible banking framework:

- Universal Declaration of Human Rights
- United Nations Agenda 2030 of the Sustainable Development Goals (SDGs)
- Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC)
- Conventions of the International Labour Organisation (ILO)
- UN Manifesto for Global Economic Ethics
- UN Global Compact
- UN Guiding Principles on Business and Human Rights
- OECD Guidelines for Multinational Enterprises
- Global Reporting Initiative
- Carbon Disclosure Project (CDP)
- UNEP FI Statement on Sustainable Development and Positive Impact Initiative
- IFC Performance Standards and Environmental, Health and Safety Guidelines
- Equator Principles
- Principles for Responsible Investment (PRI)
- Recommendations of the Task Force on Climate-related Financial Disclosures
- Principles for Responsible Banking promoted by UNEP-FI
- Financial Sector Collective Commitment to Climate Action
- Science-Based Targets Initiative
- 2 Degrees Investing Initiative

8.9.1. Integration of corporate governance practices in risk management processes

BBVA analyses the corporate governance performance of its customers and takes their management and governance practices into account in the admission process. The identification, assessment and monitoring of customer risks and their operations are integrated into BBVA's standard risk, compliance and operations processes and tools. Decisions are based on internal information or, where appropriate, on information provided by independent external analysts. Specifically, the Governance and Management module of the corporate segment credit rating model assesses the following aspects:

- Strategy, quality and skills of the management team to execute the company's strategy.
- Risk management standards and risk tolerance, including the ability to take a long-term view of the perspectives of different stakeholders.
- Operational performance standards, existence of robust internal controls and an independent process and policy oversight structure including processes to ensure the quality of financial and non-financial reporting.
- Independence, experience and skills of the Board of Directors.

The evaluation of the management team is done by assessing their experience and knowledge of the industry or knowledge of customers and their needs.

One of the aspects considered in the review of customers is the integration of climate change in their governance and decision-making processes, in line with the recommendations of the TCFD.

BBVA also analyses our customers' ESG disputes as an indicator of the quality of their governance and internal controls. Disputes are incidents related to environmental, social and governance (ESG) issues with negative implications on the reputation and financial performance of our customers. The analysis of controversies is based on the impact that incidents have caused on the environment and society (impact), the business risk as a consequence of incidents (risk) and the management systems and capacity to respond to incidents (management).

Based on the above analysis and the assessment carried out by the CIB Sustainable Finance team, the risk teams qualitatively integrate the results in the calculation of the customer rating and incorporate this analysis in the definition of the risk appetite with each customer, following specific criteria previously defined.

8.9.2. Related exclusions

BBVA's Environmental and Social Framework includes general exclusions and prohibited activities applicable to specific sectors. When there is sufficient evidence of the existence of any of the following cases related to governance risk, a specific analysis of the situation will be carried out, which may involve not initiating the relationship, or the adoption of a plan for dialogue and customer support with measures aimed at understanding and trying to correct the situation.

- Customers for whom BBVA has sufficient evidence of material breaches of applicable human rights laws and regulations, or of involvement in human rights abuses, regardless of whether such involvement is in breach of local legislation in each country.
- Customers subject to EU, USA and United Nations financial sanctions.
- Customers for whom BBVA has sufficient evidence that they are employing child or forced labour, as these concepts are defined in the ILO Conventions.
- Projects that involve the resettlement or infringement of the rights of indigenous or vulnerable groups without their free, prior and informed consent.
- Projects that threaten UNESCO World Heritage sites, Ramsar-listed wetlands, Alliance for Zero Extinction sites, and IUCN Category I-IV areas.

In the case of Customers (i) in the defence sector, this will entail not providing financial services to the customer and (ii) in the other sectors (mining, energy, agribusiness and infrastructure), a specific analysis of the situation will be carried out, which may entail not initiating the relationship, or adopting an engagement plan with the customer with measures aimed at understanding and trying to correct the situation.

8.10. Additional initiatives

8.10.1. Direct environmental impact

BBVA has a clear commitment to both society and the environment. The global strategy of the reduction of direct impacts is organized around four core elements: (I) reduction in consumption through the energy efficiency initiatives; (II) use of renewable energy; (III) awareness and involvement of employees and other stakeholders in the path toward a low-carbon economy; and (IV) compensation of its environmental footprint in scope 1, 2 and part of scope 3 (category 5 waste, category 6 emissions from business trips and category 7 displacements of employees of central services that represent 35.8% of the total number of employees object of the report)[21] through the purchase of project credits from the Voluntary Carbon Market to comply with the commitment acquired in 2021 to be a carbon-neutral company by 2050.

8.10.1.1. Group eco-efficiency plan

In its objective of reducing environmental impacts, BBVA, within the framework of the 2025 Goal, will recommend, on the one hand, a 68% reduction in Scope 1 and 2 CO2 emissions compared to 2015 and, on the other hand, a consumption of 70% of electricity from renewable sources in 2025, reaching 100% in 2030. In line with the latter objective, BBVA has been a member since 2018 of the RE100 initiative, through which the world's most influential companies commit to making their energy 100% renewable by 2050. For its part, on the other hand, BBVA continues to make progress towards reaching 100% by 2030.

In 2021, BBVA established a new Global Eco-efficiency Plan for the period 2021-2025, setting more ambitious targets, aligned with its climate strategy, focused on reducing direct impacts and achieving the 2025 Goal:

Table 117. Global Eco-efficiency Plan Goals 2021-2025

Vector	Indicators	Goal target[(1)]	GEP target[(2)]
Consumptions	Renewable electricity (%)	70 %	77 %
	Electricity consumption per employee (MWh/Employee)	—	(10)%
	Energy consumption per employee (MWh/Employee)	—	(7)%
	Water consumption per employee (m3/Employee)	—	(11)%
	Paper consumption per employee (kg/Employee)	—	(11)%
Circular economy	Net waste per employee (t/Employee)	—	(4)%
Carbon footprint	Scope 1&2 carbon emissions (tCO2e)	(68)%	(67)%
Sustainable building	Environmentally certified area (%)	—	45 %

(1) Base year 2015.

(2) Base year 2019. For the 2021-2025 Eco-efficiency Plan, 2019 is taken as the base, since the consumption values for 2020 are distorted due to the effect of the COVID-19 pandemic.

This plan is based on four lines of action:

1. Consumption

With the aim of reducing BBVA's environmental footprint[22], the following lines of actions will be implemented:

- Electricity consumption: BBVA's strategy is focused on the use of renewable energy as a key lever to contribute to the decarbonization of the energy markets where the Group is present. The strategy consists of reaching Power Purchase Agreements, such as those already in place in Mexico, Spain and Argentina, and acquiring renewable energy certificates, such as Guarantees of Origin in Spain and Portugal, or international renewable energy certifications (iRECs) in Mexico, Colombia, Peru and Turkey. There will also be a commitment to self-generation of renewable energy by the installation of solar photovoltaic and solar thermal panels in the Group's facilities, as is already happening in a number of subsidiaries in Turkey, Uruguay and Spain.
- Implementation of energy saving measures (ESMs) for the operation of buildings, to control and reduce consumption.
- Initiatives for the reduction of water consumption, such as gray water recycling systems and rainwater recirculation for irrigation in the headquarters of Spain and

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[21] Within the scope 3 emissions reported, the following categories defined in the GHG Protocol are not included: Category 1 purchase of goods and services; Category 2 capital goods; Category 3 fuel and energy related activities (not included in scopes 1 or 2); Category 4 upstream transportation and distribution; Category 7 transportation of network workers (which account for 64.2% of the total reported); Category 8 upstream leased assets; Category 9 transportation and distribution; Category 10 processing of the products sold; Category 11 use of the products sold; Category 12 end-of-life treatment of products sold; Category 13 downstream leased assets; Category 14 franchises; Category 15 investments. In relation to the information on Category 15 Investments, see the Calculation of financed emissions section of section 2.3.4 Management of risks associated with climate change and environmental factors. The scopes excluded to date could be material.

[22] Certain geographical areas are not included in the perimeter (Venezuela, Chile, Bolivia, Switzerland, the United States, Brazil and BBVA branches outside of Spain) nor certain BBVA Group companies in Spain and Turkey, which represent 8.2% of all BBVA Group employees.

Mexico, and the installation of waterless urinals in some of the buildings in Spain.

- Finally, there are measures for the digitalization and centralization of printing to reduce the consumption of paper, which is also recycled or environmentally certified in most of the geographical areas (Argentina, Colombia, Spain, Mexico, Peru, Turkey and Portugal) by 79.2% in 2022.

2. The circular economy

Waste generation is becoming a serious problem at global level, so part of BBVA's contribution to sustainable development must consist in transitioning linear consumption practices to circular consumption. BBVA has been working for many years to reduce this impact through sustainable construction standards and the implementation of ISO 14001-certified Environmental Management Systems. It has also implemented Aenor's Zero Waste certification in Ciudad BBVA, BBVA's headquarters in Spain. The goal is to minimize the amount of waste sent to landfills. The Bank’s facilities have clearly differentiated and marked areas that enable to carry out a proper sorting and subsequent recycling of waste.

Table 118. Waste (Circular economy)

	2022	2021
Hazardous waste (tons)	440	120
Recycled hazardous waste (tons)	293	58
Disposed hazardous waste (tons)	147	62
Non-hazardous waste (tons)	4,129	4,251
Recycled non-hazardous waste (tons)	1,410	2,207
Disposed non-hazardous waste (tons)	2,719	2,044

The increase in hazardous waste generation in 2022 is due to the replacement of facility components at the end of their useful life. This equipment replacement is necessary to ensure the continuity of the facilities. Throughout 2022 initiatives to reduce disposable single-use plastics have been established, so the value is not reported as it is negligible.

3. Carbon footprint

The reduction of the carbon footprint is one of the goals established within the Goal 2025. BBVA's total emissions are composed of:

- Scope 1 greenhouse gas emissions, comprising direct emissions from own-use property combustion facilities, vehicle fleet fuels and refrigerant gases.
- Scope 2 greenhouse gas emissions, including indirect emissions related to the production of electricity purchased for and consumed by buildings and branches.
- Scope 3 greenhouse gas emissions, which include other indirect emissions. At BBVA, this scope includes emissions from business travel (by air and rail), emissions from waste management and emissions from the employees' travel from headquarters to other sites (representing 35.8% of the total number of employees covered by the report).

Both Scope 1 and 2 emissions and Scope 3 emissions are calculated taking into account the GHG Protocol standard established by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

BBVA is a neutral company in terms of CO_2 emissions related to the aforementioned categories and offsets its carbon emissions through the purchase of credits in the Voluntary Carbon Market. Moreover, in line with the recommendations of the Taskforce on Scaling Voluntary Carbon Markets, BBVA has established requirements for the selection of projects with which to offset its residual emissions. Among these requirements are the obligation for projects to be certified under the maximum quality standards such as the Verra Verified Carbon Standard (VCS) and the Gold Standard, American Carbon Registry (ARC), Climate Action Reserve (CAR) and Plan Vivo; and that preferably are CO_2 absorption or capture projects.

4. Sustainable construction

Another of the objectives is to guarantee the implementation of the best environmental and energy standards in BBVA buildings to achieve a large percentage of environmentally certified surface area. In fact, the BBVA facilities hold a number of construction and management certifications.

Among the construction certifications, there are 16 buildings and 10 Group branches with the prestigious LEED (Leadership in Energy and Environmental Design) certificate for sustainable construction. These buildings include the Group's headquarters in Spain, Mexico, Argentina and Turkey. Three of them have also received the highest certification, LEED Platinum. We also hold 7 WWF Green Office labels in Turkey and 20 Edge badges in Peru. These certifications promote the reduction of our environmental footprint and carbon emissions.

With respect to management certifications, BBVA has implemented an Environmental Management System in many of its buildings, based on the ISO 14.001:2015 standard, which is certified every year by an independent entity. This certification is used to control and evaluate environmental performance in the operations of some of its buildings. This system is implemented in 86 buildings and 1,022 branches in the main countries where the Group operates. In 2022, BBVA Mexico expanded its area certified under this management system to four new buildings (42,260 sq m). Finally, three of the buildings in Spain, the BBVA Argentina headquarters and ten branches in that country also have an Energy Management System certified by an independent third party that meets the ISO 50.001:2018 standard.

Table 119. Evolution of the global eco-efficiency plan indicators (BBVA Group)(1)

	Values 2022	**Achievement 2022 (Δ 22-19)(2)**	**Objective PGE 22-19**	**Objective PGE 25-19**
Renewable electricity (%)	92%	92 %	74 %	77 %
Electricity consumption per employee (MWh/Employee) (3)	5.74	(14)%	(6)%	(10.0)%
Energy consumption per employee (MWh/Employee) (4)	6.30	(16)%	(5)%	(7)%
Water consumption per employee (m^3/Employee)	16.58	(12)%	(2)%	(11)%
Paper consumption per employee (kg/Employee)	34.05	(31)%	(9)%	(11)%
Net waste per employee (t/Employee) (5)	0.03	(8)%	(2)%	(4)%
Scope 1&2 carbon emissions (tCO_2e) (6)	52,966.20	(79)%	(62)%	(67)%
Environmentally certified area (%) (7)	44%	44 %	41 %	45 %

(1) Data for the last months of 2022 have been estimated due to the non-receipt of media.

(2) Achievement in the year 2022 with respect to the base year 2019. The achievement of the renewable electricity and environmentally certified area indicators is the % resulting in 2022.

(3) Includes the sum of renewable and non-renewable electricity (per employee).

(4) Includes the consumption of electricity and fossil fuels (natural gas, Liquified Petroleum Gas -LPG-, diesel, coal).

(5) Net waste is the total waste generated minus the waste that is recycled. To obtain the 2022 achievement, the reference data for 2019 of net waste has been restated, including the estimate of recycled waste, since its measurement was not incorporated until 2020.

(6) Includes scope 1 (fuels in installations and vehicle fleet and refrigerant gases), scope 2 market-based. The reference data for 2015 and 2019 of Scope 1 emissions has been restated, including the estimation of Refrigerant Gas emissions and Fleet fuels as its measurement was incorporated in 2021.

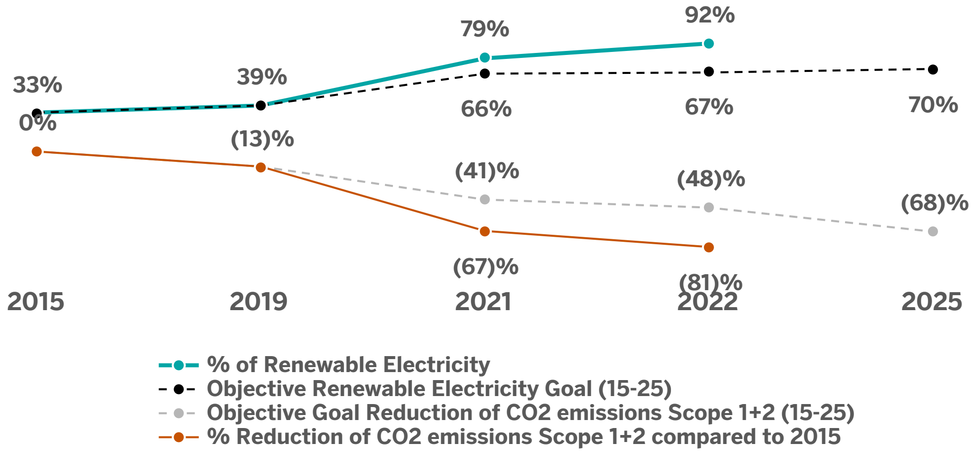
(7) Includes ISO 14001, ISO 50001, LEED, Edge and WWF Green Office certifications.

8.10.1.2. Environmental footprint

The Group's environmental footprint shows positive data with respect to the base year 2019, exceeding in all areas the objectives defined for this moment, with reductions of (79)% in Scope 1 and 2 emissions (according to the market-based method), (14)% in electricity consumption, (16)% in energy consumption, (12)% in water consumption, (31)% in paper and (8)% in net waste (all data points are per employee). The percentage of renewable electricity consumption has reached 92%, and the environmentally certified area was 44%.

Goal 2015-2025[23]

Chart 31. Environmental performance 2022



*CO2 (scope 1+2) emissions goal (MtCO2e)

BBVA's environmental performance data obtained in 2022 and the progress achieved with respect to 2021 are shown in the following table:

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[23] In order to establish the objectives of achieving the Goal 2015-2025, the consumption data for 2015 are taken as a reference. The reference data for 2015 and 2019 of Scope 1 emissions has been restated, including the estimation of Refrigerant Gas emissions and Fleet fuels as its measurement was incorporated in 2021.

Table 120. Environmental footprint (BBVA Group)(1)

	2022	**2021 (8)**	**Δ 22-21**
Consumption			
Total water consumption (cubic meters)	1,809,571	1,934,769	(6.5) %
Public water supply (cubic meters)	*1,727,582*	*1,882,391*	*(8.2) %*
Recycled water (cubic meters)	*81,989*	*52,377*	*57 %*
Paper (tons)	3,718	3,640	2 %
Total Energy (Megawatt hour) (2)	688,158	707,920	(2.8) %
Energy from renewable sources (%)	*83.9 %*	*71.3 %*	*18 %*
Energy from non renewable sources (%)	*16.1 %*	*28.7 %*	*(44) %*
Carbon footprint			
Scope 1 emissions (tons CO_2e)(3)	41,395	51,038	(19) %
Emissions from fuels in facilities (t CO_2e)	*11,783*	*14,799*	*(20) %*
Emissions from vehicle fleet fuels (t CO_2e)	*10,163*	*8,546*	*19 %*
Emissions from refrigerant gases (t CO_2e)	*19,450*	*27,693*	*(30) %*
Scope 2 emissions (tons CO_2e) market-based method (4)	11,571	42,152	(73) %
Scope 2 emissions (tons CO_2e) location-based method (5)	199,183	204,977	(3) %
Scope 1&2 emissions (tons CO_2e) market-based method	**52,967**	**93,190**	**(43)%**
Scope 1&2 emissions (tons CO_2e) location-based method	**240,578**	**256,016**	**(6)%**
Scope 3 emissions (t CO_2e) (6)	37,026	4,254	770 %
Emissions from waste management (t CO_2e)	*1,367*	*1,116*	*22 %*
Recycled hazardous waste (%)	*66.0 %*	*48.0 %*	*18.0 %*
Recycled non-hazardous waste (%)	*34.0 %*	*52.0 %*	*(18.0) %*
Donated IT equipment (units)	*1,154*	*1,225*	*(6) %*
Emissions from business travel (t CO_2e)	*14,568*	*3,138*	*364 %*
Emissions from employees commuting (t CO_2e)	*21,091*	*5,325*	*296 %*
Total CO_2e emissions (t CO_2e) market-based method	**89,992**	**97,444**	**(8)%**
Total CO_2e emissions (t CO_2e) location-based method	**277,604**	**260,269**	**7 %**
Impact of emissions (Scope 1&2) (€) (7)	*2,434,718*	*4,096,258*	*n/a*

n.a.: not available

(1) The data reflected here includes the countries Argentina, Colombia, Spain and Portugal, Mexico, Peru, Turkey and Uruguay. Certain geographical areas are not included in the perimeter (Venezuela, Chile, Bolivia, Switzerland, the United States, Brazil and BBVA branches outside Spain) or certain BBVA Group companies in Spain and Turkey, which represent 8.2% of the total employees of the BBVA Group. Some of the data for 2022 is estimated since at the end of the report the complete information for the year was not yet available.

(2) Includes the consumption of electricity and fossil fuels (diesel, natural gas and LP gas), except fuels consumed in fleets.

(3) Emissions derived from direct energy consumption (fossil fuels) and calculated based on the emission factors of 2006 IPCC Guidelines for National Greenhouse Gas Inventories. For its conversion to CO_2e, the IPCC Fifth Assessment Report and the IEA have been used as sources. As of 2021, the emissions derived from the use of the vehicle fleet and from refrigerant gas leaks in our facilities were included in this scope, applying the DEFRA emission factors to calculate CO_2e emissions in all geographical areas, including Turkey.

(4) Emissions derived from electricity consumption and calculated based on the contractual data and, failing that, the latest emission factors available from the IEA for each country.

(5) Emissions derived from electricity consumption and calculated based on the energy mix of each geographical area. The emission factors are the latest available according to IEA for each country.

