

# Prudential Relevance Report

# Pillar III

2019



*The English language version of this report is a free translation from the original, which was prepared in Spanish. All possible care has been taken, to ensure that the translation is an accurate presentation of the original. However, in all matters of interpretation, views or opinion expressed in the original language version of the document in Spanish take precedence over the translation.*

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# Glossary of Terms

ACRONYM	DESCRIPTION
<b>ALM (Asset - Liability Management)</b>	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.)
<b>AMA</b>	Advanced method for calculating the own funds requirements for operational risk. BBVA has been authorized to use the advanced method in Mexico and Spain.
<b>AT1 (Additional Tier 1)</b>	Additional Tier 1 capital consisting of hybrid instruments, mainly CoCos and preferred shares
<b>Basel III</b>	Package of proposals for reform of banking regulation, published as of December 16, 2010 and with a period of gradual implementation
<b>BCBS (Basel Committee on Banking Supervision)</b>	Basel Committee on Banking Supervision. International cooperation forum on banking supervision to increase the quality of banking supervision worldwide
<b>BIS (Bank for International Settlements)</b>	Bank for International Settlements. An independent international organization that fosters international monetary and financial cooperation and acts as a central bank
<b>CCF (Credit Conversion Factor)</b>	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
<b>CCP (Central Counterparty Clearing House)</b>	An entity that liaises between counterparties, acting as a buyer when dealing with sellers and as a seller when dealing with buyers
<b>CDS (Credit Default Swap)</b>	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
<b>CET1 (Common Equity Tier 1)</b>	Common Equity Tier 1: the entity's highest capital tier (see paragraph 2.1)
<b>Counterparty Credit Risk</b>	The credit risk corresponding to derivative instruments, repurchase and resale transactions, securities or commodities lending or borrowing transactions and deferred settlement transactions
<b>Credit Risk</b>	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
<b>CRM (Credit Risk Mitigation)</b>	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
<b>CRR / CRD IV</b>	Solvency regulation on prudential requirements of credit institutions and investment firms (EU Regulation 575/2013)
<b>CVA (Credit Valuation Adjustment)</b>	Valuation adjustments for counterparty credit risk
<b>DLGD (Downturn Loss Given Default)</b>	Severity in a period of stress in the economic cycle
<b>D-SIB (Domestic Systemically Important Bank)</b>	Domestic Systemically Important Bank
<b>EAD (Exposure at default)</b>	Maximum loss at the time of the counterparty entering into default
<b>EBA (European Banking Authority)</b>	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
<b>EC (Economic Capital)</b>	The amount of capital considered necessary to cover unexpected losses if actual losses are greater than expected losses
<b>ECAI (External Credit Assessment Institutions)</b>	External Credit Assessment Agency designated by the entity
<b>EL (Expected Loss)</b>	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
<b>FRTB (Fundamental Review of the Trading Book)</b>	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
<b>FSB (Financial Stability Board)</b>	Financial Stability Board. An international body that pursues the effectiveness and stability of the international financial system, monitoring it and publishing recommendations
<b>FTD (First to default)</b>	Derivative by which both parties negotiate protection against the first default by any of the entities that form part of the basket
<b>GRM (Global Risk Management)</b>	Global Risk Management
<b>GRMC (Global Risk Management Committee)</b>	Global Risk Management Committee
<b>G-SIBs (Global Systemically Important Banks)</b>	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
<b>IAA (Internal Assessment Approach)</b>	Internal evaluation method for the calculation of securitization exposures in the banking book
<b>ICAAP (Internal Capital Adequacy Assessment Process)</b>	Internal Capital Adequacy Assessment Process
<b>IFRS 16 (International Financial Reporting Standards – Leases)</b>	International Financial Reporting Standards for leases which entered into force on January 1, 2019, replacing IAS 17.

<b>IFRS 9 (International Financial Reporting Standards – Financial Instruments)</b>	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
<b>ILAAP (Internal Liquidity Adequacy Assessment Process)</b>	Internal Liquidity Adequacy Assessment Process
<b>IMA (Internal Model Approach)</b>	Internal model approach for calculating exposure due to market risk
<b>IMM (Internal Model Method)</b>	Internal model method for calculating exposure due to counterparty risk
<b>IRB (Internal Rating-based approach)</b>	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)
<b>IRC (Incremental Risk Capital)</b>	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
<b>LCR (Liquidity Coverage Ratio)</b>	Liquidity coverage ratio
<b>LDA (Loss Distribution Approach)</b>	Aggregate Loss Distribution Model: methodology that estimates the distribution of losses by operational event by convoluting the frequency distribution and the loss given default (LGD) distribution of these events
<b>LDP (Low Default Portfolios)</b>	Low default portfolios
<b>LGD (Loss Given Default)</b>	Severity or amount to be lost in the event of non-payment
<b>LGD BE (Loss Given Default Best Estimate)</b>	“Actual” loss from default portfolio
<b>Liquidity Risk</b>	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.
<b>LMUs (Liquidity Management Units)</b>	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
<b>LR (Leverage Ratio)</b>	Leverage ratio: a measure that relates a company’s indebtedness and assets, calculated as level 1 capital divided by the entity’s total exposure
<b>LRLGD (Long Run Loss Given Default)</b>	Long-term severity (loss given default)
<b>LtSCD (Loan to Stable Customer Deposits)</b>	Ratio that measures the relationship between net credit investment and stable customer resources
<b>Market Risk</b>	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
<b>MREL (Minimum Required Eligible Liabilities)</b>	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.
<b>OE (Original Exposure)</b>	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
<b>Operational Risk (OR)</b>	BBVA defines operational risk (“OR”) as one that can produce losses caused as a result of: human errors, inadequate or defective internal processes, inadequate conduct toward customers, markets or the entity; failures, interruptions, or deficiencies of systems or communications, inadequate management of data, legal risks and, finally, as a consequence of external events, including cyberattacks, fraud committed by third parties, natural disasters, and poor service provided by suppliers
<b>ORX (Operational Risk Exchange)</b>	External operational loss database
<b>PD (Probability of Default)</b>	Probability of non-payment by a counterparty over a period of one year
<b>PD-TTC (PD Through the Cycle)</b>	Probability of Default throughout the business cycle
<b>PIT (Point-In-Time)</b>	Approach for calculating provisions under which PD and LGD parameters must be adapted at each moment in time
<b>QCCP (Qualifying Central Counterparty)</b>	Central counterparty entity which has been either authorized under Article 14 of Regulation (EU) No. 648/2012, or recognized under Article 25 of that Regulation
<b>RW (Risk Weight)</b>	Degree of risk applied to exposures (%)
<b>RWAs (Risk-Weighted Assets)</b>	Risk exposure of the entity weighted by a percentage derived from the applicable standard (standardized approach) or internal models
<b>SFTs</b>	Securities financing transactions
<b>SREP (Supervisory Review and Evaluation Process)</b>	Supervisory Review and Evaluation Process
<b>Structural Risk</b>	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)
<b>Synthetic Securitization</b>	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
<b>TIER I (Tier One Capital)</b>	Capital built by instruments that are able to absorb losses when the entity is in operation. It consists of CET1 and AT1
<b>TIER II (Tier Two Capital)</b>	Supplementary capital consisting of instruments, mainly subordinated debt, revaluation reserves and hybrid instruments, which will absorb losses when the entity is not viable

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<b>TLAC (Total Loss Absorbing Capacity)</b>	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
<b>Traditional Securitization</b>	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
<b>VaR (Value at Risk)</b>	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

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# Executive summary

BBVA Group's (hereinafter the Group) fully loaded CET1 ratio stood at 11.74% at the end of 2019 (11.98% phased-in), including the impact of the first application of IFRS 16 which entered into force on January 1, 2019 (-11 basis points impact), which represents a growth of 40 basis points from December 2018, mainly supported by the profit generation, net of dividend payments and remuneration of contingent convertible capital instruments (hereinafter CoCos), notwithstanding the moderate growth of risk-weighted assets.

The Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) in the Group has remained well above 100% throughout 2019. At December 31, 2019, these ratios stood at 129% (158% considering the excess liquidity of the subsidiaries) and 120%, respectively. Although these requirements are only established at Group level, this minimum is comfortably exceeded in all subsidiaries.

As for the leverage ratio, as of December 31, 2019, the fully loaded ratio was 6.68%, above the minimum required ratio of 3%, still comparing very favorably with the rest of the Peer Group<sup>1</sup>.

The following sections provided detailed information about the Group's solvency and the Management Report (linked to the Group's Consolidated Annual Accounts) provided the Group's main indicators of activity and profitability.

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<sup>1</sup> The peer group of the Group consists of the following entities: Barclays, BNP Paribas, Crédit Agricole, Commerzbank, Deutsche Bank, HSBC, Intesa Sanpaolo, Lloyds Bank, RBS, Santander, Société Générale, UBS and UniCredit.

# Introduction

## Regulatory framework and regulatory developments in 2019

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") amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, through which the EU began implementing the capital reforms agreed under Basel III, with effect from January 1, 2014, thus establishing a period of gradual implementation of certain requirements until January 1, 2019.

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.

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, 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").

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.

### Regulatory developments in 2019

**BIS III reform:** The Basel Committee has carried out a reform of the Basel III framework to achieve a balance between risk sensitivity, simplicity and comparability (hereinafter, BIS III). The main modifications focus on internal models, the standard credit risk method, the market risk framework,

operational risk and the advanced model capital floors based on the standardized approach. This reform was approved by the Basel Committee on December 8, 2017, and is expected to be implemented on January 1, 2022. Capital floors will be introduced gradually over a period of 5 years, from a floor of 50% on January 1, 2022 to 72.5% on January 1, 2027. The Committee also introduced an additional leverage coefficient for global systemically important entities ("G-SIB").

With regard to the implementation of BIS III Reform in Europe, although there is still no legislative proposal, the following steps have been taken:

- The European Banking Authority (EBA), at the request of the European Commission, has published its opinion on the various regulatory options contained in the BIS III Reform in the area of Credit Risk, Operational Risk, Market Risk, capital floors and Credit Valuation Adjustment (CVA). The EBA advocates a faithful implementation of Basel by maintaining the date of entry into force as January 1, 2022.
- The European Commission published a public consultation on the implementation of BIS III Reform in the European Union in October 2019.
- In December 2019, the European Commission adopted the delegated act which includes specific topics for calculating the CRR2 standard alternative market risk method (Commission delegated regulation with regard to the alternative standardized approach for market risk), which is pending publication in the Official Journal of the European Union (hereinafter referred to as the OJUE). It is part of the European implementation of the new market framework (Fundamental Review of the Trading Book, FRTB), which will be carried out through this delegated act (for the alternative standardized approach) and through EBA technical standards (for the alternative internal method).

**Reform of the securitization framework:** On December 28, 2017, the reform of the securitization framework was published in the OJUE, and its implementation date is January 1, 2019 for securitization issued from that date. For securitization made before January 1, 2019, entities have kept on applying the old regime, according to the regulation, until December 31, 2019. The reform consists of two regulations:

1. **Regulation (EU) 2017/2401** of the European Parliament and Council of December 12, 2017 amending the CRR regarding the capital requirements of securitization positions. It grants preferential treatment to securitization considered to be simple, transparent and standardized (STS).
2. **Regulation (EU) N. 2017/2402** of the European Parliament and Council of December 12, 2017 which establishes a general framework for securitizations, creating a specific framework for STS securitizations, detailing the characteristics that a securitization must meet to be considered STS.

**Management and framework of NPLs:** In July 2017, the European Council published a package of measures to address non-performing loan assets (NPL) in Europe. For this purpose, the European Central Bank (ECB) has established supervisory expectations for Pillar 2 on prudential provisions for non-performing loan exposure classified as such as of April 1, 2018. Its application date is from the SREP exercise (Supervisory Review and Examination Process) of 2021. The supervisory expectations on prudential provisions applicable to stock (non-performing loan exposures classified as such before April 1, 2018) will be treated by the ECB within the individual dialog with each entity.

For its part, Regulation 2019/630 of April 17, 2019 was published in the OJUE on April 25, 2019, modifying the CRR with regard to the minimum coverage of losses arising from non-performing loan exposure, applies from April 26, 2019 to exposure originating from that date which become non-performing. Regarding transparency, the EBA has published guidelines on the management of NPLs that apply from June 30, 2019 and publication (disclosure) guidelines for information from NPLs that apply as of December 31, 2019.

**Declaration of Equivalence of Third Countries:** On April 1, 2019, the EC updated the list of third countries and territories whose monitoring and regulatory requirements are considered equivalent to European requirements (Implementing Decision 2019/536 of the Council Dated March 29, 2019), including Argentina for the first time. Subsequently, in December 2019 (effective January 7, 2020) the EC has included Serbia and South Korea (Commission Implementing Decision 2019/2166 of December 16, 2019). Therefore, the complete list as of December 31, 2019 is as follows:

Argentina, Australia, Brazil, Canada, China, Faeroe Islands, Greenland, Guernsey, Hong Kong, India, Isle of Man, Japan, Jersey, Mexico, Monaco, New Zealand, Saudi Arabia, Serbia, Singapore, South Africa, South Korea, Switzerland, Turkey and the United States.

**Request for authorization to compute issuances:** On April 30, 2019, the second transitional provision and the second paragraph of the single derogatory provision of Royal Decree 309/2019 entered into force, repealing the first additional provision of RDL 84/2015 which obliged Spanish entities

to request authorization to the ECB to include issuances in the capital ratios. This part of RDL 309/2019 applies to new issuances as well as authorization requests in course.

**EC reforms and provisions:** On November 23, 2016, the European Commission published a new reform package amending both the prudential banking regime (CRR) and the resolution regime (Bank Recovery and Resolution Directive, BRRD). This revision included the implementation of international standards into European legislation (regulation later than 2010 adopted by the Basel Committee – except for standards approved in December, 2017 and market risk requirements – and the total loss absorbing capacity (TLAC), the final design of the minimum requirement for own funds and eligible liabilities (MREL) along with a package of technical improvements. At the same time, a proposal has also been put forward for a directive to harmonize the hierarchy of senior debt creditors within the European Union. This directive was adopted in December 2017.

The CRR and BRRD reform package was published in the OJUE on June 7, 2019 and came into force on June 27, 2019. The regulations and directives that make up this reform are as follows:

1. **Regulation (EU) 2019/876** (CRR2) of the European Parliament and of the Council of May 20, 2019 amending Regulation (EU) 575/2013 (CRR).  
  
Its general implementation date is June 28, 2021, although some articles apply from its entry into force and others on different dates
2. **Regulation (EU) 2019/877** of the European Parliament and of the Council of May 20, 2019, amending Regulation (EU) No 806/2014 regarding loss absorption and recapitalization capacity for credit institutions and investment firms.  
  
The implementation date is December 28, 2020.
3. **Directive (EU) 2019/878** (CRD V) of the European Parliament and of the Council of May 20, 2019 amending Directive 2013/36/EU (CRD IV).  
  
Its adoption date is December 28, 2020 as Member States have until that date to publish the provisions necessary to comply with this Directive.
4. **Directive (UE) 2019/879** (BRRD2) of the European Parliament and of the Council of May 20, 2019 amending Directive 2014/59/EU (BRRD).  
  
Its adoption date is December 28, 2020 as Member States have until that date to publish the provisions necessary to comply with this Directive.

Regarding the supervisory reporting, during the last quarter of 2019, the EBA has published several documents that are currently in consultation:

1. **ITS on supervisory reporting requirements for institutions:** Establishes new templates that meet CRR2 reporting requirements, as well as reporting requirements for NPLs. The proposed implementation date is June 28, 2021.
2. **ITS on specific supervisory reporting requirements for market risk:** In reference to the new reporting requirements of the new market risk framework, the EBA will gradually publish the documents that contain the new templates, this being the first publication. The proposed implementation date is March 1, 2021.
3. **ITS amending Commission Implementing Regulation (EU) 2016/2070 with regard to benchmarking of internal models:** Introduces changes to the benchmarking exercise of internal 2021 models, where the inclusion of templates referring to IFRS 9 are the most relevant.
4. **ITS on disclosure and reporting of MREL and TLAC:** Establishes new Pillar 3 and reporting supervisor templates associated with TLAC and MREL requirements of CRR2 and BRRD2. The proposed implementation date is June 28, 2021.

In addition to the above, the EBA has updated the guidelines on definitions to be applied and templates to be submitted for Funding Plans (EBA/GL/2019/05).

Moreover, on December 18, 2019, the new framework for guaranteed bonds was published in the OJUE. The reform consists of a regulation and a directive as follows:

1. **Regulation 2019/2160** of the European Parliament and of the Council of November 27, 2019 amending Regulation (EU) 575/2013 as regards exposures in the form of guaranteed bonds.

The implementation date is July 8, 2022.

2. **Directive 2019/2162** of the European Parliament and of the Council of November 27, 2019 on the issuance and public supervision of covered bonds and which amends Directives 2009/65/EC and 2014/59/EU.

Member States have until July 8, 2021 to transpose the directive into national legislation. The implementation date will be at the latest July 8, 2022.

**Developments in the Pillar 3 framework:** On June 27, 2019, BCBS integrated the three phases of review of Pillar 3 into the Basel Consolidated Framework, which collects in a single document all the requirements of the Basel Committee. This Pillar 3 framework applies at the consolidated level to all internationally active banks and covers both disclosure of information on regulatory capital requirements, as well as other relevant regulatory metrics such as liquidity (LCR, NSFR), leverage, TLAC and remuneration information.

The BCBS will continue to update this document as new requirements are incorporated or existing requirements are modified, allowing better access to applicable regulations and facilitating credit institutions to comply with market discipline.

As a result of BCBS's review of the market risk framework (FRTB) in January 2019, BCBS published a document in November 2019 for consultation on Pillar 3 requirements related to the new framework ("Revisions to market risk disclosure requirements"). The consultation has ended in February 2020 and the proposed implementation date is January 1, 2022.

In addition, in November 2019, a consultation was launched on the breakdown of sovereign exposures ("Voluntary disclosure of sovereign exposures"). The consultation specifies that such breakdowns will only be mandatory upon request of the supervisor. The proposed implementation date is January 1, 2022.

For its part, in Europe, the EBA published on December 17, 2018 its Guidelines on disclosure of non-performing and forborne exposures (EBA/GL/2018/10), which were adopted by the Bank of Spain on July 2, 2019.

These guidelines are intended to specify the common content and uniform disclosure formats for the information related on non-performing exposures, forborne exposures and foreclosed assets. It consists of 10 templates that apply to entities that are subject to all or part of the disclosure requirements specified in the Eighth Part of the CRR. However, it includes the principle of proportionality based on the significance of the credit institutions and their level of gross non-performing loan ratio. In this way, significant entities according to the criteria set out in the aforementioned guidelines that have a non-performing loan ratio of more than 5% will be subject to the publication of all templates, while the other significant entities will be subject to 4 templates (NPL1 - Credit quality of forborne exposures, NPL3 - Credit quality of performing and non-performing exposures by past due days, NPL4 - performing and non-performing exposures and related provisions, NPL9 - Collateral obtained by taking possession and execution processes)<sup>2</sup>. The Group has a non-performing loan ratio of less than 5%, therefore not all of the NPL templates apply.

In addition, the EBA in October 2019 published a consultative document for consultation until January 2020 entitled "ITS on public disclosures by institutions" that integrates all disclosure requirements issued in a segregated manner over the past few years into a single document, with the aim of helping banks comply with market discipline.

This consultation includes relevant modifications to disclosure requirements to adapt them to changes introduced by CRR2 and maintaining appropriate consistency with the disclosure formats established by the Basel framework

<sup>2</sup> These guidelines replace the templates EU CRI-D Ageing of past-due exposures and EU CRI-E Non-performing exposures and forborne exposures set by the EBA in the Guidelines on information disclosure requirements under the Eighth Part of the CRR (EBA/GL/2016/11)

that allow comparability among internationally active banks, except for the TLAC/MREL disclosure requirements which are addressed in another document in consultation phase published in November 2019 ("ITS on disclosure and reporting of MREL and TLAC ") and the following requirements, which will be consulted in the near future:

- Disclosure of information on interest rate risk in the banking book (IRRBB)
- Disclosure of indicators of entities of global systemic importance
- Disclosure of information on environmental, social and corporate governance risks

It should be noted that in these consultations, the EBA also includes traceability between the information reported to the Supervisor and the information published under the

framework of Pillar 3 as one of the strategic objectives to ensure consistency and integration between both sets of information.

The proposed implementation date for the first consultation is June 28, 2021 and June 30, 2021 for the consultation of the disclosure of information on TLAC/MREL.

**Sustainable Finance Developments:** In December 2019, the EBA launched its action plan in the field of sustainable finance, consisting of the publication (between 2019 and 2025) of several documents (RTS/ITS, Reports, Guidelines, EC Council) related to environmental, social and corporate governance (ESG). The EBA recommends that entities act proactively to incorporate these factors into both their risk management and strategy.

## Contents of the 2019 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.

This report provides the prudential information of BBVA Consolidated Group as of December 31, 2019 which has been prepared in accordance with the precepts contained in Part Eight of the CR, complying with the guidelines published by EBA and the applicable technical implementation standards.

In this regard, Annex V of this report, available on the Group's website, gathers the correspondence of the articles of Part Eight of the CRR with the different sections of the document (or other public documents) where the required information is located.

In addition, the main EBA guidelines that apply as of December 31, 2019, as well as the standard formats used to disclose the information recommended by the various regulators 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 Executive Commission of the Bank of Spain in February 2015.
- Guidelines on disclosure requirements under Part Eight of Regulation (EU) No. 575/2013 (EBA/GL/2016/11). These guidelines provide guidance in relation to the

information that entities must disclose in application of the corresponding articles of the eighth part and with the presentation of said information. These guidelines were adopted by the Executive Commission of the Bank of Spain in October 2017.

- Guidelines on disclosure of the liquidity coverage ratio in order to complement the information on liquidity risk management in accordance with Article 435 of Regulation (EU) No. 575/2013 (EBA/GL/2017/01). These guidelines specify the general framework for the disclosure of information on risk management under Article 435 of Regulation (EU) No. 575/2013 in relation to liquidity risk, establishing a harmonized structure for the disclosure of the information required by Article 435, paragraph 1 of said Regulation. These guidelines were adopted by the Executive Commission of the Bank of Spain in July 2017.
- Guidelines on the disclosure of information on encumbered and unencumbered assets in accordance with Article 443 of Regulation (EU) No. 575/2013 (EBA/GL/2014/03), adopted by the Executive Commission of the Bank of Spain in September 2014 and that serve as the basis for the Delegated Regulation 2017/2295 of September 4 with regard to technical standards for disclosure of encumbered and unencumbered assets.
- Guidelines on the uniform disclosure of information under Article 473-bis of Regulation (EU) No.575/2013 with regard to the transitional provisions for mitigating the impact on Own funds from the introduction of IFRS 9 (EBA/GL/2018/01). These guidelines were adopted by the Executive Commission of the Bank of Spain in February 2018.

- Guidelines on appropriate remuneration policies under Articles 74, Paragraph 3 and 75, Paragraph 2, of Directive 2013/36/EU and disclosure of information under Article 450 of Regulation (EU) No 575/2013 (EBA/GL/2015/22). These guidelines were adopted by the Executive Commission of the Bank of Spain in July 2016.
- Guidelines for the disclosure of information on non-performing exposures and forborne exposures (EBA/GL/2018/10). These guidelines were adopted by the Executive Commission of the Bank of Spain in July 2019, where the first date of application was December 31, 2019.

It must be pointed out that the data published in the Prudential Relevance Report (Pillar 3) was prepared in accordance with internal control processes described in the “Standards for preparing annual financial information in the BBVA Group”. These policies ensure that the information disclosed in Pillar 3 is subject to the internal control framework defined by the Group, as well as adequate internal and external revision (by an independent expert), in compliance with the Guidelines on disclosure requirements under Part Eight of Regulation (EU) No.575/2013 (EBA/GL/2016/11).

Disclosure Requirements		
<b>Template</b>	<b>Countercyclical capital buffer - Commission Delegated Regulation (EU) 2015/1555</b>	<b>IRP Section</b>
	Geographical breakdown of relevant credit exposures for the calculation of the countercyclical capital buffer	Introduction
	Amount of entity-specific countercyclical capital buffer	Introduction
<b>Template</b>	<b>Disclosure requirements of the Third Pillar - Consolidated and enhanced framework- BCBS</b>	<b>IRP Section</b>
CC1	Composition of regulatory capital	Pillar III Annexes
CC2	Reconciliation of regulatory capital to balance sheet	1.1.4
<b>Template</b>	<b>ITS on disclosure for Own Funds by institutions (EBA/ITS/2013/01)</b>	<b>IRP Section</b>
	Capital instruments main features template	Pillar III Annexes
	Own funds disclosure template	Pillar III Annexes
<b>Template</b>	<b>Guidelines on uniform disclosure of IFRS 9 transitional arrangements (EBA/GL/2018/01)</b>	<b>IRP Section</b>
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	2.3
<b>Template</b>	<b>Guidelines on disclosure requirements EBA/GL/2016/11</b>	<b>IRP Section</b>
EU-OV1	Overview of RWAs	2.5
EU-LI1	Differences between the accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	1.1.4
EU-LI2	Main sources of the differences between the regulatory exposure amounts and carrying values in financial statements	1.1.4
EU-LI3	Outline of the differences in the scopes of consolidation (entity by entity)	Pillar III Annexes
EU-CR1-A	Credit quality of exposures by exposure class and instrument (excludes counterparty credit risk)	3.2.3.4
EU-CR1-B	Total and average net amount of exposures (includes counterparty credit risk)	3.2.3.2
EU-CR1-C	Geographical breakdown of exposures (includes counterparty credit risk)	3.2.3.3
EU-CR1-D	Credit quality of exposures by geography (excludes counterparty credit risk)	3.2.3.3
EU-CR1-E	Concentration of exposures by industry or counterparty types (excludes counterparty credit risk)	3.2.3.5
EU-CR1-B	Credit quality of exposures by industry or counterparty types (excludes counterparty credit risk)	3.2.3.5
EU-CR1-E	Maturity of exposures (excludes counterparty credit risk)	3.2.3.6
EU-CR2-A	Changes in the stock of general and specific credit risk adjustments	3.2.3.8
EU-CR2-B	Changes in the stock of defaulted and impaired loans and debt securities	3.2.3.8
EU-CR4	Standardized approach: credit risk exposure and credit risk mitigation effects	3.2.4.3
EU-CR5	Standardized approach	3.2.4.3
EU-CR6	IRB approach: credit risk exposures by exposure class and PD range	3.2.5.2
EU-CR9	IRB approach: backtesting of PD per exposure class	3.2.5.2
EU-CR8	RWA flow statements of credit risk and counterparty exposures under the IRB approach	3.2.5.2
EU-CR10 (1)	IRB: specialized lending	3.2.5.4
EU-CR10 (2)	IRB: equity	3.2.5.5
EU-CCR5-A	Impact of netting and collateral held on exposure values	3.2.6.2
EU-CCR1	Analysis of counterparty credit risk exposures by approach	3.2.6.2
EU-CCR3	Standardized approach: counterparty credit risk exposures by regulatory portfolio and risk	3.2.6.2.1
EU-CCR4	IRB approach: counterparty credit risk exposure by portfolio and PD scale	3.2.6.2.2
EU-CCR5-B	Composition of collateral for exposures to counterparty credit risk	3.2.6.2.3
EU-CCR6	Credit derivatives exposures	3.2.6.2.4
EU-CCR7	RWA flow statements of CCR exposures under the IMM	N/A
EU-CCR2	Credit valuation adjustment (CVA) capital charge	3.2.6.3
EU-CCR8	Exposures to central counterparty clearing houses	3.2.6.4
EU-CR3	Credit risk mitigation techniques overview	3.2.8.3
EU-MR1	Market risk under the standardized approach	3.3.3
EU-MR3	IMA values for trading portfolios	3.3.4.2.2
EU-MR2-A	Market risk under the internal model approach (IMA)	3.3.4.2.2
EU-MR2-B	RWA flow statements of market risk exposures under the IMA approach	3.3.4.2.2
EU-MR4	Trading book. Validation of the Market Risk Measurement Model	3.3.4.2.3
<b>Template</b>	<b>Guidelines on disclosure of non-performing and forborne exposures (EBA/GL/2018/10)</b>	<b>IRP Section</b>
NPL 1	Credit quality of forborne exposures	3.2.3.4
NPL 3	Credit quality of performing and non-performing exposures by past due days	3.2.3.3
NPL 4	Performing and non-performing exposures and related provisions	3.2.3.3
NPL 9	Collateral obtained by taking possession and execution processes	3.2.3.4

Template	Disclosure requirements for the Third Pillar – Consolidated and enhanced framework	IRP Section
SEC1	Securitization exposures in the banking book	3.2.7.5
SEC4	Securitization exposures in the banking book and associated capital requirements – bank acting as investor	3.2.7.6
SEC3	Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor	3.2.7.2
Template	Guidelines on prudent valuation adjustments (EBA/RTS/2014/06)	IRP Section
	Prudent Valuation Adjustments	3.3.4.2.1
Template	Guidelines on disclosure of liquidity information (EBA/GL/2017/01)	IRP Section
EU- LIQ1	LCR disclosure template	3.7.5
Template	Encumbered and unencumbered assets - Commission Delegated Regulation (EU) 2017/2295	IRP Section
Template A	Encumbered and unencumbered assets	3.7.6
Template B	Collateral received	3.7.6
Template C	Sources of encumbrance	3.7.6
Template	Leverage Ratio - Commission Implementing Regulation (EU) 2016/200	IRP Section
LRSum	Summary reconciliation of accounting assets and leverage ratio exposures	4.1
LRCom	Leverage ratio common disclosure	Pillar III Annexes
LRSpI	Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	Pillar III Annexes
Template	Guidelines on remuneration policies (EBA/GL/2015/22)	IRP Section
	Total remuneration of Identified Staff in 2019	5.8
	Extraordinary remuneration of the Identified Staff in 2019	5.8
	Deferred variable remuneration from periods prior to 2019	5.8
	Remunerations of the identified staff in 2019 by activity areas	5.8
	Number of individuals with total remuneration in excess of €1 million in 2019	5.8

## Composition of Capital

### Regulatory capital requirements

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

- 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.
- 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.
- 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, in accordance with CRD IV, credit institutions must comply with the combined requirement of capital buffers at all times, as of 2016. This additional capital requirement has incorporated five new capital buffers: (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 has not appeared on the said list since November 2015 (effective January 1, 2017), the G-SIB buffer does not apply to BBVA.

For more details on the quantitative indicators for assessing global systemically important entities, see the document “G-SIBs Information” in the [Shareholders and Investors/ Financial Information](#) section of the Group’s website.

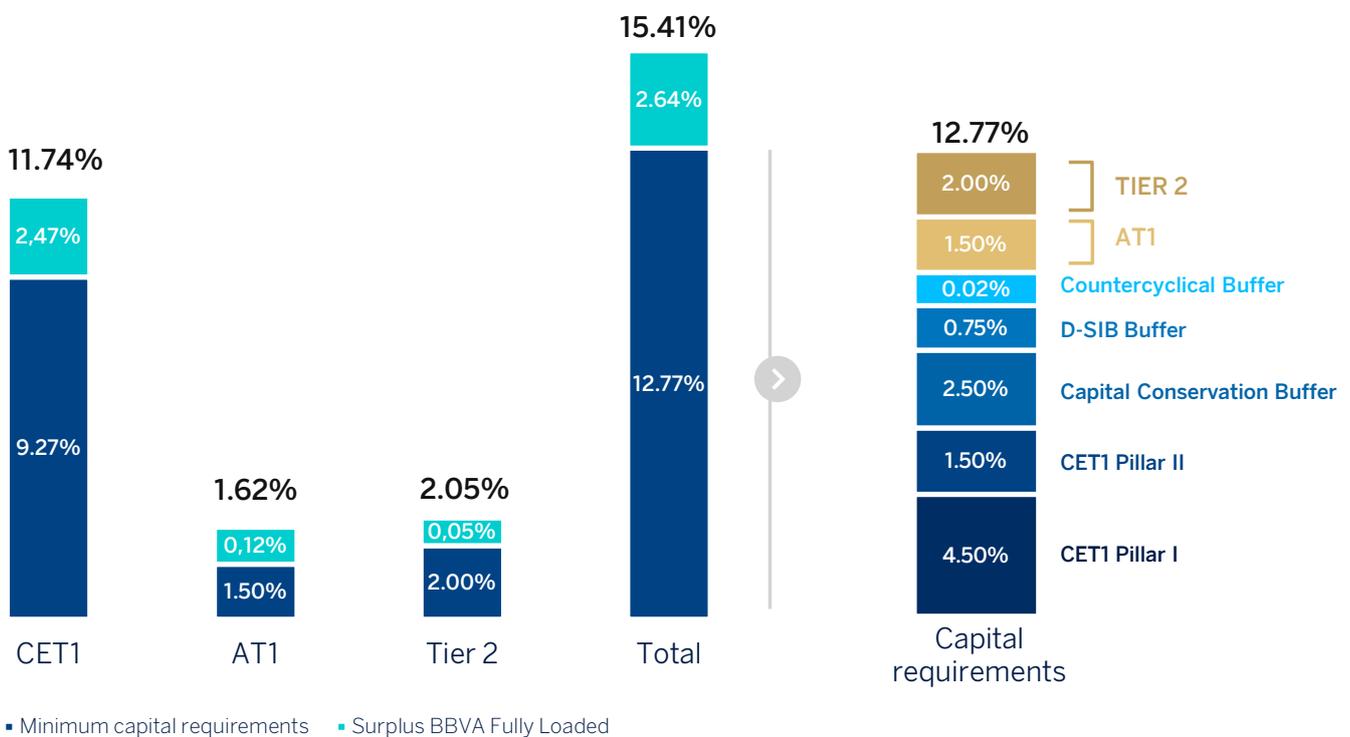
The Bank of Spain has extensive discretionary powers as regards the countercyclical capital buffer specific to each bank, the buffer for other systemically important financial institutions (which are those institutions considered to be systemically important domestic financial institutions “D-SIB”) and 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).

In December 2015, the Bank of Spain agreed to set the countercyclical capital buffer that applies to credit exposure in Spain at 0% as of January 1, 2016. These percentages will be reviewed every quarter, as the Bank of Spain decided in December 2019 to keep the countercyclical capital buffer at 0% for the first quarter of 2020.

After the supervisory review and evaluation process (SREP) conducted by the ECB, the BBVA Group was notified in December 2019 that, as of January 1, 2020, they would need to maintain a phased-in and fully loaded ratio (i) CET1 of 9.27% at the consolidated level and 8.53% at the individual level and (ii) a total capital ratio of 12.77% at the consolidated level and 12.03% at the individual level.

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 (1.5%), which remains at the same level as established after the last SREP; v) the capital conservation buffer (2.5% of CET1); vi) the capital buffer for Other Systemically Important Institutions (O-SIIs) (0.75% of CET1); and vii) the countercyclical capital buffer (0.02% of CET1).

Chart 1. Capital Requirements and capital ratios (fully loaded)



As of December 31, 2019, BBVA maintains a CET1 ratio and a fully loaded total ratio of 11.74% and 15.41%, respectively (in phased-in terms, CET1 and a total ratio of 11.98% and 15.92%, respectively) reinforcing its capital position in the Group this year.

The following table shows the distribution by geographic areas of the credit exposure for calculation of the countercyclical capital buffer:

Table 1. Geographical breakdown of relevant credit exposures for the calculation of the countercyclical capital buffer (Million Euros, 12-31-19)

	General credit exposures <sup>(1)</sup>		Trading book exposure		Securitization exposure		Own funds requirements			Own funds requirements weights	Counter-cyclical capital buffer rate	
	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	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitization exposures			Total
<b>Geographical breakdown</b>												
Bulgary	6	3	-	-	-	-	1	-	-	1	0.00%	0.50%
Denmark	12	53	-	2	-	-	2	0	-	2	0.01%	1.00%
Slovakia	14	156	-	-	-	-	21	-	-	21	0.10%	1.50%
France	223	8,017	-	64	-	-	186	2	-	188	0.90%	0.25%
Hong Kong	24	2,432	-	-	-	-	30	-	-	30	0.14%	2.00%
Ireland	21	774	-	4	-	-	23	0	-	23	0.11%	1.00%
Iceland	0	0	-	0	-	-	0	0	-	0	0.00%	1.75%
Lithuania	0	0	-	-	-	-	0	-	-	0	0.00%	1.00%
Norway	20	15	-	5	-	-	1	0	-	1	0.01%	2.50%
United Kingdom	502	6,230	-	34	-	-	197	2	-	199	0.95%	1.00%
Czech Republic	14	7	-	-	-	-	1	-	-	1	0.01%	1.50%
Sweden	3	239	-	1	-	-	18	0	-	18	0.09%	2.50%
<b>Total countries with countercyclical capital buffer established</b>	<b>839</b>	<b>17,928</b>	<b>-</b>	<b>110</b>	<b>-</b>	<b>-</b>	<b>479</b>	<b>5</b>	<b>-</b>	<b>483</b>	<b>2.30%</b>	<b>-</b>
Argentina	6,612	413	100	-	-	-	297	5	-	302	1.44%	-
Colombia	14,964	735	1,671	5	-	-	819	12	-	831	3.96%	-
Spain	31,379	170,913	4	12	30	2,794	5,489	1	68	5,558	26.48%	-
United States	79,598	19,366	1,045	153	5,915	-	4,485	7	4	4,495	21.41%	-
Mexico	38,968	43,134	84	253	20	-	3,521	29	1	3,551	16.92%	-
Peru	23,349	943	820	0	-	-	1,181	4	-	1,184	5.64%	-
Portugal	4,396	654	14	9	-	-	269	0	-	270	1.28%	-
Turkey	55,361	703	1,950	0	-	-	2,977	2	-	2,979	14.19%	-
<b>Total countries with a 0% countercyclical buffer or without countercyclical capital buffer (with own funds requirements greater than 1%)</b>	<b>254,627</b>	<b>236,861</b>	<b>5,688</b>	<b>432</b>	<b>5,965</b>	<b>2,794</b>	<b>19,038</b>	<b>59</b>	<b>73</b>	<b>19,170</b>	<b>91.32%</b>	<b>-</b>
Other areas	11,759	27,857	99	253	-	-	1,330	8	-	1,339	6.38%	-
<b>Total countries without countercyclical capital buffer (with own funds requirements less than 1%)</b>	<b>11,759</b>	<b>27,857</b>	<b>99</b>	<b>253</b>	<b>-</b>	<b>-</b>	<b>1,330</b>	<b>8</b>	<b>-</b>	<b>1,339</b>	<b>6.38%</b>	<b>-</b>
<b>Total</b>	<b>267,225</b>	<b>282,645</b>	<b>5,787</b>	<b>795</b>	<b>5,965</b>	<b>2,794</b>	<b>20,847</b>	<b>72</b>	<b>73</b>	<b>20,993</b>	<b>100.00%</b>	<b>-</b>

<sup>(1)</sup> Credit exposure excludes exposures to Central Governments or Central Banks, Regional Governments or Local Authorities, Public sector entities, Multilateral Development Banks, International Organizations and Institutions in accordance with art. 140.4 of Directive 2013/36/EU.

	Amount
Total risk exposure amount	364,448
Institution specific countercyclical buffer rate <sup>(2)</sup>	0.02%
Institution specific countercyclical buffer requirement	71

<sup>(2)</sup> Countercyclical capital buffer calculated as of December 2019 in accordance with Commission Delegated Regulation (EU) 2015/1555

## Leverage ratio

In order to provide the financial system with a metric that serves as a backstop to capital levels, irrespective of the credit risk, a measure complementing all the other capital indicators has been incorporated into Basel III and transposed to the solvency regulations. This measure, the leverage ratio, can be used to estimate the percentage of assets and off-balance sheet items financed with Tier 1 capital.

Although the book value of the assets used in this ratio is adjusted to reflect the bank's current or potential leverage with a given balance sheet position, the leverage ratio is intended to be an objective measure that may be reconciled with the financial statements.

As of December 31, 2019, the Group had a leverage ratio (fully loaded) of 6.68% and a phased-in ratio of 6.80%, above the minimum required ratio of 3% and continuing to compare very favorably with the rest of the peer group.



# 1. General information requirements

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

### 1.1.1. Corporate name and scope of application

Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter the "Bank" or "BBVA") is a private law entity subject to the rules and regulations of the banking entities operating in Spain and carries out its activity through branches and agencies throughout the country and abroad.

The bylaws and other public information are available for consultation at the Bank's registered office (Plaza San Nicolás, 4, Bilbao) and on its website ([www.bbva.com](http://www.bbva.com)).

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

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

The Group's Consolidated Annual Accounts are presented in accordance with the International Financial Reporting Standards adopted by the European Union (hereinafter referred to as 'IFRS-EU') applicable as of December 31, 2019, considering the Bank of Spain Circular 4/2017, and its successive modifications and the other provisions of the financial reporting framework applicable to the Group in Spain.

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:

- 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.
- 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.

- 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 Group's Consolidated Annual Accounts, 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 Group's Consolidated Financial Statements.

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 Group's Consolidated Annual Accounts.

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 Group's Consolidated Annual Accounts 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 details of these companies can be found in the Annexes in the file Pillar 3 2019 Annexes available in the section for **Shareholders and Investors / Financial Information** on the Group's website.

### 1.1.3. Main changes in the Group in the 2019 financial year

On August 7, 2019, BBVA reached an agreement with Banco GNB Paraguay S.A., a subsidiary of the Gilinski Financial Group, for the sale of its direct and indirect shareholding in Banco Bilbao Vizcaya Argentaria Paraguay, S.A. ("BBVA Paraguay"). BBVA's total direct and indirect stake in BBVA Paraguay is 100% of its share capital.

The estimated gain net of taxes calculated as of the date of this report will amount to approximately 40 million euros and the positive impact on the Group's Common Equity Tier 1 (fully loaded) would be approximately 6 basis points. It is estimated that the operation will close during the first quarter of 2020, once the relevant authorizations have been received.

As a result of the above, in the Group's consolidated public balance sheet, all the items in BBVA Paraguay's balance sheet have been reclassified to the category of "Non-current assets (liabilities) and divested groups of items classified as held for sale", but not for the purposes of the regulatory perimeter where such reclassification has not been carried out.

For more information on the main transactions during the year, see Note 3 of the Group's Consolidated Annual Accounts.

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

Consolidated Annual Accounts) and the book balances this report uses (regulatory perimeter), revealing the main differences between both perimeters.

This section includes an exercise in transparency to show the reconciliation process between the book balances reported in the Public Balance Sheet (attached to the Group's

**Table 2.** CC2 - Reconciliation of regulatory capital to balance sheet (Million Euros. 12-31-19)

Public Balance Sheet Headings	Public Balance Sheet	Regulatory balance sheet	Referece to template CC1
Cash, cash balances at central banks and other demand deposits	44,303	44,496	
Financial assets held for trading	102,688	103,454	
Non-trading financial assets mandatorily at fair value through profit or loss	5,557	1,692	
Financial assets designated at fair value through profit or loss	1,214	-	
Financial assets at fair value through accumulated other comprehensive income	61,183	45,888	
Financial assets at amortized cost	439,162	433,158	
Derivatives - Hedge accounting	1,729	1,610	
Fair value changes of the hedged items in portfolio hedges of interest rate risk	28	28	
Joint ventures and associates	1,488	4,520	
Insurance and reinsurance assets	341	-	
Tangible assets	10,068	9,797	
Intangible assets	6,966	6,875	g)
Tax assets	17,083	16,733	
Of which: deferred tax assets	15,318	15,051	h)
Other assets	3,800	5,723	
Non-current assets and disposal groups classified as held for sale <sup>(1)</sup>	3,079	3,082	
<b>Total Assets</b>	<b>698,690</b>	<b>677,054</b>	
Financial liabilities held for trading	89,633	89,843	
Financial liabilities designated at fair value through profit or loss	10,010	4,656	
Financial liabilities at amortized cost	516,641	512,709	o) p) r)
Derivatives - Hedge accounting	2,233	2,076	
Fair value changes of the hedged items in portfolio hedges of interest rate risk	-	-	
Liabilities under insurance and reinsurance contracts	10,606	-	
Provisions	6,538	5,946	
Tax liabilities	2,808	1,861	
Of which: deferred tax liabilities	1,928	1,100	
Other liabilities	3,742	3,696	
Liabilities included in disposal groups classified as held for sale	1,554	1,557	
<b>Total liabilities</b>	<b>643,765</b>	<b>622,345</b>	
Capital	3,267	3,267	a)
Share premium	23,992	23,992	a)
Equity instruments issued other than capital	-	-	b)
Other equity	56	56	b)
Retained earnings	26,402	26,142	b)
Revaluation reserves	-	-	b)
Other reserves	(125)	83	b)
Less: treasury shares	(62)	(62)	l)
Profit or loss attributable to owners of the parent	3,512	3,469	e)
Less: interim dividend	(1,084)	(1,084)	e)
Accumulated other comprehensive income (loss)	(7,235)	(7,287)	c) i) k)
Minority interests	6,201	6,133	
<b>Total equity</b>	<b>54,925</b>	<b>54,709</b>	
<b>Total equity and total liabilities</b>	<b>698,690</b>	<b>677,054</b>	

<sup>(1)</sup> These headings include BBVA Paraguay's assets and liabilities (see section 1.1.3.).

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 -22,352 million euros; and balance entries generated by entities that are consolidated

using the proportional integration method for an amount of +716 million euros.

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

**Table 3.** EU LII - Differences between the accounting and regulatory scopes of consolidation and the mapping of the financial statements categories with regulatory risk categories (Million Euros, 12-31-19)

	Carrying values as reported in published financial statements	Carrying Values under scope of regulatory consolidation	Carrying values of items <sup>(1)</sup>				
			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
<b>Assets</b>							
Cash, cash balances at central banks and other demand deposits	44,303	44,496	44,496	-	-	-	-
Financial assets held for trading	102,688	103,454	10,272	68,914	-	103,454	-
Non-trading financial assets mandatorily at fair value through profit or loss	5,557	1,692	1,689	-	2	-	-
Financial assets designated at fair value through profit or loss	1,214	-	-	-	-	-	-
Financial assets at fair value through accumulated other comprehensive income	61,183	45,888	43,750	-	1,816	-	322
Financial assets at amortized cost	439,162	433,158	426,155	1,689	4,929	-	385
Derivatives - Hedge accounting	1,729	1,610	-	1,610	-	-	-
Fair value changes of the hedged items in portfolio hedges of interest rate risk	28	28	-	-	-	-	28
Joint ventures and associates	1,488	4,520	4,454	-	-	-	66
Insurance and reinsurance assets	341	-	-	-	-	-	-
Tangible assets	10,068	9,797	9,797	-	-	-	-
Intangible assets	6,966	6,875	-	-	-	-	6,875
Tax assets <sup>(2)</sup>	17,083	16,733	15,312	-	-	-	1,420
Other assets <sup>(3)</sup>	3,800	5,723	3,626	-	-	-	2,097
Non-current assets and disposal groups classified as held for sale <sup>(4)</sup>	3,079	3,082	3,082	-	-	-	-
<b>Total assets</b>	<b>698,690</b>	<b>677,054</b>	<b>562,634</b>	<b>72,213</b>	<b>6,747</b>	<b>103,454</b>	<b>11,193</b>
<b>Liabilities</b>							
Financial liabilities held for trading	89,633	89,843	-	41,852	-	89,843	-
Financial liabilities designated at fair value through profit or loss	10,010	4,656	-	-	-	-	4,656
Financial liabilities at amortized cost	516,641	512,709	-	4,054	-	-	508,655
Derivatives - Hedge accounting	2,233	2,076	-	2,076	-	-	-
Fair value changes of the hedged items in portfolio hedges of interest rate risk	-	-	-	-	-	-	-
Liabilities under insurance and reinsurance contracts	10,606	-	-	-	-	-	-
Provisions	6,538	5,946	711	-	-	-	5,235
Tax liabilities <sup>(3)</sup>	2,808	1,861	997	-	-	-	863
Other liabilities	3,742	3,696	-	-	-	-	3,696
Liabilities included in disposal groups classified as held for sale <sup>(4)</sup>	1,554	1,557	-	-	-	-	1,557
<b>Total Liabilities</b>	<b>643,765</b>	<b>622,345</b>	<b>1,709</b>	<b>47,983</b>	<b>-</b>	<b>89,843</b>	<b>524,662</b>

<sup>(1)</sup> 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.

<sup>(2)</sup> Deferred tax assets that depend on future income, reduced by the amount of deferred tax liabilities (Article 38 of CCR) amount to 3,271 million euros and have a risk weight of 250%, accordance to Article 48 of CCR.

<sup>(3)</sup> The amount of other assets includes 2,097 million euros corresponding to insurance contracts linked to pensions, are not subject to capital requirements.

<sup>(4)</sup> These headings include BBVA Paraguay's assets and liabilities (see section 1.1.3.).

A table summarizing the main sources of the differences between the amount of exposure in regulatory terms (EAD)

and the book balances according to the Financial Statements is presented below:

**Table 4.** EU LI2 - Main sources of the differences between regulatory original exposure amounts and carrying values in financial statements (Million Euros. 12-31-2019)

	Items subject to:				
	Total	Credit risk framework	Counterparty credit risk framework	Securitisation framework	Market risk framework
<b>Asset carrying value amount under scope of regulatory consolidation (as per template LI1)</b>	<b>745,048</b>	<b>562,634</b>	<b>72,213</b>	<b>6,747</b>	<b>103,454</b>
<b>Liabilities carrying value amount under regulatory scope of consolidation</b>	<b>139,535</b>	<b>1,709</b>	<b>47,983</b>	<b>-</b>	<b>89,843</b>
<b>Total net amount under regulatory scope of consolidation</b>	<b>(157,479)</b>	<b>63,291</b>	<b>(23,575)</b>	<b>(3,899)</b>	<b>(193,297)</b>
Amount of off-balance-sheet	181,205	181,205	-	-	-
Counterparty credit risk in derivatives (includes the add-on)	14,708	-	14,708	-	-
Differences due to netting agreements (netting, long/short positions)	(221,922)	(4,449)	(24,176)	-	(193,297)
Accounting Provisions <sup>(1)</sup>	4,867	4,867	-	-	-
Credit risk mitigation techniques (CRM)	(16,935)	1,070	(14,106)	(3,899)	-
Credit conversion factors (CCF)	(118,314)	(118,314)	-	-	-
Other	(1,088)	(1,088)	-	-	-
<b>Exposure amounts considered for regulatory purposes</b>	<b>727,103</b>	<b>627,634</b>	<b>96,621</b>	<b>2,848</b>	<b>-</b>

<sup>(1)</sup> Includes provisions for exposures to credit risk under advanced method. The provisions for credit risk exposure using the standard method, amounting to 8,529 million euros, are not included.

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

As of December 31, 2019, there are no entities in the Group with capital adequacy below the minimum regulatory requirement that apply to it.

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.

The Group operates mainly in Spain, Mexico, the United States, 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.

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.

## 1.3. 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.

Additionally, Banco Bilbao Vizcaya Argentaria Portugal S.A. has been merged by absorption by BBVA S.A., and will continue operating in Portugal through a branch. As a result of this merger, BBVA Portugal S.A. ceases to have legal personality and, therefore, is not subject to supervision.

# 2. Own Funds and Capital

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## 2.1. Characteristics of the eligible capital resources

For the purposes of calculating minimum capital requirements, according to Regulation (EU) 575/2013 and subsequent amendments, which enter into force on June 27, 2019 (CRR), 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 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 overall results.
- 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 authorized by the supervisor (following the treatment set out in Article 5 of Decision (EU) 2015/656 of the ECB).

Furthermore, basic bank capital is adjusted mainly through the following deductions:

- f. **Additional value adjustments:** the adjustments arising from the prudent valuation of the positions at fair value are included, 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.

- h. **Deferred tax assets:** these are understood to be assets for deferred taxes that depend on future returns, excluding those deriving 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 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 securities booked as bank 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 finance for own shares, synthetic treasury stock and own securities.
- m. **Securitization:** any instance of securitization that receives a risk weighting of 1.250% is included, as set out in Article 36.1 k) ii) of the CRR.
- n. **Other CET1 deductions:** other CET1 deductions are included according to the CRR, which were not recognized in the above headings, such as losses and gains at fair value arising from the entity's own credit risk related to derivative liabilities (DVA).

Additionally, as outlined in Article 473 bis of the CRR, the Group has decided to apply transitional provisions to mitigate the impact on of the introduction of IFRS 9 on own funds, which allows the impact to be recognized progressively during a transitional period of 5 years (2018-2022).

Other deductions that may be applicable are significant stakes in financial institutions and assets for deferred taxes

arising from temporary differences that exceed the 10% limit of the CET1, and the deduction for exceeding the overall 17.65% limit of the CET1 according to Article 48.2 of the CRR. As of December 31, 2019, these stakes are held at levels below the limits indicated, with no deductions to that effect being applicable.

However, as of December 31, 2019, the Group no longer holds stakes in financial institutions that are not subject to deduction for exceeding the indicated limits (article 49 of the CRR) and, therefore, the standard template of the EBA INS1 shall not be applicable.

In addition, the Group includes as total eligible bank capital the additional Tier 1 capital instruments defined in Articles 51, 52, 85, 86 and 484 of the CRR, including the corresponding adjustments, in accordance with Article 472 of the CRR:

- 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. **Elements referred to in Article 484.4 of the CRR:** this section includes preferred securities issued by the Group.
- q. **Qualifying Tier 1 capital included in the consolidated additional capital issued by affiliates and held by third parties:** included as additional consolidated Tier 1 capital is the amount of Tier 1 capital from the subsidiaries, calculated in accordance with Article 85 and 86 of the CRR.

Finally, the Group also includes Tier 2 as eligible bank capital. Along with the guidelines established in Article 87 of the CRR, it is made up of the following elements:

- r. **Capital instruments and Tier 2 share premiums:** Understood as the funding that, for credit seniority purposes, comes behind all the common creditors. The issues, moreover, have to fulfill a number of conditions, which are laid out in Article 63 of the CRR.
- s. **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.
- t. **Credit risk adjustments:** a calculation is made of the surplus resulting between the allowances for impairment losses on assets and provisions for risk related to exposure calculated as per the IRB approach and the losses they are expected to incur, for the part that is below 0.6% of the risk-weighted exposure.

The Annex available on the Group's website presents the Group's issuance of perpetual contingent convertible securities and issuance of preference shares, which as explained above, form part of additional Tier 1 capital.

This Annex also details the Group's issues of subordinated debt as of December 31, 2019, calculated as Tier 2 capital.

## 2.2. Amount of own funds

The amount of total eligible capital, net of deductions, for the different items making up the capital base as of December 31, 2019 and 2018, respectively, is below, in accordance with the requirements for the disclosure of information related

to regulatory own funds established by the Commission's Implementing Regulation (EU) No 1423/2013 of December 20, 2013:

Table 5. Amount of capital (CC1) (Million Euros)

Reference to template CC2 <sup>(1)</sup>	12-31-2019	12-31-2018 <sup>(2)</sup>
a) Capital and share premium	27,259	27,259
b) Retained earnings	26,960	23,773
c) Other accumulated earnings and other reserves	(7,157)	(7,143)
d) Minority interests eligible as CET1	4,404	3,809
e) Net profit of the year attributed to the Group	1,316	3,188
<b>Common Equity Tier 1 Capital before other regulatory adjustments</b>	<b>52,783</b>	<b>50,887</b>
f) Additional value adjustments	(302)	(356)
g) Intangible assets	(6,803)	(8,199)
h) Deferred tax assets	(1,420)	(1,260)
i) Fair value reserves related to gains or losses on cash flow hedges	69	35
j) Expected losses in equity	-	-
k) Profit or losses on liabilities measured at fair value	(24)	(116)
l) Direct, indirect and synthetic holdings of own instruments	(484)	(432)
m) Securitisation tranches at 1250%	(25)	(34)
n) Other CET1 deductions	(142)	(211)
<b>Total Common Equity Tier 1 regulatory adjustments</b>	<b>(9,130)</b>	<b>(10,573)</b>
<b>Common Equity Tier 1 (CET1)</b>	<b>43,653</b>	<b>40,313</b>
o) Equity instruments and AT1 share premium	5,280	4,863
p) Elements referred in Article 484(4) of the CRR	120	142
q) Qualifying Tier 1 capital included in consolidated AT1 capital issued by subsidiaries and held by third parties	648	629
<b>Additional Tier 1 before regulatory adjustments</b>	<b>6,048</b>	<b>5,634</b>
<b>Total regulatory adjustments of Additional Tier 1</b>	<b>-</b>	<b>-</b>
<b>Additional Tier 1 (AT1)</b>	<b>6,048</b>	<b>5,634</b>
<b>Tier 1 (Common Equity Tier 1+Additional Tier 1)</b>	<b>49,701</b>	<b>45,947</b>
r) Equity instruments and Tier 2 share premiums	3,064	3,768
s) Admissible shareholders' funds instruments included in consolidated Tier 2 issued by subsidiaries and held by third parties	4,690	4,409
-Of which: instruments issued by subsidiaries subject to ex-subsidiary stage	921	37
t) Credit risk adjustments	550	579
<b>Tier 2 before regulatory adjustments</b>	<b>8,304</b>	<b>8,756</b>
<b>Tier 2 regulatory adjustments</b>	<b>-</b>	<b>-</b>
<b>Tier 2</b>	<b>8,304</b>	<b>8,756</b>
<b>Total Capital (Total capital = Tier 1 + Tier 2)</b>	<b>58,005</b>	<b>54,703</b>
<b>TOTAL RWA's</b>	<b>364,448</b>	<b>348,264</b>
CET 1 (phased-in)	11.98%	11.58%
CET 1 (fully loaded)	11.74%	11.34%
TIER 1 (phased-in)	13.64%	13.19%
TIER 1 (fully loaded)	13.37%	12.91%
Total Capital (phased-in)	15.92%	15.71%
Total Capital (fully loaded)	15.41%	15.45%

<sup>(1)</sup> As of December 31, 2019, the difference between phased-in and fully loaded ratios arises from the transitional treatment of certain capital elements, mainly the impact of IFRS9, to which the BBVA Group has voluntarily adhered (in accordance with the article 473 bis of the CRR). See paragraph 2.3 for more information on the transitional impact of IFRS9.