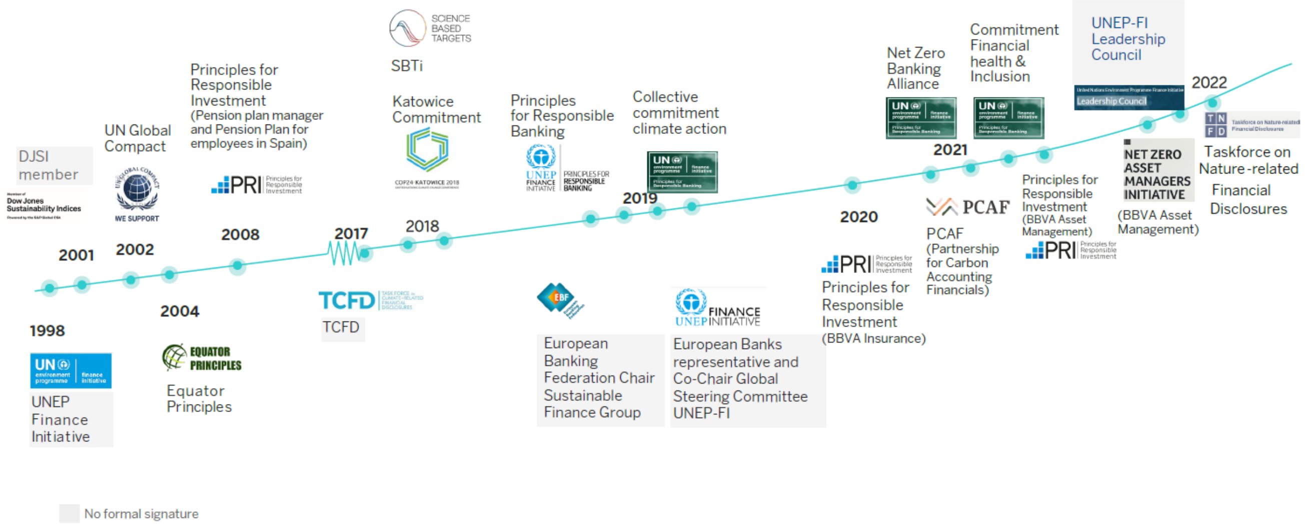
(6) Indirect emissions derived from business trips (plane and train), waste management and employee travel, using the emission factors published by DEFRA in 2022. Substantial increase in 2022 compared to 2021 due to the elimination of travel restrictions of business after the pandemic and the return of employees to the workplace in a hybrid model. For the commuting emissions of our employees, only Commuting commutes by Central Services employees have been taken into account, incorporating in 2022 the data from Turkey (2,320 tons CO_2e), which in 2021 were not included for this category.

(7) The impact of greenhouse gas emissions for 2022 is calculated using only Scope 1 and 2 emissions and using the CO_2 social cost factor based on a proportional estimate of the 2020 EPA social cost of carbon (\$51/tCO_2) and for 2025 (\$56/tCO_2), (3% discount rate, with an exchange rate of €1,153/\$).

(8) The data for 2021 differs from that published in the previous Non-Financial Information Report because the estimates included at the end of the 2021 financial year have been replaced by the actual consumption available after the publication of said report and certain values have been modified according to to the corrected data.

Given the business activities in which the BBVA Group engages, the Group has no environmental liabilities, expenses, assets, provisions or contingencies that are significant in relation to its equity, financial position and earnings.

8.10.2. Participation in international initiatives



For over 20 years, BBVA has participated actively in various supranational initiatives in close collaboration with all the stakeholders (such as the industry itself, regulators and supervisors, investors and civil society organizations). For yet another year, BBVA reiterates its support for the United Nations Global Compact.

Specifically, over the course of 2022, the Bank engaged in the following initiatives:

- Since January, BBVA has been a member of the Massachusetts Institute of Technology's (MIT Climate and Sustainability Consortium or MCSC) to accelerate the implementation of large-scale solutions to fight climate change.
- Since April, BBVA has co-chaired the Climate Finance Leadership Initiative in Colombia (CFLI). This is an initiative of the Glasgow Financial Alliance for Net Zero to speed up the global transition to net zero greenhouse gas emissions.
- In May, BBVA joined the Edison Alliance, with the commitment of the BBVA Microfinance Foundation to support the digital inclusion of vulnerable populations in Latin America.
- In July, BBVA became a founding member of Carbonplace, the global platform through which customers around the world will be offered access to voluntary carbon credits to offset their emissions.
- Since September, BBVA has been a member of the European High Level Expert Group (HLEG) that provides recommendations to the European Commission to boost sustainable finance in emerging countries. BBVA is the only private-sector bank in this group. In mid-2023, the group will present its recommendations on transformative, innovative actions to mobilize private-sector finance.
- As part of the Alliance of CEO Climate Leaders promoted by the World Economic Forum (WEF), the Chair of BBVA, together with other CEOs and leaders of major global companies, signed a statement in November calling on world leaders and participants in the United Nations Climate Change Conference at Sharm El Sheikh (COP 27) to commit to a just transition.

8.10.2.1. Universal reference frameworks

BBVA became in 2022 the first Spanish bank to join the global initiative promoted by the Task Force on Nature-related Financial Disclosures (TNFD). TNFD's mission is to develop a framework for companies around the world to report and act on their evolving impacts, dependencies, risks and opportunities related to nature. The ultimate goal is to support a shift in global financial flows.

BBVA was one of the 28 founding banks of the Principles for Responsible Banking promoted by the United Nations alliance with the financial sector (hereinafter, UNEP-FI). This is the reference framework based on six principles that seek to respond to the growing demand from different interest groups for a comprehensive framework that covers all dimensions of sustainable banking. BBVA believes that these six principles will help to reaffirm its Purpose, enhance its contribution to both the United Nations SDGs and the objectives derived from the Paris Climate Agreements, and align its business strategy with them.

In 2020, 2021 and 2022, BBVA has reported to UNEP-FI on its progress regarding each of the six principles. For more information on the progress and developments reported, see the chapter named "UNEP-FI Principles for Responsible Banking Reporting Index" in this report.

Within the framework of these principles, in 2021 BBVA was one of the founding banks of the Collective Commitment to Financial Health and Inclusion promoted by UNEP-FI with the aim of promoting universal financial inclusion and a banking sector which supports the financial health of all its customers.

BBVA was a founding member of the UN Net-Zero Banking Alliance (NZBA). The banks of this international alliance commit to making their credit and investment portfolios net neutral in greenhouse gas emissions by 2050 as deadline, in line with science and the most ambitious goals of the Paris Agreement

Likewise, BBVA Asset Management is a member of Net Zero Asset Managers, a initiative launched by a group of international asset managers to support the goal of reducing net greenhouse gas emissions to zero by 2050 or earlier.

8.10.2.2. Sustainability indices and ratings

BBVA participates annually in the main sustainability analyses conducted by rating agencies in this area. Based on the evaluations obtained through these analyses, companies are chosen to be part of the sustainability indices.

86 points / 100 Member of DJSI World and DJSI Europe 1st Bank in Europe and among its peers	AAA rating Member of the MSCI ESG Leaders Indexes (1)	ESG Rating 4.6 / 5 Member of the FTSE4 Good Index Series

ESG Score 57 / 100 (robust)	ESG Risk Rating 22,5 (medium risk) (December, 2022) (2)	82.42 puntos /100 Member of Bloomberg Gender-Equality Index	Score B

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In addition, since 2020 the Bank is part of the Nasdaq Sustainable Bond Network (NSBN), platform which brings together the world's various issuers of sustainable debt and provides a clear reference framework for socially responsible investment.

Annexes

I. EU LI3 - Outline of the differences in the scopes of consolidation and non-deducted participations in insurance undertakings

Company	Method of accounting consolidation	Global Consolidation - Method of regulatory consolidation	Proportional Consolidation – Method of regulatory consolidation	Equity method - Regulatory consolidation method	Unconsolidated - Regulatory consolidation method	Deductions (1)	Activity
ALTURA MARKETS SOCIEDAD DE VALORES SA	Equity Method		X				SECURITIES DEALER
ANIDA PROYECTOS INMOBILIARIOS, S.A. DE C.V.	Fully Consolidation			X			REAL ESTATE
AUTOCRED SPA	Equity Method		X				FINANCIAL SERVICES
BAHIA SUR RESORT S.C.	Fully Consolidation			X			REAL ESTATE
BBVA AGENCIA DE SEGUROS COLOMBIA LTDA	Fully Consolidation			X		X	INSURANCE
BBVA BROKER ARGENTINA SA	Fully Consolidation			X		X	INSURANCE
BBVA PENSIONES MEXICO, S.A. DE C.V., GRUPO FINANCIERO BBVA MEXICO	Fully Consolidation			X		X	INSURANCE
BBVA RE INHOUSE COMPAÑIA DE REASEGUROS, S.E.	Fully Consolidation			X		X	INSURANCE
BBVA SEGUROS ARGENTINA SA	Fully Consolidation			X		X	INSURANCE
BBVA SEGUROS COLOMBIA SA	Fully Consolidation			X		X	INSURANCE
BBVA SEGUROS DE VIDA COLOMBIA SA	Fully Consolidation			X		X	INSURANCE
BBVA SEGUROS MÉXICO SA DE CV GRUPO FINANCIERO BBVA MEXICO	Fully Consolidation			X		X	INSURANCE
BBVA SEGUROS SA DE SEGUROS Y REASEGUROS	Fully Consolidation			X		X	INSURANCE
BBVA SEGUROS SALUD MEXICO SA DE CV GRUPO FRO. BBVA MEXICO.	Fully Consolidation			X		X	INSURANCE
BBVA SERVICIOS, S.A.	Fully Consolidation			X			COMMERCIAL
CORPORACION IBV PARTICIPACIONES EMPRESARIALES, S.A.	Equity Method		X				INVESTMENT COMPANY
CREA MADRID NUEVO NORTE SA	Fully Consolidation			X			REAL ESTATE
REVERSION	Fully Consolidation			X			REAL ESTATE
F/253863 EL DESEO RESIDENCIAL	Fully Consolidation			X			REAL ESTATE
FIDEICOMISO 1729 INVEX ENAJENACION DE CARTERA	Equity Method		X				INSTRUMENTAL REAL ESTATE
FIDEICOMISO F/403112-6 DE ADMINISTRACION DOS LAGOS	Fully Consolidation			X			REAL ESTATE
FIDEICOMISO HARES BBVA BANCOMER F/ 47997-2	Fully Consolidation			X			REAL ESTATE
FIDEICOMISO SCOTIABANK INVERLAT S A F100322908	Fully Consolidation			X			REAL ESTATE
FOMENTO Y DESARROLLO DE CONJUNTOS RESIDENCIALES S.L. EN LIQUIDACION	Fully Consolidation			X			REAL ESTATE
FUTURO FAMILIAR, S.A. DE C.V.	Fully Consolidation			X			SERVICES
GARANTI BBVA EMEKLILIK AS	Fully Consolidation			X		X	INSURANCE
GARANTI BBVA FILO AS	Fully Consolidation			X			SERVICES
GARANTI KULTUR AS	Fully Consolidation			X			SERVICES
INVERSIONES ALDAMA, C.A.	Fully Consolidation			X			REAL ESTATE
INVERSIONES P.H.R.4, C.A.	Fully Consolidation			X			REAL ESTATE

Company	Method of accounting consolidation	Global Consolidation - Method of regulatory consolidation	Proportional Consolidation – Method of regulatory consolidation	Equity method - Regulatory consolidation method	Unconsolidated - Regulatory consolidation method	Deductions [1]	Activity
GARANTI KULTUR AS	Fully Consolidation			X			SERVICES
INVERSIONES ALDAMA, C.A.	Fully Consolidation			X			REAL ESTATE
INVERSIONES P.H.R.4, C.A.	Fully Consolidation			X			REAL ESTATE
INVERSIONES PLATCO CA	Equity Method		X				FINANCIAL SERVICES
MADIVA SOLUCIONES, S.L.	Fully Consolidation			X			SERVICES
MOTORACTIVE MULTISERVICES SRL	Fully Consolidation			X			SERVICES
MULTIASISTENCIA OPERADORA S.A. DE C.V.	Fully Consolidation			X		X	INSURANCE
MULTIASISTENCIA SERVICIOS S.A. DE C.V.	Fully Consolidation			X		X	INSURANCE
MULTIASISTENCIA, S.A. DE C.V.	Fully Consolidation			X		X	INSURANCE
OPERADORA DOS LAGOS S.A. DE C.V.	Fully Consolidation			X			SERVICES
PRO-SALUD, C.A.	Fully Consolidation			X			SERVICES
RCI COLOMBIA SA COMPAÑIA DE FINANCIAMIENTO	Equity Method		X				FINANCIAL SERVICES
SEGUROS PROVINCIAL CA	Fully Consolidation			X		X	INSURANCE
SERVICIOS CORPORATIVOS DE SEGUROS, S.A. DE C.V.	Fully Consolidation			X			SERVICES
TRIFOI REAL ESTATE SRL	Fully Consolidation			X			REAL ESTATE
URBANIZADORA SANT LLORENC SA	Fully Consolidation			X			REAL ESTATE
VERIDAS DIGITAL AUTHENTICATION SOLUTIONS MEXICO SACV	Fully Consolidation			X			SERVICES
VERIDAS DIGITAL AUTHENTICATION SOLUTIONS USA LLC	Fully Consolidation			X			SERVICES

(1) These companies are subject to the deduction for significant shareholdings in financial entities and deferred tax assets arising from temporary differences in excess of the 10% CET1 limit, as well as the deduction for joint excess of the 17.65% CET1 limit in accordance with Article 48 paragraph 2 of the CRR. As of December 31, 2022, regarding the total of significant holdings in financial sector entities, the limits indicated in phased-in terms are exceeded in €97 million, being applicable deductions for this purpose.

II. EU CC1 - Composition of regulatory own funds

	Phased-in	Regulation (UE) Nº575/2013 Reference to article	Reference to EU CC2 template (1)
Common Equity Tier 1: instruments and reserves		Referencia a artículo	
Capital instruments and the related share premium accounts	23,810	26 (1), 27, 28, 29, list of EBA 26 (3)	(a)
of which: Own shares	23,810	List 26 (3) of EBA	
Capital	2,955		
Share Premium	20,856		
Retained earnings	31,436	26 (1) (c)	(b)
Accumulated other comprehensive income and any other reserves (in order to include unrealised losses or gains, in accordance with applicable accounting standards)	(13,952)		(c)
Funds for general banking risk	—	26 (1)	
Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET1	—	486 (2)	
Minority interests (amount allowed in consolidated CET1)	1,853	84, 479, 480	(d)
Independently reviewed interim profits net of any foreseeable charge or dividend	3,814	26 (2)	(e)
Common Equity Tier 1 (CET1) capital before regulatory adjustments	**46,962**		
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
Additional value adjustments (negative amount)	(356)	34, 105	f)
Intangible assets (net of related tax liability) (negative amount)	(1,395)	36 (1) (b), 37, 472 (4)	g)
Empty set in the EU	—		
Deferred tax assets that rely on future profitability excluding those arising from temporary difference (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	(1,057)	36 (1) (c), 38, 472 (5)	h)
Fair value reserves related to gains or losses on cash flow hedges	425	33 (a)	i)
Negative amounts resulting from the calculation of expected loss amounts (equity)	(16)	36 (1) (d), 40, 159, 472 (6)	j)
Any increase in equity that results from securitised assets (negative amount)	—	32 (1)	
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(72)	33 (b)	k)
Defined-benefit pension fund assets (negative amount)	()	36 (1) (e), 41, 472 (7)	
Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(356)	36 (1) (f), 42, 472 (8)	l)
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)	—	36 (1) (g), 44, 472 (9)	
Direct, indirect and synthetic holdings 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)	—	36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)	
Direct, indirect and synthetic holdings 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)	—	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) a (3), 79, 470, 472 (11)	
Empty set in the EU	—		
Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	(1)	36 (1) (k)	
of which: qualifying holdings outside the financial sector (negative amount)	—	36 (1) (k) (i), 89 a 91	
of which: securitisation positions (negative amount)	(1)	36 (1) (k) (ii), 243 (1) (b), 244 (1) (b), 258	m)
of which: free deliveries (negative amount)	—	36 (1) (k) (iii), 379 (3)	
Deferred tax assets arising from temporary difference (amount above 10 % threshold , net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	—	36 (1) (c), 38, 48 (1) (a), 470, 472 (5)	
Amount exceeding the 17,65% threshold (negative amount)	(337)	48 (1)	n)
of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	(159)	36 (1) (i), 48 (1) (b), 470, 472 (11)	

	Phased-in	Regulation (UE) N°575/2013 Reference to article	Reference to EU CC2 template [1]
Empty set in the EU	—		
of which: deferred tax assets arising from temporary difference	(178)	36 (1) (c), 38, 48 (1) (a), 470, 472 (5)	
Losses for the current financial year (negative amount)	—		
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)	—	36 (1) (a), 472 (3)	
Empty set in the EU	—		
Qualifying AT1 deductions that exceeds the AT1 capital of the institution (negative amount)	—	36 (1) (j)	
Other CET1 deductions	(1,058)		n)
Total regulatory adjustments to Common Equity Tier 1 (CET1)	**(4,223)**		
Common Equity Tier 1 (CET1) capital	**42,738**		
Additional Tier 1 (AT1) capital: instruments			
Capital instruments and the related share premium accounts	4,875	51, 52	o)
of which: classified as equity under applicable accounting standards	—		
of which: classified as liabilities under applicable accounting standards	4,875		o)
Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	—		
Amount of qualifying items referred to in Article 494a(1) subject to phase out from AT1	—		
Amount of qualifying items referred to in Article 494b(1) subject to phase out from AT1	—	486 (3)	
Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interest not included in row 5) issued by subsidiaries and held by third parties	318	85, 86, 480	p)
of which: instruments issued by subsidiaries subject to phase-out	—	486 (3)	
Additional Tier 1 (AT1) capital before regulatory adjustments	**5,193**		
Additional Tier 1 (AT1) capital: regulatory adjustments			
Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	—	52 (1) (b), 56 (a), 57, 475 (2)	
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)	—	56 (b), 58, 475 (3)	
Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	—	56 (c), 59, 60, 79, 475 (4)	
Direct, indirect and synthetic holdings of the AT1 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)	—	56 (d), 59, 79, 475 (4)	
Empty set in the EU	—		
Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	—	56 (e)	
Other regulatory to Additional Tier 1	—		
Total regulatory adjustments to Additional Tier 1 (AT1) capital	**—**		
Additional Tier 1 (AT1) capital	**5,193**		
Tier 1 capital (T1 = CET1 + AT1)	**47,931**		
Tier 2 (T2) capital: instruments and provisions			
Capital instruments and the related share premium accounts	3,510	62, 63	q)
Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	—		
Amount of qualifying items referred to in Article 494a (2) subject to phase out from T2	—		
Amount of qualifying items referred to in Article 494b (2) subject to phase out from T2	—	486 (4)	
Qualifying own funds instruments included in consolidated T2 capital (including minority interest and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third party	2,310	87, 88, 480	r)

	Phased-in	Regulation (UE) N°575/2013 Reference to article	Reference to EU CC2 template [(1)]
of which: instruments issued by subsidiaries subject to phase-out	—	486 (4)	
Credit risk adjustments	213	62 (c) y (d)	s)
Tier 2 (T2) capital before regulatory adjustment	**6,033**		
Tier 2 (T2) capital: regulatory adjustments			
Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(10)	63 (b) (i), 66 (a), 67, 477 (2)	t)
Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institutions designed to inflate artificially the own funds of the institution (negative amount)	—	66 (b), 68, 477 (3)	
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)	—		
Empty set in the EU	—	66 (c), 69, 70, 79, 477 (4)	
Direct, indirect and synthetic holdings 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 amounts)	—	66 (d), 69, 79, 477 (4)	
Empty set in the EU	—		
Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	—		
Other regulatory adjustments to Tier 2 capital	(93)		t)
Total regulatory adjustments to Tier 2 (T2) capital	**(103)**		
Tier 2 (T2) capital	**5,930**		
Total capital (TC = T1 + T2)	**53,861**		
Total risk-weighted assets	**337,066**		
Capital ratios and capital buffers			
Common Equity Tier 1 (as a percentage of total risk exposure amount)	12.68 %	92 (2) (a), 465	
Tier 1 (as a percentage of total risk exposure amount)	14.22 %	92 (2) (b), 465	
Total capital (as a percentage of total risk exposure amount)	15.98 %	92 (2) (c)	
Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements plus a systemic risk buffer, plus systemically important institution buffer expressed as a percentage of total risk exposure amount)	8.63 %	DRC 128, 129 y 130	
of which: capital conservation buffer requirement	2.50 %		
of which: countercyclical buffer requirement	0.04 %		
of which: systemic risk buffer requirement	—		
of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	0.75 %		
of which: additional own funds requirements to address the risks other than the risk of excessive leverage	0.84 %	DRC 131	
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount) (*)	6.48 %	DRC 128	
Not relevant in EU regulations			
Not relevant in EU regulations			
Not relevant in EU regulations			
Capital ratios and capital buffers			
Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions	1,731	36 (1) (h), 45, 46, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	
Direct and indirect holdings of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions	3,056	36 (1) (i), 45, 48, 470, 472 (11)	
Empty set in the EU	—		

	Phased-in	Regulation (UE) Nº575/2013 Reference to article	Reference to EU CC2 template [1]
Deferred tax assets arising from temporary difference (amount below 10 % threshold , net of related tax liability where the conditions in Article 38 (3) are met)	3,389	36 (1)(c), 38, 48, 470, 472 (5)	
Applicable caps on the inclusion of provisions in Tier 2			
Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	—	62	
Cap on inclusion of credit risk adjustments in T2 under standardised approach	1,842	62	
Credit risk adjustments included in T2 in respect of exposures subject to internal rating-based approach (prior to the application of the cap)	213	62	
Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	758	62	
Capital instruments subject to phasing-out provisions (applicable only between 1st January 2013 and 1st January 2022)			
Current cap on CET1 instruments subject to phase-out arrangements	—	484 (3), 486 (2) y (5)	
Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	—	484 (3), 486 (2) y (5)	
Current cap on AT1 instruments subject to phase-out arrangements	—	484 (4), 486 (3) y (5)	
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	—	484 (4), 486 (3) y (5)	
Current cap on T2 instruments subject to phase-out arrangements	—	484 (4), 486 (3) y (5)	
Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	—	484 (5), 486 (4) y (5)	

(*) At the reporting date, the Group is not applying the transitory treatment of unrealised gains and losses valued at fair value with changes in other comprehensive income (hereinafter, unrealised P&L at fair value with changes in OCI) defined by article 1 paragraph 6 of the aforementioned Regulation amending article 468 of the CRR. Therefore, the Group's own funds, capital and leverage ratios to date include the full impact of the aforementioned unrealised P&L at fair value with changes in OCI.