<sup>(2)</sup> References to regulatory balance sheet items (CC2) reflecting the different items described.

<sup>(3)</sup> As a result of the amendment to IAS 12 "Income Tax" as explained in Note 2.3 of the Group's Consolidated Financial Statements, and in order to make the information comparable, the information for the 2018 financial year has been restated, with no impact on either consolidated equity or regulatory capital.

As of December 31, 2019, Common Equity Tier 1 (CET1) phased-in<sup>3</sup> stood at 11.98% (with a fully loaded ratio of 11.74%), including the impact of the first application of IFRS 16 which entered into force on January 1, 2019 (-11 basis points), which represents a growth of 40 basis points from December 2018, mainly supported by the profit generation, net of dividend payments and remuneration of contingent convertible capital instruments (hereinafter CoCos), notwithstanding the moderate growth of risk-weighted assets.

It should be noted that the impairment of the goodwill in the United States recognized by the Group amounting to 1.318 billion euros has no impact on the regulatory own funds.

The Additional Tier 1 phased-in capital (AT1) stood at 1.66% at December 31, 2019. In this regard, BBVA S.A. carried out an issuance of €1.0 billion CoCos, registered at the Spanish Securities Market Commission (CNMV) and another issuance of the same type of instruments, registered in the Securities Exchange Commission (SEC), for \$1.0 billion.

On the other hand, in February 2020, the CoCos issuance of €1.5 billion issued in February 2015 will be amortized. As at December 31, 2019, it is no longer included in the capital ratios.

Finally, in terms of issues eligible as Tier 2 capital, BBVA S.A. issued a €750 million subordinated debt and carried out the early redemption of two subordinated debt issuances; one for €1.5 billion redeemed in April 2019, and another

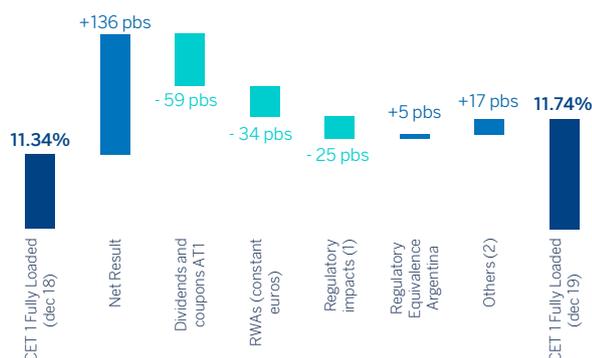
3 This phased-in CET1 ratio takes into account the impact of the first implementation of the IFRS 9 standard. In this context, the Parliament and the European Commission have established transitional arrangements that are voluntary for the institutions, adapting the impact of IFRS 9 on capital ratios. The Group has informed the supervisory body of its adherence to these arrangements

issued in June 2009 by Caixa d'Estalvis de Sabadell with an outstanding nominal amount of €4.9 million and redeemed in June 2019.

With regard to the other subsidiaries of the Group, BBVA Mexico carried out a Tier 2 issuance of USD 750 million and partially repurchased two subordinate issuances (\$250 million due in 2020 and \$500 million due in 2021). For its part, Garanti BBVA issued another Tier 2 issuance of TRY 253 million.

All of this, together with the evolution of the remaining elements eligible as Tier 2 capital, set the Tier 2 phased-in ratio at 2.28% as of December 31, 2019. In addition, in the first months of 2020, two subordinated debt issuances eligible as Tier 2 were issued, one of €1.0 billion issued by BBVA, S.A. and another of TRY 750 million issued by Garanti BBVA. These issuances will be included in the capital ratios for the first quarter of 2020 with an estimated impact of approximately +28 basis points on the Tier 2 ratio.

Chart 2. Annual evolution of the CET1 fully loaded ratio



<sup>(1)</sup> Includes impacts of IFRS 16 (-11pbs) and TRIMs (-14pbs).

<sup>(2)</sup> Others mainly include the contribution of minority interests eligible as CET1 and market impacts, such as exchange rate impacts and developments of the Held to Collect & Sell portfolio.

These levels are above the requirement established by the supervisor in his application letter in 2019, and above the regulatory requirements applicable to him as of January 1, 2020.

In November 2019, BBVA received a new communication from the Bank of Spain regarding its minimum requirement for own funds and eligible liabilities (MREL), as determined by the Single Resolution Board, that was calculated taking into account the financial and supervisory information as of

December 31, 2017.

In accordance with such communication, BBVA has to reach, by January 1, 2021, an amount of own funds and eligible liabilities equal to 15.16% of the total liabilities and own funds of its resolution group, on sub-consolidated basis (the MREL requirement). Within this MREL, an amount equal to 8.01% of the total liabilities and own funds shall be met with subordinated instruments (the subordination requirement), once the relevant allowance is applied.

This MREL requirements equal to 28.50% in terms of risk-weighted assets (RWAs), while the subordination requirement included in the MREL requirement is equal to 15.05% in terms of RWAs, once the relevant allowance has been applied.

In order to comply with this requirement, BBVA has continued its program during 2019 by closing three non-preferred debt, for a total of €3.0 billion, of which one in green bonds by €1.0 billion. In addition, BBVA issued a senior preferred debt of €1.0 billion. Moreover, during the first two months of 2020, BBVA has issued a senior non-preferred debt of €1.25 billion and another of 0.16 billion Swiss francs. The Group estimates that the current own funds and eligible liabilities structure of the resolution group meets the MREL requirement, as well as the new subordination requirement.

For its part, Risk-weighted assets (RWAs) increased by approximately 16.1 billion euros in 2019 as a result of activity growth, mainly in emerging markets and the incorporation of regulatory impacts (the application of IFRS 16 standard and TRIM - Targeted Review of Internal Models) for approximately 7.6 billion euros (which have had an impact on the CET1 ratio of -25 basis points). It should be noted that during the second quarter of the year the recognition by the European Commission of Argentina as a country whose supervisory and regulatory requirements are considered equivalent<sup>4</sup> had a positive effect on the evolution of the RWAs.

The characteristics of the main capital instruments are shown in Annex III, available on the Group's website, in accordance with Commission Implementing Regulation (EU) No 1423/2013 of December 20, 2013.

The process of reconciliation between accounting own funds and regulatory own funds is shown below. Based on the shareholders' equity reported in the Group's Consolidated Annual Accounts and applying the deductions and adjustments shown in the table below, we arrive at the regulatory capital figure eligible for solvency purposes:

<sup>4</sup> On April 1, 2019, the Official Journal of the European Union published Commission Implementing Decision (EU) 2019/536, which includes Argentina within the list of third countries and territories whose supervisory and regulatory requirements are considered equivalent for the purposes of the treatment of exposures in accordance with Regulation (EU) No. 575/2013.

**Table 6.** Reconciliation of the Public Balance Sheet from the accounting perimeter to the regulatory perimeter (Million Euros)

Eligible capital own funds	12-31-2019	12-31-2018 <sup>(2)</sup>
Capital	3,267	3,267
Share premium	23,992	23,992
Retained earnings, revaluation reserves and other reserves	26,277	23,021
Other equity	56	50
Less: Treasury shares	(62)	(296)
Attributable to the parent company	3,512	5,400
Attributable dividend	(1,084)	(1,109)
<b>Total equity</b>	<b>55,958</b>	<b>54,326</b>
Accumulated other comprehensive income (Loss)	(7,235)	(7,215)
Non-controlling interest	6,201	5,764
<b>Shareholders' equity</b>	<b>54,925</b>	<b>52,874</b>
Goodwill and other intangible assets	(6,803)	(8,199)
Direct and synthetic treasury shares	(422)	(135)
<b>Deductions</b>	<b>(7,225)</b>	<b>(8,334)</b>
Differences from solvency and accounting level	(215)	(176)
<b>Equity not eligible at solvency level</b>	<b>(215)</b>	<b>(176)</b>
<b>Other adjustments and deductions<sup>(3)</sup></b>	<b>(3,832)</b>	<b>(4,049)</b>
<b>Common Equity Tier 1 (CET 1)</b>	<b>43,653</b>	<b>40,313</b>
<b>Additional Tier 1 before Regulatory Adjustments</b>	<b>6,048</b>	<b>5,634</b>
<b>Tier 1</b>	<b>49,701</b>	<b>45,947</b>
<b>Tier 2</b>	<b>8,304</b>	<b>8,756</b>
<b>Total Capital (Tier 1 + Tier 2)</b>	<b>58,005</b>	<b>54,703</b>
<b>TOTAL Minimum capital required<sup>(1)</sup></b>	<b>46,540</b>	<b>41,576</b>

<sup>(1)</sup> Calculated over minimum total capital applicable for each period.

<sup>(2)</sup> As a result of the amendment to IAS 12 "Income Tax" as explained in Note 2.3 of the Group's Consolidated Financial Statements, and in order to make the information comparable, the information for the 2018 financial year has been restated, with no impact on either consolidated equity or regulatory capital.

<sup>(3)</sup> Other adjustments and deductions includes the amount of minority interest not eligible as capital, amount of dividends not distributed and other deductions and filters set by the CRR.

## 2.3. IFRS 9 Transitional Arrangements

Following the guidelines of the EBA (EBA/GL/2018/01), the following is a summary of own funds, capital adequacy

ratios, leverage ratio with and without the application of the transitional provisions of IFRS 9 or the analogous ECL.

**Table 7.** 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 (Million euros)

Own funds (million euros)	12-31-2019	09-30-2019	06-30-2019	03-31-2019	12-31-2018
CET1 Capital	43,653	43,432	42,329	41,784	40,313
CET1 Capital without IFRS9 transitional arrangement or similar ECL	42,844	42,623	41,520	40,975	39,449
Tier 1 Capital (T1)	49,701	51,035	48,997	47,455	45,947
Tier 1 Capital (T1) without IFRS9 transitional arrangement or similar ECL	48,892	50,226	48,188	46,646	45,083
Total Capital	58,005	59,731	56,941	54,797	54,703
Total Capital without IFRS9 transitional arrangement or similar ECL	57,196	58,922	56,132	53,988	53,839
<b>Risk-weighted assets (million euros)</b>					
Total Risk-weighted assets	364,448	368,196	360,069	360,679	348,264
Total Risk-weighted assets without IFRS9 transitional arrangement or similar ECL	364,943	368,690	360,563	361,173	348,804
<b>Capital ratio</b>					
CET1 Capital (as a percentage of total exposure to risk)	11.98%	11.80%	11.76%	11.58%	11.58%
CET1 Capital (as a percentage of total exposure to risk) without IFRS9 transitional arrangement or similar ECL	11.74%	11.56%	11.52%	11.35%	11.31%
Tier 1 Capital (T1) (as a percentage of total exposure to risk)	13.64%	13.86%	13.61%	13.16%	13.19%
Tier 1 Capital (T1) (as a percentage of total exposure to risk) without IFRS9 transitional arrangement or similar ECL	13.40%	13.62%	13.36%	12.92%	12.93%
Total Capital (as a percentage of total exposure to risk)	15.92%	16.22%	15.81%	15.19%	15.71%
Total Capital (as a percentage of total exposure to risk) without IFRS9 transitional arrangement or similar ECL	15.67%	15.98%	15.57%	14.95%	15.44%
<b>Leverage Ratio</b>					
Total exposure related to leverage ratio	731,087	740,141	732,135	722,708	705,299
Leverage Ratio	6.80%	6.90%	6.69%	6.57%	6.51%
Leverage ratio without IFRS9 transitional arrangements or similar ECL	6.70%	6.79%	6.58%	6.45%	6.39%

## 2.4. 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 organization, 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 resale 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 recognized 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 can cause losses due to human errors, inadequate or defective internal processes, inadequate conduct toward customers or markets, failures, interruptions, or deficiencies of systems or communications, inadequate management of data, legal risk and, finally, as a consequence of external events,

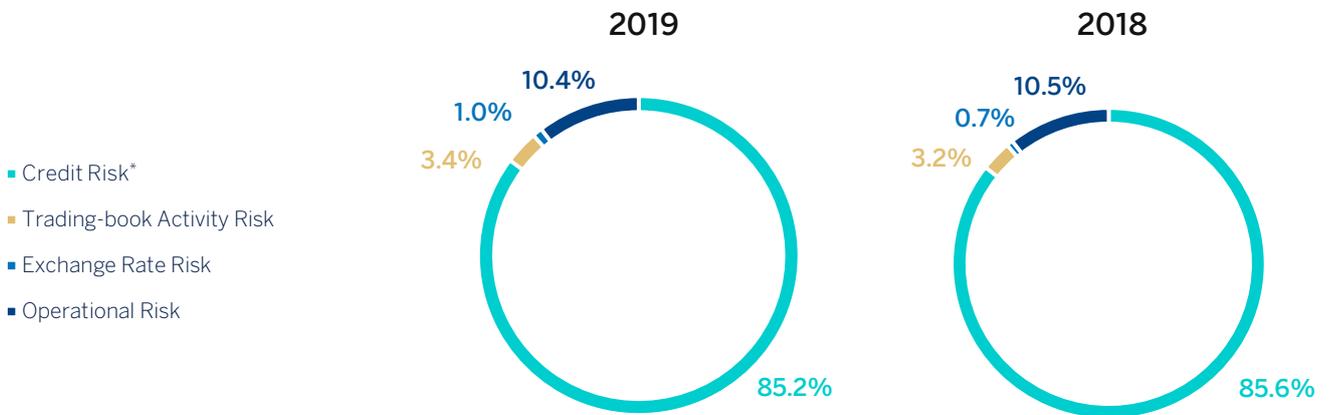
including cyberattacks, fraud committed by third parties, natural disasters, and poor service provided by suppliers. This definition includes legal risk, but excludes strategic and/or business risk and reputational risk.

- **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 chart below shows the total risk-weighted assets broken down by type of risk (where credit risk encompasses counterparty risk) as of December 31, 2019 and December 31, 2018:

**Chart 3.** Distribution of RWAs by risk type eligible on Pillar I



<sup>(\*)</sup> Credit Risk includes Risk by CVA adjustment

## 2.5. 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 shows the total capital requirements broken down by risk type as of December 31, 2019 and December 31, 2018:

**Table 8.** EU OV1 - Overview of RWAs (Million Euros)

	RWA <sup>(1)</sup>		Minimum Capital Requirements <sup>(2) (3)</sup>
	12-31-2019	12-31-2018	12-31-2019
<b>Credit Risk (excluding CCR)</b>	<b>286,159</b>	<b>274,256</b>	<b>22,893</b>
Of which the standardised approach <sup>(4)</sup>	190,603	188,158	15,248
Of which the foundation IRB (FIRB) approach <sup>(6)</sup>	4,606	5,421	369
Of which the advanced IRB (AIRB) approach <sup>(7)</sup>	88,191	77,733	7,055
Of which equity IRB under the simple risk-weighted approach <sup>(5)</sup>	2,758	2,944	221
<b>CCR</b>	<b>8,289</b>	<b>8,483</b>	<b>663</b>
Of which mark to market	6,716	7,065	537
Of which original exposure	-	-	-
Of which the standardised approach	-	-	-
Of which the Internal model method (IMM)	-	-	-
Of which risk exposure amount for contributions to the default fund of a CCP	44	41	3
Of which CVA	1,529	1,377	122
<b>Settlement Risk</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Securitisation exposures in the banking book (after the cap)</b>	<b>924</b>	<b>2,623</b>	<b>74</b>
Of which IRB approach	863	1,673	69
Of which IRB supervisory formula approach (SFA)	-	-	-
Of which internal assessment approach (IAA)	-	-	-
Of which standardised approach	61	950	5
<b>Market Risk</b>	<b>16,066</b>	<b>13,316</b>	<b>1,285</b>
Of which the standardised approach	6,991	5,048	559
Of which IMA	9,075	8,268	726
<b>Operational Risk</b>	<b>37,877</b>	<b>36,725</b>	<b>3,030</b>
Of which basic indicator approach	805	5,908	64
Of which the standardised approach	15,250	9,341	1,220
Of which IRB approach	21,822	21,476	1,746
<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	<b>15,134</b>	<b>12,862</b>	<b>1,211</b>
<b>Floor Adjustment</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>364,448</b>	<b>348,264</b>	<b>29,156</b>

<sup>(1)</sup> Risk-weighted assets for the transitional period (phased-in).

<sup>(2)</sup> Calculated on the total capital requirements of 8% (Article 92 of the CRR).

<sup>(3)</sup> Under CET 1 requirements (9.27%) after the supervisory evaluation process (SREP), the requirements amount to EUR 33,784 million euro. Under Total Capital requirements (12.77%), the requirements amount to EUR 46,540 million euros.

<sup>(4)</sup> Deferred tax assets arising from temporary differences, which are not deducted from eligible own funds (subject to a risk weighting of 250%) are excluded, in accordance with Article 48.4 of the CRR. This amount is 7,279 and 6,548 million euros as of December 31, 2019 and December 31, 2018, respectively.

In addition, the standardized approach includes the impact of the first application of IFRS16 (for further information on the standard, see Note 2.3. of the Group's consolidated Financial Statements).

<sup>(5)</sup> Equity, calculated under the simple risk-weighted approach and internal model approach, is included. Significant investments in financial sector entities and insurers that are not deducted from eligible own funds (subject to a risk weighting of 250%) are excluded, in accordance with Article 48.4 CRR. This amount is 7,854 and 6,313 million euros as of December 31, 2019 and December 31, 2018, respectively.

<sup>(6)</sup> Exposures classified in the FIRB approach correspond to specialized lending exposures. The Group has chosen to use the slotting criteria, in line with article 153.5 of the CRR.

<sup>(7)</sup> As of December 31, 2019, it includes the effects derived from TRIM (Targeted Review of Internal Models) that will become effective in 2020.

The evolution of RWAs during 2019 is characterized by the organic growth of the activity, being the effect of the exchange rate not relevant at this period. Additionally, the following singular impacts stand out:

- Inclusion of regulatory impacts (application of IFRS 16 and TRIM - Targeted Review of Internal Models) for approximately €7.6 billion.
- Recognition by the European Commission of Argentina as an equivalent country for the purposes of supervisory and regulatory requirements with a reduction in RWAs of approximately €1.5 billion.
- Change from the basic approach to the standardized approach of operational risk at Garanti BBVA for the purpose of calculating consolidated requirements, which has resulted in a reduction of approximately €0.6 billion.

- Recognition of sovereign guarantees that mitigate the credit risk of securitization, mainly from the United States, which has led to a reduction of approximately €0.9 billion.

The following is a breakdown of risk-weighted assets and capital requirements broken down by risk type and exposure categories as of December 31, 2019 and December 31, 2018:

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

**Table 9.** Capital requirements by risk type and exposure class (Million Euros)

Exposure Class and risk type	Capital requirements <sup>(2)</sup>		RWA's <sup>(1)</sup>	
	12-31-2019	12-31-2018	12-31-2019	12-31-2018
<b>Credit Risk</b>	<b>16,014</b>	<b>15,817</b>	<b>200,176</b>	<b>197,715</b>
Central governments or central banks	2,375	2,445	29,685	30,560
Regional governments or local authorities	132	113	1,644	1,416
Public sector entities	63	57	790	714
Multilateral development banks	1	1	11	10
International organisations	-	-	-	-
Institutions	429	496	5,366	6,203
Corporates	6,999	7,159	87,486	89,481
Retail	3,079	2,941	38,493	36,768
Secured by mortgages on immovable property	1,199	1,237	14,983	15,466
Exposures in default	305	333	3,808	4,159
Exposures associated with particularly high risk	411	132	5,136	1,652
Covered bonds	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	0	0	1	2
Collective investments undertakings	1	5	8	57
Other exposures	1,021	898	12,767	11,229
<b>Securitisation exposures</b>	<b>5</b>	<b>76</b>	<b>61</b>	<b>950</b>
Securitisation exposures	5	76	61	950
<b>Total credit risk by Standardised approach</b>	<b>16,019</b>	<b>15,893</b>	<b>200,237</b>	<b>198,665</b>
<b>Credit Risk</b>	<b>7,125</b>	<b>6,498</b>	<b>89,061</b>	<b>81,222</b>
Central governments or central banks	54	54	673	677
Institutions	532	429	6,646	5,366
Corporates	4,769	4,441	59,615	55,513
Of which: SMEs	998	950	12,478	11,877
Of which: Specialised lending	433	506	5,407	6,330
Of which: Others	3,338	2,984	41,730	37,305
Retail	1,770	1,573	22,128	19,667
Of which: Secured by mortgages on immovable property	712	591	8,904	7,385
Of which: Qualifying revolving	589	555	7,365	6,938
Of which: Other SMEs	131	140	1,636	1,752
Of which: Other Non-SMEs	338	287	4,223	3,592
<b>Equity</b>	<b>1,293</b>	<b>1,220</b>	<b>16,167</b>	<b>15,246</b>
On the basis of method:	-	-	-	-
Of which: Simple approach	813	647	10,164	8,085
Of which: PD/LGD approach	444	479	5,554	5,989
Of which: Internal models	36	94	449	1,172
On the basis of nature:	-	-	-	-
Of which: Listed instruments	378	439	4,730	5,493
Of which: Non listed instruments in sufficiently diversified portfolios	915	780	11,437	9,753
<b>Securitisation exposures</b>	<b>69</b>	<b>134</b>	<b>863</b>	<b>1,673</b>
Securitisation exposures	69	134	863	1,673
<b>Total credit risk by IRB approach</b>	<b>8,487</b>	<b>7,851</b>	<b>106,091</b>	<b>98,141</b>
<b>Total contributions to the default fund of a CCP</b>	<b>3</b>	<b>3</b>	<b>44</b>	<b>41</b>
<b>Total credit risk</b>	<b>24,510</b>	<b>23,748</b>	<b>306,372</b>	<b>296,846</b>
<b>Settlement risk</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Standardised approach:	272	222	3,395	2,776
Of which: Price Risk by fixed income exposures	197	155	2,461	1,940
Of which: Price Risk by Securitisation exposures	2	1	21	13
Of which: Price Risk by correlation	51	54	641	670
Of which: Price Risk by stocks and shares	20	11	248	136
Of which: Commodities Risk	2	1	24	18
IRB: Market Risk	726	661	9,075	8,268
<b>Total trading book risk</b>	<b>998</b>	<b>884</b>	<b>12,470</b>	<b>11,044</b>
<b>Foreign exchange risk (standardised approach)</b>	<b>288</b>	<b>182</b>	<b>3,596</b>	<b>2,271</b>
<b>CVA risk</b>	<b>122</b>	<b>110</b>	<b>1,529</b>	<b>1,377</b>
<b>Operational risk</b>	<b>3,030</b>	<b>2,938</b>	<b>37,877</b>	<b>36,725</b>
<b>Others<sup>(3)</sup></b>	<b>208</b>	<b>-</b>	<b>2,605</b>	<b>-</b>
<b>Capital requirements</b>	<b>29,156</b>	<b>27,861</b>	<b>364,448</b>	<b>348,264</b>

<sup>(1)</sup> Risk-weighted assets for the transitional period (phased-in).

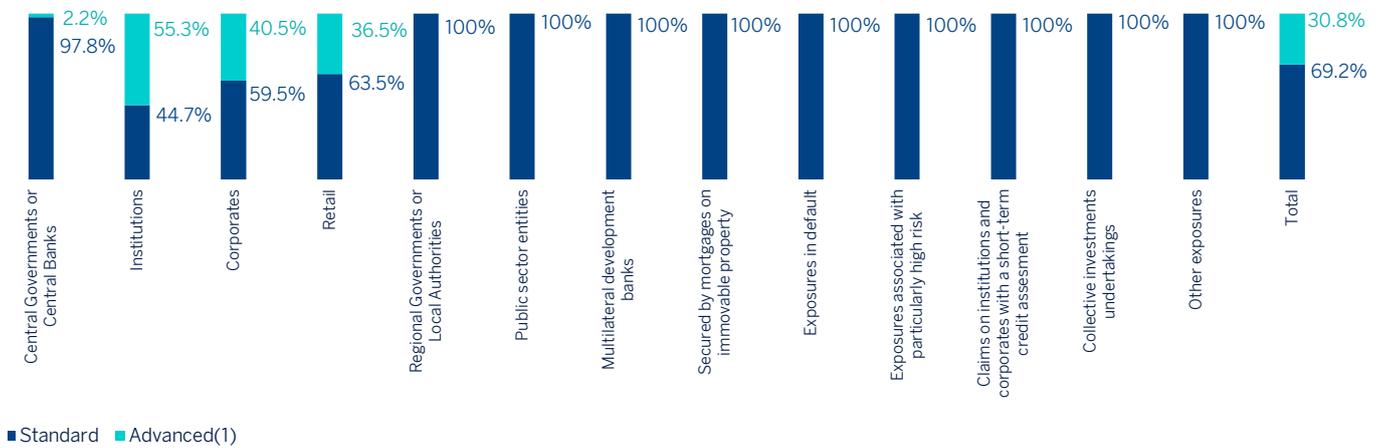
<sup>(2)</sup> Calculated on the total capital requirements of 8% (Article 92 of the CRR).

<sup>(3)</sup> This line includes the regulatory impacts of TRIM (Targeted Review of Internal Models) which as of December 31, 2019 have not been assigned to their corresponding exposure category (mainly exposures secured by real estate property).

A breakdown of the percentage of RWAs calculated according to the standardized approach and IRB approach

for each exposure category in the frameworks for credit and counterparty risk and securitization risk is below:

**Chart 4.** Distribution of RWAs by exposure category and method



<sup>(1)</sup> Excluding securitization and equity credit risk positions

<sup>(1)</sup> Table 28 of the report sets out the models and portfolios authorized by the supervisor to be used in calculating capital requirements.

## 2.6. 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 three years and analyzing 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.



# 3. Risk

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## 3.1. 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 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.

This model, which is fully applied in the Group, comprises the following basic elements:

- Governance and organization
- Risk Appetite Framework
- Evaluation, 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. These elements are described in the "Risk Management" section of the Management Report accompanying the Group's Consolidated Financial Statements.

## 3.2. Credit and Counterparty Risk

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

Credit risk is based on the likelihood 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.

It is the Groups' most important risk and includes counterparty risk, issuer risk, settlement risk and country risk management.

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

On the basis of what is approved by the Board of Directors, BBVA's Executive Committee establishes the Corporate Policies and specific limits for each type of risk, to enable the Group to take up a position within the parameters established by the Board of Directors.

The Risks and Compliance Committee assists the Board of Directors to determine the Group's risk strategy and the Executive Committee to determine the Group's risk limits and policy, analyzing and assessing in advance the proposals submitted to these governing bodies.

The Risks and Compliance Committee, Executive Committee and the Board itself conduct proper monitoring of the

implementation of the Group's risk strategy and risk profile.

Based on the risk strategy determined by the Board of Directors, and following the report of the Risks and Compliance Committee, the Executive Committee assesses and, where appropriate, approves as part of the basic limits structure, the proposed Asset Allocation core limit with the determined level of disaggregation. The limits are established annually, at maximum levels of exposure by type of portfolio.

The Asset Allocation limits for portfolios, small businesses and risk will be defined taking into account the established metrics in terms of exposure and composition of portfolios, and must be geared to maximizing the Group's generation of additional recurring economic earnings, subject to a framework of restrictions resulting from the definition of the target risk profile.

The Corporate Risk Area will establish risk concentration thresholds: individual, per portfolio and by sector. Individual concentration will be limited to its impact on solvency (CET1). The portfolio and sector concentration will be in terms of EAD, under the cuts by retail portfolio/wholesale sector. Herfindahl indices are used for the individual portfolio concentration index, taking the first 1,000 counterparties in terms of EAD, as well as the sum of the exposure of the 20 biggest counterparties in relation to the impact on solvency.

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

The existing gaps with respect to the target portfolio must be identified at global level and transmitted to the Business Areas, establishing plans at global and local level to adapt the

risk to the predefined target profile and taking into account the future expected performance of the portfolios.

For managing risk and capital, BBVA quantifies its credit risk using two main metrics: expected loss ("EL") and economic capital ("EC"). The expected loss reflects the average value of the losses and is viewed as a business cost. However, economic capital is the amount of capital considered necessary to cover unexpected losses if actual losses are greater than expected losses.

These risk metrics are combined with information on profitability in value-based management, thus integrating the profitability-risk binomial into decision-making, from the definition of business strategy to the approval of individual loans, price setting, assessment of non-performing loan portfolios, incentives to areas in the Group, etc.

There are three essential parameters in the process of calculating the EL and EC measurements: the probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD"), mainly based on the estimate of credit conversion factors ("CCF"). They are generally estimated using historical information available on the systems and are assigned to operations and customers according to their particular characteristics.

In this context, the rating and scoring tools assess the risk in each customer/transaction according to their credit quality by assigning them a score, which is used to assign risk metrics together with other additional information: transaction seniority, loan to value ratio, customer segment, etc.

Section 3.2.5.1 of this Document details the definitions, approaches and data used by the Group to determine the bank capital requirements for estimating the parameters of probability of default (PD), loss given default (LGD) and exposure at default (EAD).

## 3.2.2. Definitions and accounting methodologies

The "expected loss" impairment accounting model is applied to financial assets valued at amortized cost and to financial assets measured at fair value with changes in other accumulated comprehensive income, except for investments in equity instruments; it is also applied to financial guarantee contracts and loan commitments that are unilaterally revocable by the Bank. Likewise, all financial instruments measured at fair value with regard to profit or loss are excluded from the impairment model.

For more information about the accounting impairment model, and other accounting definitions (according to Article 442 of CRR), refer to Note 2.2.1 of the Group's Consolidated Financial Statements.

## 3.2.3. Information on credit risk

### 3.2.3.1. Exposure to credit risk

According to Article 5 of the CRR, with respect to the bank 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 standardized approach (Section 3.2.4), credit risk according to the advanced approach (Section 3.2.5), counterparty credit risk (Section 3.2.6), securitization credit risk (Section 3.2.7) and structural equity risk (Section 3.4).

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 standardized and advanced approaches as of December 31, 2019 and December 31, 2018 (including counterparty credit risk):

**Table 10.** Credit Risk and Counterparty Risk Exposure (Million Euros, 12-31-2019)

Exposure Class	Original Exposure <sup>(1)</sup>	Provisions <sup>(2)</sup>	Net exposure of provisions <sup>(3)</sup>	On-balance exposure after credit risk mitigation techniques <sup>(4a)</sup>	Off-balance exposure after credit risk mitigation techniques <sup>(4b)</sup>	Exposure in the adjusted value <sup>(5)</sup>	EAD <sup>(6)</sup>	RWA's <sup>(7)</sup>	RWA density (8=(7)/(6))
Central governments or central banks	130,050	(128)	129,922	148,210	5,624	153,834	148,863	29,685	20%
Regional governments or local authorities	10,665	(23)	10,642	6,830	1,049	7,879	7,101	1,644	23%
Public sector entities	1,764	(2)	1,763	1,643	227	1,870	1,779	790	44%
Multilateral development banks	167	(0)	167	210	38	247	210	11	5%
International organizations	0	-	0	0	0	0	0	-	0%
Institutions	36,102	(32)	36,070	12,270	13,202	25,472	13,333	5,366	40%
Corporates	112,830	(1,106)	111,723	72,768	32,558	105,327	89,826	87,486	97%
Retail	89,038	(1,781)	87,257	52,116	30,403	82,519	54,871	38,493	70%
Secured by mortgages on immovable property	39,867	(229)	39,638	39,423	164	39,587	39,561	14,983	38%
Exposures in default	8,276	(4,673)	3,603	3,198	328	3,526	3,423	3,808	111%
Exposures associated with particularly high risk	4,472	(509)	3,962	3,317	419	3,736	3,424	5,136	150%
Covered bonds	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	1	(0)	1	1	-	1	1	1	96%
Collective investments undertakings	22	(0)	22	6	4	10	8	8	100%
Other exposures	21,063	(45)	21,018	25,346	825	26,172	25,843	12,767	49%
Securitization exposures	3,953	-	3,953	134	-	134	134	61	45%
<b>Total standardized approach</b>	<b>458,271</b>	<b>(8,529)</b>	<b>449,742</b>	<b>365,472</b>	<b>84,841</b>	<b>450,313</b>	<b>388,379</b>	<b>200,237</b>	<b>52%</b>
Central governments or central banks	11,018	(5)		13,172	656	13,829	13,498	673	5%
Institutions	115,854	(39)		93,188	5,521	98,708	96,262	6,646	7%
Corporates	156,624	(2,356)		86,917	66,987	153,903	119,106	59,615	50%
Corporates (SMEs)	23,121	(1,029)		17,135	4,588	21,723	18,979	12,478	66%
Corporates: Specialized lending	7,310	(62)		6,639	671	7,310	6,986	5,407	77%
Corporates: Others	126,192	(1,266)		63,142	61,728	124,870	93,140	41,730	45%
Retail	118,897	(2,467)		96,129	22,696	118,825	100,020	22,128	22%
Of which: secured by immovable property	78,379	(941)		73,978	4,376	78,353	74,139	8,904	12%
Of which: Qualifying revolving	24,618	(646)		7,190	17,428	24,618	10,430	7,365	71%
Of which: Others	15,901	(880)		14,961	893	15,854	15,452	5,859	38%
Retail: Other SMEs	4,444	(268)		3,524	878	4,401	4,006	1,636	41%
Retail: Other Non-SMEs	11,456	(611)		11,438	15	11,453	11,445	4,223	37%
Securitization exposures	2,794	-		2,714	-	2,714	2,714	856	32%
<b>Total IRB approach</b>	<b>405,188</b>	<b>(4,867)</b>	<b>-</b>	<b>292,120</b>	<b>95,860</b>	<b>387,979</b>	<b>331,600</b>	<b>89,917</b>	<b>27%</b>
<b>Total credit risk dilution and delivery</b>	<b>863,459</b>	<b>(13,396)</b>	<b>449,742</b>	<b>657,592</b>	<b>180,701</b>	<b>838,293</b>	<b>719,979</b>	<b>290,153</b>	<b>40%</b>
<b>Equity</b>	<b>7,124</b>	<b>-</b>	<b>-</b>	<b>7,124</b>	<b>-</b>	<b>7,124</b>	<b>7,124</b>	<b>16,167</b>	<b>227%</b>
Simple risk weight approach	961	-		961	-	961	961	2,309	240%
Exposures in sufficiently diversified portfolios	563	-		563	-	563	563	1,070	190%
Exchange traded exposures	290	-		290	-	290	290	841	290%
Others	108	-		108	-	108	108	399	370%
PD/LGD approach	2,883	-		2,883	-	2,883	2,883	5,554	193%
Internal models approach	138	-		138	-	138	138	449	324%
Exposures subject to a 250% risk weight	3,142			3,142		3,142	3,142	7,854	250%
<b>Total credit risk</b>	<b>870,583</b>	<b>(13,396)</b>	<b>449,742</b>	<b>664,716</b>	<b>180,701</b>	<b>845,417</b>	<b>727,103</b>	<b>306,321</b>	<b>42%</b>

<sup>(1)</sup> Gross exposure value before credit risk mitigation techniques, excluding contributions to the default fund for a CCP

<sup>(2)</sup> Includes provisions and impairment of financial assets and contingent risk and commitments

<sup>(3)</sup> Standardized Approach exposures are adjusted by credit risk adjustments. The original equity exposure is shown net of impairment

<sup>(4a)</sup> (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 securitization exposure, unfunded credit protection is included

<sup>(5)</sup> It corresponds to the exposure value adjusted by eligible credit risk mitigation techniques.

<sup>(6)</sup> Exposure at default, calculated as (4a)+(4b)\*CCF

## Credit Risk and Counterparty Risk Exposure (Million Euros. 12-31-2018)

Exposure Class	Original Exposure <sup>(1)</sup>	Provisions <sup>(2)</sup>	Net exposure of provisions <sup>(3)</sup>	On-balance exposure after credit risk mitigation techniques <sup>(4a)</sup>	Off-balance exposure after credit risk mitigation techniques <sup>(4b)</sup>	Exposure in the adjusted value <sup>(5)</sup>	EAD <sup>(6)</sup>	RWA's <sup>(7)</sup>	RWA density <sup>(8=(7)/(6))</sup>
Central governments or central banks	122,473	(33)	122,440	138,637	4,893	143,530	139,186	30,560	22%
Regional governments or local authorities	10,208	(23)	10,184	6,419	485	6,904	6,649	1,416	21%
Public sector entities	991	(9)	982	1,759	132	1,890	1,810	714	39%
Multilateral development banks	265	(0)	265	453	24	477	453	10	2%
International organizations	-	-	-	-	-	-	-	-	-
Institutions	35,874	(14)	35,859	17,441	13,618	31,059	19,315	6,203	32%
Corporates	125,314	(1,181)	124,133	75,549	41,762	117,311	91,400	89,481	98%
Retail	86,939	(1,722)	85,217	50,062	30,743	80,805	52,465	36,768	70%
Secured by mortgages on immovable property	40,917	(302)	40,615	40,389	145	40,534	40,458	15,466	38%
Exposures in default	8,609	(4,649)	3,960	3,367	449	3,816	3,612	4,159	115%
Exposures associated with particularly high risk	1,168	(51)	1,117	1,101	1	1,102	1,101	1,652	150%
Covered bonds	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	3	(0)	3	3	-	3	3	2	66%
Collective investments undertakings	76	(1)	75	45	24	69	57	57	100%
Other exposures	18,100	(36)	18,064	27,502	1,727	29,229	28,452	11,229	39%
Securitization exposures	4,623	-	4,623	4,623	-	4,623	4,623	950	21%
<b>Total standardized approach</b>	<b>455,561</b>	<b>(8,022)</b>	<b>447,539</b>	<b>367,348</b>	<b>94,003</b>	<b>461,351</b>	<b>389,584</b>	<b>198,665</b>	<b>51%</b>
Central governments or central banks	10,698	(5)	-	12,213	495	12,708	12,459	677	5%
Institutions	100,329	(58)	-	76,740	5,523	82,263	79,992	5,366	7%
Corporates	135,616	(2,176)	-	75,295	58,254	133,549	103,991	55,513	53%
Corporates (SMEs)	19,894	(1,103)	-	14,530	3,766	18,297	16,231	11,877	73%
Corporates: Specialized lending	7,706	(73)	-	7,304	403	7,706	7,536	6,330	84%
Corporates: Others	108,016	(999)	-	53,461	54,085	107,545	80,224	37,305	47%
Retail	118,211	(2,660)	-	97,055	21,065	118,120	101,011	19,667	19%
Of which: secured by immovable property	81,472	(1,330)	-	76,963	4,484	81,446	77,186	7,385	10%
Of which: Qualifying revolving	22,167	(584)	-	6,525	15,642	22,167	9,682	6,938	72%
Of which: Others	14,571	(745)	-	13,568	939	14,507	14,142	5,344	38%
Retail: Other SMEs	4,132	(281)	-	3,240	840	4,079	3,746	1,752	47%
Retail: Other Non-SMEs	10,440	(464)	-	10,328	100	10,427	10,396	3,592	35%
Securitization exposures	5,593	-	-	5,382	-	5,382	5,382	1,673	31%
<b>Total IRB approach</b>	<b>370,447</b>	<b>(4,898)</b>	<b>-</b>	<b>266,685</b>	<b>85,336</b>	<b>352,021</b>	<b>302,834</b>	<b>82,895</b>	<b>27%</b>
<b>Total credit risk dilution and delivery</b>	<b>826,008</b>	<b>(12,920)</b>	<b>447,539</b>	<b>634,033</b>	<b>179,340</b>	<b>813,373</b>	<b>692,418</b>	<b>281,560</b>	<b>41%</b>
<b>Equity</b>	<b>6,822</b>	<b>-</b>	<b>-</b>	<b>6,822</b>	<b>-</b>	<b>6,822</b>	<b>6,822</b>	<b>15,246</b>	<b>223%</b>
Simple risk weight approach	712	-	-	712	-	712	712	1,772	249%
Exposures in sufficiently diversified portfolios	343	-	-	343	-	343	343	651	190%
Exchange traded exposures	309	-	-	309	-	309	309	897	290%
Others	61	-	-	61	-	61	61	224	370%
PD/LGD approach	3,201	-	-	3,201	-	3,201	3,201	5,989	187%
Internal models approach	383	-	-	383	-	383	383	1,172	306%
Exposures subject to a 250% risk weight	2,525	-	-	2,525	-	2,525	2,525	6,314	250%
<b>Total credit risk</b>	<b>832,829</b>	<b>(12,920)</b>	<b>447,539</b>	<b>640,855</b>	<b>179,340</b>	<b>820,194</b>	<b>699,240</b>	<b>296,805</b>	<b>42%</b>

<sup>(1)</sup> Gross exposure value before credit risk mitigation techniques, excluding contributions to the default fund for a CCP

<sup>(2)</sup> Includes provisions and impairment of financial assets and contingent risk and commitments

<sup>(3)</sup> Standardized Approach exposures are adjusted by credit risk adjustments. The original equity exposure is shown net of impairment

<sup>(4a)</sup> (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 securitization exposure, unfunded credit protection is included

<sup>(5)</sup> It corresponds to the exposure value adjusted by eligible credit risk mitigation techniques.

<sup>(6)</sup> Exposure at default, calculated as (4a)+(4b)\*CCF

### 3.2.3.2. Distribution and maturity of credit risk exposure

The following table provides the average amount of credit risk exposure during 2019 and 2018, both for the standardized approach and the advanced method by exposure categories:

**Table 11.** EU CRB-B - Total and average net amount of exposures (including counterparty credit risk) (Million Euros)

Exposure Class	31-12-2019		31-12-2018	
	Net value of exposures at the end of the period (4Q) <sup>(1)</sup>	Average net exposures over the period	Net value of exposures at the end of the period (4Q) <sup>(1)</sup>	Average net exposures over the period
Central governments or central banks	11,014	9,178	10,693	7,461
Institutions	115,815	114,552	100,271	96,062
Corporates	154,267	146,359	133,440	131,251
Of which: Specialized lending	7,249	7,343	7,633	8,305
Of which: SMEs	22,092	20,810	18,790	15,952
Retail	116,431	115,975	115,551	115,232
Secured by immovable property	77,437	78,385	80,142	81,180
Qualifying revolving	23,973	23,199	21,583	21,248
Other retail	15,021	14,391	13,826	12,804
SMEs	4,176	3,984	3,851	3,648
Non-SMEs	10,845	10,408	9,975	9,156
Equity	7,124	7,145	6,822	7,068
<b>Total IRB approach</b>	<b>404,651</b>	<b>393,210</b>	<b>366,777</b>	<b>357,074</b>
Central governments or central banks	129,922	125,611	122,440	115,638
Regional governments or local authorities	10,642	10,948	10,184	10,289
Public sector entities	1,763	1,285	982	953
Multilateral development banks	167	288	265	131
International organizations	0	0	0	1
Institutions	36,070	38,088	35,859	32,090
Corporates	111,723	119,071	124,133	125,610
Of which: SMEs	13,154	22,949	21,890	20,285
Retail	87,257	86,432	85,217	90,028
Of which: SMEs	25,382	25,919	26,558	29,031
Secured by mortgages on immovable property	39,638	40,128	40,615	44,530
Of which: SMEs	13,689	13,111	3,495	5,983
Exposures in default	3,603	3,874	3,960	3,911
Exposures associated with particularly high risk	3,962	3,602	1,117	2,041
Covered bonds	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	1	3	3	8
Collective investments undertakings	22	165	75	72
Equity exposures	-	-	-	-
Other exposures	21,018	20,177	18,064	19,844
<b>Total standardized approach</b>	<b>445,789</b>	<b>449,673</b>	<b>442,917</b>	<b>445,143</b>
<b>Total</b>	<b>850,440</b>	<b>842,883</b>	<b>809,694</b>	<b>802,217</b>

<sup>(1)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure

The distribution by geographical area of the original exposure, net of provisions based on the country of the counterparty is shown below. The distribution includes credit risk exposure and counterparty credit risk exposure, as well as equity credit exposure.

**Table 12.** EU CRB-C - Geographical breakdown of exposures (including counterparty credit risk) (Million Euros. 12-31-2019)

Exposure Class	Original Exposure net of provisions <sup>(1)(2)</sup>						
	Spain	Turkey	Mexico	USA	South America	Other areas <sup>(3)</sup>	Total
Central governments or central banks	17	0	130	5,365	202	5,299	11,014
Institutions	40,190	32	426	3,442	1,168	70,556	115,815
Corporates	63,949	504	23,936	18,986	2,689	44,204	154,267
Retail	98,372	1	17,418	39	69	532	116,431
Equity	4,742	198	977	333	458	416	7,124
<b>Total IRB approach</b>	<b>207,271</b>	<b>735</b>	<b>42,888</b>	<b>28,164</b>	<b>4,586</b>	<b>121,007</b>	<b>404,651</b>
Central governments or central banks	56,958	13,636	32,447	9,557	9,755	7,570	129,922
Regional governments or local authorities	282	99	3,316	6,726	82	137	10,642
Public sector entities	-	46	226	625	867	0	1,763
Multilateral development banks	-	-	-	-	144	23	167
International organizations	0	-	-	-	-	-	0
Institutions	16,494	3,132	8,486	3,312	291	4,354	36,070
Corporates	5,429	25,420	4,920	49,595	20,588	5,772	111,723
Retail	14,477	20,625	16,502	16,430	17,167	2,056	87,257
Secured by mortgages on immovable property	3,231	3,656	11,316	10,354	8,875	2,206	39,638
Exposures in default	467	1,247	409	480	763	237	3,603
Exposures associated with particularly high risk	200	2,291	527	254	689	1	3,962
Covered bonds	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	0	-	-	-	1	-	1
Collective investments undertakings	11	-	1	2	-	7	22
Equity exposures	-	-	-	-	-	-	-
Other exposures	7,564	2,122	5,293	2,483	3,297	259	21,018
<b>Total standardized approach</b>	<b>105,114</b>	<b>72,275</b>	<b>83,443</b>	<b>99,817</b>	<b>62,519</b>	<b>22,622</b>	<b>445,789</b>
<b>Total</b>	<b>312,385</b>	<b>73,010</b>	<b>126,331</b>	<b>127,981</b>	<b>67,104</b>	<b>143,630</b>	<b>850,440</b>

<sup>(1)</sup> Geographical areas determined based on the counterparty.

<sup>(2)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure.

<sup>(3)</sup> Includes all other countries not included in the previous columns. The countries with the greatest exposure in this area are: United Kingdom, France, Italy, Germany and Portugal.

EU CRB-C - Geographical breakdown of exposures (including counterparty credit risk) (Million Euros. 12-31-2018)

Exposure Class	Original Exposure net of provisions <sup>(1)(2)</sup>						
	Spain	Turkey	Mexico	USA	South America	Other areas <sup>(3)</sup>	Total
Central governments or central banks	11	0	130	4,958	447	5,146	10,693
Institutions	41,262	12	458	3,100	719	54,720	100,271
Corporates	59,773	508	20,429	12,889	2,008	37,834	133,440
Retail	99,329	2	15,526	40	72	583	115,551
Equity	4,804	56	800	292	361	508	6,821
<b>Total IRB approach</b>	<b>205,177</b>	<b>577</b>	<b>37,344</b>	<b>21,280</b>	<b>3,607</b>	<b>98,792</b>	<b>366,777</b>
Central governments or central banks	64,761	14,408	18,078	6,968	8,519	9,706	122,440
Regional governments or local authorities	53	33	2,342	7,486	168	103	10,184
Public sector entities	0	35	200	0	747	0	982
Multilateral development banks	-	-	-	-	96	169	265
International organizations	0	0	-	-	-	0	0
Institutions	11,694	2,446	7,576	2,157	3,580	8,407	35,859
Corporates	7,259	26,299	14,024	50,243	19,172	7,136	124,133
Retail	12,989	22,005	14,197	17,036	16,895	2,095	85,217
Secured by mortgages on immovable property	3,586	4,738	9,555	10,719	9,525	2,493	40,615
Exposures in default	662	1,449	342	585	699	224	3,960
Exposures associated with particularly high risk	113	110	363	199	332	0	1,117
Covered bonds	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	0	-	0	-	3	-	3
Collective investments undertakings	8	-	0	32	-	36	75
Equity exposures	-	-	-	-	-	-	-
Other exposures	5,990	2,002	4,722	2,089	2,879	383	18,064
<b>Total standardized approach</b>	<b>107,115</b>	<b>73,525</b>	<b>71,399</b>	<b>97,513</b>	<b>62,614</b>	<b>30,751</b>	<b>442,917</b>
<b>Total</b>	<b>312,292</b>	<b>74,102</b>	<b>108,743</b>	<b>118,793</b>	<b>66,221</b>	<b>129,543</b>	<b>809,694</b>

<sup>(1)</sup> Geographical areas determined based on the counterparty.

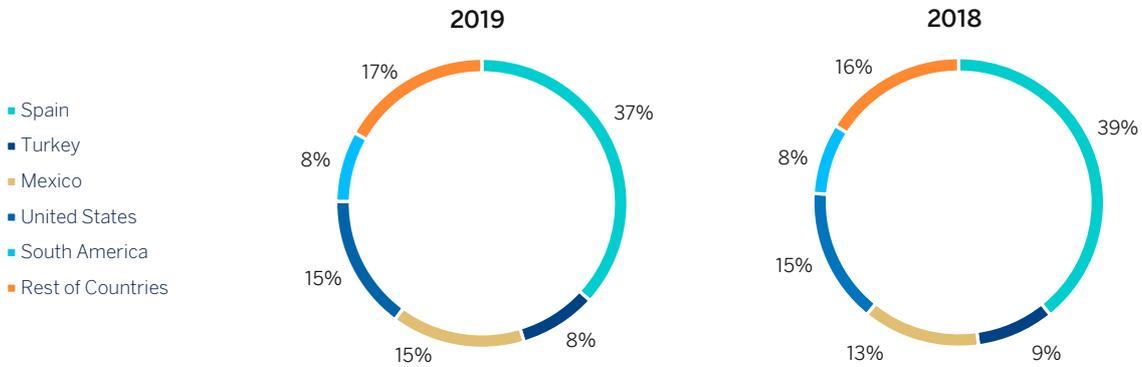
<sup>(2)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure.

<sup>(3)</sup> Includes all other countries not included in the previous columns. The countries with the greatest exposure in this area are: United Kingdom, France, Italy, Germany and Portugal.

Below, there is a graphic depiction of the original exposure distribution by geographic area, revealing the Group's high

level of geographic diversification, which constitutes one of the key factors for its strategic growth.

**Chart 5.** Distribution of credit risk exposures by geographical areas



<sup>(\*)</sup> Includes all other countries not included in the rest of buckets. The countries with the greatest exposure in this area are: United Kingdom, France, Italy, Germany and Portugal

In addition, the following table shows the distribution of original exposure net of provisions by economic sector for financial assets and contingent risk and commitments

(standardized and advanced approach), excluding counterparty credit risk but including equity credit risk:

**Table 13.** EU CRB-D - Concentration of exposures by industry or counterparty types (excluding counterparty credit risk) (Million Euros, 12-31-2019)

Exposure Class	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing Industry	Energy supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication	Financial activities and insurance	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defense, compulsory social security	Education	Human health services and social work activities	Arts, entertainment and recreation	Other services	Household activities as employers of domestic staff; Activities of households as products of goods and services for own use	Extraterrestrial organizations activities	Individuals without business activity	Total <sup>(1)</sup>
Central governments or central banks	-	-	0	-	-	-	-	-	-	-	2,474	-	81	-	6,860	0	-	-	-	-	0	-	9,414
Institutions	3	-	170	434	310	594	12	1,342	9	66	11,614	93	67	243	19,189	1	92	19	8	-	30	-	34,295
Corporates	1,923	5,086	44,062	17,235	1,434	11,845	19,697	4,675	4,893	6,304	11,543	9,115	6,223	3,466	38	303	1,378	804	319	4	0	-	150,345
Retail	581	45	1,858	105	64	1,922	3,814	1,408	1,439	490	223	458	1,711	637	-	252	706	304	6,222	7	-	94,179	116,427
Equity	-	-	-	-	-	830	0	-	-	2,830	2,352	0	0	-	34	-	-	-	1,078	-	-	-	7,124
<b>Total IRB approach</b>	<b>2,506</b>	<b>5,131</b>	<b>46,090</b>	<b>17,775</b>	<b>1,808</b>	<b>15,190</b>	<b>23,523</b>	<b>7,425</b>	<b>6,341</b>	<b>9,690</b>	<b>28,206</b>	<b>9,666</b>	<b>8,082</b>	<b>4,346</b>	<b>26,121</b>	<b>557</b>	<b>2,175</b>	<b>1,126</b>	<b>7,626</b>	<b>11</b>	<b>30</b>	<b>94,179</b>	<b>317,606</b>
Central governments or central banks	-	-	0	-	-	-	0	1	-	-	27,355	-	-	0	92,720	0	1	0	2,250	-	-	-	122,327
Regional governments or local authorities	0	-	52	27	65	48	4	140	-	0	0	-	1	2	8,614	653	860	10	93	-	-	-	10,568
Public sector entities	2	0	304	427	25	0	0	8	-	29	44	-	0	0	711	5	0	0	37	-	-	-	1,595
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	114	-	-	-	53	-	-	-	-	-	-	-	167
International organizations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0
Institutions	1	0	14	62	-	29	15	53	24	35	21,755	51	215	293	662	0	177	0	354	-	-	-	23,738
Corporates	1,712	1,996	31,688	5,984	339	3,909	13,210	6,404	5,381	3,756	4,902	12,438	2,256	2,696	234	684	3,951	523	6,649	55	0	0	108,766
Retail	1,109	403	4,619	214	51	2,034	11,192	1,922	1,452	457	680	921	2,420	1,793	-	1,529	1,879	310	6,032	8	-	47,709	86,733
Secured by mortgages on immovable property	408	218	1,821	179	10	653	2,947	516	1,172	187	321	17,433	1,605	1,494	-	1,076	1,164	123	4,111	2	-	4,198	39,638
Exposures in default	109	65	351	31	5	431	521	221	181	39	72	233	170	107	4	45	52	25	603	0	0	336	3,602
Exposures associated with particularly high risk	2	1	4	660	0	843	356	4	4	1	223	1,123	655	35	-	1	1	1	8	0	-	12	3,931
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assesment	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	10
Collective investments undertakings	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other exposures	0	-	0	-	-	0	0	0	-	0	12,476	565	53	-	0	-	0	-	7,916	-	-	8	21,018
<b>Total standardized approach</b>	<b>3,342</b>	<b>2,683</b>	<b>38,853</b>	<b>7,585</b>	<b>496</b>	<b>7,946</b>	<b>28,245</b>	<b>9,269</b>	<b>8,213</b>	<b>4,505</b>	<b>67,955</b>	<b>32,764</b>	<b>7,373</b>	<b>6,419</b>	<b>102,999</b>	<b>3,993</b>	<b>8,085</b>	<b>991</b>	<b>28,052</b>	<b>65</b>	<b>0</b>	<b>52,262</b>	<b>422,096</b>
<b>Total</b>	<b>5,849</b>	<b>7,814</b>	<b>84,942</b>	<b>25,359</b>	<b>2,304</b>	<b>23,136</b>	<b>51,768</b>	<b>16,694</b>	<b>14,554</b>	<b>14,195</b>	<b>96,161</b>	<b>42,430</b>	<b>15,455</b>	<b>10,765</b>	<b>129,119</b>	<b>4,550</b>	<b>10,260</b>	<b>2,117</b>	<b>35,679</b>	<b>76</b>	<b>31</b>	<b>146,442</b>	<b>739,702</b>