(1) Reference to the headings of the regulatory balance sheet (CC2) where the different items described are reflected.

(2) Excess of CET1 over the Group's minimum Common Equity Tier 1 capital requirements established by the ECB through the SREP letter applicable to date

(3) As of December 31, 2022, the total shareholder remuneration for 2022 is deducted from CET 1, so that row EU-5a includes the deduction of cash remuneration (€2,593 million) and ro 27a, includes the deduction of €422 million corresponding to the execution of a program to repurchase BBVA shares, approved by the Board of Directors on January 31, 2023 and subject to obtaining the corresponding regulatory authorizations.

III.1. Parent company AT1 issuances (Millon euros. 12-31-2022)

Issuer	Banco Bilbao Vizcaya Argentaria S.A.	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	ES0813211028	US05946KAG67
Public or private	Public	Public
Governing law(s) of the instrument	Spanish	New York, except subordination, set-off waiver and recognition of bail-in power which are under Spanish law
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Additional Tier 1	Additional Tier 1
Post-transitional CRR rules	Additional Tier 1	Additional Tier 1
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	AT1-Contingent Convertible	AT1-Contingent Convertible
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	1000	937.56
Nominal amount of instrument	EUR 1,000 Mill	USD 1,000 Mill
Issue price	100%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	15/7/2020	9/5/2019
Perpetual or dated	Perpetual	Perpetual
Original maturity date	No maturity	No maturity
Issuer call subject to prior supervisory approval	Yes	Yes
Optional call date, contingent call dates, and redemption amount	Issuer call date: 15/01/2026; also subject to both Regulatory and Tax call. 100%	Issuer call date: 03/05/2025; also subject to both Regulatory and Tax call. 100%
Subsequent call dates, if applicable	At any time on or after the first reset date	At any time on or after the first reset date
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed Reset	Fixed Reset
Coupon rate and any related index	6%; the 5-year Mid-Swap Rate + 6,456%	6,5% quarterly until First Reset Date (March 5th); 5-year UST + 5,192%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Fully discretionary	Fully discretionary
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Noncumulative	Noncumulative
onvertible or non-convertible	Convertible according to its T&C (Trigger Event and Capital Reduction) and in case of non-viability or resolution (PONV)	Convertible according to its T&C (Trigger Event and Capital Reduction) and in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	Trigger event: CET1 5.125%; At solo & (sub-)consolidated. Contractual recognition Capital Reduction: Capital reduction provided for in Article 418.3 of the LSC. Contractual recognition PONV: Statutory recognition. Competent authority: SRB	Trigger event: CET1 5.125%; At solo & (sub-)consolidated. Contractual recognition Capital Reduction: Capital reduction provided for in Article 418.3 of the LSC. Contractual recognition PONV: Statutory recognition. Competent authority: SRB
If convertible, fully or partially	Trigger event: Total Capital reduction: Total PONV: Total or partial, depending on what the SRB determines	Trigger event: Total Capital reduction: Total PONV: Total or partial, depending on what the SRB determines
If convertible, conversion rate	Trigger Event and Capital Reduction: Variable PONV: To decide by SRB	Trigger Event and Capital Reduction: Variable PONV: To decide by SRB
If convertible, mandatory or optional conversion	Trigger event: Mandatory Capital reduction: Mandatory (unless otherwise indicated by the holder) PONV: Mandatory	Trigger event: Mandatory Capital reduction: Mandatory (unless otherwise indicated by the holder) PONV: Mandatory
If convertible, specify instrument type convertible into	Trigger Event and Capital Reduction: BBVA's CET1 PONV: To be decided by SRB	Trigger Event and Capital Reduction: BBVA's CET1 PONV: To decide by SRB
If convertible, specify issuer of instrument it converts into	Trigger Event and Capital Reduction: BBVA PONV: To be decided by SRB	Trigger Event and Capital Reduction: BBVA PONV: To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	Trigger event and Capital reduction: BBVA's CET1 PONV:To be decided by the SRB	Trigger event and Capital reduction: BBVA's CET1 PONV:To be decided by the SRB
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	2	2
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to common shares and reserves and pari passu with preferred shares and the others AT1. Immediately subordinate to Tier 2	Senior to common shares and reserves and pari passu with preferred shares and the rest of AT1. Immediately subordinate to Tier 2
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	US05946KAF84	ES0813211002
Public or private	Public	Public
Governing law(s) of the instrument	New York law, except provisions relating to the subordination of the Preferred Securities shall be governed by with the common laws of Spain	Spanish
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Additional Tier 1	Additional Tier 1
Post-transitional CRR rules	Additional Tier 1	Additional Tier 1
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	AT1-Contingent Convertible	AT1-Contingent Convertible
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	937.56	1000
Nominal amount of instrument	USD 1,000 Mill	EUR 1000 Mill
Issue price	100%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	16/11/2017	24/9/2018
Perpetual or dated	Perpetual	Perpetual
Original maturity date	No maturity	No maturity
Issuer call subject to prior supervisory approval	Yes	Yes
Optional call date, contingent call dates, and redemption amount	Issuer call date: 16/11/2027 (fully) also subject to both Regulatory and Tax call (entirely). 100%	Issuer call date: 24/09/2023 (fully) also subject to both Regulatory and Tax call (entirely). 100%
Subsequent call dates, if applicable	At any time on or after the first reset date	At any time on or after the first reset date
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed Reset	Fixed Reset
Coupon rate and any related index	6.125% quarterly (10 initial years); 5 year Mid-Swap + 3,870%	5.875%; EUR 5 year mid Swaps + 5.66%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Fully discretionary	Fully discretionary
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Noncumulative	Noncumulative
onvertible or non-convertible	Convertible according to its T&C (Trigger Event and Capital Reduction) and in case of non-viability or resolution (PONV)	Convertible according to its T&C (Trigger Event and Capital Reduction) and in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	Trigger event: CET1 5.125%; At solo & (sub-)consolidated. Contractual recognition Capital Reduction: Capital reduction provided for in Article 418.3 of the LSC. Contractual recognition PONV: Statutory recognition. Competent authority: SRB	Trigger event: CET1 5.125%; At solo & (sub-)consolidated. Contractual recognition Capital Reduction: Capital reduction provided for in Article 418.3 of the LSC. Contractual recognition PONV: Statutory recognition. Competent authority: SRB
If convertible, fully or partially	Trigger event: Total Capital reduction: Total PONV: Total or partial, depending on what the SRB determines	Trigger event: Total Capital reduction: Total PONV: Total or partial, depending on what the SRB determines
If convertible, conversion rate	Trigger Event and Capital Reduction: Variable PONV: To decide by SRB	Trigger Event and Capital Reduction: Variable PONV: To decide by SRB
If convertible, mandatory or optional conversion	Trigger event: Mandatory Capital reduction: Mandatory (unless otherwise indicated by the holder) PONV: Mandatory	Trigger event: Mandatory Capital reduction: Mandatory (unless otherwise indicated by the holder) PONV: Mandatory
If convertible, specify instrument type convertible into	Trigger Event and Capital Reduction: BBVA's CET1 PONV: To decide by SRB	Trigger Event and Capital Reduction: BBVA's CET1 PONV: To decide by SRB
If convertible, specify issuer of instrument it converts into	Trigger Event and Capital Reduction: BBVA PONV: To be decided by SRB	Trigger Event and Capital Reduction: BBVA PONV: To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	Trigger event and Capital reduction: BBVA's CET1 PONV:To be decided by the SRB	Trigger event and Capital reduction: BBVA's CET1 PONV:To be decided by the SRB
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	2	2
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to common shares and reserves and pari passu with preferred shares and the rest of AT1. Immediately subordinate to Tier 2	Senior to common shares and reserves and pari passu with preferred shares and the rest of AT1. Immediately subordinate to Tier 2
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	ES0813211010
Public or private	Public
Governing law(s) of the instrument	Spanish
Contractual recognition of conversion by resolution institution	Yes
Regulatory treatment	
Transitional CRR rules	Additional Tier 1
Post-transitional CRR rules	Additional Tier 1
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	AT1-Contingent Convertible
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	1000
Nominal amount of instrument	EUR 1,000 Mill
Issue price	100%
Redemption price	100%
Accounting classification	Liability – amortised cost
Original date of issuance	29/3/2019
Perpetual or dated	Perpetual
Original maturity date	No maturity
Issuer call subject to prior supervisory approval	Yes
Optional call date, contingent call dates, and redemption amount	Issuer call date: 29/03/2024; also subject to both Regulatory and Tax call. 100%
Subsequent call dates, if applicable	At any time on or after the first reset date
Coupons / dividends	
Fixed or floating dividend/coupon	Fixed Reset
Coupon rate and any related index	6%; 5-year Mid-Swap Rate + 6,039%
Existence of a dividend stopper	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Fully discretionary
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary
Existence of step up or other incentive to redeem	No
Noncumulative or cumulative	Noncumulative
onvertible or non-convertible	Convertible according to its T&C (Trigger Event and Capital Reduction) and in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	Trigger event: CET1 5.125%; At solo & (sub-)consolidated. Contractual recognition Capital Reduction: Capital reduction provided for in Article 418.3 of the LSC. Contractual recognition PONV: Statutory recognition. Competent authority: SRB
If convertible, fully or partially	Trigger event: Total Capital reduction: Total PONV: Total or partial, depending on what the SRB determines
If convertible, conversion rate	Trigger Event and Capital Reduction: Variable PONV: To decide by SRB
If convertible, mandatory or optional conversion	Trigger event: Mandatory Capital reduction: Mandatory (unless otherwise indicated by the holder) PONV: Mandatory
If convertible, specify instrument type convertible into	Trigger Event and Capital Reduction: BBVA's CET1 PONV: To decide by SRB
If convertible, specify issuer of instrument it converts into	Trigger Event and Capital Reduction: BBVA PONV: To be decided by SRB
Write-down features	Yes
If write-down, write-down trigger (s)	Trigger event and Capital reduction: BBVA's CET1 PONV:To be decided by the SRB
If write-down, full or partial	Fully or partially
If write-down, permanent or temporary	Permanent
If temporary write-down, description of write-up mechanism	N/A
Type of subordination	N/A
Order of priority in normal insolvency proceedings	2
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to common shares and reserves and pari passu with preferred shares and the rest of AT1. Immediately subordinate to Tier 2
Non-compliant transitioned features	No
If yes, specify non-compliant features	N/A
Link to the terms and conditions of the instrument	Terms and Conditions

III.2. Parent company T2 issuances (Millon euros. 12-31-2022)

Issuer	Banco Bilbao Vizcaya Argentaria SA	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	XS2206805769	XS2104051433
Public or private	Public	Public
Governing law(s) of the instrument	Spanish	Spanish
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	296.787	994.021
Nominal amount of instrument	GBP 300 Mill	EUR 1,000 Mill
Issue price	100%	99.39%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	15/7/2020	16/1/2020
Perpetual or dated	Dated	Dated
Original maturity date	15/7/2031	16/1/2030
Issuer call subject to prior supervisory approval	Yes	Yes
Optional call date, contingent call dates, and redemption amount	Issuer call date: 15/07/2025; also subject to both Regulatory (Total) and Tax call (Partial). 100%	Issuer call date: 16/01/2025; also subject to both Regulatory (Total) and Tax call (Partial). 100%
Subsequent call dates, if applicable	No	No
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed reset	Fixed reset
Coupon rate and any related index	3,104%; 5-year GBP Mid Swap Rate + 127pbs	1%; 5Y Euro Mid Swap + 127 bps
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Convertible in case of non-viability or resolution (PONV)	Convertible in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If convertible, fully or partially	Total or partial, depending on what the SRB determines	Total or partial, depending on what the SRB determines
If convertible, conversion rate	To be decided by SRB	To be decided by SRB
If convertible, mandatory or optional conversion	Mandatory	Mandatory
If convertible, specify instrument type convertible into	To be decided by SRB	To be decided by SRB
If convertible, specify issuer of instrument it converts into	To be decided by SRB	To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	3	3
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	XS1954087695	XS1562614831
Public or private	Public	Public
Governing law(s) of the instrument	Spanish	English legislation except provisions of status of the notes under Spanish law
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	738.275	769.657
Nominal amount of instrument	EUR 750 Mill	EUR 1,000 Mill
Issue price	100%	99.99%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	22/2/2019	2/10/2017
Perpetual or dated	Dated	Dated
Original maturity date	22/2/2029	2/10/2027
Issuer call subject to prior supervisory approval	Yes	No
Optional call date, contingent call dates, and redemption amount	Issuer call date: 22/02/2024; also subject to both Regulatory (Total) and Tax call (Partial). 100%	Only subject to both Regulatory and Tax call 100%
Subsequent call dates, if applicable	No	N/A
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed reset	Fixed
Coupon rate and any related index	2.575%; 5Y Euro Mid Swap + 245 bps	3.50%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Convertible in case of non-viability or resolution (PONV)	Convertible in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If convertible, fully or partially	Total or partial, depending on what the SRB determines	Total or partial, depending on what the SRB determines
If convertible, conversion rate	To be decided by SRB	To be decided by SRB
If convertible, mandatory or optional conversion	Mandatory	Mandatory
If convertible, specify instrument type convertible into	To be decided by SRB	To be decided by SRB
If convertible, specify issuer of instrument it converts into	To be decided by SRB	To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	3	3
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	XS1569874503	XS1579039006
Public or private	Private	Private
Governing law(s) of the instrument	English legislation except provisions of status of the notes under Spanish law	English legislation except provisions of status of the notes under Spanish law
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	143.81	45.766
Nominal amount of instrument	EUR 165 Mill	EUR 53,4 mills
Issue price	99.45%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	2/24/2017 & 3/14/2017	16/3/2017
Perpetual or dated	Dated	Dated
Original maturity date	24/2/2032	16/3/2027
Issuer call subject to prior supervisory approval	No	No
Optional call date, contingent call dates, and redemption amount	Only subject to both Regulatory and Tax call 100%	Only subject to both Regulatory and Tax call 100%
Subsequent call dates, if applicable	N/A	N/A
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed	Fixed (until 03/16/2019) and floating since that date
Coupon rate and any related index	4.00%	3% and afterwards annually resettable at CMS (10 years) +1.30%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Convertible in case of non-viability or resolution (PONV)	Convertible in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If convertible, fully or partially	Total or partial, depending on what the SRB determines	Total or partial, depending on what the SRB determines
If convertible, conversion rate	To be decided by SRB	To be decided by SRB
If convertible, mandatory or optional conversion	Mandatory	Mandatory
If convertible, specify instrument type convertible into	To be decided by SRB	To be decided by SRB
If convertible, specify issuer of instrument it converts into	To be decided by SRB	To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	3	3
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	XS1587857498	XS1615673701
Public or private	Private	Private
Governing law(s) of the instrument	English legislation except provisions of status of the notes under Spanish law	English legislation except provisions of status of the notes under Spanish law
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	108.925	16.721
Nominal amount of instrument	USD 120 Mill	CHF 20 Mill
Issue price	100%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	31/3/2017	24/5/2017
Perpetual or dated	Dated	Dated
Original maturity date	31/3/2032	24/5/2027
Issuer call subject to prior supervisory approval	No	No
Optional call date, contingent call dates, and redemption amount	Only subject to both Regulatory and Tax call 100%	Only subject to both Regulatory and Tax call 100%
Subsequent call dates, if applicable	N/A	N/A
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed	Fixed
Coupon rate and any related index	5.70%	1.6%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Convertible in case of non-viability or resolution (PONV)	Convertible in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If convertible, fully or partially	Total or partial, depending on what the SRB determines	Total or partial, depending on what the SRB determines
If convertible, conversion rate	To be decided by SRB	To be decided by SRB
If convertible, mandatory or optional conversion	Mandatory	Mandatory
If convertible, specify instrument type convertible into	To be decided by SRB	To be decided by SRB
If convertible, specify issuer of instrument it converts into	To be decided by SRB	To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	3	3
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	XS1615674261	XS1824263260
Public or private	Private	Private
Governing law(s) of the instrument	English legislation except provisions of status of the notes under Spanish law	English legislation except provisions of status of the notes under Spanish law
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	120.986	264.19
Nominal amount of instrument	EUR 150 Mill	USD 300 Mill
Issue price	100%	99.23%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	24/5/2017	29/5/2018
Perpetual or dated	Dated	Dated
Original maturity date	24/5/2027	29/5/2033
Issuer call subject to prior supervisory approval	No	No
Optional call date, contingent call dates, and redemption amount	Only subject to both Regulatory and Tax call 100%	Only subject to both Regulatory and Tax call 100%
Subsequent call dates, if applicable	N/A	NA
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed	Fixed
Coupon rate and any related index	2.54%	5.25%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Convertible in case of non-viability or resolution (PONV)	Convertible in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If convertible, fully or partially	Total or partial, depending on what the SRB determines	Total or partial, depending on what the SRB determines
If convertible, conversion rate	To be decided by SRB	To be decided by SRB
If convertible, mandatory or optional conversion	Mandatory	Mandatory
If convertible, specify instrument type convertible into	To be decided by SRB	To be decided by SRB
If convertible, specify issuer of instrument it converts into	To be decided by SRB	To be decided by SRB
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	PONV Competent authority: SRB Contractual recognition	PONV Competent authority: SRB Contractual recognition
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	3	3
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred	Senior to capital, reserves and instruments AT1 Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior bonds both preferred and non-preferred
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Banco Bilbao Vizcaya Argentaria SA
Unique identifier (e.g. ISIN)	ES0213211131
Public or private	Private
Governing law(s) of the instrument	Spanish
Contractual recognition of conversion by resolution institution	No
Regulatory treatment	
Transitional CRR rules	Tier 2
Post-transitional CRR rules	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	10.439
Nominal amount of instrument	EUR 100 Mill
Issue price	99.77%
Redemption price	100%
Accounting classification	Liability – amortised cost
Original date of issuance	7/4/2008
Perpetual or dated	Dated
Original maturity date	7/4/2023
Issuer call subject to prior supervisory approval	Yes
Optional call date, contingent call dates, and redemption amount	No
Subsequent call dates, if applicable	N/A
Coupons / dividends	
Fixed or floating dividend/coupon	Fixed
Coupon rate and any related index	6.2%
Existence of a dividend stopper	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory
Existence of step up or other incentive to redeem	No
Noncumulative or cumulative	Cumulative
onvertible or non-convertible	Convertible in case of non-viability or resolution (PONV)
If convertible, conversion trigger (s)	PONV Competent authority: SRB Contractual recognition
If convertible, fully or partially	Total or partial, depending on what the SRB determines
If convertible, conversion rate	To be decided by SRB
If convertible, mandatory or optional conversion	Mandatory
If convertible, specify instrument type convertible into	To be decided by SRB
If convertible, specify issuer of instrument it converts into	To be decided by SRB
Write-down features	Yes
If write-down, write-down trigger (s)	PONV Competent authority: SRB Contractual recognition
If write-down, full or partial	Fully or partially
If write-down, permanent or temporary	Permanent
If temporary write-down, description of write-up mechanism	N/A
Type of subordination	N/A
Order of priority in normal insolvency proceedings	3
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior to Preferred, Additional Level 1 instruments and Superior Level 2 instruments (Perpetual) Pari passu to other issues of T2 (compute or not compute in capital) Junior to Tier 3 and senior obligations both preferred and non-preferred
Non-compliant transitioned features	No
If yes, specify non-compliant features	N/A
Link to the terms and conditions of the instrument	Terms and Conditions

III.3. Mexico issuances (Millon euros. 12-31-2022)

Issuer	BBVA Bancomer S.A., Institución de Banca Múltiple, Grupo Financiero BBVA Bancomer, acting through its Texas Agency	BBVA Bancomer S.A., Institución de Banca Múltiple, Grupo Financiero BBVA Bancomer, acting through its Texas Agency
Unique identifier (e.g. ISIN)	USP16259AN67 -- US05533UAG31	US05533UAF57 - USP16259AM84
Public or private	Public	Public
Governing law(s) of the instrument	New York, except for the determination of trigger events, capital events, or regulatory events that are determined under Mexican law. Also ranking and subordination are under Mexican law	New York, except for the determination of trigger events, capital events, or regulatory events that are determined under Mexican law. Also ranking and subordination are under Mexican law
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 Instruments	Tier 2 Instruments
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	483.864	611.847
Nominal amount of instrument	USD 750 Mill	USD 1,000 Mill
Issue price	100%	99.51%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	13/9/2019	18/1/2018
Perpetual or dated	Dated	Dated
Original maturity date	13/9/2034	18/1/2033
Issuer call subject to prior supervisory approval	Yes	No
Optional call date, contingent call dates, and redemption amount	09/13/2029 fully or partially. (also subject to Regulatory call and Tax call, only with full amortisation). 100%	01/18/2028 fully or partially. (also subject to Regulatory call and Tax call, only with fully amortisation. 100%
Subsequent call dates, if applicable	No	No
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed reset	Fixed reset
Coupon rate and any related index	5.875%. From call Treasury yield optional date + 430.8 bps	5.125%. From call Treasury yield optional date + 265 bps
Existence of a dividend stopper	Yes	Yes
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A
If convertible, fully or partially	N/A	N/A
If convertible, conversion rate	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	(*) A Trigger Event will be deemed to have occurred if any of the following events takes places: (i) the CNBV publishes a determination, in its official publication of capitalisation levels for Mexican Banks, that the issuer's Fundamental Capital is equal to or below 4.5%; (ii) the Issuer does not comply with the Mexican Banking Law and other regulation or (iii) the Banking Stability Committee determines that financial assistance is required by the Issuer to avoid revocation of the Issuer's license for its failure to comply with corrective measures.	(*) A Trigger Event will be deemed to have occurred if any of the following events takes places: (i) the CNBV publishes a determination, in its official publication of capitalisation levels for Mexican Banks, that the issuer's Fundamental Capital is equal to or below 4.5%; (ii) the Issuer does not comply with the Mexican Banking Law and other regulation or (iii) the Banking Stability Committee determines that financial assistance is required by the Issuer to avoid revocation of the Issuer's license for its failure to comply with corrective measures.
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The Notes constitute Subordinated Preferred Indebtedness, and (i) will be subordinate and junior in right of payment and in liquidation to all of the present and future Senior Indebtedness, (ii) will rank pari passu without preference among themselves and with all of the present and future other unsecured subordinated preferred indebtedness and (iii) will be senior to subordinated non-preferred indebtedness and all classes of equity or capital stock.	The Notes constitute Subordinated Preferred Indebtedness, and (i) will be subordinate and junior in right of payment and in liquidation to all of the present and future Senior Indebtedness, (ii) will rank pari passu without preference among themselves and with all of the present and future other unsecured subordinated preferred indebtedness and (iii) will be senior to subordinated non-preferred indebtedness and all classes of equity or capital stock.
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	BBVA Bancomer S.A., Institución de Banca Múltiple, Grupo Financiero BBVA Bancomer, acting through its Texas Agency
Unique identifier (e.g. ISIN)	US05533UAE82 - USP16259AL02
Public or private	Public
Governing law(s) of the instrument	New York, except for the determination of trigger events, capital events, or regulatory events that are determined under Mexican law. Also ranking and subordination are under Mexican law
Contractual recognition of conversion by resolution institution	Yes
Regulatory treatment	
Transitional CRR rules	Tier 2
Post-transitional CRR rules	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 Instruments
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	84.405
Nominal amount of instrument	USD 200 Mill
Issue price	99.79%
Redemption price	100%
Accounting classification	Liability – amortised cost
Original date of issuance	12/11/2014
Perpetual or dated	Dated
Original maturity date	12/11/2029
Issuer call subject to prior supervisory approval	Yes
Optional call date, contingent call dates, and redemption amount	11/12/2024 fully. (also subject to Regulatory call and Tax call, only with full amortisation). 100%
Subsequent call dates, if applicable	No
Coupons / dividends	
Fixed or floating dividend/coupon	Fixed reset
Coupon rate and any related index	5.35% since call date Treasury yield + 300bps
Existence of a dividend stopper	Yes
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory
Existence of step up or other incentive to redeem	No
Noncumulative or cumulative	Cumulative
onvertible or non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A
If convertible, fully or partially	N/A
If convertible, conversion rate	N/A
If convertible, mandatory or optional conversion	N/A
If convertible, specify instrument type convertible into	N/A
If convertible, specify issuer of instrument it converts into	N/A
Write-down features	Yes
If write-down, write-down trigger (s)	(*) A Trigger Event will be deemed to have occurred if any of the following events takes places: (i) the CNBV publishes a determination, in its official publication of capitalisation levels for Mexican Banks, that the issuer's Fundamental Capital is equal to or below 4.5%; (ii) the Issuer does not comply with the Mexican Banking Law and other regulation or (iii) the Banking Stability Committee determines that financial assistance is required by the Issuer to avoid revocation of the Issuer's license for its failure to comply with corrective measures.
If write-down, full or partial	Fully or partially
If write-down, permanent or temporary	Permanent
If temporary write-down, description of write-up mechanism	N/A
Type of subordination	N/A
Order of priority in normal insolvency proceedings	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The Notes constitute Subordinated Preferred Indebtedness, and (i) will be subordinate and junior in right of payment and in liquidation to all of the present and future Senior Indebtedness, (ii) will rank pari passu without preference among themselves and with all of the present and future other unsecured subordinated preferred indebtedness and (iii) will be senior to subordinated non-preferred indebtedness and all classes of equity or capital stock.
Non-compliant transitioned features	No
If yes, specify non-compliant features	N/A
Link to the terms and conditions of the instrument	Terms and Conditions

III.4. South America issuances (Millon euros. 12-31-2022)

Issuer	BBVA Colombia	BBVA Colombia
Unique identifier (e.g. ISIN)	COB13CB00197	COB13CB00213
Public or private	Public	Public
Governing law(s) of the instrument	Colombian	Colombian
Contractual recognition of conversion by resolution institution	No	No
Regulatory treatment		
Transitional CRR rules	Tier2	Tier2
Post-transitional CRR rules	Non eligible	Tier2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	14.878	1.067
Nominal amount of instrument	COP 152,000 Mill	COP 200,000 Mill
Issue price	100%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	19/9/2011	19/2/2013
Perpetual or dated	Dated	Dated
Original maturity date	19/9/2026	19/2/2023
Issuer call subject to prior supervisory approval	No	No
Optional call date, contingent call dates, and redemption amount	N/A	N/A
Subsequent call dates, if applicable	N/A	N/A
Coupons / dividends		
Fixed or floating dividend/coupon	Floating	Floating
Coupon rate and any related index	CPI + 4.70%	CPI + 3.60%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A
If convertible, fully or partially	N/A	N/A
If convertible, conversion rate	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A
Write-down features	No	No
If write-down, write-down trigger (s)	N/A	N/A
If write-down, full or partial	N/A	N/A
If write-down, permanent or temporary	N/A	N/A
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior debt securities other than parity securities rank immediately superior	Senior debt securities other than parity securities rank immediately superior
Non-compliant transitioned features	Yes	Yes
If yes, specify non-compliant features	No write down existence or conversion by authority	No write down existence or conversion by authority
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	BBVA Colombia	BBVA Colombia
Unique identifier (e.g. ISIN)	COB13CB00221	COB13CB00239
Public or private	Public	Public
Governing law(s) of the instrument	Colombian	Colombian
Contractual recognition of conversion by resolution institution	No	No
Regulatory treatment		
Transitional CRR rules	Tier2	Tier2
Post-transitional CRR rules	Non eligible	Non eligible
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	22.017	23.711
Nominal amount of instrument	COP 165,000 Mill	COP 160,000 Mill
Issue price	100%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	19/2/2013	26/11/2014
Perpetual or dated	Dated	Dated
Original maturity date	19/2/2028	26/11/2034
Issuer call subject to prior supervisory approval	No	No
Optional call date, contingent call dates, and redemption amount	N/A	N/A
Subsequent call dates, if applicable	N/A	N/A
Coupons / dividends		
Fixed or floating dividend/coupon	Floating	Floating
Coupon rate and any related index	CPI + 3.89%	CPI + 4.50%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A
If convertible, fully or partially	N/A	N/A
If convertible, conversion rate	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A
Write-down features	No	No
If write-down, write-down trigger (s)	N/A	N/A
If write-down, full or partial	N/A	N/A
If write-down, permanent or temporary	N/A	N/A
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior debt securities other than parity securities rank immediately superior	Senior debt securities other than parity securities rank immediately superior
Non-compliant transitioned features	Yes	Yes
If yes, specify non-compliant features	No write down existence or conversion by authority	No write down existence or conversion by authority
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	BBVA Colombia	BBVA Colombia
Unique identifier (e.g. ISIN)	COB13CB00247	USP1024TAN92 -- US05890JAA88
Public or private	Public	Public
Governing law(s) of the instrument	Colombian	New York State Law., except in the event of Preventive Measures, or Intervention by the "Superintendencia Financiera de Colombia" or dissolution or liquidation of BBVA Colombia under Colombian banking law
Contractual recognition of conversion by resolution institution	No	No
Regulatory treatment		
Transitional CRR rules	Tier2	Tier2
Post-transitional CRR rules	Non eligible	Tier2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	16.1	167.154
Nominal amount of instrument	COP 90,000 Mill	USD 400 Mill
Issue price	100%	99.91%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	26/11/2014	21/4/2015
Perpetual or dated	Dated	Dated
Original maturity date	26/11/2029	21/4/2025
Issuer call subject to prior supervisory approval	No	Yes
Optional call date, contingent call dates, and redemption amount	N/A	04/21/2020; Tax call
Subsequent call dates, if applicable	N/A	Tax call can be exercised at any time after 04/21/2020
Coupons / dividends		
Fixed or floating dividend/coupon	Floating	Fixed
Coupon rate and any related index	CPI + 4.38%	4.88%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A
If convertible, fully or partially	N/A	N/A
If convertible, conversion rate	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A
Write-down features	No	No
If write-down, write-down trigger (s)	N/A	N/A
If write-down, full or partial	N/A	N/A
If write-down, permanent or temporary	N/A	N/A
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior debt securities other than parity securities rank immediately superior	Senior debt securities other than parity securities rank immediately superior
Non-compliant transitioned features	Yes	Yes
If yes, specify non-compliant features	No write down existence or conversion by authority	No write down existence or conversion by authority
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	BBVA Peru	BBVA Peru
Unique identifier (e.g. ISIN)	US05537GAD79-USP16236AG98	PEP11600D102
Public or private	Public	Public
Governing law(s) of the instrument	New York	Peruvian
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	107.424	14.628
Nominal amount of instrument	USD 300 Mill	USD 45 Mill
Issue price	99.317%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	9/22/2014	10/02/2013
Perpetual or dated	Dated	Dated
Original maturity date	9/22/2029	10/02/2028
Issuer call subject to prior supervisory approval	Yes	Yes
Optional call date, contingent call dates, and redemption amount	Issuer call date: 09/22/2024, also subject to Regulatory call	Issuer call date: 10/02/2023, also subject to Regulatory call
Subsequent call dates, if applicable	N/A	Any time from call date
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed reset	Fixed
Coupon rate and any related index	5.25% 2.15%+UST5Y (9/22/2024)	6.53125%
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A
If convertible, fully or partially	N/A	N/A
If convertible, conversion rate	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	SBS	SBS
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior debt securities other than parity securities rank immediately superior	Senior debt securities other than parity securities rank immediately superior
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	BBVA Uruguay SA
Unique identifier (e.g. ISIN)	N/A
Public or private	Private
Governing law(s) of the instrument	Uruguayan
Contractual recognition of conversion by resolution institution	Yes
Regulatory treatment	
Transitional CRR rules	Tier 2
Post-transitional CRR rules	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	14.6
Nominal amount of instrument	USD 15 Mill
Issue price	100%
Redemption price	100%
Accounting classification	Liability – amortised cost
Original date of issuance	24/2/2021
Perpetual or dated	Dated
Original maturity date	24/2/2031
Issuer call subject to prior supervisory approval	Yes
Optional call date, contingent call dates, and redemption amount	At issuer's discretion after 5 years from the date of issue, minimum amount of 1 MM USD
Subsequent call dates, if applicable	At issuer's discretion after 5 years from the date of issue, minimum amount of 1 MM USD
Coupons / dividends	
Fixed or floating dividend/coupon	Floating
Coupon rate and any related index	LIBOR 180d + 3,65%
Existence of a dividend stopper	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory
Existence of step up or other incentive to redeem	No
Noncumulative or cumulative	Cumulative
onvertible or non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A
If convertible, fully or partially	N/A
If convertible, conversion rate	N/A
If convertible, mandatory or optional conversion	N/A
If convertible, specify instrument type convertible into	N/A
If convertible, specify issuer of instrument it converts into	N/A
Write-down features	No
If write-down, write-down trigger (s)	N/A
If write-down, full or partial	Fully or partially
If write-down, permanent or temporary	Permanent
If temporary write-down, description of write-up mechanism	N/A
Type of subordination	N/A
Order of priority in normal insolvency proceedings	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior debt securities other than parity securities rank immediately superior
Non-compliant transitioned features	No
If yes, specify non-compliant features	N/A
Link to the terms and conditions of the instrument	Terms and Conditions

III.5. Turkey issuances (Millon euros. 12-31-2022)

Issuer	Garanti BBVA	Garanti BBVA
Unique identifier (e.g. ISIN)	TRSGRAN23013	TRSGRANE2915
Public or private	Public	Public
Governing law(s) of the instrument	Turkish	Turkish
Contractual recognition of conversion by resolution institution	Yes	Yes
Regulatory treatment		
Transitional CRR rules	Tier 2	Tier 2
Post-transitional CRR rules	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	34.678	11.245
Nominal amount of instrument	TRY 750 Mill	TRY 252.8 Mill
Issue price	100%	100%
Redemption price	100%	100%
Accounting classification	Liability – amortised cost	Liability – amortised cost
Original date of issuance	2/14/2020	10/9/2019
Perpetual or dated	Dated	Dated
Original maturity date	2/14/2030	10/7/2029
Issuer call subject to prior supervisory approval	Yes	Yes
Optional call date, contingent call dates, and redemption amount	At five years from the date of issue in full (also subject to both the Regulatory call and the Tax call, only in full amortisation).100%.	At five years from the date of issue in full (also subject to both the Regulatory call and the Tax call, only in full amortisation).100%.
Subsequent call dates, if applicable	No	No
Coupons / dividends		
Fixed or floating dividend/coupon	Floating	Floating
Coupon rate and any related index	TLREF+250_bps	TLREF+130_bps
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No
Noncumulative or cumulative	Cumulative	Cumulative
onvertible or non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A
If convertible, fully or partially	N/A	N/A
If convertible, conversion rate	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A
Write-down features	Yes	Yes
If write-down, write-down trigger (s)	Cases that by a loss the issuer has become or is likely to become non-viable. Non-viability/Write -down of the notes . BRSA.	Cases that by a loss the issuer has become or is likely to become non-viable. Non-viability/Write -down of the notes . BRSA.
If write-down, full or partial	Fully or partially	Fully or partially
If write-down, permanent or temporary	Permanent	Permanent
If temporary write-down, description of write-up mechanism	N/A	N/A
Type of subordination	N/A	N/A
Order of priority in normal insolvency proceedings	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Constitute Non-Preferred Debt and will rank (1) junior to the Senior Debt and Preferred Debt, (2) pari passu among themselves and with all the other Non-Preferred Debt, (3) senior only to all classes of equity capital	Constitute Non-Preferred Debt and will rank (1) junior to the Senior Debt and Preferred Debt, (2) pari passu among themselves and with all the other Non-Preferred Debt, (3) senior only to all classes of equity capital
Non-compliant transitioned features	No	No
If yes, specify non-compliant features	N/A	N/A
Link to the terms and conditions of the instrument	Terms and Conditions	Terms and Conditions

Issuer	Garanti BBVA
Unique identifier (e.g. ISIN)	XS1617531063 (144A) US900148AE73 (Reg S)
Public or private	Public
Governing law(s) of the instrument	English law except regarding subordinatio that will follow Turkish law
Contractual recognition of conversion by resolution institution	Yes
Regulatory treatment	
Transitional CRR rules	Tier 2
Post-transitional CRR rules	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	At solo & (sub-)consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 instrument
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	394.304
Nominal amount of instrument	USD 750 Mill
Issue price	100%
Redemption price	100%
Accounting classification	Liability – amortised cost
Original date of issuance	5/23/2017
Perpetual or dated	Dated
Original maturity date	5/24/2027
Issuer call subject to prior supervisory approval	Yes
Optional call date, contingent call dates, and redemption amount	05/24/2022 fully (also subject to Regulatory call and Tax call, only full amortisation)only in full amortisation: 100%
Subsequent call dates, if applicable	No
Coupons / dividends	
Fixed or floating dividend/coupon	Fixed to fixed
Coupon rate and any related index	6.125% (swap5y$+ 4.22%)
Existence of a dividend stopper	No
Fully discretionary, partially discretionary or mandatory (in terms of timing	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory
Existence of step up or other incentive to redeem	No
Noncumulative or cumulative	Cumulative
onvertible or non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A
If convertible, fully or partially	N/A
If convertible, conversion rate	N/A
If convertible, mandatory or optional conversion	N/A
If convertible, specify instrument type convertible into	N/A
If convertible, specify issuer of instrument it converts into	N/A
Write-down features	Yes
If write-down, write-down trigger (s)	Cases that by a loss the issuer has become or is likely to become non-viable. Non-viability/Write - down of the notes . BRSA.
If write-down, full or partial	Fully or partially
If write-down, permanent or temporary	Permanent
If temporary write-down, description of write-up mechanism	N/A
Type of subordination	N/A
Order of priority in normal insolvency proceedings	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Constitute Non-Preferred Debt and will rank (1) junior to the Senior Debt and Preferred Debt, (2) pari passu among themselves and with all the other Non-Preferred Debt, (3) senior only to all classes of equity capital
Non-compliant transitioned features	No
If yes, specify non-compliant features	N/A
Link to the terms and conditions of the instrument	Terms and Conditions

IV. Geographical breakdown of relevant credit exposures for the calculation of the countercyclical capital buffer (Million Euros. 12-31-2021)

	General credit exposures [1]		Trading book exposure		Securitisation exposure		Own funds requirements						
Geographical breakdown	**Exposure value for SA**	**Exposure value for IRB**	**Sum of long and short position of trading book**	**Trading book exposure value for internal models**	**Exposure value for SA**	**Total exposure value**	**Of which: General credit exposures**	**Of which: Trading book exposures**	**Of which: Securitisation exposures**	**Total**	**Risk-weighted exposure amounts**	**Own funds requirements weights**	**Countercyclical capital buffer rate**
Bulgary	26	1	—	—	—	27	2	—	—	2	26	0.01 %	1.00 %
Denmark	5	130	6	6	—	147	6	—	—	6	75	0.03 %	2.00 %
Slovakia	—	153	—	—	—	153	20	—	—	20	251	0.11 %	1.00 %
Estonia	—	1	—	—	—	1	—	—	—	—	—	—	1.00 %
Hong-Kong	2	3,998	—	—	—	4,000	75	—	—	75	943	0.41 %	1.00 %
Iceland	—	—	—	—	—	—	—	—	—	—	—	—	2.00 %
Luxembourg	72	2,219	15	15	—	2,321	91	2	—	92	1,155	0.50 %	0.50 %
Norway	15	44	15	14	—	87	2	—	—	2	26	0.01 %	2.00 %
United Kingdom	1,133	7,576	71	69	—	8,848	413	8	—	421	5,259	2.30 %	1.00 %
Czech Republic	1	103	—	—	—	104	5	—	—	5	58	0.03 %	1.50 %
Romania	2,200	11	—	—	—	2,210	113	—	—	113	1,409	0.62 %	0.50 %
Sweden	21	267	11	11	—	310	13	1	—	14	170	0.08 %	1.00 %
Total countries with countercyclical capital buffer	**3,475**	**14,503**	**118**	**115**	**—**	**18,208**	**740**	**11**	**—**	**750**	**9,372**	**4.10 %**	
Germany	166	5,470	97	92	25	5,850	199	8	—	207	2,584	1.13 %	—
Argentina	5,279	219	124	—	—	5,622	395	—	—	395	4,938	2.16 %	—
Colombia	2,336	874	28	27	—	3,265	184	2	—	186	2,325	1.02 %	—
Spain	13,774	698	79	29	—	14,579	856	4	—	859	10,743	4.70 %	—
United States	22,620	146,003	67	43	4,140	172,873	5,413	3	36	5,452	68,154	29.81 %	—
France	724	24,704	143	158	—	25,730	785	9	—	794	9,925	4.34 %	—
Italy	1,321	8,481	204	205	—	10,211	304	7	—	312	3,898	1.71 %	—
Mexico	45	5,327	22	19	—	5,413	208	—	—	208	2,598	1.14 %	—
Netherlands	37,151	37,910	387	270	—	75,719	4,073	45	—	4,118	51,475	22.51 %	—
Peru	541	4,956	112	111	—	5,719	197	8	—	206	2,571	1.13 %	—
Portugal	18,100	849	50	1	—	19,000	1,129	—	—	1,129	14,116	6.17 %	—
United Kingdom	2,581	2,374	4	3	—	4,963	238	—	—	238	2,975	1.30 %	—
Turkey	41,677	567	246	—	—	42,491	2,755	2	—	2,758	34,471	15.08 %	—
Total countries with a 0% countercyclical buffer or without countercyclical capital buffer (with own funds requirements greater than 1%)	**146,315**	**238,432**	**1,563**	**958**	**4,165**	**391,435**	**16,736**	**88**	**36**	**16,862**	**210,773**	**92.18 %**	
Saudi Arabia	—	56	—	—	—	56	1	—	—	1	18	0.01 %	—
Australia	—	422	—	—	—	423	18	—	—	18	227	0.10 %	—
Austria	61	286	10	10	—	367	15	—	—	15	194	0.08 %	—
Belgium	49	813	14	14	—	890	38	1	—	39	483	0.21 %	—
Bolivia	19	1	—	—	—	19	2	—	—	2	20	0.01 %	—
Brazil	6	205	85	7	—	302	8	6	—	15	186	0.08 %	—
Canada	2	201	1	1	—	204	11	—	—	12	146	0.07 %	—
China	2	788	—	—	—	790	18	—	—	18	222	0.10 %	—
South Korea	21	375	—	—	—	396	9	—	—	9	115	0.05 %	—