<sup>(1)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure

## EU CRB-D - Concentration of exposures by industry or counterparty types (excluding counterparty credit risk) (Million Euros. 12-31-2018)

Exposure Class	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing Industry	Energy supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication	Financial activities and insurance	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defense, compulsory social security	Education	Human health services and social work activities	Arts, entertainment and recreation	Other services	Household activities as employers of domestic staff, Activities of households as products of goods and services for own use	Extraterrestrial organizations activities	Individuals without business activity	Total <sup>(1)</sup>
Central governments or central banks	-	-	0	-	-	-	-	-	-	-	2,315	-	-	-	3,547	0	-	-	-	-	0	-	5,862
Institutions	2	-	259	486	284	731	18	1,716	8	27	10,781	425	189	29	17,488	1	79	28	5	-	26	-	32,581
Corporates	1,045	5,249	39,078	15,269	1,426	10,245	15,779	4,342	3,956	5,450	9,049	6,109	5,713	2,813	1,869	250	1,024	693	595	3	0	-	129,957
Retail	616	44	1,970	121	57	1,946	4,033	1,455	1,451	465	231	468	1,721	641	1	234	684	305	6,395	7	-	92,698	115,544
Equity	-	-	-	-	-	809	0	-	-	2,981	2,329	5	0	-	26	-	-	-	672	-	-	-	6,822
<b>Total IRB approach</b>	<b>1,663</b>	<b>5,294</b>	<b>41,307</b>	<b>15,876</b>	<b>1,767</b>	<b>13,731</b>	<b>19,830</b>	<b>7,512</b>	<b>5,415</b>	<b>8,922</b>	<b>24,704</b>	<b>7,006</b>	<b>7,623</b>	<b>3,483</b>	<b>22,932</b>	<b>486</b>	<b>1,787</b>	<b>1,025</b>	<b>7,667</b>	<b>11</b>	<b>26</b>	<b>92,698</b>	<b>290,765</b>
Central governments or central banks	0	-	0	0	-	0	5	0	0	0	39,188	0	0	0	74,387	0	1	0	1,011	-	0	-	114,593
Regional governments or local authorities	-	-	7	32	74	48	4	139	-	0	69	36	0	19	7,769	545	1,167	3	267	-	0	-	10,180
Public sector entities	-	-	288	350	25	0	1	2	0	-	78	-	0	0	218	16	0	0	1	-	-	-	981
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	222	-	-	-	44	-	-	-	-	-	-	-	265
International organizations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	-	0	-	0
Institutions	2	0	728	0	-	1,732	92	5,280	2	18	19,073	56	195	46	154	0	176	0	571	-	-	-	28,124
Corporates	3,078	2,624	31,037	7,032	645	4,152	14,993	6,506	3,450	3,416	11,538	13,878	3,038	2,210	204	743	5,085	733	7,229	42	0	-	121,635
Retail	4,166	281	4,729	304	57	2,737	10,539	1,900	1,235	486	738	860	2,434	1,151	299	1,197	1,428	287	4,786	9	-	45,571	85,194
Secured by mortgages on immovable property	801	229	1,970	658	10	941	3,147	541	1,192	200	325	17,649	1,562	944	258	1,072	1,084	120	3,810	2	-	4,101	40,615
Exposures in default	111	58	91	301	7	492	657	183	165	32	41	287	134	70	26	32	63	24	584	0	0	582	3,939
Exposures associated with particularly high risk	1	0	1	0	0	292	14	0	32	0	118	494	3	4	-	0	1	0	25	0	-	131	1,117
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assesment	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	3
Collective investments undertakings	-	-	-	-	-	-	-	-	-	-	69	-	-	-	-	-	-	-	-	-	-	-	69
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other exposures	0	-	0	0	-	0	0	0	-	1	10,104	922	56	-	0	0	0	-	6,981	-	-	-	18,064
<b>Total standardized approach</b>	<b>8,158</b>	<b>3,192</b>	<b>38,853</b>	<b>8,677</b>	<b>818</b>	<b>10,394</b>	<b>29,453</b>	<b>14,551</b>	<b>6,076</b>	<b>4,153</b>	<b>81,565</b>	<b>34,182</b>	<b>7,422</b>	<b>4,445</b>	<b>83,359</b>	<b>3,605</b>	<b>9,005</b>	<b>1,167</b>	<b>25,264</b>	<b>53</b>	<b>0</b>	<b>50,385</b>	<b>424,781</b>
<b>Total</b>	<b>9,822</b>	<b>8,486</b>	<b>80,160</b>	<b>24,554</b>	<b>2,585</b>	<b>24,125</b>	<b>49,283</b>	<b>22,064</b>	<b>11,491</b>	<b>13,075</b>	<b>106,269</b>	<b>41,189</b>	<b>15,045</b>	<b>7,929</b>	<b>106,291</b>	<b>4,091</b>	<b>10,792</b>	<b>2,192</b>	<b>32,931</b>	<b>64</b>	<b>26</b>	<b>143,083</b>	<b>715,546</b>

<sup>(1)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure

The following table shows the distribution of original exposure, net of value adjustments and provisions, by residual maturity of financial assets and contingent risk and

commitments, broken down by categories of exposure under the standard and advanced approaches, excluding counterparty risk and including equity credit risk:

**Table 14.** EU CRB-E - Maturity of exposures (excluding counterparty credit risk) (Million Euros. 12-31-2019)

Exposure Class	Net exposure value <sup>(1)</sup>				No stated maturity	Total
	On demand	≤ 1 year	> 1 year ≤ 5 years	> 5 years		
Central governments or central banks	-	591	6,081	262	2,480	9,414
Institutions	577	9,668	7,971	11,583	4,497	34,295
Corporates	481	52,945	64,965	22,967	8,988	150,345
Retail	7	2,049	6,624	83,415	24,332	116,427
Equity	-	-	-	-	7,124	7,124
<b>Total IRB approach</b>	<b>1,065</b>	<b>65,253</b>	<b>85,640</b>	<b>118,227</b>	<b>47,421</b>	<b>317,606</b>
Central governments or central banks	25,424	14,468	30,707	50,840	888	122,327
Regional governments or local authorities	9	640	2,113	7,800	6	10,568
Public sector entities	84	814	182	516	-	1,595
Multilateral development banks	54	83	16	15	-	167
International organizations	-	-	-	0	0	0
Institutions	4,303	9,503	4,727	1,234	3,973	23,738
Corporates	5,538	35,147	48,740	18,648	694	108,766
Retail	2,762	28,464	35,917	14,687	4,904	86,733
Secured by mortgages on immovable property	231	4,595	4,062	30,739	11	39,638
Exposures in default	51	767	64	1,625	1,096	3,602
Exposures associated with particularly high risk	104	1,483	916	1,036	391	3,931
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	6	-	-	4	10
Collective investments undertakings	1	0	-	-	-	1
Equity exposures	-	-	-	-	-	-
Other exposures	4,053	5,495	24	-	11,447	21,018
<b>Total standardized approach</b>	<b>42,613</b>	<b>101,465</b>	<b>127,467</b>	<b>127,138</b>	<b>23,412</b>	<b>422,096</b>
<b>Total</b>	<b>43,677</b>	<b>166,717</b>	<b>213,108</b>	<b>245,365</b>	<b>70,834</b>	<b>739,702</b>

<sup>(1)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure

EU CRB-E - Maturity of exposures (excluding counterparty credit risk) (Million Euros. 12-31-2018)

Exposure Class	Net exposure value <sup>(1)</sup>				No stated maturity	Total
	On demand	≤ 1 year	> 1 year ≤ 5 years	> 5 years		
Central governments or central banks	9	319	2,886	303	2,345	5,862
Institutions	205	7,219	8,707	11,098	5,353	32,581
Corporates	246	42,572	55,537	21,199	10,403	129,957
Retail	12	2,200	6,174	85,153	22,005	115,544
Equity	-	-	-	-	6,822	6,822
<b>Total IRB approach</b>	<b>471</b>	<b>52,309</b>	<b>73,305</b>	<b>117,752</b>	<b>46,927</b>	<b>290,765</b>
Central governments or central banks	11,308	37,868	16,741	47,789	887	114,593
Regional governments or local authorities	0	805	1,737	7,631	6	10,180
Public sector entities	7	770	144	17	43	981
Multilateral development banks	211	38	16	-	-	265
International organizations	-	-	-	0	0	0
Institutions	5,113	12,757	5,261	754	4,240	28,124
Corporates	10,635	37,301	50,879	20,520	2,300	121,635
Retail	2,611	28,222	30,134	15,993	8,233	85,194
Secured by mortgages on immovable property	304	4,689	4,517	31,094	12	40,615
Exposures in default	24	893	21	1,877	1,126	3,939
Exposures associated with particularly high risk	-	273	222	622	0	1,117
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	1	1	-	-	1	3
Collective investments undertakings	-	47	20	1	1	69
Equity exposures	-	-	-	-	-	-
Other exposures	1,467	4,654	30	8	11,906	18,064
<b>Total standardized approach</b>	<b>31,681</b>	<b>128,319</b>	<b>109,722</b>	<b>126,305</b>	<b>28,753</b>	<b>424,781</b>
<b>Total</b>	<b>32,151</b>	<b>180,628</b>	<b>183,027</b>	<b>244,058</b>	<b>75,681</b>	<b>715,546</b>

<sup>(1)</sup> The template shows original exposure net of value adjustments and provisions reported in the COREP Statements for equity and credit risk, excluding securitization exposure

### 3.2.3.3. Credit quality of exposures

The value of the exposure by exposure class, broken down by defaulted and non-defaulted exposures as of December 31, 2019 is below. This table excludes exposure subject to

the counterparty credit risk framework under Part 3, Section II, Chapter IV of the CRR, as well as exposures subject to the securitization framework as defined in Part 3, Section II, chapter V of the CRR.

**Table 15.** EU CR1-A - Credit quality of exposures by exposure class and instrument (excluding counterparty credit risk) (Million Euros, 12-31-2019)

Exposure Class	Gross Original exposure <sup>(4)</sup>		Credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period <sup>(5)</sup>	Net values <sup>(3)</sup>
	Defaulted exposures	Non-defaulted exposures				
Central governments or central banks	55	9,364	5	9	0	9,414
Institutions	92	34,243	39	22	(18)	34,295
Corporates	3,722	148,980	2,356	5,503	180	150,345
Of which: Specialized lending	147	6,200	62	13	(12)	6,285
Of which: SMEs	1,704	21,278	1,029	3,846	(74)	21,954
Of which: Others	1,870	121,502	1,266	1,644	266	122,107
Retail	4,057	114,836	2,467	2,193	(193)	116,427
Secured by immovable property	2,820	75,558	941	1,253	(389)	77,437
Qualifying revolving	214	24,404	646	53	62	23,973
Other retail	1,023	14,874	880	887	135	15,017
SMEs	407	4,033	268	169	(13)	4,172
Non-SMEs	616	10,841	611	718	147	10,845
Equity	-	7,124	-	-	-	7,124
<b>Total IRB approach</b>	<b>7,925</b>	<b>314,548</b>	<b>4,867</b>	<b>7,727</b>	<b>(31)</b>	<b>317,606</b>
Central governments or central banks	18	122,455	128	4	95	122,327
Regional governments or local authorities	-	10,591	23	21	(0)	10,568
Public sector entities	26	1,597	2	14	(7)	1,595
Multilateral development banks	-	167	0	-	0	167
International organizations	-	0	-	-	-	0
Institutions	487	23,770	32	6	17	23,738
Corporates	3,034	109,872	1,106	10,958	(75)	108,766
Retail	3,340	88,515	1,781	3,001	59	86,733
Secured by mortgages on immovable property	1,248	39,867	229	2,061	(73)	39,638
Exposures in default <sup>(1)</sup>	8,275	-	4,673	-	24	3,602
Exposures associated with particularly high risk <sup>(2)</sup>	779	3,661	509	93	458	3,931
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	1	0	-	(0)	1
Collective investments undertakings	-	10	0	5	(0)	10
Equity exposures	-	-	-	-	-	-
Other exposures	123	21,063	45	2,368	8	21,018
<b>Total standardized approach</b>	<b>9,054</b>	<b>421,570</b>	<b>8,529</b>	<b>18,532</b>	<b>507</b>	<b>422,096</b>
<b>Total</b>	<b>16,979</b>	<b>736,118</b>	<b>13,396</b>	<b>26,259</b>	<b>476</b>	<b>739,702</b>
Of which: Loans	15,957	394,358	12,502	26,259	265	397,813
Of which: Debt securities	21	70,847	135	-	91	70,733
Of which: Off-balance sheet exposures	1,001	180,823	759	-	120	181,065
Of which: Others	-	90,090	-	-	-	90,090

<sup>(1)</sup> Defaulted exposures are additionally broken down by their respective original exposure class.

<sup>(2)</sup> Defaulted high risk exposures are included in the row "Exposures associated with particularly high risk" separately from the exposure class "Exposure in Default" as reported in the COREP statement.

<sup>(3)</sup> Net exposure is calculated as follows:

- Net exposure by standardized approach = "Non-defaulted exposure" - "Credit risk adjustment"; except "Exposure in default" and "Items associated with particularly high risk" that are calculated the same way as in the IRB approach

- Net exposure by IRB approach = "Exposure in default" + "Non-defaulted exposure" - "Credit risk adjustment"

<sup>(4)</sup> The table shows the gross original exposure of the COREP Statements for equity and credit risk, according to the standardized and IRB approaches, excluding positions subject to the framework of counterparty credit risk.

<sup>(5)</sup> The positive amounts represent provision increases, while negative amounts represent decreases.

## EU CR1-A - Credit quality of exposures by exposure class and instrument (excluding counterparty credit risk) (Million Euros. 12-31-2018)

Exposure Class	Gross Original exposure <sup>(4)</sup>				Credit risk adjustment charges of the period <sup>(5)</sup>	Net values <sup>(3)</sup>
	Defaulted exposures	Non-defaulted exposures	Credit risk adjustment	Accumulated write-offs		
Central governments or central banks	80	5,786	5	10	1	5,862
Institutions	161	32,477	58	19	(5)	32,581
Corporates	4,017	128,116	2,176	5,402	(1,271)	129,957
Of which: Specialized lending	161	6,510	73	1,635	(36)	6,597
Of which: SMEs	2,006	17,774	1,103	-	(717)	18,677
Of which: Others	1,851	103,832	999	3,767	(518)	104,683
Retail	4,778	113,425	2,660	2,056	321	115,544
Secured by immovable property	3,672	77,800	1,330	1,170	138	80,142
Qualifying revolving	199	21,968	584	51	57	21,583
Other retail	907	13,657	745	835	126	13,819
SMEs	418	3,707	281	142	83	3,844
Non-SMEs	489	9,950	464	692	43	9,975
Equity	-	6,822	-	-	-	6,822
<b>Total IRB approach</b>	<b>9,037</b>	<b>286,627</b>	<b>4,898</b>	<b>7,487</b>	<b>(954)</b>	<b>290,765</b>
Central governments or central banks	8	114,627	33	9	(15)	114,593
Regional governments or local authorities	-	10,203	23	21	16	10,180
Public sector entities	0	990	9	20	4	981
Multilateral development banks	-	265	0	-	(1)	265
International organizations	0	0	-	-	-	0
Institutions	25	28,139	14	11	(2)	28,124
Corporates	3,484	122,816	1,181	16,315	(432)	121,635
Retail	3,486	86,916	1,722	3,596	476	85,194
Secured by mortgages on immovable property	1,416	40,917	302	2,733	(37)	40,615
Exposures in default <sup>(1)</sup>	8,588	-	4,649	-	4	3,939
Exposures associated with particularly high risk <sup>(2)</sup>	30	1,138	51	147	(17)	1,117
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	3	0	-	0	3
Collective investments undertakings	-	69	1	9	0	69
Equity exposures	-	-	-	-	-	-
Other exposures	170	18,100	36	2,009	3	18,064
<b>Total standardized approach</b>	<b>8,618</b>	<b>424,184</b>	<b>8,022</b>	<b>24,869</b>	<b>(1)</b>	<b>424,781</b>
<b>Total</b>	<b>17,655</b>	<b>710,810</b>	<b>12,920</b>	<b>32,355</b>	<b>(955)</b>	<b>715,546</b>
Of which: Loans	16,647	376,575	12,237	32,355	(1,318)	380,985
Of which: Debt securities	21	62,542	44	-	(3)	62,519
Of which: Off-balance sheet exposures	987	179,061	639	-	366	179,409
Of which: Others	-	92,632	-	-	-	92,632

<sup>(1)</sup> Defaulted exposures are additionally broken down by their respective original exposure class.

<sup>(2)</sup> Defaulted high risk exposures are included in the row "Exposures associated with particularly high risk" separately from the exposure class "Exposure in Default" as reported in the COREP statement.

<sup>(3)</sup> Net exposure is calculated as follows:

- Net exposure by standardized approach = "Non-defaulted exposure" - "Credit risk adjustment"; except "Exposure in default" and "Items associated with particularly high risk" that are calculated the same way as in the IRB approach

- Net exposure by IRB approach = "Exposure in default" + "Non-defaulted exposure" - "Credit risk adjustment"

<sup>(4)</sup> The table shows the gross original exposure of the COREP Statements for equity and credit risk, according to the standardized and IRB approaches, excluding positions subject to the framework of counterparty credit risk.

<sup>(5)</sup> The positive amounts represent provision increases, while negative amounts represent decreases.

The information on non-performing exposures by portfolio type and exposure class is broken down in the following table, which includes the amounts as of December 31, 2019 and the main figures as of December 31, 2018 for comparative purposes only:

**Table 16.** NPL4 - Performing and non-performing exposures and related provisions (Million euros)

	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write-off	Collateral and financial guarantees received	
	Performing exposures		Non-performing exposures				Performing exposures – accumulated impairment and provisions		Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					On performing exposures	On non-performing exposures
	Of which stage 1	Of which stage 2	Of which stage 1	Of which stage 2	Of which stage 1	Of which stage 2	Of which stage 1	Of which stage 2	Of which stage 1	Of which stage 2	Of which stage 1	Of which stage 2			
Loans and advances	396,946	363,449	33,498	15,957	-	15,957	4,326	2,143	2,183	8,092	-	8,092	26,206	181,867	5,132
Central banks	4,285	4,285	-	-	-	-	9	9	-	-	-	-	0	5	-
General governments	28,787	28,105	682	88	-	88	38	15	22	21	-	21	32	11,897	21
Credit institutions	13,519	13,361	158	6	-	6	11	9	3	2	-	2	5	193	-
Other financial corporations	10,951	10,815	136	17	-	17	22	19	2	10	-	10	3	3,385	1
Non-financial corporations	165,239	149,223	16,017	8,465	-	8,465	1,713	808	904	4,748	-	4,748	17,064	55,548	2,003
Of which: SME	47,042	40,279	6,764	4,078	-	4,078	723	331	392	2,259	-	2,259	4,820	20,602	1,301
Households	174,165	157,660	16,505	7,381	-	7,381	2,534	1,282	1,252	3,312	-	3,312	9,102	110,839	3,107
Debt securities	77,534	77,178	356	34	-	34	135	60	75	18	-	18	-	-	-
Central banks	1,015	1,015	-	-	-	-	5	5	-	-	-	-	-	-	-
General governments	64,505	64,195	310	-	-	-	116	44	72	-	-	-	-	-	-
Credit institutions	1,057	1,057	-	0	-	0	0	0	-	0	-	0	-	-	-
Other financial corporations	7,851	7,823	28	33	-	33	12	10	2	17	-	17	-	-	-
Non-financial corporations	3,106	3,088	18	1	-	1	2	1	1	1	-	1	-	-	-
Off-balance-sheet exposures	179,717	169,265	10,452	1,001	-	1,001	443	248	196	268	-	268	-	7,324	109
Central banks	2	2	-	0	-	0	0	0	-	0	-	0	-	-	-
General governments	3,756	3,672	84	7	-	7	2	2	0	1	-	1	-	91	-
Credit institutions	18,689	18,422	267	1	-	1	5	5	1	0	-	0	-	2	-
Other financial corporations	7,655	7,495	160	0	-	0	3	3	1	0	-	0	-	66	0
Non-financial corporations	103,232	95,604	7,628	920	-	920	252	111	141	254	-	254	-	6,774	106
Households	46,383	44,071	2,313	73	-	73	181	128	53	12	-	12	-	391	4
<b>Total exposures December 2019</b>	<b>654,197</b>	<b>609,892</b>	<b>44,306</b>	<b>16,992</b>	<b>-</b>	<b>16,992</b>	<b>4,905</b>	<b>2,451</b>	<b>2,454</b>	<b>8,378</b>	<b>-</b>	<b>8,378</b>	<b>26,206</b>	<b>189,191</b>	<b>5,242</b>
Loans and advances	383,503			16,357			4,451			7,760			32,355		5,570
Debt securities	67,722			36			48			16			-		-
Off-balance sheet exposures	169,082			987			419			217			-		113
<b>Total exposures December 2018</b>	<b>620,307</b>			<b>17,381</b>			<b>4,918</b>			<b>7,993</b>			<b>32,355</b>		<b>5,683</b>

(\*) Includes the book value of repurchase agreements, positions subject to the securitization framework and excludes BBVA Paraguay assets that are registered in accounting as non-current assets held for sale (see Note 1.1.3.).

(\*\*) The Group's overall policy is to align the concepts of default and stage 3 so that they are uniform in the field of management. However, for portfolios where the IRB models are used, there may be some differences in the use of materiality thresholds in wholesale exposures due to other prudential specifications. In any case, the Group estimates that the difference between the two concepts is immaterial at December 31, 2019 since it would not exceed 1% to the exposures in default.

The distribution by geographical area of defaulted and non-defaulted exposures of financial assets and contingent

risk and commitments, as well as credit risk adjustments, is below:

**Table 17.** EU CR1-C - Credit quality of exposures by geography (excluding counterparty credit risk) (Million Euros. 12-31-2019)

	Gross Original exposure <sup>(1)</sup>		Credit risk adjustment <sup>(c)</sup>	Accumulated write-offs	Credit risk adjustment charges of the period <sup>(2)</sup>	Net values (d)=(a)+(b)-(c)
	Defaulted exposures <sup>(a)</sup>	Non-defaulted exposures <sup>(b)</sup>				
Spain	8,732	283,920	5,253	16,882	(369)	287,398
Turkey	3,402	70,784	2,649	428	498	71,537
Mexico	1,393	113,827	1,979	2,728	131	113,241
USA	784	125,121	793	4,431	(50)	125,112
South America	2,010	64,271	2,212	1,420	381	64,069
Other areas <sup>(3)</sup>	658	78,195	509	371	(116)	78,344
<b>Total</b>	<b>16,979</b>	<b>736,118</b>	<b>13,396</b>	<b>26,259</b>	<b>476</b>	<b>739,702</b>

<sup>(1)</sup> The template shows the net Original Exposure from the COREP Statements for equity and credit risk, excluding securitization exposures

<sup>(2)</sup> The positive amounts represent provision increases, while negative amounts represents decreases

<sup>(3)</sup> Includes all other countries not included on the previous columns. The countries with the greatest exposure in this area are: United Kingdom, France, Italy, Germany and Portugal

EU CR1-C - Credit quality of exposures by geography (excluding counterparty credit risk) (Million Euros. 12-31-2018)

	Gross Original exposure <sup>(1)</sup>		Credit risk adjustment <sup>(c)</sup>	Accumulated write-offs	Credit risk adjustment charges of the period <sup>(2)</sup>	Net values (d)=(a)+(b)-(c)
	Defaulted exposures <sup>(a)</sup>	Non-defaulted exposures <sup>(b)</sup>				
Spain	10,270	287,464	5,622	24,328	(2,500)	292,112
Turkey	2,601	73,404	2,151	377	888	73,853
Mexico	1,162	98,403	1,848	2,272	61	97,717
USA	883	115,647	843	3,857	243	115,687
South America	1,892	62,954	1,831	1,140	416	63,015
Other areas <sup>(3)</sup>	847	72,939	625	382	(62)	73,161
<b>Total</b>	<b>17,655</b>	<b>710,810</b>	<b>12,920</b>	<b>32,355</b>	<b>(955)</b>	<b>715,546</b>

<sup>(1)</sup> The template shows the net Original Exposure from the COREP Statements for equity and credit risk, excluding securitization exposures

<sup>(2)</sup> The positive amounts represent provision increases, while negative amounts represents decreases

<sup>(3)</sup> Includes all other countries not included on the previous columns. The countries with the greatest exposure in this area are: United Kingdom, France, Italy, Germany and Portugal

The distribution by counterparty sector of defaulted and non-defaulted exposures of financial assets and contingent risk

and commitments, as well as their credit risk adjustments, are shown below:

**Table 18.** EU CR1-B - Credit quality of exposures by industry or counterparty types (excluding counterparty credit risk) (Million Euros. 12-31-2019)

	Gross Original Exposure <sup>(1)</sup>			Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures	Credit risk adjustment		
Agriculture, forestry and fishing	247	5,801	200	(103)	5,849
Mining and quarrying	186	7,787	158	77	7,814
Manufacturing	1,012	85,008	1,078	(359)	84,942
Electricity, gas, steam and air conditioning supply	382	25,323	346	(98)	25,359
Water supply	38	2,309	43	5	2,304
Construction	2,921	22,159	1,945	690	23,136
Wholesale and retail trade	2,462	51,139	1,832	235	51,768
Transport and storage	714	16,472	492	12	16,694
Accommodation and food service activities	516	14,362	324	11	14,554
Information and communication	157	14,146	108	(127)	14,195
Financial activities and insurance	370	96,038	247	(2)	96,161
Real estate activities	690	42,199	459	(211)	42,430
Professional, scientific and technical activities	496	15,338	380	32	15,455
Administrative and support service activities	313	10,763	311	96	10,765
Public administration and defence, compulsory social security	160	129,131	172	54	129,119
Education	200	4,541	191	30	4,550
Human health services and social work activities	119	10,259	117	(59)	10,260
Arts, entertainment and recreation	77	2,089	48	(10)	2,117
Other services	773	35,779	873	167	35,679
Household activities as employers of domestic staff; Activities of households as products of goods and services for own use	2	75	1	(0)	76
Extraterritorial organizations activities	0	31	0	0	31
Individuals without business activity	5,144	145,369	4,071	34	146,442
<b>Total</b>	<b>16,979</b>	<b>736,118</b>	<b>13,396</b>	<b>476</b>	<b>739,702</b>

<sup>(1)</sup> The template shows the gross original exposure reported in the COREP Statements for equity and credit risk, excluding securitization exposure

EU CR1-B - Credit quality of exposures by industry or counterparty types (excluding counterparty credit risk) (Million Euros. 12-31-2018)

	Gross Original Exposure <sup>(1)</sup>			Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures	Credit risk adjustment		
Agriculture, forestry and fishing	288	9,837	303	119	9,822
Mining and quarrying	140	8,427	81	(54)	8,486
Manufacturing	1,429	80,167	1,437	(78)	80,160
Electricity, gas, steam and air conditioning supply	565	24,433	444	181	24,554
Water supply	27	2,595	37	10	2,585
Construction	1,871	23,509	1,255	(1,127)	24,125
Wholesale and retail trade	2,464	48,416	1,597	106	49,283
Transport and storage	664	21,879	480	29	22,064
Accommodation and food service activities	538	11,267	313	(2)	11,491
Information and communication	985	12,326	235	63	13,075
Financial activities and insurance	338	106,181	250	27	106,269
Real estate activities	960	40,898	669	(149)	41,189
Professional, scientific and technical activities	467	14,926	347	(132)	15,045
Administrative and support service activities	262	7,882	215	35	7,929
Public administration and defence, compulsory social security	259	106,150	118	56	106,291
Education	111	4,141	161	100	4,091
Human health services and social work activities	159	10,809	176	20	10,792
Arts, entertainment and recreation	102	2,148	58	(3)	2,192
Other services	843	32,793	705	(305)	32,931
Household activities as employers of domestic staff; Activities of households as products of goods and services for own use	1	64	1	(0)	64
Extraterritorial organizations activities	0	26	0	0	26
Individuals without business activity	5,183	141,937	4,037	149	143,083
<b>Total</b>	<b>17,655</b>	<b>710,810</b>	<b>12,920</b>	<b>(955)</b>	<b>715,546</b>

<sup>(1)</sup> The template shows the gross original exposure reported in the COREP Statements for equity and credit risk, excluding securitization exposure

The distribution of the gross carrying amount of performing and non-performing exposures of loans and debt securities by residual maturity is shown in the following table, which

includes the amounts as of December 31, 2019 and the main figures as of December 31, 2018 for comparative purposes only:

**Table 19.** NPL3 - Credit quality of performing and non-performing exposures by past due days (Million Euros. 31-12-2019)

	Gross carrying amount/nominal amount <sup>(1)</sup>											
	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		
Loans and advances	396,946	393,722	3,224	15,957	8,107	1,323	1,930	2,329	1,970	148	149	15,957
Central banks	4,285	4,285	-	-	-	-	-	-	-	-	-	-
General governments	28,787	28,783	4	88	61	1	2	3	2	4	16	88
Credit institutions	13,519	13,518	1	6	4	2	0	0	-	-	-	6
Other financial corporations	10,951	10,950	1	17	9	5	1	0	2	-	-	17
Non-financial corporations	165,239	164,549	691	8,465	4,433	396	914	1,400	1,152	83	86	8,465
Of which: SME	47,042	46,624	418	4,078	1,719	203	504	878	719	23	31	4,078
Households	174,165	171,638	2,527	7,381	3,600	918	1,012	926	815	62	48	7,381
Debt securities	77,534	77,534	-	34	31	3	-	-	-	-	-	34
Central banks	1,015	1,015	-	-	-	-	-	-	-	-	-	-
General governments	64,505	64,505	-	-	-	-	-	-	-	-	-	-
Credit institutions	1,057	1,057	-	0	0	-	-	-	-	-	-	0
Other financial corporations	7,851	7,851	-	33	30	3	-	-	-	-	-	33
Non-financial corporations	3,106	3,106	-	1	1	-	-	-	-	-	-	1
Off-balance-sheet exposures	179,717	-	-	1,001	-	-	-	-	-	-	-	1,001
Central banks	2	-	-	0	-	-	-	-	-	-	-	0
General governments	3,756	-	-	7	-	-	-	-	-	-	-	7
Credit institutions	18,689	-	-	1	-	-	-	-	-	-	-	1
Other financial corporations	7,655	-	-	0	-	-	-	-	-	-	-	0
Non-financial corporations	103,232	-	-	920	-	-	-	-	-	-	-	920
Households	46,383	-	-	73	-	-	-	-	-	-	-	73
<b>Total exposures December 2019</b>	<b>654,197</b>	<b>471,256</b>	<b>3,224</b>	<b>16,992</b>	<b>8,138</b>	<b>1,325</b>	<b>1,930</b>	<b>2,329</b>	<b>1,970</b>	<b>148</b>	<b>149</b>	<b>16,992</b>

<sup>(\*)</sup> Includes the carrying value of reverse repurchase agreements, positions subject to the securitization framework and excludes BBVA Paraguay assets that are recorded as non-current assets held for sale (see Note 1.1.3.).