	General credit exposures [1]		Trading book exposure		Securitisation exposure		Own funds requirements						
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Trading book exposure value for internal models	Exposure value for SA	Total exposure value	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total	Risk-weighted exposure amounts	Own funds requirements weights	Countercyclical capital buffer rate
Cuba	—	17	—	—	—	17	3	—	—	3	35	0.02 %	—
Ecuador	1	21	—	—	—	23	2	—	—	2	20	0.01 %	—
Egypt	29	11	—	—	—	41	4	—	—	4	49	0.02 %	—
United Arab Emirates	79	232	—	—	—	310	14	—	—	14	175	0.08 %	—
Finland	26	110	10	10	—	156	5	—	—	5	62	0.03 %	—
Gibraltar	14	1	—	—	—	15	1	—	—	1	14	0.01 %	—
Hungary	21	125	—	—	—	145	7	—	—	7	86	0.04 %	—
Ireland	8	1,307	8	7	—	1,330	41	1	—	42	520	0.23 %	—
Cayman islands	—	692	—	—	—	692	57	—	—	57	706	0.31 %	—
Japan	44	90	—	—	—	134	6	—	—	6	69	0.03 %	—
Jersey	—	195	—	—	—	195	9	—	—	9	108	0.05 %	—
Malasia	—	40	—	—	—	40	2	—	—	2	21	0.01 %	—
Malta	73	—	—	—	—	73	6	—	—	6	72	0.03 %	—
Morocco	75	—	—	—	—	75	6	—	—	6	75	0.03 %	—
Marshall islands	2	111	—	—	—	114	5	—	—	5	58	0.03 %	—
Mauricio	14	4	—	—	—	19	1	—	—	1	16	0.01 %	—
Panama	16	42	—	—	—	58	3	—	—	3	33	0.02 %	—
Poland	1	202	—	—	—	203	11	—	—	11	140	0.06 %	—
Qatar	6	32	—	—	—	38	2	—	—	2	23	0.01 %	—
Singapur	120	1,030	—	—	—	1,150	31	—	—	31	390	0.17 %	—
South Africa	—	19	—	—	—	19	1	—	—	1	15	0.01 %	—
Switzerland	534	2,295	33	28	—	2,890	115	1	—	116	1,447	0.63 %	—
Taiwan	—	1,618	—	—	—	1,618	28	—	—	28	355	0.15 %	—
Uruguay	2,362	136	—	—	—	2,499	142	—	—	142	1,770	0.78 %	—
Venezuela	308	22	—	—	—	329	25	—	—	25	308	0.14 %	—
Virgin islands (UK)	2	419	—	—	—	421	14	—	—	14	170	0.08 %	—
Other countries [2]	198	224	6	3	—	432	8	2	—	7	149	0.02 %	—
Total countries without countercyclical capital buffer (with own funds requirements less than 1%)	**4,093**	**12,142**	**167**	**80**	**—**	**16,483**	**669**	**11**	**—**	**679**	**8,497**	**3.72 %**	
Total	**153,883**	**265,077**	**1,848**	**1,153**	**4,165**	**426,126**	**18,145**	**110**	**36**	**18,291**	**228,642**	**100 %**	

(*) The established order is alphabetical according to the Spanish version.

[1] Credit exposure excludes exposures to Central Governments or Central Banks, Regional Governments or Local Authorities, Public sector entities, Multilateral Development Banks, International Organisations and Institutions in accordance with art. 140.4 of Directive 2013/36/EU.

[2] Other countries include those territories (85) where own funds requirements applicable to countercyclical buffer are less than €1 million.

V. EU LR2 - Leverage ratio common disclosure (Million Euros)

	12-31-2022 Phased-in	12-31-2022 Fully-loaded	6-30-2022 Phased-in	6-30-2022 Fully-loaded	12-31-2021 Phased-in	12-31-2021 Fully-loaded
On-balance sheet exposures (excluding derivatives and SFTs)						
On-balance sheet items (excluding derivatives, SFTs, but including collateral)	596,650	596,650	601,172	601,172	517,383	517,383
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	—	—	—	—	—	—
(Deductions of receivables assets for cash variation margin provided in deri- vatives transactions)	(529)	(529)	(772)	(772)	(1,138)	(1,138)
(Adjustment for securities received under securities financing transactions that are recognised as an asset)	—	—	—	—	—	—
(General credit risk adjustments to on-balance sheet items)	—	—	—	—	—	—
(Asset amounts deducted in determining Tier 1 capital)	(4,033)	(4,287)	(3,846)	(4,229)	(3,354)	(4,119)
Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 to 6)	**592,088**	**591,834**	**596,554**	**596,171**	**512,891**	**512,126**
Derivative exposures						
Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	6,337	6,337	6,093	6,093	5,093	5,093
Derogation for derivatives: replacement costs contribution under the simplified standardised approach	—	—	—	—	—	—
Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	15,405	15,405	15,557	15,557	12,695	12,695
Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	—	—	—	—	—	—
Exposure determined under Original Exposure Method	—	—	—	—	—	—
(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	—	—	—	—	—	—
(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	—	—	—	—	—	—
(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	—	—	—	—	—	—
Adjusted effective notional amount of written credit derivatives	19,697	19,697	24,516	24,516	15,914	15,914
(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(16,301)	(16,301)	(13,039)	(13,039)	(5,417)	(5,417)
Total derivatives exposures (sum of lines 8 to 12)	**25,138**	**25,138**	**33,128**	**33,128**	**28,285**	**28,285**
Securities financing transaction (SFT) exposures						
Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	46,914	46,914	43,522	43,522	59,590	59,590
(Netted amounts of cash payables and cash receivables of gross SFT assets)	(6,570)	(6,570)	(8,615)	(8,615)	(6,908)	(6,908)
Counterparty credit risk exposure for SFT assets	13,215	13,215	16,108	16,108	14,026	14,026
Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 of Regulation (EU) No 575/2013	—	—	—	—	—	—
Agent transaction exposures	—	—	—	—	—	—
(Exempted CCP leg of client-cleared SFT exposure)	—	—	—	—	—	—
Total securities financing transaction exposures (sum of lines 14 to EU-17a)	**53,559**	**53,559**	**51,015**	**51,015**	**66,708**	**66,708**
Other off-balance sheet exposures						
Off-balance sheet exposures at gross notional amount	192,181	192,181	184,235	184,235	166,115	166,115
(Adjustments for conversion to credit equivalent amounts)	(124,331)	(124,331)	(112,147)	(112,147)	(102,144)	(102,144)
(General provisions associated with off-balance sheet exposures deducted in determining Tier 1 capital)	—	—	—	—	—	—
Off-balance sheet exposures (sum of lines 19 to 21)	**67,849**	**67,849**	**72,089**	**72,089**	**63,971**	**63,971**
Exempted exposures in accordance with Article 429a of the CRR (on and off balance sheet)						
(Exposures excluded from the total exposure measure in accordance with Article 429a(1)(c) of the CRR)	—	—	—	—	—	—
(Exposures exempted in accordance with Article 429a(1)(j) of the CRR (on and off balance sheet))	—	—	—	—	—	—
(Excluded exposures of public development banks (or units) - Public sector investments)	—	—	—	—	—	—
(Excluded exposures of public development banks (or units) - Promotional loans)	—	—	—	—	—	—
(Excluded passing-through promotional loan exposures by non-public development banks (or units))	—	—	—	—	—	—
(Excluded guaranteed parts of exposures arising from export credits)	(644)	(644)	(769)	(769)	(66)	(66)
(Excluded excess collateral deposited at triparty agents)	—	—	—	—	—	—
(Excluded CSD related services of CSD/institutions in accordance with Article 429a(1)(o) of the CRR)	—	—	—	—	—	—
(Excluded CSD related services of designated institutions in accordance with Article 429a(1)(p) of the CRR)	—	—	—	—	—	—
(Reduction of the exposure value of pre-financing or intermediate loans)	—	—	—	—	—	—
(Total exempted exposures)	**(644)**	**(644)**	**(769)**	**(769)**	**(66)**	**(66)**

	12-31-2022	12-31-2022	6-30-2022	6-30-2022	12-31-2021	12-31-2021
	Phased-in	Fully-loaded	Phased-in	Fully-loaded	Phased-in	Fully-loaded
Capital and total exposure measure						
Tier 1 capital	47,931	47,677	46,828	46,445	45,687	44,922
Leverage ratio total exposure measure	**737,990**	**737,736**	**752,017**	**751,634**	**671,790**	**671,025**
Leverage ratio						
Leverage ratio	**6.49%**	**6.46%**	**6.23%**	**6.18%**	**6.80%**	**6.69%**
Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	**6.49%**	**6.46%**	**6.23%**	**6.18%**	**6.80%**	**6.69%**
Leverage ratio (excluding the impact of any applicable temporary waiver of central bank reserves) (%)	**6.49%**	**6.46%**	**6.23%**	**6.18%**	**6.48%**	**6.37%**
Regulatory minimum leverage ratio requirement (%)	**3.00%**	**3.00%**	**3.00%**	**3.00%**	**3.06%**	**3.06%**
Additional own funds requirements to address the risk of excessive leverage (%)	**—**	**—**	**—**	**—**	**—**	**—**
Of which: comprised of common equity tier 1 capital	**—**	**—**	**—**	**—**	**—**	**—**
Leverage ratio cushion requirement (%)	**—**	**—**	**—**	**—**	**—**	**—**
Overall leverage ratio requirement (%)	**3.00%**	**3.00%**	**3.00%**	**3.00%**	**3.06%**	**3.06%**
Choice on transitional arrangements and relevant exposures						
Choice on transitional arrangements for the definition of the capital measure	Transitional	Fully phased in	Transitional	Fully phased in	Transitional	Fully phased in
Disclosure of mean values						
Mean value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	42,298	42,298	46,998	46,998	47,762	47,762
Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	40,344	40,344	34,907	34,907	52,682	52,682
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)	739,944	739,690	764,108	763,725	676,710	675,945
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)	739,944	739,690	764,108	763,725	710,457	709,692
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)	6.48 %	6.45 %	6.13 %	6.08 %	6.75 %	6.65 %
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)	6.48 %	6.45 %	6.13 %	6.08 %	6.43 %	6.33 %

VI. ESG3: Banking book - Climate change transition risk: Alignment metrics

Sector	NACE Sectors	Portfolio gross carrying amount (Million euros)	Alignment metric	Description	Year of reference	Distance to IEA NZE2050 in the year 2030
Power	D.35.11	8,767	0.202725	Average tonnes of CO2 per MWh	2022	56 %
Power	D.35.12	33	0.010605	Average tonnes of CO2 per MWh	2022	(92)%
Power	D.35.13	306	0.277558	Average tonnes of CO2 per MWh	2022	114 %
Power	D.35.14	5	0.000205	Average tonnes of CO2 per MWh	2022	(100)%
Power	Other	3	0.298009	Average tonnes of CO2 per MWh	2022	130 %
Automotive	C.29.10	716	0.000194	Average tonnes of CO2 per passenger-km	2022	94 %
Aviation	H.51.10	320	0.000104	Average tonnes of CO2 per passenger-km	2022	48 %
Aviation	H.51.21	—	0.00009	Average tonnes of CO2 per passenger-km	2022	29 %
Cement, clinker and lime production	C.23.51	575	0.716449	Average tonnes of CO2 per tonne of output	2022	48 %
Cement, clinker and lime production	C.23.52	136	0.566599	Average tonnes of CO2 per tonne of output	2022	17 %
Cement, clinker and lime production	C.23.61	3	0.56691	Average tonnes of CO2 per tonne of output	2022	17 %
Cement, clinker and lime production	Other	27	0.57109	Average tonnes of CO2 per tonne of output	2022	18 %
Iron and steel, coke, and metal ore production	C.24.10	1,844	1.119102	Average tonnes of CO2 per tonne of output	2022	24 %
Iron and steel, coke, and metal ore production	C.24.20	—	1.26148	Average tonnes of CO2 per tonne of output	2022	39 %
Iron and steel, coke, and metal ore production	C.24.52	233	1.244598	Average tonnes of CO2 per tonne of output	2022	37 %
Iron and steel, coke, and metal ore production	Other	50	1.248966	Average tonnes of CO2 per tonne of output	2022	38 %

(*) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-tradable at Fair Value through Profit or Loss". Instruments: loans and advances, fixed income and equities. Sectors: non-financial corporations. Special features: principal activity code (NACE) information used for internal management and reporting purposes. The figures may vary slightly from the calculations made on the PACTA portfolio alignment, because this methodology takes into account the committed available while the figures shown in the table above correspond to transactions with a gross book balance.

VII. ESG1. Banking book- Climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity (BBVA S.A. Million euros)

	Gross carrying amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)		GHG emissions percentage derived from company-specific reporting [3]	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
Sector/subsector		**Of which excluded from Paris Agreement [2]**	**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**						
Exposures towards sectors that highly contribute to climate change [1]	**83,320**	**7,357**	**6,734**	**2,740**	**(1,761)**	**(237)**	**(1,433)**	**34,511,416**	**17,585,884**	**0.22 %**	**61,527**	**12,579**	**5,526**	**3,688**	**4**
A - Agriculture, forestry and fishing	**2,244**	**—**	**283**	**107**	**(57)**	**(5)**	**(48)**	**2,039,757**	**484,441**	**—**	**1,596**	**515**	**102**	**31**	**4**
B - Mining and quarrying	**2,583**	**1,403**	**54**	**10**	**(7)**	**(2)**	**(4)**	**4,416,295**	**725,846**	**—**	**1,981**	**466**	**112**	**24**	**4**
B.05 - Mining of coal and lignite	72	1	—	—	—	—	—	306,324	9,839	—	72	—	—	—	3
B.06 - Extraction of crude petroleum and natural gas	1,313	1,189	20	—	(2)	(2)	—	2,636,167	564,002	—	800	389	111	13	5
B.07 - Mining of metal ores	792	—	9	1	(1)	—	—	239,352	70,296	—	779	9	—	4	3
B.08 - Other mining and quarrying	182	—	13	9	(4)	—	(4)	77,371	31,297	—	108	67	1	6	5
B.09 - Mining support service activities	224	213	12	—	—	—	—	1,157,081	50,412	—	222	1	—	1	2
C - Manufacturing	**28,671**	**2,224**	**1,580**	**634**	**(449)**	**(38)**	**(389)**	**16,449,674**	**11,313,615**	**0.04 %**	**23,792**	**3,524**	**256**	**1,099**	**3**
C.10 - Manufacture of food products	4,352	—	298	80	(59)	(5)	(49)	3,379,252	2,992,671	—	3,501	599	56	196	4
C.11 - Manufacture of beverages	1,060	—	67	19	(10)	(1)	(8)	242,968	182,684	—	869	129	15	47	4
C.12 - Manufacture of tobacco products	721	—	—	—		—	—	229,081	122,777	—	719	1	—	1	2
C.13 - Manufacture of textiles	857	—	57	17	(20)	(10)	(9)	354,616	275,842	—	742	99	11	5	4
C.14 - Manufacture of wearing apparel	117	—	13	13	(8)	—	(7)	54,234	34,731	—	95	15	2	5	4
C.15 - Manufacture of leather and related products	289	—	20	15	(10)	—	(9)	113,332	98,442	—	268	18	2	1	1
C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	248	—	37	8	(5)	(1)	(4)	147,630	79,083	—	198	36	8	6	4
C.17 - Manufacture of pulp, paper and paperboard	780	—	60	18	(11)	(1)	(9)	642,275	220,115	—	498	258	4	20	3
C.18 - Printing and service activities related to printing	218	—	28	19	(11)	(1)	(10)	52,898	34,678	—	167	33	13	5	4
C.19 - Manufacture of coke oven products	1,933	1,905	40	—	(1)	—	—	3,487,989	2,186,533	—	1,074	728	12	119	5
C.20 - Production of chemicals	2,670	194	84	20	(14)	(1)	(11)	1,475,614	930,598	—	2,323	224	12	111	3
C.21 - Manufacture of pharmaceutical preparations	925	—	36	6	(4)	(1)	(3)	267,369	170,358	1.38 %	719	175	1	30	4
C.22 - Manufacture of rubber products	722	—	51	17	(10)	(1)	(8)	295,555	234,457	—	541	114	20	47	5
C.23 - Manufacture of other non-metallic mineral products	1,018	—	106	24	(20)	(2)	(17)	1,096,669	311,717	—	808	156	11	43	4
C.24 - Manufacture of basic metals	1,821	101	118	72	(44)	(1)	(42)	1,225,841	687,528	—	1,566	158	5	92	3
C.25 - Manufacture of fabricated metal products, except machinery and equipment	1,482	—	120	165	(131)	(3)	(126)	634,161	514,552	—	1,119	256	29	78	4

	Gross carrying amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)		GHG emissions percentage derived from company-specific reporting (3)	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
Sector/subsector		Of which excluded from Paris Agreement (2)	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						
C.26 - Manufacture of computer, electronic and optical products	3,118	—	17	26	(21)	(1)	(19)	508,048	418,426	—	3,060	44	6	8	1
C.27 - Manufacture of electrical equipment	1,198	—	91	6	(6)	(2)	(4)	417,445	357,639	—	1,027	104	14	53	3
C.28 - Manufacture of machinery and equipment n.e.c.	1,974	24	90	36	(25)	(2)	(22)	596,778	504,772	—	1,832	103	10	29	2
C.29 - Manufacture of motor vehicles, trailers and semi-trailers	1,746	—	144	25	(13)	(2)	(10)	712,630	615,761	—	1,445	133	2	166	4
C.30 - Manufacture of other transport equipment	638	—	48	4	(2)	(1)	(1)	213,453	138,391	—	602	7	—	29	2
C.31 - Manufacture of furniture	162	—	19	15	(9)	(1)	(8)	79,841	44,279	—	98	52	10	2	4
C.32 - Other manufacturing	397	—	16	18	(9)	(1)	(8)	100,926	65,531	—	337	52	6	2	3
C.33 - Repair and installation of machinery and equipment	225	—	20	11	(6)	—	(5)	121,069	92,050	—	184	30	7	4	4
D - Electricity, gas, steam and air conditioning supply	**11,138**	**2,979**	**447**	**19**	**(46)**	**(30)**	**(10)**	**5,434,559**	**1,053,718**	**0.23 %**	**7,863**	**1,533**	**757**	**985**	**5**
D35.1 - Electric power generation, transmission and distribution	9,885	2,085	386	17	(41)	(27)	(9)	4,674,665	740,308	0.01 %	7,052	1,151	706	976	5
D35.11 - Production of electricity	6,462	1,545	332	11	(36)	(26)	(6)	4,042,720	497,372	—	4,558	993	652	259	5
D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	1,247	894	60	—	(4)	(3)	—	751,655	312,471	1.90 %	807	379	51	10	5
D35.3 - Steam and air conditioning supply	6	—	1	2	(1)	—	(1)	8,239	939	—	4	3	—	(1)	5
E - Water supply; sewerage, waste management and remediation activities	**925**	**—**	**51**	**17**	**(12)**	**(1)**	**(10)**	**420,181**	**165,073**	**—**	**566**	**162**	**166**	**31**	**6**
F - Construction	**5,802**	**—**	**590**	**560**	**(345)**	**(31)**	**(303)**	**1,257,567**	**1,055,824**	**0.43 %**	**3,336**	**657**	**1,536**	**273**	**7**
F.41 - Construction of buildings	3,330	—	391	368	(230)	(27)	(196)	433,899	346,565	0.75 %	1,345	409	1,435	141	10
F.42 - Civil engineering	1,072	—	53	85	(55)	(1)	(53)	301,660	264,290	—	903	63	44	62	3
F.43 - Specialised construction activities	1,400	—	146	107	(60)	(3)	(54)	522,008	444,969	—	1,088	185	57	70	4
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	**16,263**	**716**	**1,550**	**658**	**(402)**	**(45)**	**(335)**	**1,585,359**	**1,092,283**	**—**	**13,068**	**1,896**	**353**	**946**	**4**
H - Transportation and storage	**6,488**	**35**	**843**	**128**	**(112)**	**(39)**	**(66)**	**2,425,270**	**1,390,695**	**1.83 %**	**4,758**	**815**	**708**	**207**	**5**
H.49 - Land transport and transport via pipelines	2,411	4	176	88	(54)	(5)	(45)	649,855	526,735	—	1,982	319	41	69	4
H.50 - Water transport	244	—	2	—	—	—	—	459,132	123,542	—	203	39	1	1	3
H.51 - Air transport	516	—	267	9	(11)	(7)	(3)	730,992	220,649	—	331	20	146	19	6
H.52 - Warehousing and support activities for transportation	3,154	31	385	29	(45)	(27)	(16)	585,128	514,386	3.76 %	2,097	424	519	114	6
H.53 - Postal and courier activities	163	—	13	2	(2)	—	(2)	6,673	5,383	—	145	13	1	4	2
I - Accommodation and food service activities	**4,401**	**—**	**880**	**321**	**(156)**	**(22)**	**(126)**	**385,059**	**288,311**	**—**	**2,411**	**1,428**	**522**	**40**	**5**
L - Real estate activities	**4,805**	**—**	**456**	**286**	**(175)**	**(24)**	**(142)**	**97,695**	**16,078**	**—**	**2,156**	**1,583**	**1,014**	**52**	**7**

	Gross carrying amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)		GHG emissions percentage derived from company-specific reporting [(3)]	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
Sector/subsector		Of which excluded from Paris Agreement [(2)]	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						
Exposures towards sectors other than those that highly contribute to climate change [(1)]	17,699	—	1,841	475	(623)	(164)	(304)				12,281	2,304	635	2,479	6
K - Financial and insurance activities	1,665	—	31	7	(7)	(1)	(4)				1,398	160	24	83	3
Exposures to other sectors (NACE codes J, M - U)	16,034	—	1,810	468	(616)	(163)	(300)				10,883	2,144	611	2,396	6
TOTAL	101,019	7,357	8,575	3,215	(2,384)	(401)	(1,737)	34,511,416	17,585,884	0.22 %	73,808	14,883	6,161	6,167	5

(*.1) Accounting portfolios: "At amortised cost", "Fair Value through Other Comprehensive Income (FVOCI)", "Fair Value through P&L" and "Non-tradable at Fair Value through P&L". Instruments: loans and advances, fixed income and equities. Sectors: non-financial corporations.

(*.2) Specific details:

- Information on customers' economic activities has been used based on the local economic classifications of each geography, in the case of Spanish companies, the National Classification of Economic Activities (CNAE), or other equivalent standards in the other geographies where the Group operates. These local classifications by activity are equivalent to the Statistical Classification of Economic Activities of the European Community (NACE). In addition, information provided by risk analysts who review the NACE for individual customers is being used when it does not accurately reflect the main economic activity. This information on customer economic activity is used for the BBVA Group's internal risk management.
- Calculation of GHG emissions only for scope BBVA S.A. loans and advances (excluding Portugal branches, whose emissions have not been measured due to low materiality).
- Operational marking excluded from the Paris Agreement(1). The thresholds considered for exclusion from the Paris Agreement on the basis of the Delegated Regulation (EU) 2020/1818 are:
  - Companies deriving 1 % or more of their revenues from the exploration, mining, extraction, distribution or refining of anthracite, hard coal and lignite.
  - Companies deriving 10 % or more of their revenues from the exploration for, extraction, extraction, distribution or refining of liquid fuels.
  - Companies deriving 50 % or more of their revenues from the exploration for, extraction, production or distribution of gaseous fuels.
  - Companies deriving 50 % or more of their revenues from the generation of electricity with a GHG emission intensity exceeding 100 gCO2/kWh.

(*.3) Revenues from customer activities are obtained from S&P data. Revenues from activities indicated in the supplier's "S&P Paris-Aligned & Climate, Transition (PACT) Indices Methodology" are considered. For those cases where no information is available on the client's activity revenues, it is assumed that its revenues come from the main activity (NACE) used for internal management and reporting.

(*.4) Companies engaged in electricity generation take into account the emissions intensity estimated under the PACTA methodology in the logic to be considered as companies excluded from the Paris Agreement.

(*.5) Exposures computed in the numerator of column k ("GHG emissions") are estimated under the PCAF methodology with approach 1a or 1b.

(1) 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.

(2) 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

(3) GHG emissions (column i, "GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty)"): gross carrying amount percentage of the portfolio derived from company-specific reporting

VIII.a Regulatory compliance (12-31-2022)

The following table provides the correspondence between disclosure requirements as per Part Eight of CRR and the sections of Pillar 3 report where the information can be found:

CRR Article	Description	Pillar 3 Section
General principles of disclosure		
Art.431 - Disclosure requirements and policies	Scope of application of disclosure and publication requirements for data that convey a complete picture of the institution's risk profile	2022 Prudential Relevance Report - Pillar 3. (Section 1.3)
Art.432 - Non-material, proprietary or confidential information	Omission of disclosures considered non-significant or confidential and the reasons, if applicable, for their classification as such.	BBVA Group has not made use of the exemption for disclosures considered proprietary or confidential.
Art.433 - Frequency and scope of disclosures	Publication of the information with the frequency set by article 433a. Disclosures shall be published coinciding with the publication of the financial statements or as soon as possible thereafter.	The BBVA Group publishes more frequently than once a year, as defined in article 433a on disclosures by large entities.
Art.434 - Uniform disclosure formats	Obligation to disclose information in electronic format and in a single medium or location	The BBVA Group publishes the 2022 Prudential Relevance Report in a single document, including its annexes, in the BBVA website.
Technical criteria on transparency and disclosure of information.		

CRR Article	Description	Pillar 3 Section
Art.435.- Disclosure of risk management objectives and policies	1. Institutions shall disclose their risk management objectives and policies for each separate category of risk, including the risks referred to in this Title. Those disclosures shall include: (a) the strategies and processes to manage those categories of risks;	Section 4.1 Section 4.2 Section 4.3 Section 4.4 Section 4.5 Section 4.6
	b) the structure and organisation of the relevant risk management function including information on the basis of its authority, its powers and accountability in accordance with the institution's incorporation and governing documents;	Section 4.1 Section 4.2.1 Section 4.3.4.3 Section 4.4 Section 4.5.2 Section 4.6.3
	(c) the scope and nature of risk reporting and measurement systems;	Section 4.1.3 Section 4.2.1 Section 4.3.1 Section 4.4.1, 4.4.2 and 4.4.3 Section 4.5.1 Section 4.6.1
	(d) the policies for hedging and mitigating risk, and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants;	Section 4.2.8
	(e) a declaration approved by the management body on the adequacy of the risk management arrangements of the relevant institution providing assurance that the risk management systems put in place are adequate with regard to the institution's profile and strategy	Section 4.1.1
	(f) a concise risk statement approved by the management body succinctly describing the relevant institution's overall risk profile associated with the business strategy; that statement shall include: (i) key ratios and figures providing external stakeholders a comprehensive view of the institution's management of risk, including how the risk profile of the institution interacts with the risk tolerance set by the management body; (ii) information on intragroup transactions and transactions with related parties that may have a material impact of the risk profile of the consolidated group.	Section 4.1
	2. Institutions shall disclose the following information regarding governance arrangements: (a) the number of directorships held by members of the management body;	Section 7
	(b) the recruitment policy for the selection of members of the management body and their actual knowledge, skills and expertise;	Section 7
	(c) the policy on diversity with regard to selection of members of the management body, its objectives and any relevant targets set out in that policy, and the extent to which those objectives and targets have been achieved	Section 7
	(d) whether or not the institution has set up a separate risk committee and the number of times the risk committee has met	Section 4.1.1
	e) the description of the information flow on risk to the management body	Section 4.1.1

CRR Article	Description	Pillar 3 Section
Art.436 - Disclosure of the scope of application	(a) the name of the institution to which this Regulation applies	Section 2.1.1
	(b) a reconciliation between the consolidated financial statements prepared in accordance with the applicable accounting framework and the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation pursuant to Sections 2 and 3 of Title II of Part One; that reconciliation shall outline the differences between the accounting and regulatory scopes of consolidation and the legal entities included within the regulatory scope of consolidation where it differs from the accounting scope of consolidation; the outline of the legal entities included within the regulatory scope of consolidation shall describe the method of regulatory consolidation where it is different from the accounting consolidation method, whether those entities are fully or proportionally consolidated and whether the holdings in those legal entities are deducted from own funds	Section 2.1.2
	c) a breakdown of assets and liabilities of the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation pursuant to Sections 2 and 3 of Title II of Part One, broken down by type of risks as referred to under this Part.	Section 2.1.4
	(d) a reconciliation identifying the main sources of differences between the carrying value amounts in the financial statements under the regulatory scope of consolidation as defined in Sections 2 and 3 of Title II of Part One, and the exposure amount used for regulatory purposes; that reconciliation shall be supplemented by qualitative information on those main sources of differences;	Section 2.1.4
	(e) for exposures from the trading book and the non-trading book that are adjusted in accordance with Article 34 and Article 105, a breakdown of the amounts of the constituent elements of an institution's prudent valuation adjustment, by type of risks, and the total of constituent elements separately for the trading book and non-trading book positions	Section 4.3.4.2
	(f) any current or expected material practical or legal impediment to the prompt transfer of own funds or to the repayment of liabilities between the parent undertaking and its subsidiaries	N/A
	(g) the aggregate amount by which the actual own funds are less than required in all subsidiaries that are not included in the consolidation, and the name or names of those subsidiaries;	N/A
	(h) where applicable, the circumstances under which use is made of the derogation referred to in Article 7 or the individual consolidation method laid down in Article 9.	N/A
Art.437 - Disclosure of own funds	(a) a full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and the filters and deductions applied to own funds of the institution pursuant to Articles 32 to 36, 56, 66 and 79 with the balance sheet in the audited financial statements of the institution;	Section 3.2
	(b) a description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution	Section 3.1
	(c) the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	Section 3.1
	(d) a separate disclosure of the nature and amounts of the following: (i) each prudential filter applied pursuant to Articles 32 to 35; (ii) items deducted pursuant to Articles 36, 56 and 66; (iii) items not deducted pursuant to Articles 47, 48, 56, 66 and 79	Section 3.2
	(e) a description of all restrictions applied to the calculation of own funds in accordance with this Regulation and the instruments, prudential filters and deductions to which those restrictions apply	Section 3.1
	(f) a comprehensive explanation of the basis on which capital ratios are calculated where those capital ratios are calculated by using elements of own funds determined on a basis other than the basis laid down in this Regulation.	N/A
Art.437a - Disclosure of own funds and eligible liabilities	a) the composition of their own funds and eligible liabilities, their maturity and their main features;	N/A
	(b) the ranking of eligible liabilities in the creditor hierarchy;	N/A
	(c) the total amount of each issuance of eligible liabilities instruments referred to in Article 72b and the amount of those issuances that is included in eligible liabilities items within the limits specified in Article 72b(3) and (4);	N/A
	(d) the total amount of excluded liabilities referred to in Article 72a(2).	N/A

CRR Article	Description	Pillar 3 Section
Art.438 - Disclosure of own funds requirements and risk-weighted exposure amounts	(a) a summary of their approach to assessing the adequacy of their internal capital to support current and future activities;	Section 3.5
	(b) the amount of the additional own funds requirements based on the supervisory review process as referred to in point (a) of Article 104(1) of Directive 2013/36/EU and its composition in terms of Common Equity Tier 1, additional Tier 1 and Tier 2 instruments	Section 3.1
	(c) upon demand from the relevant competent authority, the result of the institution's internal capital adequacy assessment process	Section 3.5
	(d) the total risk-weighted exposure amount and the corresponding total own funds requirement determined in accordance with Article 92, to be broken down by the different risk categories set out in Part Three and, where applicable, an explanation of the effect on the calculation of own funds and risk-weighted exposure amounts that results from applying capital floors and not deducting items from own funds	Section 3.3.1
	(e) the on- and off-balance-sheet exposures, the risk-weighted exposure amounts and associated expected losses for each category of specialised lending referred to in Table 1 of Article 153(5) and the on- and off-balancesheet exposures and risk-weighted exposure amounts for the categories of equity exposures set out in Article 155(2)	Section 4.2.5.4
	(f) the exposure value and the risk-weighted exposure amount of own funds instruments held in any insurance undertaking, reinsurance undertaking or insurance holding company that the institutions do not deduct from their own funds in accordance with Article 49 when calculating their capital requirements on an individual, sub-consolidated and consolidated basis	N/A
	(g) the supplementary own funds requirement and the capital adequacy ratio of the financial conglomerate calculated in accordance with Article 6 of Directive 2002/87/EC and Annex I to that Directive where method 1 or 2 set out in that Annex is applied	N/A
	(h) the variations in the risk-weighted exposure amounts of the current disclosure period compared to the immediately preceding disclosure period that result from the use of internal models, including an outline of the key drivers explaining those variations.	Section 4.2.5.2

CRR Article	Description	Pillar 3 Section
Art.439 - Disclosure of exposures to counterparty credit risk	(a) a description of the methodology used to assign internal capital and credit limits for counterparty credit exposures, including the methods to assign those limits to exposures to central counterparties;	Section 4.2.6.1.1
	(b) a description of policies related to guarantees and other credit risk mitigants, such as the policies for securing collateral and establishing credit reserves.	Section 4.2.6.1.2
	c) a description of policies with respect to General Wrong-Way risk and Specific Wrong-Way risk as defined in Article 291	Section 4.2.6.1.3
	(d) the amount of collateral the institution would have to provide if its credit rating was downgraded	Section 4.2.6.1.4
	(e) the amount of segregated and unsegregated collateral received and posted per type of collateral, further broken down between collateral used for derivatives and securities financing transactions.	Section 4.2.6.2.3
	(f) for derivative transactions, the exposure values before and after the effect of the credit risk mitigation as determined under the methods set out in Sections 3 to 6 of Chapter 6 of Title II of Part Three, whichever method is applicable, and the associated risk exposure amounts broken down by applicable method.	Section 4.2.6.2
	(g) for securities financing transactions, the exposure values before and after the effect of the credit risk mitigation as determined under the methods set out in Chapters 4 and 6 of Title II of Part Three, whichever method is used, and the associated risk exposure amounts broken down by applicable method.	Section 4.2.6.2
	(h) the exposure values after credit risk mitigation effects and the associated risk exposures for credit valuation adjustment capital charge, separately for each method as set out in Title VI of Part Three;	Section 4.2.6.2
	(i) the exposure value to central counterparties and the associated risk exposures within the scope of Section 9 of Chapter 6 of Title II of Part Three, separately for qualifying and non-qualifying central counterparties, and broken down by types of exposures;	Section 4.2.6.4
	(j) the notional amounts and fair value of credit derivative transactions; credit derivative transactions shall be broken down by product type; within each product type, credit derivative transactions shall be broken down further by credit protection bought and credit protection sold;	Section 4.2.6.2.3
	(k) the estimate of alpha where the institution has received the permission of the competent authorities to use its own estimate of alpha in accordance with Article 284(9);	Section 4.2.6.2
	(l) separately, the disclosures included in point (e) of Article 444 and point (g) of Article 452;	Section 4.2.6.2 Section 4.2.6.2.2
	(m) for institutions using the methods set out in Sections 4 to 5 of Chapter 6 of Title II Part Three, the size of their on- and off-balance-sheet derivative business as calculated in accordance with Article 273a(1) or (2), as applicable.	N/A
	Where the central bank of a Member State provides liquidity assistance in the form of collateral swap transactions, the competent authority may exempt institutions from the requirements in points (d) and (e) of the first subparagraph where that competent authority considers that the disclosure of the information referred to therein could reveal that emergency liquidity assistance has been provided. For those purposes, the competent authority shall set out appropriate thresholds and objective criteria.	N/A
Art.440 - Disclosure of countercyclical capital buffers	(a) the geographical distribution of the exposure amounts and risk-weighted exposure amounts of its credit exposures used as a basis for the calculation of their countercyclical capital buffer;	Section 3.1 and Annex IV
	(b) the amount of their institution-specific countercyclical capital buffer.	Section 3.1
Art.441 - Disclosure of indicators of global systemic importance	G-SIIs shall disclose, on an annual basis, the values of the indicators used for determining their score in accordance with the identification methodology referred to in Article 131 of Directive 2013/36/EU.	N/A

CRR Article	Description	Pillar 3 Section
Art.442 - Institutions shall disclose the following information regarding the institution's exposure to credit risk and dilution risk	(a) the scope and definitions that they use for accounting purposes of 'past due' and 'impaired' and the differences, if any, between the definitions of 'past due' and 'default' for accounting and regulatory purposes.	Section 4.2.2
	(b) a description of the approaches and methods adopted for determining specific and general credit risk adjustments.	Section 4.2.2
	(c) information on the amount and quality of performing, non-performing and forborne exposures for loans, debt securities and off-balance-sheet exposures, including their related accumulated impairment, provisions and negative fair value changes due to credit risk and amounts of collateral and financial guarantees received.	Section 4.2.3.2
	(d) an ageing analysis of accounting past due exposures.	Section 4.2.3.2
	(e) the gross carrying amounts of both defaulted and non-defaulted exposures, the accumulated specific and general credit risk adjustments, the accumulated write-offs taken against those exposures and the net carrying amounts and their distribution by geographical area and industry type and for loans, debt securities and offbalance-sheet exposures	Section 4.2.3.2
	(f) any changes in the gross amount of defaulted on- and off-balance-sheet exposures, including, as a minimum, information on the opening and closing balances of those exposures, the gross amount of any of those exposures reverted to non-defaulted status or subject to a write-off.	Section 4.2.3.2
	(g) the breakdown of loans and debt securities by residual maturity.	Section 4.2.3.2
Art.443 - Disclosure of encumbered and unencumbered assets.	Institutions shall disclose information concerning their encumbered and unencumbered assets. For those purposes, institutions shall use the carrying amount per exposure class broken down by asset quality and the total amount of the carrying amount that is encumbered and unencumbered. Disclosure of information on encumbered and unencumbered assets shall not reveal emergency liquidity assistance provided by central banks.	Section 4.5.7
Art.444 - Disclosure of the use of the Standardised Approach	a) the names of the nominated ECAIs and ECAs and the reasons for any changes in those nominations over the disclosure period;	Section 4.2.4.1
	(b) the exposure classes for which each ECAI or ECA is used;	Section 4.2.4.1
	(c) a description of the process used to transfer the issuer and issue credit ratings onto items not included in the trading book;	Section 4.2.4.1
	(d) the association of the external rating of each nominated ECAI or ECA with the risk weights that correspond to the credit quality steps as set out in Chapter 2 of Title II of Part Three, taking into account that it is not necessary to disclose that information where the institutions comply with the standard association published by EBA;	Section 4.2.4.1
	(e) the exposure values and the exposure values after credit risk mitigation associated with each credit quality step as set out in Chapter 2 of Title II of Part Three, by exposure class, as well as the exposure values deducted from own funds.	Section 4.2.4.3 Section 4.2.6.2
Art.445 - Disclosure of exposure to market risk	Institutions calculating their own funds requirements in accordance with points (b) and (c) of Article 92(3) shall disclose those requirements separately for each risk referred to in those points. In addition, own funds requirements for the specific interest rate risk of securitisation positions shall be disclosed separately.	Section 4.3.3
Art.446 - Disclosure of operational risk management	(a) the approaches for the assessment of own funds requirements for operation risk that the institution qualifies for.	Section 4.6.4
	(b) where the institution makes use of it, a description of the methodology set out in Article 312(2), which shall include a discussion of the relevant internal and external factors being considered in the institution's advanced measurement approach;	N/A
	(c) in the case of partial use, the scope and coverage of the different methodologies used.	N/A