<sup>(1)</sup> Gross carrying amount

Credit quality of performing and non-performing exposures by past due days (Million Euros. 31-12-2018)

	Gross carrying amount/nominal amount <sup>(1)</sup>									
	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 ≤ 5 years	Past due > 5 years		
Loans and advances	383,503	379,276	4,227	16,357	8,927	1,347	1,876	3,704	503	16,357
Debt securities	67,722	67,722	-	36	27	8	-	-	-	36
Off-balance sheet exposures	169,082	-	-	987	-	-	-	-	-	987
<b>Total exposures December 2018</b>	<b>620,307</b>	<b>446,998</b>	<b>4,227</b>	<b>17,381</b>	<b>8,954</b>	<b>1,355</b>	<b>1,876</b>	<b>3,704</b>	<b>503</b>	<b>17,381</b>

<sup>(\*)</sup> The December 2018 table is published for comparative purposes, including the breakdown available in FINREP's regulatory requirement

<sup>(\*)</sup> Includes the carrying value of reverse repurchase agreements, positions subject to the securitization framework and excludes BBVA Paraguay assets that are recorded as non-current assets held for sale (see Note 1.1.3.).

<sup>(1)</sup> Gross carrying amount

### 3.2.3.4. Impairment losses in the period

The details of impairment losses on financial assets and contingent risk and commitments, as well as derecognition

of losses previously recognized in asset write-offs recorded directly in the income statement in 2019 and 2018 are below:

**Table 20.** EU CR2-A - Changes in the stock of general and specific credit risk adjustments (Million Euros. 12-31-2019)

	<b>Accumulated credit risk adjustment<sup>(1)</sup></b>
<b>Opening balance</b>	<b>12,920</b>
Increases due to origination and acquisition	1,866
Decrease due to derecognition repayments and disposals	(1,500)
Changes due to change in credit risk (net)	3,835
Changes due to modifications without derecognition (net)	236
Changes due to update in the institution's methodology for estimation (net)	-
Decrease in allowance account due to write-offs	(2,542)
Other adjustments	(1,419)
<b>Closing balance</b>	<b>13,396</b>
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	(919)
Specific credit risk adjustments recorded directly to the statement of profit or loss	537

<sup>(1)</sup> Reverse repurchase agreements are included and positions subject to the securitization framework are excluded.

In addition, the flow statements of non-performing loans and fixed income in the balance sheet between December 31, 2019 and December 31, 2018 are shown below:

**Table 21.** EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities (Million Euros. 12-31-2019)

	<b>Gross carrying value defaulted exposures<sup>(2)</sup></b>
<b>Opening balance<sup>(1)</sup></b>	<b>16,668</b>
Loans and debt securities that have defaulted or impaired since the last reporting period	5,707
Returned to non-defaulted status	(3,215)
Amounts written off	(3,803)
Other changes	620
<b>Closing balance</b>	<b>15,978</b>

<sup>(1)</sup> Reverse repurchase agreements are included and positions subject to the securitization framework and off-balance positions are excluded

<sup>(2)</sup> Gross carrying amount

A table with a general overview of forborne exposures is shown below, which includes the amounts as of December

31, 2019 and the main figures as of December 31, 2018 for comparative purposes only:

**Table 22.** NPL1 - Credit quality of forborne exposures (Million Euros)

	Gross carrying amount/nominal amount of exposures with forbearance measures <sup>(1)</sup>				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
	Performing forborne	Non-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	
Loans and advances	6,888	9,350	9,350	9,350	623	4,164	7,304	3,423
Central banks	-	-	-	-	-	-	-	-
General governments	96	62	62	62	3	7	49	16
Credit institutions	-	-	-	-	-	-	-	-
Other financial corporations	1	5	5	5	0	4	1	1
Non-financial corporations	2,853	5,235	5,235	5,235	294	2,722	2,417	1,185
Households	3,938	4,048	4,048	4,048	326	1,431	4,838	2,221
Debt Securities	-	-	-	-	-	-	-	-
Loan commitments given	134	45	45	45	5	7	-	-
<b>Total exposures December 2019</b>	<b>7,022</b>	<b>9,395</b>	<b>9,395</b>	<b>9,395</b>	<b>628</b>	<b>4,172</b>	<b>7,304</b>	<b>3,423</b>
Loans and advances	7,165	10,003	10,003	10,003	683	4,202	8,427	4,130
Debt securities	-	-	-	-	-	-	-	-
Off-balance sheet exposures	138	87	87	87	5	21	-	-
<b>Total exposures December 2018</b>	<b>7,304</b>	<b>10,091</b>	<b>10,091</b>	<b>10,091</b>	<b>688</b>	<b>4,223</b>	<b>8,427</b>	<b>4,130</b>

<sup>(1)</sup> Includes the carrying value of reverse repurchase agreements, positions subject to the securitization framework and excludes BBVA Paraguay assets that are recorded as non-current assets held for sale (see Note 1.1.3.).

<sup>(2)</sup> Gross carrying amount

The foreclosed assets obtained from non-performing exposure as of December 31, 2019 are shown below,

distinguishing between collateral classified as tangible fixed assets and other types of collateral:

**Table 23.** NPL9 - Collateral obtained by taking possession and execution processes (Million Euros. 12-31-2019)

	Collateral obtained by taking possession	
	Value at initial recognition <sup>(1)</sup>	Accumulated negative changes <sup>(2)</sup>
Property, plant and equipment (PP&E)	641	-
Other than PP&E	2,996	738
Residential immovable property	1,438	377
Commercial Immovable property	348	152
Movable property (auto, shipping, etc.)	1	0
Equity and debt instruments	1,177	209
Other	31	-
<b>Total</b>	<b>3,637</b>	<b>738</b>

<sup>(1)</sup> Value at initial recognition: the gross carrying amount of the collateral obtained by taking possession at initial recognition in the balance sheet

<sup>(2)</sup> Accumulated negative changes: accumulated impairment or accumulated negative changes to the initial recognition value of the collateral obtained by taking possession

## 3.2.4. Information on the standardized approach

### 3.2.4.1. Identification of external rating agencies

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

The exposure for which the ratings of ECAI are used are those corresponding 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 weighting 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 weightings. If the two lowest risk weightings coincide, then that weighting 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.

### 3.2.4.2. 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.

### 3.2.4.3. 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 standardized approach, are shown below, excluding securitization and counterparty credit risk exposure, which is presented in Section 3.2.6 of this Report.

**Table 24.** EU CR4 - Standardized approach - credit risk exposure and credit risk mitigation effects (Million Euros. 12-31-2019)

Exposure Class	Exposures before CCF and CRM <sup>(1)</sup>		Exposures post-CCF and CRM <sup>(2)</sup>		RWA <sup>(3)</sup> and RWA Density	
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA Density
Central governments or central banks	117,878	4,449	146,001	654	29,629	20%
Regional governments or local authorities	9,512	1,056	6,827	271	1,643	23%
Public sector entities	1,383	212	1,504	137	714	43%
Multilateral development banks	130	38	210	-	11	5%
International Organizations	-	-	-	-	-	-
Institutions	10,202	13,536	10,239	1,063	4,725	42%
Corporates	75,447	33,319	71,354	17,058	86,058	97%
Retail	56,081	30,653	52,060	2,755	38,451	70%
Secured by mortgages on immovable property	39,471	167	39,423	138	14,983	38%
Exposures in default	3,273	330	3,197	225	3,806	111%
Exposures associated with particularly high risk	3,502	428	3,285	107	5,088	150%
Covered bonds	-	-	-	-	-	-
Institutions and corporates with a short term credit assessment	1	-	1	-	1	96%
Collective Investment Undertakings	6	4	4	3	7	100%
Equity	-	-	-	-	-	0%
Other Items	21,018	-	21,211	496	12,767	59%
<b>Total</b>	<b>337,904</b>	<b>84,191</b>	<b>355,316</b>	<b>22,907</b>	<b>197,882</b>	<b>52%</b>

<sup>(1)</sup> Net OE: original exposure net of value adjustments and provisions

<sup>(2)</sup> EAD: original exposure net of value adjustments and provisions after CRM and CCF

<sup>(3)</sup> RWAs: EAD after risk-weighting

## EU CR4 - Standardized approach - credit risk exposure and credit risk mitigation effects (Million Euros, 12-31-2018)

Exposure Class	Exposures before CCF and CRM <sup>(1)</sup>		Exposures post-CCF and CRM <sup>(2)</sup>		RWA <sup>(3)</sup> and RWA Density	
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA Density
Central governments or central banks	111,247	3,346	137,615	549	30,247	22%
Regional governments or local authorities	9,683	497	6,414	230	1,415	21%
Public sector entities	824	157	1,757	51	714	39%
Multilateral development banks	242	24	453	-	10	2%
International Organizations	-	-	-	-	-	-
Institutions	14,236	13,888	14,236	1,874	4,991	31%
Corporates	78,195	43,440	74,105	15,851	88,046	98%
Retail	54,130	31,064	50,039	2,403	36,753	70%
Secured by mortgages on immovable property	40,470	146	40,389	68	15,466	38%
Exposures in default	3,487	453	3,346	245	4,127	115%
Exposures associated with particularly high risk	1,116	1	1,101	-	1,652	150%
Covered bonds	-	-	-	-	-	-
Institutions and corporates with a short term credit assessment	3	-	3	-	2	66%
Collective Investment Undertakings	44	24	44	12	57	100%
Equity	-	-	-	-	-	-
Other Items	18,064	-	17,959	950	11,229	59%
<b>Total</b>	<b>331,743</b>	<b>93,038</b>	<b>347,461</b>	<b>22,236</b>	<b>194,707</b>	<b>53%</b>

<sup>(1)</sup> Net OE: original exposure net of value adjustments and provisions

<sup>(2)</sup> EAD: original exposure net of value adjustments and provisions after CRM and CCF

<sup>(3)</sup> RWAs: EAD after risk-weighting

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 standardized approach, excluding securitization 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 3.2.6 of this report.

**Table 25.** Standardized approach: exposure values before application of credit risk mitigation techniques (Million Euros. 12-31-2019)

Exposure Class	Risk Weight																Total credit exposures amount (pre CCF and pre-CRM)	Of which: unrated <sup>(1)</sup>	
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted			
Central Government or central banks	90,680	-	-	-	4,536	-	5,923	-	-	17,045	872	3,271	-	-	-	-	-	122,327	51,205
Regional government or local authorities	244	-	-	-	6,827	-	3,360	-	-	136	-	-	-	-	-	-	-	10,568	9,110
Public sector entities	-	-	-	-	672	-	634	-	-	289	1	-	-	-	-	-	-	1,595	1,092
Multilateral development banks	77	-	-	-	90	-	-	-	-	-	-	-	-	-	-	-	-	167	114
International Organizations	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Institutions	-	250	-	-	6,292	-	15,024	-	-	2,152	21	-	-	-	-	-	-	23,738	20,511
Corporates	-	399	-	-	142	-	2,935	-	-	104,209	1,081	-	-	-	-	-	-	108,766	107,315
Retail	-	-	-	-	-	-	-	-	84,589	2,145	-	-	-	-	-	-	-	86,733	86,601
Secured by mortgages on immovable property	-	-	-	-	-	33,296	4,898	-	810	634	-	-	-	-	-	-	-	39,638	39,634
Exposures in default	-	-	-	-	-	-	-	-	-	2,797	805	-	-	-	-	-	-	3,602	3,596
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	3,931	-	-	-	-	-	-	3,931	3,931
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	0	-	-	-	-	1	-	-	-	-	-	-	-	1	0
Collective investment undertakings	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	10	10
Other Items	7,484	-	-	-	6	-	-	-	-	13,527	0	-	-	-	-	-	-	21,018	20,941
Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>98,485</b>	<b>649</b>	<b>-</b>	<b>-</b>	<b>18,566</b>	<b>33,296</b>	<b>32,774</b>	<b>-</b>	<b>85,398</b>	<b>142,946</b>	<b>6,711</b>	<b>3,271</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>422,096</b>	<b>344,060</b>

<sup>(1)</sup> Of which: Unrated refers to exposure for which no credit rating from designated ECAIs is available

Standardized approach: exposure values before application of credit risk mitigation techniques (Million Euros. 12-31-2018)

Exposure Class	Risk Weight																Total credit exposures amount (pre CCF and pre-CRM)	Of which: unrated <sup>(1)</sup>	
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted			
Central Government or central banks	82,586	-	-	-	4,318	-	4,652	-	-	19,977	56	3,004	-	-	-	-	-	114,593	48,775
Regional government or local authorities	204	-	-	-	9,836	-	49	-	-	91	-	-	-	-	-	-	-	10,180	10,180
Public sector entities	1	-	-	-	200	-	454	-	-	325	0	-	-	-	-	-	-	981	588
Multilateral development banks	222	-	-	-	-	-	20	-	-	24	-	-	-	-	-	-	-	265	265
International Organizations	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Institutions	-	3,192	-	-	19,808	-	2,551	-	-	2,574	0	-	-	-	-	-	-	28,124	26,702
Corporates	-	-	-	-	102	-	1,237	-	-	119,909	386	-	-	-	-	-	-	121,635	120,975
Retail	-	-	-	-	-	-	-	-	85,194	-	-	-	-	-	-	-	-	85,194	77,678
Secured by mortgages on immovable property	-	-	-	-	-	33,035	6,178	-	493	909	-	-	-	-	-	-	-	40,615	38,246
Exposures in default	-	-	-	-	-	-	-	-	-	2,725	1,215	-	-	-	-	-	-	3,939	3,400
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	1,117	-	-	-	-	-	-	1,117	632
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	3	1
Collective investment undertakings	-	-	-	-	-	-	-	-	-	69	-	-	-	-	-	-	-	69	69
Other Items	5,595	-	-	-	-	-	-	-	-	12,469	0	-	-	-	-	-	-	18,064	17,926
Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>88,608</b>	<b>3,192</b>	<b>-</b>	<b>-</b>	<b>34,265</b>	<b>33,035</b>	<b>15,142</b>	<b>-</b>	<b>85,687</b>	<b>159,074</b>	<b>2,774</b>	<b>3,004</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>424,781</b>	<b>345,437</b>

<sup>(1)</sup> Of which: Unrated refers to exposures for which no credit rating from designated ECAIs is available

**Table 26.** EU CR5 - Standardized approach: exposure values after application of credit risk mitigation techniques (Million Euros. 12-31-2019)

Exposure Class	Risk Weight																Total credit exposures amount (post-CCF and post-CRM)	Of which: unrated <sup>(1)</sup>	
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted			
Central Government or central banks	118,530	-	-	-	1,230	-	5,708	-	-	17,044	872	3,271	-	-	-	-	-	146,655	50,520
Regional government or local authorities	1	-	-	-	6,579	-	381	-	-	136	-	-	-	-	-	-	-	7,098	7,075
Public sector entities	-	-	-	-	798	-	578	-	-	264	1	-	-	-	-	-	-	1,641	497
Multilateral development banks	157	-	-	-	53	-	-	-	-	-	-	-	-	-	-	-	-	210	114
International Organizations	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Institutions	-	250	-	-	5,757	-	3,474	-	-	1,802	19	-	-	-	-	-	-	11,302	8,756
Corporates	-	-	-	-	34	-	1,895	-	-	85,656	828	-	-	-	-	-	-	88,412	86,955
Retail	-	-	-	-	-	-	-	-	54,814	-	-	-	-	-	-	-	-	54,814	54,682
Secured by mortgages on immovable property	-	-	-	-	-	33,285	4,843	-	804	629	-	-	-	-	-	-	-	39,561	39,558
Exposures in default	-	-	-	-	-	-	-	-	-	2,655	767	-	-	-	-	-	-	3,423	3,582
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	3,392	-	-	-	-	-	-	3,392	3,392
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	0	-	-	-	-	1	-	-	-	-	-	-	-	1	0
Collective investment undertakings	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	7	7
Other Items	8,935	-	-	-	6	-	-	-	-	12,765	0	-	-	-	-	-	-	21,707	21,707
Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>127,622</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>14,458</b>	<b>33,285</b>	<b>16,879</b>	<b>-</b>	<b>55,618</b>	<b>120,959</b>	<b>5,880</b>	<b>3,271</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>378,222</b>	<b>276,846</b>

<sup>(1)</sup> Of which: Unrated refers to exposure for which no credit rating from designated ECAIs is available

EU CR5 - Standardized approach: exposure values after application of credit risk mitigation techniques (Million Euros. 12-31-2018)

Exposure Class	Risk Weight																Total credit exposures amount (post-CCF and post-CRM)	Of which: unrated <sup>(1)</sup>	
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted			
Central Government or central banks	108,890	-	-	-	1,462	-	4,783	-	-	19,969	56	3,004	-	-	-	-	-	138,164	52,283
Regional government or local authorities	7	-	-	-	6,497	-	49	-	-	91	-	-	-	-	-	-	-	6,644	6,644
Public sector entities	47	-	-	-	1,084	-	362	-	-	316	0	-	-	-	-	-	-	1,809	570
Multilateral development banks	433	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	453	242
International Organizations	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Institutions	-	3,123	-	-	8,782	-	2,066	-	-	2,139	0	-	-	-	-	-	-	16,110	15,183
Corporates	-	-	-	-	66	-	1,149	-	-	88,359	381	-	-	-	-	-	-	89,956	89,294
Retail	-	-	-	-	-	-	-	-	52,442	-	-	-	-	-	-	-	-	52,442	45,361
Secured by mortgages on immovable property	-	-	-	-	-	33,013	6,077	-	469	899	-	-	-	-	-	-	-	40,458	38,107
Exposures in default	-	-	-	-	-	-	-	-	-	2,519	1,072	-	-	-	-	-	-	3,591	3,111
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	1,101	-	-	-	-	-	-	1,101	631
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	3	1
Collective investment undertakings	-	-	-	-	-	-	-	-	-	57	-	-	-	-	-	-	-	57	57
Other Items	7,680	-	-	-	-	-	-	-	-	11,228	0	-	-	-	-	-	-	18,909	18,772
Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>117,057</b>	<b>3,123</b>	<b>-</b>	<b>-</b>	<b>17,892</b>	<b>33,013</b>	<b>14,506</b>	<b>-</b>	<b>52,911</b>	<b>125,578</b>	<b>2,612</b>	<b>3,004</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>369,696</b>	<b>270,256</b>

<sup>(1)</sup> Of which: Unrated refers to exposure for which no credit rating from designated ECAIs is available

The following table presents the flow statements of credit and counterparty credit risk RWA under standardized approach during 2019:

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

	Credit Risk		Counterparty Credit Risk		Total	
	RWA amounts	Capital Requirements	RWA amounts	Capital Requirements	RWA amounts	Capital requirements
<b>RWAs as of December 31, 2018</b>	<b>194,707</b>	<b>15,577</b>	<b>3,008</b>	<b>241</b>	<b>197,715</b>	<b>15,817</b>
Asset size	3,854	308	(296)	(24)	3,558	285
Asset quality	(37)	(3)	(23)	(2)	(60)	(5)
Model updates	-	-	-	-	-	-
Methodology and policy	-	-	-	-	-	-
Acquisitions and disposals	-	-	-	-	-	-
Foreign exchange movements	(642)	(51)	(394)	(32)	(1,036)	(83)
Other	-	-	-	-	-	-
<b>RWAs as of December 31, 2019</b>	<b>197,882</b>	<b>15,831</b>	<b>2,294</b>	<b>184</b>	<b>200,176</b>	<b>16,014</b>

The above table shows the most relevant changes recorded during 2019 in credit risk models according to the standardized approach:

- The size of assets reflects the variations in RWAs due to exposure increases, which have mainly occurred in retail exposures, partially offset by a reduction in corporates; and by the increase of approximately 3.4 billion due to IFRS 16 impact. In addition, in 2019, the European Commission recognized Argentina as an equivalent country for the purposes of supervisory and regulatory requirements with a reduction in RWAs of approximately 1.5 billion.
- Asset quality includes changes in RWAs from the regulatory category of Exposures in default.
- Finally, the exchange rate includes the impact of foreign exchange variations on RWAs during 2019, which mainly

reflects the net effect of the depreciation of the Turkish lira and the Argentine peso against the euro, which has partially offset the growth of exposures by the appreciation of the US dollar and Mexican peso.

## 3.2.5. Information on the IRB approach

### 3.2.5.1. General information

#### 3.2.5.1.1. Authorization by the supervisor to use the IRB approach

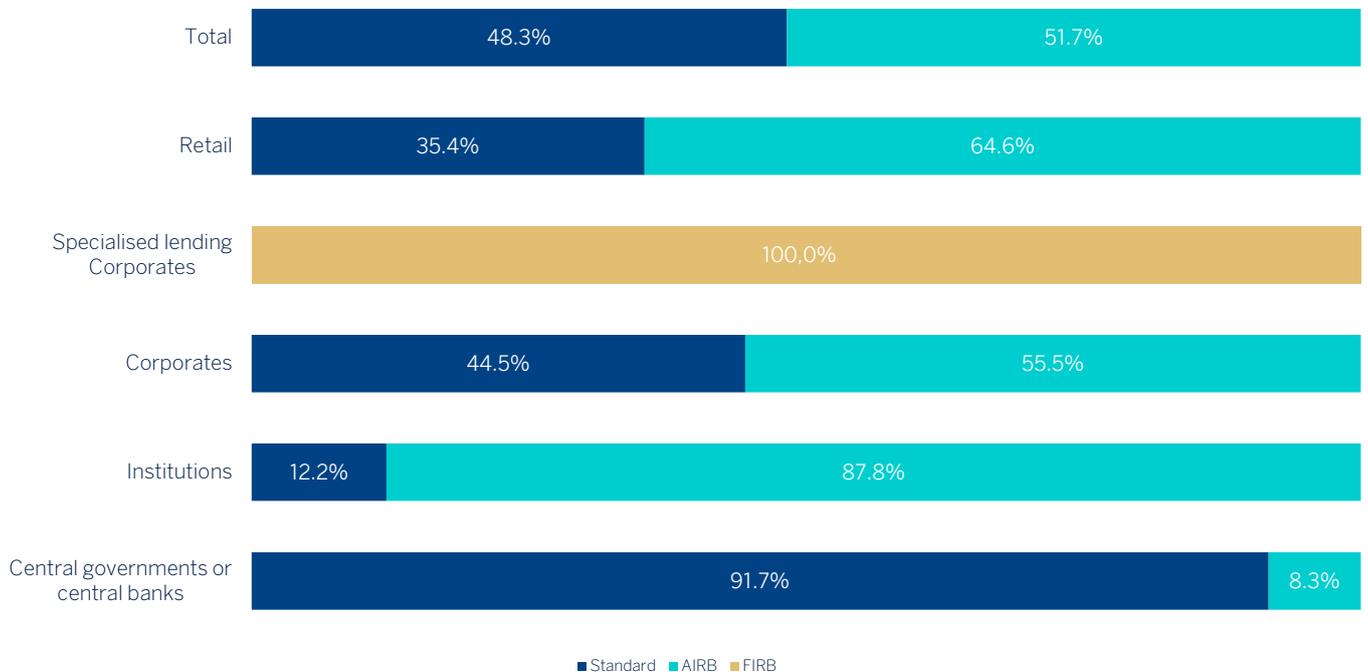
The following are the models authorized by the supervisor for use in the calculation of bank capital requirements.

**Table 28.** Models authorized by the supervisor for the purpose of their use in the calculation of capital requirements (12-31-2019)

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

The following chart shows the distribution of exposures at default related to credit risk and counterparty credit risk by model for each exposure category, as of December 31, 2019:

**Chart 6.** Distribution of EAD by Exposure Category and Method for Credit and Counterparty Risk



<sup>(\*)</sup> All other exposure categories are calculated under the standardized approach

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 by the characteristics of the transactions, economic and financial conditions of the customer, information on payment behavior, credit bureau, etc.

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 maintains its schedule established for receiving approval for additional Advanced Internal Models in different risk classes and geographical areas.

**3.2.5.1.2. 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 29.** Master Scale of BBVA's rating (12-31-2019)

External rating Standard & Poor's List	Internal rating Reduced List (22 groups)	Probability of default (basic points)		
		Average	Minimum from >=	Maximum
AAA	AAA	1	-	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

### 3.2.5.1.3. Use of internal estimates for purposes other than the calculation of bank 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.

### 3.2.5.1.4. 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 recognized 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.

### 3.2.5.1.5. Control mechanisms for internal rating systems

The Group has a management framework for rating systems that includes all the phases of its life cycle: from the time when a need that triggers the construction or modification of a model is identified, through to its use and monitoring.

Appropriate monitoring allows detection of unexpected behavior, identification of incorrect use and even anticipation when changes in the risk profile of the portfolios or products require corrective action to be taken. The monitoring of the risk rating systems is performed with a frequency that is appropriate to the nature of the model, the availability of new data, modeling techniques and the importance of its use in management. This is analyzed from a twofold perspective: performance and use.

The aim of performance monitoring is to detect deficiencies in the performance of the rating systems for risk anticipating its deterioration over time. It allows us to determine if these systems work correctly, helping to verify that the model components work as expected. The monitoring performance framework can identify weaknesses and establish the plans of action needed to ensure correct operation. This analytical framework, a fundamental component of risk model planning, sets out the minimum criteria to be taken into account, as well as the metrics and thresholds that make it possible to flag unwanted behaviors.

The purpose of the use monitoring is to verify that the model is used generally, in the way it was intended, and appropriately. This control mechanism allows continued detection of deviations from the planned use of models, as well as the establishment of action plans for their correction.