CRR Article	Description	Pillar 3 Section
Art.447 - Disclosure of key metrics	(a) the composition of their own funds and their own funds requirements as calculated in accordance with Article 92.	Executive summary Section 3.1
	(b) the total risk exposure amount as calculated in accordance with Article 92(3);	Executive summary
	(c) where applicable, the amount and composition of additional own funds which the institutions are required to hold in accordance with point (a) of Article 104(1) of Directive 2013/36/EU.	Section 3.1
	(d) their combined buffer requirement which the institutions are required to hold in accordance with Chapter 4 of Title VII of Directive 2013/36/EU.	Executive summary
	(e) their leverage ratio and the total exposure measure as calculated in accordance with Article 429.	Executive summary Section 5.1
	(f) the following information in relation to their liquidity coverage ratio as calculated in accordance with the delegated act referred to in Article 460(1): (i) the average or averages, as applicable, of their liquidity coverage ratio based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period; (ii) the average or averages, as applicable, of total liquid assets, after applying the relevant haircuts, included in the liquidity buffer pursuant to the delegated act referred to in Article 460(1), based on end-of-themonth observations over the preceding 12 months for each quarter of the relevant disclosure period; (iii) the averages of their liquidity outflows, inflows and net liquidity outflows as calculated pursuant to the delegated act referred to in Article 460(1), based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period;	Section 4.5.5
	(g) the following information in relation to their net stable funding requirement as calculated in accordance with Title IV of Part Six: (i) the net stable funding ratio at the end of each quarter of the relevant disclosure period; (ii) the available stable funding at the end of each quarter of the relevant disclosure period; (iii) the required stable funding at the end of each quarter of the relevant disclosure period;	Executive summary Section 4.5.6
	(h) their own funds and eligible liabilities ratios and their components, numerator and denominator, as calculated in accordance with Articles 92a and 92b and broken down at the level of each resolution group, where applicable.	N/A
Art.448 - Disclosure of exposures to interest rate risk on positions not held in the trading book	(a) the changes in the economic value of equity calculated under the six supervisory shock scenarios referred to in Article 98(5) of Directive 2013/36/EU for the current and previous disclosure periods.	Section 4.4.1
	(b) the changes in the net interest income calculated under the two supervisory shock scenarios referred to in Article 98(5) of Directive 2013/36/EU for the current and previous disclosure periods.	Section 4.4.1
	(c) a description of key modelling and parametric assumptions, other than those referred to in points (b) and © of Article 98(5a) of Directive 2013/36/EU used to calculate changes in the economic value of equity and in the net interest income required under points (a) and (b) of this paragraph.	Section 4.4.1
	(d) an explanation of the significance of the risk measures disclosed under points (a) and (b) of this paragraph and of any significant variations of those risk measures since the previous disclosure reference date.	Section 4.4.1
	e) the description of how institutions define, measure, mitigate and control the interest rate risk of their nontrading book activities for the purposes of the competent authorities' review in accordance with Article 84 of Directive 2013/36/EU, including: (i) a description of the specific risk measures that the institutions use to evaluate changes in their economic value of equity and in their net interest income; (ii) a description of the key modelling and parametric assumptions used in the institutions' internal measurement systems that would differ from the common modelling and parametric assumptions referred to in Article 98(5a) of Directive 2013/36/EU for the purpose of calculating changes to the economic value of equity and to the net interest income, including the rationale for those differences; (iii) a description of the interest rate shock scenarios that institutions use to estimate the interest rate risk; (iv) the recognition of the effect of hedges against those interest rate risks, including internal hedges that meet the requirements laid down in Article 106(3); (v) an outline of how often the evaluation of the interest rate risk occurs.	Section 4.4.1
	(f) the description of the overall risk management and mitigation strategies for those risks.	Section 4.4.1
	(g) average and longest repricing maturity assigned to non-maturity deposits.	Section 4.4.1
	2. By way of derogation from paragraph 1 of this Article, the requirements set out in points (c) and (e)(i) to (e) (iv) of paragraph 1 of this Article shall not apply to institutions that use the standardised methodology or the simplified standardised methodology referred to in Article 84(1) of Directive 2013/36/EU.	N/A

CRR Article	Description	Pillar 3 Section
Art.449 - Disclosure of exposures to securitisation positions	(a) a description of their securitisation and re-securitisation activities, including their risk management and investment objectives in connection with those activities, their role in securitisation and re-securitisation transactions, whether they use the simple, transparent and standardised securitisation (STS) as defined in point (10) of Article 242, and the extent to which they use securitisation transactions to transfer the credit risk of the securitised exposures to third parties with, where applicable, a separate description of their synthetic securitisation risk transfer policy;	Section 4.2.7.1.1
	(b) the type of risks they are exposed to in their securitisation and re-securitisation activities by level of seniority of the relevant securitisation positions providing a distinction between STS and non-STS positions and: (i) the risk retained in own-originated transactions; (ii) the risk incurred in relation to transactions originated by third parties;	Section 4.2.7.2
	(c) their approaches for calculating the risk-weighted exposure amounts that they apply to their securitisation activities, including the types of securitisation positions to which each approach applies and with a distinction between STS and non-STS positions.	Section 4.2.7.1.3
	(d) a list of SSPEs falling into any of the following categories, with a description of their types of exposures to those SSPEs, including derivative contracts: (i) SSPEs which acquire exposures originated by the institutions; (ii) SSPEs sponsored by the institutions; (iii) SSPEs and other legal entities for which the institutions provide securitisation-related services, such as advisory, asset servicing or management services; (iv) SSPEs included in the institutions' regulatory scope of consolidation.	Section 4.2.7.2
	(e) a list of any legal entities in relation to which the institutions have disclosed that they have provided support in accordance with Chapter 5 of Title II of Part Three.	Section 4.2.7.2
	(f) a list of legal entities affiliated with the institutions and that invest in securitisations originated by the institutions or in securitisation positions issued by SSPEs sponsored by the institutions.	Section 4.2.7.2
	(g) a summary of their accounting policies for securitisation activity, including where relevant a distinction between securitisation and re-securitisation positions.	Section 4.2.7.1.4
	(h) the names of the ECAIs used for securitisations and the types of exposure for which each agency is used.	Section 4.2.4.1
	(i) where applicable, a description of the Internal Assessment Approach as set out in Chapter 5 of Title II of Part Three, including the structure of the internal assessment process and the relation between internal assessment and external ratings of the relevant ECAI disclosed in accordance with point (h), the control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review, the exposure types to which the internal assessment process is applied and the stress factors used for determining credit enhancement levels.	Section 4.2.7.3
	(j) separately for the trading book and the non-trading book, the carrying amount of securitisation exposures, including information on whether institutions have transferred significant credit risk in accordance with Articles 244 and 245, for which institutions act as originator, sponsor or investor, separately for traditional and synthetic securitisations, and for STS and non-STS transactions and broken down by type of securitisation exposures.	Section 4.2.7.2
	(k) for the non-trading book activities, the following information: (i) the aggregate amount of securitisation positions where institutions act as originator or sponsor and the associated risk-weighted assets and capital requirements by regulatory approaches, including exposures deducted from own funds or risk weighted at 1 250 %, broken down between traditional and synthetic securitisations and between securitisation and re-securitisation exposures, separately for STS and non-STS positions, and further broken down into a meaningful number of risk-weight or capital requirement bands and by approach used to calculate the capital requirements	Section 4.2.7.3.2
	(ii) the aggregate amount of securitisation positions where institutions act as investor and the associated riskweighted assets and capital requirements by regulatory approaches, including exposures deducted from own funds or risk weighted at 1 250 %, broken down between traditional and synthetic securitisations, securitisation and re-securitisation positions, and STS and non-STS positions, and further broken down into a meaningful number of risk weight or capital requirement bands and by approach used to calculate the capital requirements	Section 4.2.7.2 Section 4.2.7.3.2
	(l) for exposures securitised by the institution, the amount of exposures in default and the amount of the specific credit risk adjustments made by the institution during the current period, both broken down by exposure type.	Section 4.2.7.3.3

CRR Article	Description	Pillar 3 Section
Art.449 a - Disclosure of environmental, social and governance risks (ESG risks)	From 28 June 2022, large institutions which have issued securities that are admitted to trading on a regulated market of any Member State, as defined in point (21) of Article 4(1) of Directive 2014/65/EU, shall disclose information on ESG risks, including physical risks and transition risks, as defined in the report referred to in Article 98(8) of Directive 2013/36/EU. The information referred to in the first paragraph shall be disclosed on an annual basis for the first year and biannually thereafter.	Section 8
Art.450 - Disclosure of remuneration policy	(a) information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, where applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders.	Section 6.1
	(b) information about the link between pay of the staff and their performance;	Section 6.4
	(c) the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria;	Section 6.3
	(d) the ratios between fixed and variable remuneration set in accordance with point (g) of Article 94(1) of Directive 2013/36/EU.	Section 6.7
	(e) information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based.	Section 6.5
	(f) the main parameters and rationale for any variable component scheme and any other non-cash benefits.	Section 6.6
	(g) aggregate quantitative information on remuneration, broken down by business area.	Section 6.8
	(h) aggregate quantitative information on remuneration, broken down by senior management and members of staff whose professional activities have a material impact on the risk profile of the institutions, indicating the following:	Detailed in the following sections
	(i) the amounts of remuneration awarded for the financial year, split into fixed remuneration including a description of the fixed components, and variable remuneration, and the number of beneficiaries.	Section 6.8
	(ii) the amounts and forms of awarded variable remuneration, split into cash, shares, share-linked instruments and other types separately for the part paid upfront and the deferred part.	Section 6.8
	(iii) the amounts of deferred remuneration awarded for previous performance periods, split into the amount due to vest in the financial year and the amount due to vest in subsequent years.	Section 6.8
	(iv) the amount of deferred remuneration due to vest in the financial year that is paid out during the financial year, and that is reduced through performance adjustments.	Section 6.8
	(v) the guaranteed variable remuneration awards during the financial year, and the number of beneficiaries of those awards.	Section 6.8
	(vi) the severance payments awarded in previous periods, that have been paid out during the financial year.	Section 6.8
	(vii) the amounts of severance payments awarded during the financial year, split into paid upfront and deferred, the number of beneficiaries of those payments and highest payment that has been awarded to a single person.	Section 6.8
	(i) the number of individuals that have been remunerated EUR 1 million or more per financial year, with the remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and with the remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million.	Section 6.8
	(j) upon demand from the relevant Member State or competent authority, the total remuneration for each member of the management body or senior management.	Section 6.8
	(k) information on whether the institution benefits from a derogation laid down in Article 94(3) of Directive 2013/36/EU. For the purposes of point (k) of the first subparagraph of this paragraph, institutions that benefit from such a derogation shall indicate whether they benefit from that derogation on the basis of point (a) or (b) of Article 94(3) of Directive 2013/36/EU. They shall also indicate for which of the remuneration principles they apply the derogation(s), the number of staff members that benefit from the derogation(s) and their total remuneration, split into fixed and variable remuneration.	N/A
	2. For large institutions, the quantitative information on the remuneration of institutions' collective management body referred to in this Article shall also be made available to the public, differentiating between executive and non-executive members. Institutions shall comply with the requirements set out in this Article in a manner that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities and without prejudice to Regulation (EU) 2016/679 of the European Parliament and of the Council.	Section 6.8

CRR Article	Description	Pillar 3 Section
Art.451 - Disclosure of the leverage ratio.	(a) the leverage ratio and how the institutions apply Article 499(2).	Section 5.1
	(b) a breakdown of the total exposure measure referred to in Article 429(4), as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements.	Section 5.1
	(c) where applicable, the amount of exposures calculated in accordance with Articles 429(8) and 429a(1) and the adjusted leverage ratio calculated in accordance with Article 429a(7).	Annex V
	(d) a description of the processes used to manage the risk of excessive leverage.	Section 5.3
	(e) a description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers.	Section 5.2
	2. Public development credit institutions as defined in Article 429a(2) shall disclose the leverage ratio without the adjustment to the total exposure measure determined in accordance with point (d) of the first subparagraph of Article 429a(1).	Annex V
	3. In addition to points (a) and (b) of paragraph 1 of this Article, large institutions shall disclose the leverage ratio and the breakdown of the total exposure measure referred to in Article 429(4) based on averages calculated in accordance with the implementing act referred to in Article 430(7).	Annex V
Art 451a - Disclosure of liquidity requirements	(a) the average or averages, as applicable, of their liquidity coverage ratio based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period;	Section 4.5.5
	(b) the average or averages, as applicable, of total liquid assets, after applying the relevant haircuts, included in the liquidity buffer pursuant to the delegated act referred to in Article 460(1), based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period, and a description of the composition of that liquidity buffer.	Section 4.5.5
	(c) the averages of their liquidity outflows, inflows and net liquidity outflows as calculated in accordance with the delegated act referred to in Article 460(1), based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period and the description of their omposition.	Section 4.5.5
	(a) quarter-end figures of their net stable funding ratio calculated in accordance with Chapter 2 of Title IV of Part Six for each quarter of the relevant disclosure period.	Section 4.5.6
	(b) an overview of the amount of available stable funding calculated in accordance with Chapter 3 of Title IV of Part Six.	Section 4.5.6
	(c) an overview of the amount of required stable funding calculated in accordance with Chapter 4 of Title IV of Part Six.	Section 4.5.6
	4. Institutions shall disclose the arrangements, systems, processes and strategies put in place to identify, measure, manage and monitor their liquidity risk in accordance with Article 86 of Directive 2013/36/EU.	Section 4.5.1 Section 4.5.2

CRR Article	Description	Pillar 3 Section
Art.452 - Disclosure of the use of the IRB Approach to credit risk	(a) the competent authority's permission of the approach or approved transition.	Section 4.2.5.1.1
	(b) for each exposure class referred to in Article 147, the percentage of the total exposure value of each class subject to the Standardised Approach laid down in Chapter 2 of Title II of Part Three or to the IRB Approach laid down in Chapter 3 of Title II of Part Three, as well as the part of each exposure class subject to a roll-out plan; where institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, they shall disclose separately the percentage of the total exposure value of each exposure class subject to that permission.	Section 4.2.5.1.1
	(c) the control mechanisms for rating systems at the different stages of model development, controls and changes, which shall include information on: (i) the relationship between the risk management function and the internal audit function; (ii) the rating system review; (iii) the procedure to ensure the independence of the function in charge of reviewing the models from the functions responsible for the development of the models; (iv) the procedure to ensure the accountability of the functions in charge of developing and reviewing the models;	Section 4.2.5.1.5
	(d) the role of the functions involved in the development, approval and subsequent changes of the credit risk models.	Section 4.2.5.1.5
	(e) the scope and main content of the reporting related to credit risk models.	Section 4.2.5.1.5
	(f) a description of the internal ratings process by exposure class, including the number of key models used with respect to each portfolio and a brief discussion of the main differences between the models within the same portfolio, covering: (i) the definitions, methods and data for estimation and validation of PD, which shall include information on how PDs are estimated for low default portfolios, whether there are regulatory floors and the drivers for differences observed between PD and actual default rates at least for the last three periods; (ii) where applicable, the definitions, methods and data for estimation and validation of LGD, such as methods to calculate downturn LGD, how LGDs are estimated for low default portfolio and the time lapse between the default event and the closure of the exposure; (iii) where applicable, the definitions, methods and data for estimation and validation of conversion factors, including assumptions employed in the derivation of those variables.	Section 4.2.5.1.7
	(g) as applicable, the following information in relation to each exposure class referred to in Article 147: (i) their gross on-balance-sheet exposure; (ii) their off-balance-sheet exposure values prior to the relevant conversion factor; (iii) their exposure after applying the relevant conversion factor and credit risk mitigation; (iv) any model, parameter or input relevant for the understanding of the risk weighting and the resulting risk exposure amounts disclosed across a sufficient number of obligor grades (including default) to allow for a meaningful differentiation of credit risk; (v) separately for those exposure classes in relation to which institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, and for exposures for which the institutions do not use such estimates, the values referred to in points (i) to (iv) subject to that permission;	Section 4.2.5.2 Section 4.2.6.2.2
	(h) institutions' estimates of PDs against the actual default rate for each exposure class over a longer period, with separate disclosure of the PD range, the external rating equivalent, the weighted average and arithmetic average PD, the number of obligors at the end of the previous year and of the year under review, the number of defaulted obligors, including the new defaulted obligors, and the annual average historical default rate.	Section 4.2.5.3

CRR Article	Description	Pillar 3 Section
Art.453 - Disclosure of the use of credit risk mitigation techniques	(a) the core features of the policies and processes for on- and off-balance-sheet netting and an indication of the extent to which institutions make use of balance sheet netting.	Section 4.2.6.1.2
	(b) the core features of the policies and processes for eligible collateral evaluation and management.	Section 4.2.6.1.2
	(c) a description of the main types of collateral taken by the institution to mitigate credit risk.	Section 4.2.9.2.2
	(d) for guarantees and credit derivatives used as credit protection, the main types of guarantor and credit derivative counterparty and their creditworthiness used for the purpose of reducing capital requirements, excluding those used as part of synthetic securitisation structures.	Section 4.2.9.3
	(e) information about market or credit risk concentrations within the credit risk mitigation taken.	Section 4.2.9.4
	(f) for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, the total exposure value not covered by any eligible credit protection and the total exposure value covered by eligible credit protection after applying volatility adjustments; the disclosure set out in this point shall be made separately for loans and debt securities and including a breakdown of defaulted exposures.	Section 4.2.9.3
	(g) the corresponding conversion factor and the credit risk mitigation associated with the exposure and the incidence of credit risk mitigation techniques with and without substitution effect.	Section 4.2.9.3
	(h) for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the on- and off-balance-sheet exposure value by exposure class before and after the application of conversion factors and any associated credit risk mitigation.	Section 4.2.3.3
	(i) for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the riskweighted exposure amount and the ratio between that risk-weighted exposure amount and the exposure value after applying the corresponding conversion factor and the credit risk mitigation associated with the exposure; the disclosure set out in this point shall be made separately for each exposure class.	Section 4.2.3.3
	(j) for institutions calculating risk-weighted exposure amounts under the IRB Approach, the risk-weighted exposure amount before and after recognition of the credit risk mitigation impact of credit derivatives; where institutions have received permission to use own LGDs and conversion factors for the calculation of riskweighted exposure amounts, they shall make the disclosure set out in this point separately for the exposure classes subject to that permission.	N/A
Art.454 - Disclosure of the use of the Advanced Measurement Approaches to operational risk	The institutions using the Advanced Measurement Approaches set out in Articles 321 to 324 for the calculation of their own funds requirements for operational risk shall disclose a description of their use of insurance and other risk-transfer mechanisms for the purpose of mitigating that risk. .	Section 4.6.4
Art.455 - Use of internal market risk models	(a) for each sub-portfolio covered: (i) the characteristics of the models used; (ii) where applicable, for the internal models for incremental default and migration risk and for correlation trading, the methodologies used and the risks measured through the use of an internal model including a description of the approach used by the institution to determine liquidity horizons, the methodologies used to achieve a capital assessment that is consistent with the required soundness standard and the approaches used in the validation of the model; (iii) a description of stress testing applied to the sub-portfolio; (iv) a description of the approaches used for back-testing and validating the accuracy and consistency of the internal models and modelling processes;	Section 4.3.4.
	(b) the scope of permission by the competent authority.	Section 4.3.1
	(c) a description of the extent and methodologies for compliance with the requirements set out in Articles 104 and 105.	Section 4.3.2
	(d) the highest, the lowest and the mean of the following: (i) the daily value-at-risk measures over the reporting period and at the end of the reporting period; (ii) the stressed value-at-risk measures over the reporting period and at the end of the reporting period; (iii) the risk numbers for incremental default and migration risk and for the specific risk of the correlation trading portfolio over the reporting period and at the end of the reporting period.	Section 4.3.4.2.2
	(e) the elements of the own funds requirement as specified in Article 364.	Section 4.3.4.2.2
	(f) the weighted average liquidity horizon for each sub-portfolio covered by the internal models for incremental default and migration risk and for correlation trading.	Section 4.3.4.2
	(g) a comparison of the daily end-of-day value-at-risk measures to the one-day changes of the portfolio's value by the end of the subsequent business day together with an analysis of any important overshooting during the reporting period.	Section 4.3.4.2.4

VIII.b. Regulatory compliance ESG

The following table provides the correspondence of the disclosure requirements as per Annex II of Regulation 2022/2453 regarding the disclosure of ESG risks:

Annex II Article	Description		Pillar 3 Section
Environmental, Social and Governance (ESG) Risk, in accordance with Article 449a CRR			
Table 1. Qualitative information on Environmental risk	Business strategy and processes	(a) Institution's business strategy to integrate environmental factors and risks, taking into account the impact of environmental factors and risks on institution's business environment, business model, strategy and financial planning	Section 8.1.1 Section 8.2 Section 8.4.1 and 8.4.2
		(b) Objectives, targets and limits to assess and address environmental risk in short-, medium-, and long-term, and performance assessment against these objectives, targets and limits, including forward-looking information in the design of business strategy and processes	Section 8.2 Section 8.5 Section 8.6 Section 8.7 Section 8.8.2 Section 8.10.1 and 8.10.2
		(c) Current investment activities and (future) investment targets towards environmental objectives and EU Taxonomy-aligned activities	Section 8.1.2.3 Section 8.2.3 and 8.2.4
		(d) Policies and procedures relating to direct and indirect engagement with new or existing counterparties on their strategies to mitigate and reduce environmental risks	Section 8.5.3 Section 8.5.4 Section 8.7 Section 8.8.2, 8.8.3 and 8.8.4
Table 1. Qualitative information on Environmental risk	Governance	(e) Responsibilities of the management body for setting the risk framework, supervising and managing the implementation of the objectives, strategy and policies in the context of environmental risk management covering relevant transmission channels	Section 7.4 Section 8.2 Section 8.3 Section 8.4.1 and 8.4.2
		(f) Management body's integration of short-, medium- and long-term effects of environmental factors and risks, organisational structure both within business lines and internal control functions	Section 8.3 Section 8.4.1 and 8.4.2 Section 8.5 Section 8.6
		(g) Integration of measures to manage environmental factors and risks in internal governance arrangements, including the role of committees, the allocation of tasks and responsibilities, and the feedback loop from risk management to the management body covering relevant transmission channels	Section 8.3 Section 8.4.1 and 8.4.2 Section 8.5 Section 8.6
		(h) Lines of reporting and frequency of reporting relating to environmental risk	Section 7.4 Section 8.3
		(i) Alignment of the remuneration policy with institution's environmental risk-related objectives	Section 6.1, 6.3, 6.4 and 6.5 Section 8.3

Annex II Article	Description		Pillar 3 Section
Environmental, Social and Governance (ESG) Risk, in accordance with Article 449a CRR			
Table 1. Qualitative information on Environmental risk	Risk management	(j) Integration of short-, medium- and long-term effects of environmental factors and risks in the risk framework	Section 8.4.2 Section 8.5 Section 8.6
		(k) Definitions, methodologies and international standards on which the environmental risk management framework is based	Section 8.1.2 Section 8.2.1 and 8.2.3 Section 8.4 Section 8.5 Section 8.6 Section 8.7 Section 8.10
		(l) Processes to identify, measure and monitor activities and exposures (and collateral where applicable) sensitive to environmental risks, covering relevant transmission channels	Section 8.2.1 Section 8.4 Section 8.5 Section 8.6 Section 8.7
		(m) Activities, commitments and exposures contributing to mitigate environmental risks	Section 8.2.1 and 8.2.4 Section 8.5 Section 8.6 Section 8.7
		(n) Implementation of tools for identification, measurement and management of environmental risks	Section 8.2.1 Section 8.4 Section 8.5 Section 8.6 Section 8.7
		(o) Results and outcome of the risk tools implemented and the estimated impact of environmental risk on capital and liquidity risk profile	Section 8.4 Section 4.5.1
		(p) Data availability, quality and accuracy, and efforts to improve these aspects	Section 8.2.1 Section 8.4.1 Section 8.5
		(q) Description of limits to environmental risks (as drivers of prudential risks) that are set, and triggering escalation and exclusion in the case of breaching these limits	Section 8.2.1 and 8.2.4 Section 8.4.2 Section 8.5.1 Section 8.7
		(r) Description of the link (transmission channels) between environmental risks with credit risk, liquidity and funding risk, market risk, operational risk and reputational risk in the risk management framework	Section 8.4.1 and 8.4.2 Section 8.5.1

Annex II Article	Description		Pillar 3 Section
Environmental, Social and Governance (ESG) Risk, in accordance with Article 449a CRR			
Table 2. Qualitative informacion on Social risk	Business strategy and processes	(a) Adjustment of the institution's business strategy to integrate social factors and risks taking into account the impact of social risk on the institution's business environment, business model, strategy and financial planning	Section 8.1.1 Section 8.2.3 and 8.2.4 Section 8.4.2 Section 8.5.1, 8.5.3 and 8.5.4 Section 8.8
		(b) Objectives, targets and limits to assess and address social risk in short-term, medium-term and long-term, and performance assessment against these objectives, targets and limits, including forward-looking information in the design of business strategy and processes	Section 8.2.3 and 8.2.4 Section Section 8.5.1, 8.5.3 and 8.5.4 Section 8.8 Section 8.10.2
		(c) Policies and procedures relating to direct and indirect engagement with new or existing counterparties on their strategies to mitigate and reduce socially harmful activities	Section 8.5.1, 8.5.3 and 8.5.4 Section 8.8
Table 2. Qualitative informacion on Social risk	Governance	(d) Responsibilities of the management body for setting the risk framework, supervising and managing the implementation of the objectives, strategy and policies in the context of social risk management covering counterparties' approaches to:	Section 7.4 Section 8.3 Section 8.4.2 Section 8.8 Section 8.9.2
		(d).(i) Activities towards the community and society	
		(d).(ii) Employee relationships and labour standards	
		(d).(iii) Customer protection and product responsibility	
		(d).(iv) Human rights	
		(e) Integration of measures to manage social factors and risks in internal governance arrangements, including the role of committees, the allocation of tasks and responsibilities, and the feedback loop from risk management to the management body	Section 7.4 Section 8.3
		(f) Lines of reporting and frequency of reporting relating to social risk	Section 7.4 Section 8.3
		(g) Alignment of the remuneration policy in line with institution's social risk-related objectives	Section 6.1, 6.3, 6.4 and 6.5 Section 8.3
Table 2. Qualitative informacion on Social risk	Risk management	(h) Definitions, methodologies and international standards on which the social risk management framework is based	Section 8.2.4 Section 8.5.3 Section 8.8
		(i) Processes to identify, measure and monitor activities and exposures (and collateral wher applicable) sensitive to social risk, covering relevant transmission channels	Section 8.2.4 Section 8.4.2 Section 8.5.1, 8.5.2 and 8.5.3 Section 8.8
		(j) Activities, commitments and assets contributing to mitigate social risk	Section 8.2.4 Section 8.5.1, 8.5.2 and 8.5.3 Section 8.8
		(k) Implementation of tools for identification and management of social risk	Section 8.4.2 Section 8.5.1, 8.5.2 and 8.5.3 Section 8.8
		(l) Description of setting limits to social risk and cases to trigger escalation and exclusion in the case of breaching these limits	Section 8.8 Section 8.9.2
		(m) Description of the link (transmission channels) between environmental risks with credit risk, liquidity and funding risk, market risk, operational risk and reputational risk in the risk management framework	Section 8.8

Annex II Article	Description		Pillar 3 Section
Environmental, Social and Governance (ESG) Risk, in accordance with Article 449a CRR			
Table 3. Qualitative information on Governance risk	Governance	(a) Institution's integration in their governance arrangements governance performance of the counterparty, including committees of the highest governance body, committees responsible for decision-making on economic, environmental, and social topics	Section 8.3 Section 8.5.1, 8.5.3 and 8.5.4 Section 8.8.3 and 8.8.5 Section 8.9
		(b) Institution's accounting of the counterparty's highest governance body's role in non-financial reporting	Section 8.9
		(c) Institution's integration in governance arrangements of the governance performance of their counterparties including:	Section 8.9
		(c).(i) Ethical considerations	
		(c).(ii) Strategy and risk management	
		(c).(iii) Inclusiveness	
		(c).(iv) Transparency	
		(c).(v) Management of conflict of interest	
		(c).(vi) Internal communication on critical concerns	
Table 3. Qualitative information on Governance risk	Risk management	(d) Institution's integration in risk management arrangements the governance performance of their counterparties considering:	Section 8.5.1, 8.5.3 and 8.5.4 Section 8.8.3 and 8.8.5 Section 8.9
		(d).(i) Ethical considerations	
		(d).(ii) Strategy and risk management	
		(d).(iii) Inclusiveness	
		(d).(iv) Transparency	
		(d).(v) Management of conflict of interest	
		(d).(vi) Internal communication on critical concerns	
Template 1. Banking book- Indicators of potential climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity	Paragraph 1.b	institutions shall start disclosing information on scope 1, 2 and 3 emissions of their counterparties, if already available, including qualitative information in the narrative accompanying this template on the methodology and sources used for the calculation of those emissions. Where institutions are not yet estimating their counterparties' emissions associated with their financing activities, including lending and investment activities, they shall disclose information on their plans to implement methodologies to estimate and disclose this information. Institutions shall start disclosing information in columns (i) to (k) of the template with first disclosure reference date as of 30 June 2024.	Section 8.5.1 and 8.5.2
	Paragraph 2	Institutions shall include in the narrative accompanying the template, explanations on the information disclosed and the changes compared to previous disclosure periods, as well as any implications that those exposures may have in terms of credit, market, operational, reputational and liquidity risks for the institutions.	Section 8.5.1 and 8.5.2
Template 3. Banking book - Indicators of potential climate change transition risk: Alignment metrics	Paragraph 3	Institutions that are already estimating information on their sectoral alignment to the Paris Agreement shall disclose the information in this template. Institutions are to explain in the narrative part accompanying the template the method used and the data source. Those institutions that are not yet estimating their sectoral alignment shall disclose information on their plans to implement a method to estimate and disclose that information. In any case, institutions shall start disclosing the information included in this template with first disclosure reference date as of 30 June 2024.	Section 8.2.1

Annex II Article	Description		Pillar 3 Section
Environmental, Social and Governance (ESG) Risk, in accordance with Article 449a CRR			
Template 4. Banking book - Indicators of potential climate change transition risk: Exposures to top 20 carbon-intensive firms	Paragraph 3	Institutions shall disclose in the narrative accompanying the disclosure the source of the data they use. Where institutions are not able to identify exposures towards the top 20 carbon-intensive firms in the world, they shall explain why they have not indicated such exposures, including in the case in which they do not have any exposures towards the top 20 carbon-intensive firms in the world.	Section 8.5.3.4
Template 5. Banking book - Indicators of potential climate change physical risk: Exposures subject to physical risk	Paragraph 5	Institutions shall disclose the information in this template on a best effort basis and explain in the narrative 0accompanying the template the sources of information and methods that they have used to identify exposures subject to climate-change physical risk.	Section 8.6
Template 10. Other climate change mitigating actions that are not covered in Regulation (EU) 2020/852	Paragraph 2	Institutions shall include in the narrative accompanying this template detailed explanations on the nature and type of mitigating actions reflected in this template, including information on the type of risks that they aim to mitigate, climate change objectives that they support and information on the related counterparties and the timing of the actions. They shall also explain why those exposures are not fully aligned with the criteria laid down in Regulation (EU) 2020/852, and are not sustainable in accordance with Regulation (EU) 2020/852 but still contribute towards mitigating climate change risk transition or physical risk, as well as any other relevant information that may help understand the risk management framework of the institution.	Section 8.2.3

VIII.c Regulatory compliance - Tables not applicable to BBVA Group (12-31-2022)

Table name	Description	Publication	Reason
EU CR7	IRB approach – Effect on the RWEAs of credit derivatives used as CRM techniques	EBA/ITS/2020/04	The Group does not use credit derivatives as a credit risk mitigation technique
EU CCR7	RWEA flow statements of CCR exposures under the IMM	EBA/ITS/2020/04	The Group uses the standardised approach for counterparty credit risk (SA-CCR) for the derivatives exposure value calculation, so IMM is not used.
EU CQ2	Quality of forbearance	EBA/ITS/2020/04	The Group has a NPL ratio lower than 5%
EU CQ6	Collateral valuation - loans and advances	EBA/ITS/2020/04	The Group has a NPL ratio lower than 5%
EU CQ8	Collateral obtained by taking possession and execution processes – vintage breakdown	EBA/ITS/2020/04	The Group has a NPL ratio lower than 5%
EU INS1	Insurance participations	EBA/ITS/2020/04	The Group is not considered a financial conglomerate subject to additional supervision
EU INS2	Financial conglomerates - information on own funds and capital adequacy ratio	EBA/ITS/2020/04	The Group is not considered a financial conglomerate subject to additional supervision
EU KM2	Key metrics - MREL and, where applicable, G-SII requirement for own funds and eligible liabilitie	EBA/ITS/2020/06	The Group is not considered as a G-SIB
EU TLAC1	Composition - MREL and, where applicable, G-SII requirement for own funds and eligible liabilities	EBA/ITS/2020/06	The Group is not considered as a G-SIB
EU iLAC	Internal loss absorbing capacity: internal MREL and, where applicable, requirement for own funds and eligible liabilities for non-EU G-SIIs	EBA/ITS/2020/06	The Group is not considered as a G-SIB
EU TLAC 2	Creditor ranking - Entity that is not a resolution entity	EBA/ITS/2020/06	The Group is not considered as a G-SIB
EU TLAC 3	Creditor ranking - resolution entity	EBA/ITS/2020/06	The Group is not considered as a G-SIB
GSIB1	Indicators of systemic importance	EBA/ITS/2021/01	The Group is not considered as a G-SIB

Glossary of Terms

ACRONYM	DESCRIPTION
ALM (Asset - Liability Management)	Mechanism for managing structural balance-sheet risk due to potential imbalances between assets and liabilities due to different types of factors (interest rate, exchange rate, liquidity, etc.)
AMA	Advanced method for calculating the own funds requirements for operational risk
AT1 (Additional Tier 1)	Additional Tier 1 capital consisting of hybrid instruments, mainly CoCos and preferred shares
Basel III	Package of proposals for reform of banking regulation, published as of December 16, 2010 and with a period of gradual implementation
BCBS (Basel Committee on Banking Supervision)	Basel Committee on Banking Supervision. International cooperation forum on banking supervision to increase the quality of banking supervision worldwide
CCyB (Countercyclical Buffer)	Countercyclical buffer, the part of a set of macroprudential instruments designed to help counteract the procyclicality of the financial system
CCF (Credit Conversion Factor)	Credit conversion factor. The ratio between the current available amount of a commitment that could be used and would therefore be outstanding at the time of default, and the current available amount of the commitment
CCP (Central Counterparty Clearing House)	An entity that liaises between counterparties, acting as a buyer when dealing with sellers and as a seller when dealing with buyers
CDS (Credit Default Swap)	Financial derivative between a beneficiary and a guarantor through which the beneficiary pays the guarantor a premium in exchange for receiving protection from possible credit events over a period of time
CET1 (Common Equity Tier 1)	Common Equity Tier 1: the entity's capital of the highest quality (see paragraph 2.1)
Counterparty Credit Risk	The credit risk corresponding to derivative instruments, repurchase and reverse repurchase transactions, securities or commodities lending or borrowing transactions and deferred settlement transactions
CoCo (Contingent Convertible)	Convertible contingent bond. Hybrid issues with debt and equity elements convertible into shares
Credit Risk	Credit risk is based on the possibility that one party to the financial instrument's contract will fail to meet its contractual obligations on the grounds of insolvency or inability to pay and will cause a financial loss for the other party
CRM (Credit Risk Mitigation)	Credit Risk Mitigation: a technique used by the institution to reduce the credit risk associated with one or more exposures that the institution still maintains
CRR / CRD IV	Solvency regulation on prudential requirements of credit institutions and investment firms (EU Regulation 575/2013)
CVA (Credit Valuation Adjustment)	Valuation adjustments for counterparty credit risk
DLGD (Downturn Loss Given Default)	Severity in a period of stress in the economic cycle
D-SIB (Domestic Systemically Important Bank)	Domestic Systemically Important Bank
EAD (Exposure at default)	Maximum loss at the time of the counterparty entering into default
EBA (European Banking Authority)	European Banking Authority. Independent institution responsible for promoting the stability of the financial system, the transparency of financial markets and products and the protection of depositors and investors
EC (Economic Capital)	The amount of capital considered necessary to cover unexpected losses if actual losses are greater than expected losses
ECB (European Central Bank)	Central bank of the countries of the European Union that have the euro as their currency
ECAI (External Credit Assessment Institutions)	External Credit Assessment Agency designated by the entity
EL (Expected Loss)	The ratio between the amount expected to be lost in an exposure, due to potential non-payment by a counterparty or dilution over a period of one year, and the amount due at the time of non-payment
ERBA (External Rating Base Approach)	Methodology for estimating RWAs of securitisations from external ratings
Environmental, social and governance (ESG)	Environmental, social and good corporate governance criteria, the main objective of which is to contribute to sustainable development
FRTB (Fundamental Review of the Trading Book)	A set of reforms proposed by the BCBS on the market risk framework, with the aim of improving the design and consistency of market risk capital standards
FSB (Financial Stability Board)	Financial Stability Board. An international body that pursues the effectiveness and stability of the international financial system, monitoring it and publishing recommendations
FTD (First to default)	Derivative by which both parties negotiate protection against the first default by any of the entities that form part of the basket
GRM (Global Risk Management)	Global Risk Management
GRMC (Global Risk Management Committee)	Global Risk Management Committee
G-SIBs (Global Systemically Important Banks)	Financial institutions that, because of their large size, market importance and interconnectedness, could cause a serious crisis in the international financial system in the event of economic problems
IAA (Internal Assessment Approach)	Internal evaluation method for the calculation of securitisation exposures in the banking book
ICAAP (Internal Capital Adequacy Assessment Process)	Internal Capital Adequacy Assessment Process

ACRONYM	DESCRIPTION
IFRS 9 (International Financial Reporting Standards – Financial Instruments)	International Financial Reporting Standards for Financial Instruments which entered into force on January 1, 2018, replacing IAS 39 in relation to the classification and valuation of financial assets and liabilities, the impairment of financial assets and the accounting of hedges
ILAAP (Internal Liquidity Adequacy Assessment Process)	Internal Liquidity Adequacy Assessment Process
IMA (Internal Model Approach)	Internal model approach for calculating exposure due to market risk
IMM (Internal Model Method)	Internal model method for calculating exposure due to counterparty risk
IRB (Internal Rating-based approach)	Internal model method for calculating exposure due to credit risk, based on internal ratings. This method can be broken down into two types, depending on the estimations set by the Supervisor or the own ones: FIRB (Foundation IRB) and AIRB (Advanced IRB)
IRBA (Internal Risk Base Approach)	Methodology for estimating RWAs of securitisations from internal ratings
IRC (Incremental Risk Capital)	Charge applied to the market risk exposure calculated by the internal method that quantifies the risk not captured by the VaR model, specifically in migration and default events
LCR (Liquidity Coverage Ratio)	Liquidity coverage ratio
LDP (Low Default Portfolios)	Low default portfolios
LGD (Loss Given Default)	Severity or amount to be lost in the event of non-payment
LGD BE (Loss Given Default Best Estimate)	"Actual" loss from default portfolio
Liquidity Risk	Risk of an entity having difficulties in duly meeting its payment commitments, or where, to meet them, it has to resort to funding under burdensome terms which may harm the entity's image or reputation.
LMUs (Liquidity Management Units)	Group entities with financial self-sufficiency created with the aim of preventing and limiting liquidity risk, preventing it from spreading in a crisis that could affect only one or more of these Entities
LR (Leverage Ratio)	Leverage ratio: a measure that relates a company's indebtedness and assets, calculated as level 1 capital divided by the entity's total exposure
LRLGD (Long Run Loss Given Default)	Long-term severity (loss given default)
LtSCD (Loan to Stable Customer Deposits)	Ratio that measures the relationship between net credit investment and stable customer resources
Market Risk	Risk due to the possibility that there may be losses in the value of positions held due to movements in the market variables that affect the valuation of financial products and assets in trading activity
MDA (Maximum Distributable Amount)	Trigger by which the ECB restricts the capacity to pay out dividends
MREL (Minimum Required Eligible Liabilities)	Minimum requirement of own funds and eligible liabilities. New requirement faced by European banks, which aims to create a buffer of solvency that absorbs the losses of a financial entity in the event of resolution without jeopardizing taxpayers' money. The level of this buffer is determined individually for each banking group based on their level of risk and other particular characteristics
MTN (Medium Term Note)	Notes accounted as Issuances designated at fair value through P&L considered equivalent to senior issuances for liquidity
NCAHS	Non-Current Assets Held for Sale
NCLHS	Non-Current Liabilities Held for Sale
NSFR	Net Stable Funding Ratio
OE (Original Exposure)	Gross amount that the entity may lose in the event that the counterparty cannot meet its contractual payment obligations, regardless of the effect of guarantees or credit improvements or credit risk mitigation operations
Operational Risk (OR)	BBVA defines operational risk (OR) as risk that may cause losses as a result of human error; inadequate or defective internal processes; inadequate conduct towards customers, in the markets or against the company; failures, interruptions or deficiencies in systems or communications; theft, loss or misuse of information, as well as deterioration of its quality; internal or external fraud including, in all cases, fraud resulting from cyber-attacks; theft or physical damage to assets or persons; legal risks; risks resulting from workforce and occupational health management; and inadequate service provided by suppliers
PD (Probability of Default)	Probability of non-payment by a counterparty over a period of one year
PD-TTC (PD Through the Cycle)	Probability of Default throughout the business cycle
PIT (Point-In-Time)	Approach for calculating provisions under which PD and LGD parameters must be adapted at each moment in time
P2G	Pillar 2 Capital Guidance
P2R	Pillar 2 Capital Requirement
RW (Risk Weight)	Degree of risk applied to exposures (%)
RWAs (Risk-Weighted Assets)	Risk exposure of the entity weighted by a percentage derived from the applicable standard (standardised approach) or internal models
SFTs	Securities financing transactions
SREP (Supervisory Review and Evaluation Process)	Supervisory Review and Evaluation Process
Structural Risk	This risk is divided into Structural Interest-Rate Risk (movements in market interest rates that cause changes in an entity's net interest income and book value) and Structural Exchange-Rate Risk (exposure to variations in exchange rates originating in the Group's foreign companies and in the provision of funds to foreign branches financed in a different currency from that of the investment)

ACRONYM	DESCRIPTION
Synthetic Securitisation	A type of operation where the loan portfolio is not typically transferred to a fund; on the contrary, the credit remains in the balance sheet of the corresponding entity, but this transfers the default risk to a third party. The objective of this type of instrument is the transmission of balance risk and capital release. Normally, the assignment of risk is usually made through a derivative (CDS) or through a financial guarantee
TIER I (Tier One Capital)	Capital built by instruments that are able to absorb losses when the entity is in operation. It consists of CET1 and AT1
TIER II (Tier Two Capital)	Supplementary capital consisting of instruments, mainly subordinated debt, revaluation reserves and hybrid instruments, which will absorb losses when the entity is not viable
TLAC (Total Loss Absorbing Capacity)	Total loss absorption capacity: Regulatory framework approved by the FSB with the aim of ensuring that global systemically important entities (G-SIB) maintain a minimum level of eligible instruments and liabilities to ensure that in resolution procedures, and immediately thereafter, the essential functions of the entity can be maintained without jeopardizing taxpayers' money or financial stability
Traditional Securitisation	Operation through which an entity is capable of transforming a series of heterogeneous and illiquid financial assets into liquid homogeneous instruments (usually guarantees or bonds) and marketable securities, managing to transfer the risk of the assets in most cases while liquidity is preserved
TRIM (Targeted Review of Internal Models)	Control model implemented by the ECB aimed at reducing inconsistencies and the variability in banks' internal models used to calculate their risk-weighted assets
VaR (Value at Risk)	A risk measurement model that provides a prediction of the maximum loss that the entity's trading portfolios might experience as a result of market price variations over a given time horizon and for a specific confidence interval