Additionally, the Group has an area independent of the developers of the rating systems and the departments responsible for their monitoring, whose main function is to subject the models used to an effective contrast, in order to guarantee their 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.

The various aspects to be improved and detected during the review process are reflected in the validation reports by setting recommendations. These reports are presented to the established Risk Committees, together with the status of the action plans associated with the recommendations, to ensure their resolution and the proper operation of the rating systems at any time.

### 3.2.5.1.6. 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 the Risk units appointed for this purpose, which periodically analyze 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.

In the case of emerging countries where BBVA subsidiaries or branches are present, the rating in local currency is adjusted to the rating obtained by the emerging countries tool under the authorization of the Risk Committee assigned for this purpose.

- Institutions:** The rating for Public Institutions is generally provided by the risk units responsible for their approval, on a yearly basis, coinciding with the review of customer risk or with the reporting of their financial accounts.

In the case of financial institutions, the responsible Risk unit gives a regular rating for these customers, continuously monitoring them on domestic and international markets. External ratings are a key factor in assigning ratings for financial institutions.

- 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.

- **SMEs:** 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 Businesses:** 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.
- **Specialized 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 behavior. Proactive models allow offers of pre-approved and/

or pre-offered products, which are instrumentalized 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:

- Mortgages, Consumer Finance and Retail Cards - Spain:* 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.
  - Consumer Finance Autos Spain:* The financing request may come through the call center or be directly recorded in the web application by our authorized dealers. The necessary information on the customer (personal, financial information, authorization 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.
  - Retail Revolving- Cards BBVA Mexico:* The manager or specialist party gathers the necessary information on the customer (personal, financial information and authorization 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.
    - Behavioral: Every month all the active cards are rated according to their transactional behavior 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 behavior and flows.
  - Proactive - Spain:* 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.
  - 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.

### 3.2.5.1.7. 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 behavior 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 RAR – 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 bank 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<sup>5</sup> approach, analyzing 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 analyzes the evolution of the exposure up to the time of the breach of contract, while the obligor level approach analyzes 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.

### 3.2.5.2. Exposure values by category and PD range

The following table presents the information on credit risk as of December 31, 2019 (excluding counterparty credit risk, which is set out in detail in Table CCR4 in section 3.2.6.2.2) using the internal ratings-based (IRB) approach, by debtor grade for the different categories of exposure:

<sup>5</sup> A cohort is a twelve-month window that has a reference date (end of each month) and contains all delinquent transactions whose date of noncompliance occurs within said cohort. All operations must have a contract date prior to the reference date.

**Table 30.** EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range (Million Euros. 12-31-2019)

PD Scale as of 12-31-2019 <sup>(1)(7)</sup>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF <sup>(2)</sup>	EAD post CRM and post-CCF	Average PD <sup>(3)</sup>	Number of obligors	Average LGD <sup>(4)</sup>	Average Maturity (days) <sup>(5)</sup>	RWAs	RWA Density	EL	Value adjustments and provisions
<b>Prudential portfolios for FIRB approach(6)</b>	<b>5,676</b>	<b>671</b>	<b>51.7%</b>	<b>6,022</b>	<b>-</b>	<b>352</b>	<b>-</b>		<b>4,606</b>	<b>76%</b>	<b>113</b>	<b>(62)</b>
Corporate - Specialized lending	5,676	671	51.7%	6,022	-	352	-	-	4,606	76%	113	(62)
<b>Prudential portfolios for AIRB approach</b>	<b>215,544</b>	<b>96,342</b>	<b>41.1%</b>	<b>239,149</b>	<b>3.97%</b>	<b>11,054,690</b>	<b>37.74%</b>		<b>85,586</b>	<b>36%</b>	<b>3,457</b>	<b>(4,805)</b>
<b>Central governments or central banks</b>	<b>9,109</b>	<b>310</b>	<b>49.6%</b>	<b>11,899</b>	<b>0.1%</b>	<b>60</b>	<b>26.7%</b>	<b>567</b>	<b>664</b>	<b>6%</b>	<b>3</b>	<b>(5)</b>
0,00<0,15	8,684	113	49.8%	11,489	0.0%	24	26.1%	550	596	5%	1	(2)
0,15<0,25	64	63	49.8%	324	0.2%	3	41.6%	1,176	20	6%	0	(0)
0,25<0,50	5	8	45.0%	46	0.3%	4	44.4%	613	5	10%	0	(2)
0,50<0,75	0	0	35.3%	0	0.6%	1	21.7%	402	0	30%	-	-
0,75<2,50	95	2	49.8%	7	0.9%	7	42.0%	580	3	51%	0	(0)
2,50<10,00	202	107	50.4%	28	4.2%	13	43.1%	292	31	112%	1	(1)
10,00<100,00	12	8	50.2%	5	18.1%	5	39.4%	128	9	194%	0	(0)
100,00 (Default)	47	8	-	1	100.0%	3	39.2%	971	0	1%	0	(1)
<b>Institutions</b>	<b>27,634</b>	<b>6,701</b>	<b>55.7%</b>	<b>15,189</b>	<b>0.5%</b>	<b>2,845</b>	<b>42.2%</b>	<b>504</b>	<b>4,243</b>	<b>28%</b>	<b>27</b>	<b>(39)</b>
0,00<0,15	20,587	4,764	56.5%	11,976	0.1%	1,555	43.6%	470	2,428	20%	4	(9)
0,15<0,25	2,282	579	51.0%	952	0.2%	465	42.7%	524	370	39%	1	(2)
0,25<0,50	3,188	1,058	56.5%	995	0.3%	281	24.9%	777	320	32%	1	(4)
0,50<0,75	326	108	50.6%	235	0.5%	167	37.4%	1,115	148	63%	0	(1)
0,75<2,50	955	124	52.2%	877	1.4%	129	43.0%	422	764	87%	5	(2)
2,50<10,00	124	38	50.3%	68	4.2%	139	36.3%	973	87	127%	1	(1)
10,00<100,00	84	27	48.5%	55	14.4%	17	42.4%	857	121	222%	3	(4)
100,00 (Default)	89	3	49.7%	30	100.0%	92	37.8%	118	4	14%	11	(16)
<b>Corporate SMEs</b>	<b>18,431</b>	<b>4,551</b>	<b>40.2%</b>	<b>18,841</b>	<b>10.3%</b>	<b>32,755</b>	<b>44.2%</b>	<b>788</b>	<b>12,355</b>	<b>66%</b>	<b>816</b>	<b>(1,029)</b>
0,00<0,15	2,748	1,092	41.8%	3,980	0.1%	7,001	51.3%	715	1,058	27%	2	(12)
0,15<0,25	672	214	43.8%	901	0.2%	1,584	51.5%	705	346	38%	1	(3)
0,25<0,50	1,502	352	42.5%	1,686	0.3%	2,883	48.2%	738	832	49%	3	(6)
0,50<0,75	3,524	594	44.7%	3,380	0.5%	3,776	41.4%	908	2,351	70%	7	(14)
0,75<2,50	4,079	1,055	38.6%	3,642	1.2%	5,840	42.5%	986	3,190	88%	18	(25)
2,50<10,00	3,639	1,065	36.3%	3,136	4.2%	7,416	37.9%	855	3,337	106%	50	(179)
10,00<100,00	612	130	33.8%	458	18.4%	1,511	35.5%	1,250	772	169%	30	(27)
100,00 (Default)	1,656	48	37.9%	1,657	100.0%	2,744	42.6%	120	468	28%	705	(762)
<b>Corporate Non-SMEs</b>	<b>61,299</b>	<b>62,074</b>	<b>48.6%</b>	<b>90,321</b>	<b>2.4%</b>	<b>11,898</b>	<b>41.7%</b>	<b>706</b>	<b>40,643</b>	<b>45%</b>	<b>761</b>	<b>(1,266)</b>
0,00<0,15	26,073	34,260	48.6%	43,874	0.1%	2,755	43.5%	704	12,349	28%	21	(23)
0,15<0,25	6,583	8,835	49.2%	11,432	0.2%	1,046	40.7%	755	4,874	43%	9	(16)
0,25<0,50	13,183	11,376	49.9%	18,964	0.3%	1,797	39.9%	753	10,080	53%	24	(23)
0,50<0,75	6,077	3,529	46.3%	7,176	0.5%	1,711	38.8%	697	4,781	67%	14	(16)
0,75<2,50	4,184	2,382	46.8%	4,192	1.1%	1,701	42.0%	681	3,800	91%	20	(23)
2,50<10,00	2,942	1,298	41.1%	2,420	4.4%	2,082	41.6%	548	3,456	143%	45	(171)
10,00<100,00	500	280	45.7%	458	13.9%	169	42.5%	815	974	213%	27	(12)
100,00 (Default)	1,757	114	46.2%	1,805	100.0%	637	33.3%	233	330	18%	602	(982)
<b>Retail - Mortgage exposures</b>	<b>74,000</b>	<b>4,378</b>	<b>3.7%</b>	<b>74,139</b>	<b>4.4%</b>	<b>1,054,848</b>	<b>24.1%</b>	<b>-</b>	<b>8,904</b>	<b>12%</b>	<b>610</b>	<b>(941)</b>
0,00<0,15	56,265	3,104	3.7%	56,366	0.0%	838,237	23.3%	-	1,774	3%	6	(9)
0,15<0,25	2,005	28	3.7%	2,005	0.2%	25,223	29.2%	-	248	12%	1	(2)
0,25<0,50	3,281	423	3.7%	3,296	0.3%	42,025	30.8%	-	617	19%	3	(2)
0,50<0,75	1,953	255	3.7%	1,961	0.5%	26,409	30.0%	-	518	26%	3	(3)
0,75<2,50	4,268	328	3.7%	4,279	1.1%	55,196	27.0%	-	1,617	38%	13	(50)
2,50<10,00	2,297	199	3.7%	2,302	4.7%	28,834	26.9%	-	1,993	87%	29	(200)
10,00<100,00	1,112	40	3.7%	1,112	18.9%	11,614	26.9%	-	1,778	160%	58	(82)
100,00 (Default)	2,820	0	3.7%	2,818	100.0%	27,310	17.6%	-	359	13%	496	(593)

PD Scale as of 12-31-2019 <sup>(1)(7)</sup>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF <sup>(2)</sup>	EAD post CRM and post-CCF	Average PD <sup>(3)</sup>	Number of obligors	Average LGD <sup>(4)</sup>	Average Maturity (days) <sup>(5)</sup>	RWAs	RWA Density	EL	Value adjustments and provisions
<b>Retail - Other exposures SMEs</b>	<b>3,556</b>	<b>884</b>	<b>55.0%</b>	<b>4,002</b>	<b>12.6%</b>	<b>155,069</b>	<b>51.9%</b>	<b>-</b>	<b>1,635</b>	<b>41%</b>	<b>291</b>	<b>(268)</b>
0,00<0,15	327	238	53.3%	454	0.1%	23,712	51.7%	-	52	11%	0	(1)
0,15<0,25	146	66	53.9%	182	0.2%	7,173	52.5%	-	32	18%	0	(0)
0,25<0,50	256	95	55.6%	308	0.3%	11,021	51.9%	-	71	23%	0	(0)
0,50<0,75	343	119	54.2%	404	0.5%	15,094	52.0%	-	127	32%	1	(1)
0,75<2,50	871	188	57.1%	969	1.2%	33,664	51.4%	-	441	45%	6	(4)
2,50<10,00	1,019	140	57.7%	1,083	4.3%	42,177	50.5%	-	653	60%	23	(24)
10,00<100,00	197	29	50.2%	203	21.5%	8,279	46.1%	-	176	87%	20	(13)
100,00 (Default)	398	10	40.3%	400	100.0%	13,949	59.9%	-	82	21%	240	(225)
<b>Retail - Other exposures Non-SMEs</b>	<b>11,441</b>	<b>16</b>	<b>50.5%</b>	<b>11,445</b>	<b>6.7%</b>	<b>1,023,637</b>	<b>56.5%</b>	<b>-</b>	<b>4,223</b>	<b>37%</b>	<b>392</b>	<b>(611)</b>
0,00<0,15	4,856	5	37.7%	4,858	0.1%	385,973	54.7%	-	446	9%	2	(3)
0,15<0,25	642	1	50.8%	643	0.2%	65,735	61.1%	-	171	27%	1	(2)
0,25<0,50	794	1	57.9%	794	0.3%	81,542	59.8%	-	263	33%	1	(3)
0,50<0,75	1,017	4	56.8%	1,018	0.5%	107,899	60.2%	-	467	46%	3	(5)
0,75<2,50	1,321	1	59.1%	1,322	1.2%	135,038	60.3%	-	898	68%	9	(13)
2,50<10,00	1,984	3	60.6%	1,983	3.9%	171,172	55.9%	-	1,674	84%	43	(104)
10,00<100,00	212	1	40.5%	212	21.3%	20,638	57.2%	-	276	130%	26	(24)
100,00 (Default)	615	0	41.7%	615	100.0%	55,640	49.8%	-	29	5%	306	(457)
<b>Retail - qualifying revolving (QRRE)</b>	<b>7,190</b>	<b>17,428</b>	<b>18.6%</b>	<b>10,430</b>	<b>6.5%</b>	<b>8,773,578</b>	<b>68.6%</b>	<b>-</b>	<b>7,365</b>	<b>71%</b>	<b>527</b>	<b>(646)</b>
0,00<0,15	1,104	4,540	24.9%	2,234	0.0%	2,782,216	45.5%	-	30	1%	0	(1)
0,15<0,25	23	41	26.7%	34	0.2%	37,976	49.6%	-	2	6%	0	(0)
0,25<0,50	78	131	26.0%	112	0.3%	140,727	49.0%	-	8	8%	0	(0)
0,50<0,75	472	1,757	12.4%	690	0.5%	484,949	71.1%	-	130	19%	3	(3)
0,75<2,50	1,595	5,377	13.6%	2,324	1.1%	1,494,958	74.2%	-	836	36%	20	(33)
2,50<10,00	2,697	5,040	18.8%	3,643	5.1%	2,728,548	76.1%	-	3,797	104%	141	(204)
10,00<100,00	1,009	542	31.4%	1,179	20.9%	961,891	76.2%	-	2,549	216%	188	(247)
100,00 (Default)	213	1	29.7%	213	100.0%	142,313	82.1%	-	13	6%	175	(159)
<b>Equity</b>	<b>2,883</b>	<b>-</b>	<b>-</b>	<b>2,883</b>	<b>1.3%</b>	<b>-</b>	<b>68.4%</b>	<b>-</b>	<b>5,554</b>	<b>193%</b>	<b>30</b>	<b>-</b>
0,00<0,15	1,687	-	-	1,687	0.1%	-	64.0%	-	2,013	119%	2	-
0,15<0,25	110	-	-	110	0.2%	-	68.8%	-	112	103%	0	-
0,25<0,50	0	-	-	-	0.3%	-	65.0%	-	0	0%	-	-
0,50<0,75	14	-	-	14	0.6%	-	65.0%	-	23	160%	0	-
0,75<2,50	443	-	-	443	1.1%	-	79.7%	-	1,081	244%	3	-
2,50<10,00	630	-	-	630	5.1%	-	83.2%	-	2,325	369%	25	-
10,00<100,00	-	-	-	-	0.0%	-	0.0%	-	-	0%	-	-
100,00 (Default)	-	-	-	-	0.0%	-	0.0%	-	-	0%	-	-
<b>Total Standardized Approach</b>	<b>221,219</b>	<b>97,013</b>	<b>41.1%</b>	<b>245,171</b>	<b>4.0%</b>	<b>11,055,042</b>	<b>37.7%</b>	<b>-</b>	<b>90,193</b>	<b>37%</b>	<b>3,569</b>	<b>(4,867)</b>

<sup>(1)</sup> PD Intervals recommended by the EBA Guidelines on Disclosure Requirements under Part Eight of the CRR

<sup>(2)</sup> Calculated as EAD after CCF for off-balance sheet exposure over total off-balance exposure before CCF

<sup>(3)</sup> Corresponds to obligor grade PD weighted by EAD post CRM

<sup>(4)</sup> Corresponds to obligor grade LGD weighted by EAD post CRM

<sup>(5)</sup> Corresponds to the obligor maturity in days weighted by EAD post CRM. According to Regulation (EU) No 680/2014, it is reported only for categories in which the average maturities are relevant for the calculation of RWAs.

<sup>(6)</sup> Exposure classified in the FIRB approach corresponds to specialized lending. The Group has chosen to use the slotting criteria, in line with Article 153.5 of the CRR.

<sup>(7)</sup> As of December 31, 2019, it includes the effects derived from TRIM (Targeted Review of Internal Models) that will become effective in 2020.

EU CR6 - IRB approach – Credit risk exposures by exposure class and PD range (Million Euros, 12-31-2018)

PD Scale as of 12-31-2018 <sup>(1)</sup>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF <sup>(2)</sup>	EAD post CRM and post-CCF	Average PD <sup>(3)</sup>	Number of obligors	Average LGD <sup>(4)</sup>	Average Maturity (days) <sup>(5)</sup>	RWAs	RWA Density	EL	Value adjustments and provisions
<b>Prudential portfolios for FIRB approach<sup>(6)</sup></b>	<b>6,268</b>	<b>403</b>	<b>57.7%</b>	<b>6,500</b>	<b>-</b>	<b>300</b>	<b>-</b>		<b>5,421</b>	<b>83%</b>	<b>140</b>	<b>(73)</b>
Corporate - Specialized lending	6,268	403	57.7%	6,500	-	300	-	-	5,421	83%	140	(73)
<b>Prudential portfolios for AIRB approach</b>	<b>198,988</b>	<b>86,385</b>	<b>42.3%</b>	<b>218,321</b>	<b>4.70%</b>	<b>11,527,717</b>	<b>35.98%</b>		<b>77,733</b>	<b>36%</b>	<b>3,101</b>	<b>(4,825)</b>
<b>Central governments or central banks</b>	<b>5,729</b>	<b>137</b>	<b>49.6%</b>	<b>7,627</b>	<b>0.3%</b>	<b>54</b>	<b>27.3%</b>	<b>695</b>	<b>451</b>	<b>6%</b>	<b>5</b>	<b>(5)</b>
0,00<0,15	5,294	19	49.4%	7,350	0.0%	19	26.7%	694	354	5%	1	(0)
0,15<0,25	12	13	50.0%	136	0.2%	2	43.6%	920	3	2%	0	(0)
0,25<0,50	8	0	50.1%	33	0.3%	4	44.0%	600	2	7%	0	(1)
0,50<0,75	-	0	43.1%	0	0.5%	1	12.4%	582	0	18%	-	-
0,75<2,50	128	2	49.1%	5	1.1%	8	34.1%	479	3	62%	0	(0)
2,50<10,00	213	88	50.1%	83	4.9%	12	49.9%	548	83	100%	2	(2)
10,00<100,00	1	7	50.6%	4	21.2%	3	18.9%	107	4	97%	0	(0)
100,00 (Default)	73	8	50.0%	16	100.0%	5	10.2%	585	2	13%	2	(1)
<b>Institutions</b>	<b>25,687</b>	<b>6,952</b>	<b>58.9%</b>	<b>12,482</b>	<b>0.5%</b>	<b>3,361</b>	<b>40.6%</b>	<b>558</b>	<b>3,576</b>	<b>29%</b>	<b>26</b>	<b>(58)</b>
0,00<0,15	18,715	5,100	60.6%	9,886	0.1%	1,847	41.2%	524	1,967	20%	3	(17)
0,15<0,25	2,292	785	50.6%	853	0.2%	605	40.7%	699	327	38%	1	(8)
0,25<0,50	3,180	707	56.5%	643	0.3%	304	30.5%	862	251	39%	1	(3)
0,50<0,75	431	125	51.1%	278	0.5%	197	36.3%	309	171	62%	1	(1)
0,75<2,50	719	176	53.6%	653	1.4%	157	42.6%	708	623	95%	4	(2)
2,50<10,00	149	52	75.9%	95	3.2%	138	42.6%	503	129	136%	1	(4)
10,00<100,00	42	6	56.8%	41	20.1%	22	43.9%	812	102	246%	4	(3)
100,00 (Default)	160	2	89.8%	32	100.0%	91	38.1%	130	7	20%	12	(19)
<b>Corporate SMEs</b>	<b>15,964</b>	<b>3,816</b>	<b>45.2%</b>	<b>16,117</b>	<b>13.5%</b>	<b>32,087</b>	<b>47.1%</b>	<b>696</b>	<b>11,781</b>	<b>73%</b>	<b>869</b>	<b>(1,103)</b>
0,00<0,15	1,240	711	44.1%	1,897	0.1%	4,463	51.7%	729	526	28%	1	(5)
0,15<0,25	628	251	43.8%	893	0.2%	1,839	53.6%	740	352	39%	1	(3)
0,25<0,50	1,268	354	45.8%	1,528	0.3%	3,226	51.8%	644	753	49%	2	(5)
0,50<0,75	2,832	591	42.1%	2,845	0.5%	4,626	48.7%	692	2,019	71%	7	(16)
0,75<2,50	3,815	955	47.5%	3,552	1.2%	6,790	46.8%	827	3,067	86%	19	(41)
2,50<10,00	3,769	850	45.4%	3,124	4.3%	7,526	44.5%	869	3,858	123%	59	(179)
10,00<100,00	473	36	46.5%	354	15.3%	1,083	42.8%	890	692	195%	23	(25)
100,00 (Default)	1,938	68	50.1%	1,924	100.0%	2,534	39.3%	133	514	27%	756	(830)
<b>Corporate Non-SMEs</b>	<b>51,288</b>	<b>54,395</b>	<b>49.5%</b>	<b>77,891</b>	<b>2.6%</b>	<b>10,436</b>	<b>44.4%</b>	<b>649</b>	<b>36,273</b>	<b>47%</b>	<b>455</b>	<b>(999)</b>
0,00<0,15	21,005	30,232	49.1%	36,913	0.1%	2,345	44.9%	654	10,353	28%	18	(20)
0,15<0,25	5,722	8,093	48.3%	9,854	0.2%	1,168	45.5%	809	4,342	44%	9	(10)
0,25<0,50	10,836	8,875	52.1%	15,947	0.3%	1,779	45.3%	536	9,016	57%	23	(22)
0,50<0,75	4,438	3,331	48.6%	5,866	0.5%	1,126	46.1%	767	4,152	71%	14	(33)
0,75<2,50	4,897	2,157	48.1%	4,985	1.1%	1,531	42.6%	727	4,500	90%	24	(30)
2,50<10,00	2,612	1,474	51.8%	2,556	3.8%	1,988	45.1%	541	3,545	139%	44	(122)
10,00<100,00	109	51	53.3%	44	15.7%	86	46.3%	591	90	206%	3	(3)
100,00 (Default)	1,669	181	46.8%	1,726	100.0%	413	18.6%	218	275	16%	320	(760)
<b>Retail - Mortgage exposures</b>	<b>76,986</b>	<b>4,487</b>	<b>5.0%</b>	<b>77,186</b>	<b>5.2%</b>	<b>1,081,452</b>	<b>17.1%</b>	<b>-</b>	<b>7,385</b>	<b>10%</b>	<b>579</b>	<b>(1,330)</b>
0,00<0,15	57,198	3,197	5.0%	57,345	0.0%	847,224	15.7%	-	1,290	2%	5	(9)
0,15<0,25	3,448	41	5.0%	3,448	0.2%	40,742	22.0%	-	323	9%	2	(2)
0,25<0,50	2,865	416	5.0%	2,885	0.3%	39,778	26.2%	-	460	16%	2	(3)
0,50<0,75	2,086	251	5.0%	2,098	0.5%	27,410	25.8%	-	450	21%	3	(3)
0,75<2,50	3,762	330	5.0%	3,777	1.1%	45,956	23.0%	-	1,195	32%	9	(53)
2,50<10,00	3,402	209	5.0%	3,409	4.7%	39,563	20.3%	-	2,222	65%	32	(317)
10,00<100,00	553	42	5.0%	555	18.2%	6,852	22.6%	-	703	127%	23	(47)
100,00 (Default)	3,672	0	5.2%	3,670	100.0%	33,927	13.7%	-	742	20%	504	(896)

PD Scale as of 12-31-2018 <sup>(1)</sup>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF <sup>(2)</sup>	EAD post CRM and post-CCF	Average PD <sup>(3)</sup>	Number of obligors	Average LGD <sup>(4)</sup>	Average Maturity (days) <sup>(5)</sup>	RWAs	RWA Density	EL	Value adjustments and provisions
<b>Retail - Other exposures SMEs</b>	<b>3,278</b>	<b>847</b>	<b>60.3%</b>	<b>3,739</b>	<b>13.9%</b>	<b>139,251</b>	<b>55.8%</b>	-	<b>1,749</b>	<b>47%</b>	<b>297</b>	<b>(281)</b>
0,00<0,15	216	197	58.8%	332	0.1%	19,022	56.1%	-	42	13%	0	(0)
0,15<0,25	109	53	60.0%	141	0.2%	5,655	56.3%	-	27	19%	0	(0)
0,25<0,50	199	89	59.3%	251	0.3%	9,555	56.9%	-	63	25%	0	(0)
0,50<0,75	314	117	59.7%	381	0.5%	14,004	55.6%	-	127	33%	1	(1)
0,75<2,50	786	208	61.4%	902	1.2%	29,690	55.5%	-	448	50%	6	(5)
2,50<10,00	1,031	146	63.7%	1,101	4.6%	40,603	55.9%	-	740	67%	28	(32)
10,00<100,00	216	27	56.9%	221	19.5%	8,709	51.2%	-	207	93%	22	(20)
100,00 (Default)	408	10	47.3%	410	100.0%	12,013	58.1%	-	96	23%	238	(221)
<b>Retail - Other exposures Non-SMEs</b>	<b>10,331</b>	<b>109</b>	<b>68.6%</b>	<b>10,396</b>	<b>6.0%</b>	<b>903,167</b>	<b>54.2%</b>	-	<b>3,592</b>	<b>35%</b>	<b>303</b>	<b>(464)</b>
0,00<0,15	4,563	5	38.2%	4,565	0.1%	349,518	53.6%	-	415	9%	1	(2)
0,15<0,25	513	7	22.0%	514	0.2%	55,419	58.4%	-	126	24%	1	(1)
0,25<0,50	895	20	23.2%	899	0.3%	89,485	58.5%	-	313	35%	2	(2)
0,50<0,75	841	25	26.0%	845	0.5%	69,823	56.2%	-	380	45%	3	(3)
0,75<2,50	1,204	8	33.9%	1,206	1.2%	120,717	55.4%	-	751	62%	8	(9)
2,50<10,00	1,678	41	129.1%	1,729	4.5%	156,298	52.6%	-	1,394	81%	41	(89)
10,00<100,00	149	2	23.6%	149	21.8%	15,943	52.8%	-	182	123%	17	(15)
100,00 (Default)	489	0	-	489	100.0%	45,964	47.1%	-	32	6%	230	(344)
<b>Retail - qualifying revolving (QRRE)</b>	<b>6,525</b>	<b>15,642</b>	<b>20.2%</b>	<b>9,682</b>	<b>6.7%</b>	<b>9,357,909</b>	<b>73.3%</b>	-	<b>6,938</b>	<b>72%</b>	<b>537</b>	<b>(584)</b>
0,00<0,15	1,037	4,630	27.1%	2,292	0.0%	3,013,548	47.7%	-	32	1%	0	(1)
0,15<0,25	15	36	31.2%	26	0.2%	48,987	51.2%	-	2	6%	0	(0)
0,25<0,50	109	143	28.2%	149	0.3%	191,447	50.6%	-	12	8%	0	(0)
0,50<0,75	399	1,449	13.3%	591	0.5%	458,301	77.3%	-	108	18%	2	(5)
0,75<2,50	1,323	4,355	14.7%	1,965	1.2%	1,406,515	81.2%	-	719	37%	19	(32)
2,50<10,00	2,450	4,507	18.9%	3,303	5.3%	3,074,464	82.9%	-	3,561	108%	146	(173)
10,00<100,00	994	522	31.4%	1,157	21.3%	1,013,206	83.0%	-	2,495	216%	205	(215)
100,00 (Default)	199	0	19.9%	199	100.0%	151,441	82.6%	-	10	5%	164	(159)
<b>Equity<sup>(7)</sup></b>	<b>3,201</b>	<b>-</b>	<b>0.0%</b>	<b>3,201</b>	<b>1.1%</b>	<b>-</b>	<b>88.8%</b>	-	<b>5,989</b>	<b>187%</b>	<b>30</b>	<b>-</b>
0,00<0,15	1,966	-	-	1,966	0.1%	-	89.8%	-	2,354	120%	2	-
0,15<0,25	118	-	-	118	0.2%	-	65.0%	-	124	105%	0	-
0,25<0,50	0	-	-	0	0.3%	-	65.0%	-	0	124%	0	-
0,50<0,75	-	-	-	-	0.0%	-	0.0%	-	-	-	-	-
0,75<2,50	508	-	-	508	0.9%	-	90.0%	-	1,287	253%	4	-
2,50<10,00	608	-	-	608	4.4%	-	89.3%	-	2,222	366%	24	-
10,00<100,00	-	-	-	-	0.0%	-	0.0%	-	-	0%	0	-
100,00 (Default)	-	-	-	-	0.0%	-	0.0%	-	-	0%	-	-
<b>Total Standardized Approach</b>	<b>205,256</b>	<b>86,788</b>	<b>42.4%</b>	<b>224,822</b>	<b>4.7%</b>	<b>11,528,017</b>	<b>36.0%</b>	-	<b>83,154</b>	<b>37%</b>	<b>3,241</b>	<b>(4,898)</b>

<sup>(1)</sup> PD Intervals recommended by the EBA Guidelines on Disclosure Requirements under Part Eight of the CRR

<sup>(2)</sup> Calculated as EAD after CCF for off-balance sheet exposure over total off-balance exposure before CCF

<sup>(3)</sup> Corresponds to obligor grade PD weighted by EAD post CRM

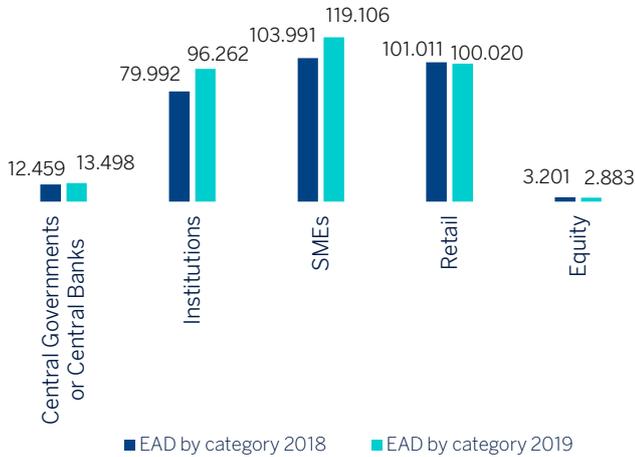
<sup>(4)</sup> Corresponds to obligor grade LGD weighted by EAD post CRM

<sup>(5)</sup> Corresponds to the obligor maturity in days weighted by EAD post CRM. According to Regulation (EU) No 680/2014, it is reported only for categories in which the average maturities are relevant for the calculation of RWAs.

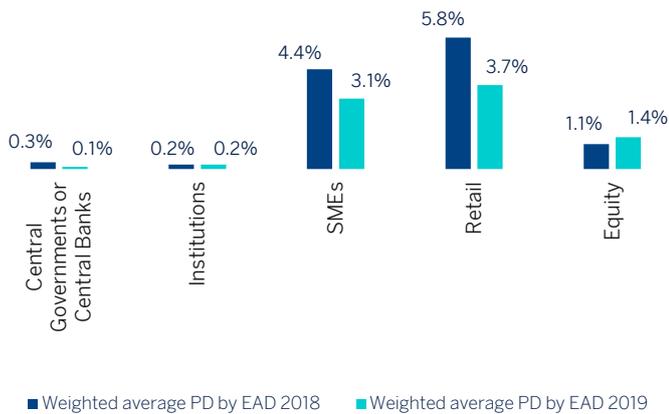
<sup>(6)</sup> Exposure classified in the FIRB approach corresponds to specialized lending. The Group has chosen to use the slotting criteria, in line with Article 153.5 of the CRR.

The information contained in the above tables is set out below in graphic format (including counterparty risk):

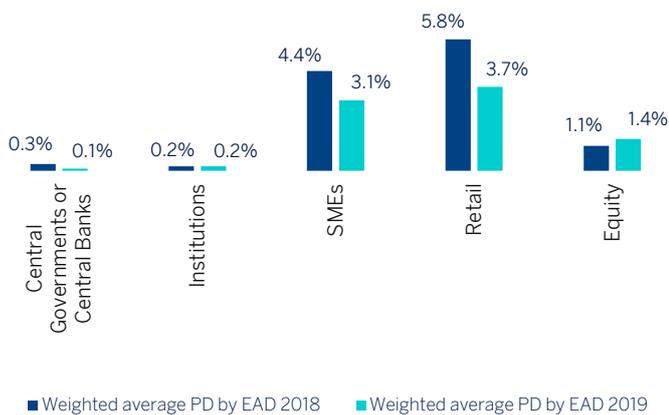
**Chart 7.** Advanced Measurement Approach: EAD by obligor category



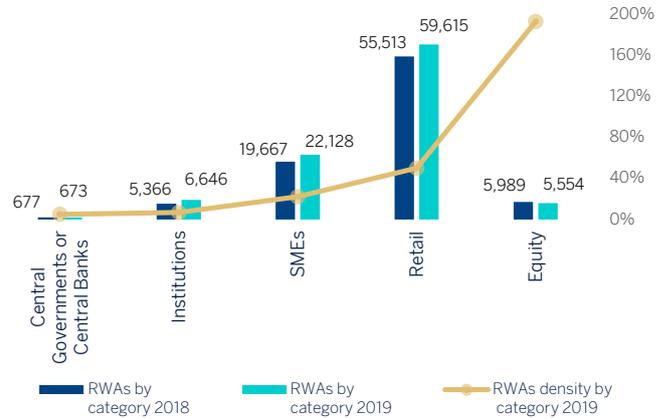
**Chart 8.** Advanced Measurement Approach: Weighted average PD by EAD



**Chart 9.** Advanced Measurement Approach: Weighted average LGD by EAD



**Chart 10.** Advanced Measurement Approach: RWAs by obligor category



To provide backtesting data to validate the reliability of PD calculations, the table compares the PD used in IRB capital calculations with the effective default rates for the Group’s obligors (credit and counterparty credit risk) is included below.

The information is broken down by geographies using internal models. The criteria adopted to comply with the EBA uniform template are as follows:

- Portfolio: The portfolio breakdown corresponds to that recommended by the supervisor, excluding equity positions.
- PD Range: These are those included in the Group’s internal master scale of ratings found in 3.2.5.1.2 (Table 28).
- External rating equivalence: Equivalence between PDs and external ratings described in 3.2.5.1.2 has been used.
- Weighted average PD and arithmetic average PD by obligor: The PD after mitigation was used, i.e., the one associated with guarantors.
- Number of obligors: Obligor are presented at end of the financial year and at end of previous financial year.
- Defaulted obligors: In order to ensure the traceability of the table, columns “g” and “h” in the standard table have been unified to show information on operations/clients who defaulted at some point during the last 12 months, so that defaulted obligors over the year is broken down by PD range.
- Average historical annual default rate: It corresponds to the average annual default rate for the last five years.

**Table 31.** EU CR9 - IRB approach - Backtesting of PD per exposure class (BBVA S.A. 12-31-2019)

PD Range	External rating equivalent	Weighted average PD <sup>(1)</sup>	Arithmetic average PD by obligors	Number of Obligors		Defaulted obligors in the year	Average historical annual default rate
				31-12-2019	31-12-2018		
<b>Central governments or central banks</b>							
0.00<0.02	AAA	0.01%	0.01%	5	3	-	-
0.02<0.03	AA+	0.03%	0.03%	1	2	-	-
0.03<0.04	AA	0.03%	0.03%	3	-	-	-
0.04<0.05	AA-	0.04%	0.04%	3	1	-	-
0.05<0.06	A+	0.05%	0.05%	8	6	-	-
0.06<0.09	A	0.08%	0.08%	1	1	-	-
0.09<0.11	A-	0.10%	0.10%	2	2	-	-
0.11<0.17	BBB+	0.14%	0.14%	5	5	-	-
0.17<0.24	BBB	0.21%	0.21%	4	3	-	-
0.29<0.39	BBB-	0.29%	0.31%	4	4	-	-
0.39<0.67	BB+	0.58%	0.58%	1	1	-	-
0.67<1.16	BB	0.89%	0.88%	4	3	-	-
1.16<1.94	BB-	1.48%	1.41%	3	5	-	67%
1.94<3.35	B+	2.06%	2.38%	3	3	-	14%
3.35<5.81	B	4.46%	4.56%	2	7	-	-
5.81<11.61	B-	9.28%	8.06%	8	4	1	20%
11.61<100.00	C	18.09%	15.40%	5	3	-	-
100.00 (default)	D	100.00%	100.00%	3	5	-	-
<b>Institutions</b>							
0.00<0.02	AAA	0.03%	0.03%	10	14	-	-
0.02<0.03	AA+	0.03%	0.03%	9	16	-	-
0.03<0.04	AA	0.03%	0.03%	31	38	-	-
0.04<0.05	AA-	0.04%	0.04%	146	129	-	-
0.05<0.06	A+	0.05%	0.05%	324	352	-	-
0.06<0.09	A	0.08%	0.08%	162	293	1	-
0.09<0.11	A-	0.10%	0.10%	486	594	8	0%
0.11<0.17	BBB+	0.14%	0.14%	1,158	1,224	10	0%
0.17<0.24	BBB	0.20%	0.20%	536	683	7	0%
0.29<0.39	BBB-	0.31%	0.31%	325	358	-	0%
0.39<0.67	BB+	0.51%	0.51%	188	220	3	1%
0.67<1.16	BB	0.88%	0.89%	89	98	-	2%
1.16<1.94	BB-	1.50%	1.50%	176	196	-	-
1.94<3.35	B+	2.55%	2.56%	73	84	-	1%
3.35<5.81	B	4.40%	4.41%	59	37	-	2%
5.81<11.61	B-	7.82%	7.84%	22	35	2	-
11.61<100.00	C	14.76%	19.90%	21	26	1	-
100.00 (default)	D	100.00%	100.00%	92	93	-	-
<b>Corporate - SMEs</b>							
0.00<0.02	AAA	0.03%	0.03%	74	85	-	-
0.02<0.03	AA+	0.03%	0.03%	20	24	-	-
0.03<0.04	AA	0.03%	0.03%	45	17	-	-
0.04<0.05	AA-	0.05%	0.04%	15	33	1	-
0.05<0.06	A+	0.05%	0.05%	21	11	-	-
0.06<0.09	A	0.06%	0.07%	52	25	-	-
0.09<0.11	A-	0.10%	0.10%	5,124	2,465	4	0%
0.11<0.17	BBB+	0.14%	0.14%	1,878	2,023	4	0%
0.17<0.24	BBB	0.20%	0.20%	1,615	1,920	4	0%
0.29<0.39	BBB-	0.31%	0.31%	2,590	2,930	9	0%
0.39<0.67	BB+	0.55%	0.55%	2,953	3,645	35	0%
0.67<1.16	BB	0.84%	0.84%	2,855	3,437	44	1%
1.16<1.94	BB-	1.53%	1.50%	2,778	3,008	79	2%
1.94<3.35	B+	2.58%	2.58%	2,690	2,992	99	3%
3.35<5.81	B	4.67%	4.56%	2,243	1,888	96	2%
5.81<11.61	B-	8.93%	9.05%	2,396	2,393	113	4%
11.61<100.00	C	18.54%	21.18%	1,512	1,050	76	11%
100.00 (default)	D	100.00%	100.00%	2,635	2,574	-	-
<b>Corporate - Non-SMEs</b>							
0.00<0.02	AAA	-	-	-	-	-	-
0.02<0.03	AA+	0.03%	0.03%	31	31	-	-
0.03<0.04	AA	0.03%	0.03%	37	25	-	-
0.04<0.05	AA-	0.04%	0.04%	19	23	-	-
0.05<0.06	A+	0.05%	0.05%	50	43	-	-
0.06<0.09	A	0.08%	0.08%	244	286	-	0%

PD Range	External rating equivalent	Weighted average PD <sup>(1)</sup>	Arithmetic average PD by obligors	Number of Obligors		Defaulted obligors in the year	Average historical annual default rate
				31-12-2019	31-12-2018		
0.09<0.11	A-	0.10%	0.10%	1,563	857	3	0%
0.11<0.17	BBB+	0.14%	0.14%	1,034	1,218	5	0%
0.17<0.24	BBB	0.21%	0.22%	1,063	1,214	2	0%
0.29<0.39	BBB-	0.31%	0.32%	1,444	1,636	6	0%
0.39<0.67	BB+	0.51%	0.52%	900	954	6	1%
0.67<1.16	BB	0.91%	0.95%	570	712	8	1%
1.16<1.94	BB-	1.50%	1.56%	389	473	12	2%
1.94<3.35	B+	2.67%	2.73%	412	501	15	4%
3.35<5.81	B	4.41%	4.34%	432	208	12	4%
5.81<11.61	B-	8.82%	8.86%	201	138	6	3%
11.61<100.00	C	13.69%	18.30%	154	56	7	16%
100.00 (default)	D	100.00%	100.00%	391	374	-	-
<b>Retail - Mortgage exposures</b>							
0.00<0.02	AAA	0.03%	0.03%	447,207	424,862	119	0%
0.02<0.03	AA+	0.03%	0.03%	77,011	85,594	72	0%
0.03<0.04	AA	0.03%	0.03%	82,575	15,557	15	0%
0.04<0.05	AA-	0.05%	0.05%	33,040	134,256	126	0%
0.05<0.06	A+	0.05%	0.05%	31,973	11,754	4	0%
0.06<0.09	A	0.07%	0.07%	70,598	83,183	124	0%
0.09<0.11	A-	0.10%	0.10%	53,643	32,424	60	0%
0.11<0.17	BBB+	0.15%	0.15%	42,190	59,594	155	0%
0.17<0.24	BBB	0.20%	0.20%	25,223	40,742	133	0%
0.29<0.39	BBB-	0.32%	0.32%	42,025	39,778	152	0%
0.39<0.67	BB+	0.54%	0.54%	26,409	27,410	159	1%
0.67<1.16	BB	0.78%	0.77%	39,287	25,358	239	1%
1.16<1.94	BB-	1.76%	1.76%	15,909	20,598	362	1%
1.94<3.35	B+	2.68%	2.67%	10,203	15,015	577	5%
3.35<5.81	B	3.92%	3.92%	9,971	9,750	784	9%
5.81<11.61	B-	7.55%	7.55%	8,660	14,798	1,745	14%
11.61<100.00	C	18.89%	18.74%	11,614	6,852	1,268	24%
100.00 (default)	D	100.00%	100.00%	27,310	33,927	-	-
<b>Retail - Other exposures SMEs</b>							
0.00<0.02	AAA	-	-	-	-	-	-
0.02<0.03	AA+	-	-	-	-	-	-
0.03<0.04	AA	-	-	-	-	-	-
0.04<0.05	AA-	-	-	-	-	-	-
0.05<0.06	A+	-	-	-	-	-	-
0.06<0.09	A	-	-	-	-	-	-
0.09<0.11	A-	0.10%	0.10%	16,439	12,121	6	0%
0.11<0.17	BBB+	0.13%	0.13%	7,383	7,017	-	0%
0.17<0.24	BBB	0.20%	0.20%	7,203	5,708	6	0%
0.29<0.39	BBB-	0.31%	0.31%	11,120	9,379	34	0%
0.39<0.67	BB+	0.52%	0.52%	15,151	13,901	54	0%
0.67<1.16	BB	0.89%	0.89%	17,239	14,516	116	1%
1.16<1.94	BB-	1.58%	1.58%	16,554	15,168	181	1%
1.94<3.35	B+	2.54%	2.54%	17,426	15,041	274	2%
3.35<5.81	B	4.42%	4.40%	15,527	13,639	419	3%
5.81<11.61	B-	7.62%	7.59%	9,388	11,875	613	5%
11.61<100.00	C	21.53%	22.04%	8,315	8,742	1,068	9%
100.00 (default)	D	100.00%	100.00%	13,980	11,259	-	-
<b>Retail - Other exposures Non-SMEs</b>							
0.00<0.02	AAA	0.00%	0.00%	3	127,422	3	0%
0.02<0.03	AA+	0.03%	0.03%	102,001	13,725	12	0%
0.03<0.04	AA	0.03%	0.03%	39,448	30,967	24	0%
0.04<0.05	AA-	0.04%	0.04%	72,835	938	5	0%
0.05<0.06	A+	0.06%	0.06%	43,631	16,432	17	0%
0.06<0.09	A	0.06%	0.07%	30,849	58,448	106	0%
0.09<0.11	A-	0.10%	0.10%	7,355	23,608	61	0%

PD Range	External rating equivalent	Weighted average PD <sup>(1)</sup>	Arithmetic average PD by obligors	Number of Obligors		Defaulted obligors in the year	Average historical annual default rate
				31-12-2019	31-12-2018		
0.11<0.17	BBB+	0.13%	0.12%	89,860	77,990	255	0%
0.17<0.24	BBB	0.20%	0.20%	65,735	55,305	402	0%
0.29<0.39	BBB-	0.30%	0.29%	81,542	86,456	697	1%
0.39<0.67	BB+	0.50%	0.51%	107,899	65,409	792	1%
0.67<1.16	BB	0.90%	0.89%	68,209	62,770	1,133	1%
1.16<1.94	BB-	1.45%	1.46%	66,829	54,836	1,416	2%
1.94<3.35	B+	2.54%	2.57%	74,921	57,172	1,741	2%
3.35<5.81	B	4.24%	4.25%	78,771	65,823	2,796	4%
5.81<11.61	B-	7.94%	7.83%	17,481	25,615	1,789	7%
11.61<100.00	C	21.31%	22.39%	20,639	15,842	4,654	26%
100.00 (default)	D	100.00%	100.00%	55,640	45,874	-	-
<b>Retail - qualifying revolving (QRRE)</b>							
0.00<0.02	AAA	0.03%	0.03%	753,482	2,247,434	644	0%
0.02<0.03	AA+	0.03%	0.03%	1,401,597	192,205	210	0%
0.03<0.04	AA	0.04%	0.04%	210,330	76,175	115	0%
0.04<0.05	AA-	0.04%	0.04%	110,402	94,398	135	0%
0.05<0.06	A+	0.06%	0.06%	3,972	58,936	135	0%
0.06<0.09	A	0.08%	0.08%	65,007	122,460	360	0%
0.09<0.11	A-	0.10%	0.10%	123,283	69,750	149	0%
0.11<0.17	BBB+	0.14%	0.14%	114,142	152,190	708	0%
0.17<0.24	BBB	0.20%	0.20%	37,963	48,987	163	0%
0.29<0.39	BBB-	0.29%	0.30%	140,687	191,447	1,240	1%
0.39<0.67	BB+	0.49%	0.51%	130,456	130,075	1,315	1%
0.67<1.16	BB	0.87%	0.89%	129,461	155,087	2,349	1%
1.16<1.94	BB-	1.52%	1.52%	100,825	69,194	1,396	2%
1.94<3.35	B+	2.62%	2.67%	78,872	120,340	4,597	3%
3.35<5.81	B	4.51%	4.52%	66,995	63,878	2,575	4%
5.81<11.61	B-	8.17%	7.57%	32,127	46,252	2,930	6%
11.61<100.00	C	15.59%	15.89%	27,493	30,412	4,344	12%
100.00 (default)	D	100.00%	100.00%	66,970	52,908	-	-
<b>Corporate - Specialized lending</b>				<b>627</b>	<b>607</b>		

<sup>(1)</sup> 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.

#### EU CR9 - Método IRB: approach - Backtesting of PD per exposure class (BBVA S.A. 12-31-2019)

PD Range	External rating equivalent	Weighted average PD <sup>(1)</sup>	Arithmetic average PD by obligors	Number of Obligors		Defaulted obligors in the year	Average historical annual default rate
				31-12-2019	31-12-2018		
<b>Corporate - SMEs</b>							
0.00 a <0.02	AAA	0.00%	0.00%	-	-	-	-
0.02 a <0.03	AA+	0.00%	0.00%	-	-	-	-
0.03 a <0.04	AA	0.00%	0.00%	-	-	-	-
0.04 a <0.05	AA-	0.00%	0.00%	-	-	-	-
0.05 a <0.06	A+	0.00%	0.00%	-	-	-	-
0.06 a <0.09	A	0.00%	0.00%	-	-	-	-
0.09 a <0.11	A-	0.09%	0.09%	-	-	-	-
0.11 a <0.17	BBB+	0.11%	0.11%	-	1	-	-
0.17 a <0.24	BBB	0.21%	0.21%	19	35	-	-
0.29 a <0.39	BBB-	0.33%	0.31%	374	675	-	-
0.39 a <0.67	BB+	0.51%	0.49%	902	1,448	-	-
0.67 a <1.16	BB	0.89%	0.93%	211	591	-	-
1.16 a <1.94	BB-	1.41%	1.20%	155	391	-	-
1.94 a <3.35	B+	2.57%	2.16%	110	302	-	-
3.35 a <5.81	B	4.02%	3.65%	55	192	-	-
5.81 a <10.61	B-	8.91%	5.82%	50	481	-	-
10.61 a <100.00	C	17.92%	11.79%	21	136	-	-
100.00 (default)	D	100.00%	100.00%	149	880	-	-
<b>Corporate - Non-SMEs</b>							
0.00 a <0.02	AAA	0.00%	0.00%	-	-	-	-
0.02 a <0.03	AA+	0.00%	0.00%	-	-	-	-
0.03 a <0.04	AA	0.00%	0.00%	-	-	-	-
0.04 a <0.05	AA-	0.00%	0.00%	-	-	-	-
0.05 a <0.06	A+	0.00%	0.00%	-	6	-	-
0.06 a <0.09	A	0.08%	0.08%	5	29	-	-
0.09 a <0.11	A-	0.10%	0.10%	27	16	-	-

PD Range	External rating equivalent	Weighted average PD <sup>(1)</sup>	Arithmetic average PD by obligors	Number of Obligors 31-12-2019	Number of Obligors 31-12-2018	Defaulted obligors in the year	Average historical annual default rate
0.11 a <0.17	BBB+	0.13%	0.13%	28	84	-	-
0.17 a <0.24	BBB	0.20%	0.20%	100	209	-	-
0.29 a <0.39	BBB-	0.33%	0.31%	562	3,374	8	1%
0.39 a <0.67	BB+	0.49%	0.50%	899	4,683	14	1%
0.67 a <1.16	BB	1.08%	0.95%	305	1,784	28	3%
1.16 a <1.94	BB-	1.43%	1.21%	511	1,808	36	3%
1.94 a <3.35	B+	2.48%	2.28%	154	1,100	33	3%
3.35 a <5.81	B	4.22%	4.01%	177	431	41	6%
5.81 a <10.61	B-	7.74%	5.81%	763	7,356	47	3%
10.61 a <100.00	C	15.45%	12.96%	26	135	5	8%
100.00 (default)	D	100.00%	100.00%	254	143	39	46%
<b>Retail - qualifying revolving (QRRE)</b>							
0.00 a <0.02	AAA	0.00%	0.00%	-	-	-	-
0.02 a <0.03	AA+	0.00%	0.00%	-	-	-	-
0.03 a <0.04	AA	0.00%	0.00%	-	-	-	-
0.04 a <0.05	AA-	0.00%	0.00%	-	-	-	-
0.05 a <0.06	A+	0.00%	0.00%	-	-	-	-
0.06 a <0.09	A	0.00%	0.00%	-	-	-	-
0.09 a <0.11	A-	0.00%	0.00%	-	-	-	-
0.11 a <0.17	BBB+	0.00%	0.00%	1	-	-	-
0.17 a <0.24	BBB	0.21%	0.18%	13	-	-	-
0.29 a <0.39	BBB-	0.36%	0.30%	40	-	-	0%
0.39 a <0.67	BB+	0.53%	0.49%	354,493	328,226	787	0%
0.67 a <1.16	BB	0.92%	0.88%	720,615	684,538	2,273	0%
1.16 a <1.94	BB-	1.54%	1.35%	544,057	497,696	4,048	1%
1.94 a <3.35	B+	2.49%	2.37%	671,605	635,913	7,982	1%
3.35 a <5.81	B	4.26%	3.36%	755,064	800,168	13,969	2%
5.81 a <10.61	B-	7.64%	5.82%	1,123,885	1,407,913	25,535	75%
10.61 a <100.00	C	21.00%	24.59%	934,398	982,794	43,225	4%
100.00 (default)	D	100.00%	100.00%	75,343	98,533	11,122	57%

<sup>(1)</sup> 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.

The following table presents the flow statements of credit and counterparty credit risk RWA under internal model (IRB) during 2019:

**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 amount	Capital requirements
<b>RWAs as of December 31, 2018</b>	<b>77,166</b>	<b>6,173</b>	<b>4,056</b>	<b>325</b>	<b>81,222</b>	<b>6,498</b>
Asset size	5,279	421	(721)	(58)	4,558	364
Asset quality	1,459	116	540	44	1,999	161
Model updates	-	-	-	-	-	-
Methodology and policy	-	-	-	-	-	-
Acquisitions and disposals	-	-	-	-	-	-
Foreign exchange movements	735	59	547	43	1,282	102
Other	-	-	-	-	-	-
<b>RWAs as of December 31, 2019</b>	<b>84,638</b>	<b>6,769</b>	<b>4,422</b>	<b>355</b>	<b>89,061</b>	<b>7,124</b>

The previous table shows the most relevant changes recorded during 2019 in credit risk models according to the IRB method:

- The size of the asset reflects the variations in RWAs due to increases in exposure that have mainly occurred in the regulatory categories of Corporates and Institutions and to a lesser extent in the exposures secured by real estate.
- Asset quality reflects changes in RWAs due to changes in those elements that affect the determination of IRB model parameters, which have increased RWAs by €1,999 million.

- Finally, the exchange rate isolates the effect that currency variations have on RWAs. In 2019, they have been affected mainly by the appreciation of the US dollar and the Mexican peso.

### 3.2.5.3. Comparative analysis of the estimates made

The following charts compare the expected loss calculated according to the Group's internal estimates of parameters for the main portfolios approved by the European Central Bank,

with the effective loss incurred between 2001 and the most recent date available. The average effective loss between the years, is also outlined below:

- **Observed loss:** Effective loss calculated as the default rate ratio<sup>6</sup> observed, multiplied by the estimated point in time loss given default (LGD)<sup>7</sup>.
- **Average:** Average effective loss, which is the average observed losses for each year.
- **Expected loss:** calculated as the average annual default rate for a high number of years multiplied by the average annual loss given default, also recalculated over a wide range of years.

The observed loss is the annual loss incurred. It must be less than the expected loss adjusted to the cycle in the best years of an economic cycle, and greater during years of crisis.

The comparison has been made for the portfolios of Mortgages, Consumer Finance, Credit Cards, Autos (retailers), and SMEs and Developers, all of them in Spain and Portugal. In Mexico, Credit Card and SMEs have been compared for the period from 2007 to the most recent date available. Regarding the categories of Institutions (Public and Financial Institutions) and Corporates, historical experience shows that there is such a small number of defaulted exposure (Low Default Portfolios) that it is not statistically significant, and hence the reason the comparison is not shown.

The charts show that during the years of biggest economic growth, in general the effective loss was significantly lower than the expected loss adjusted to the cycle calculated using internal models.

From the beginning of the crisis, the opposite is happening. This is in line with the major economic slowdown and the financial difficulties experienced by households and companies, above all in the case of small businesses in development and construction.

**Retail Mortgages:**

Starting in 2007, the effective losses are above the expected loss adjusted to the cycle, as they are losses incurred in years of crisis. Effective losses are in line with the expected loss adjusted to the cycle.

**Chart 11.** Comparative analysis of expected loss: retail mortgages



**Consumer Finance:**

The chart shows that during the years of biggest economic growth the effective loss was lower than the expected loss. The contrary was the case starting in 2007. This is in line with the major economic slowdown and the financial difficulties experienced by households.

**Chart 12.** Comparative analysis of expected loss: consumer finance



6 PD PiT Basel

7 The methodology (LGD pit) makes it possible to better approximate the observed losses. For the most recent years, since recovery processes have not yet been completed, the best estimate of final loss given default (LGD) is included.

**Credit Cards:**

As in the case of Mortgages and Consumer Finance, the observed loss is lower than the Expected Loss calculated using average parameters at best periods of the cycle, and higher during its worst periods.

**Chart 13.** Comparative analysis of expected loss: Credit Cards



**Automobiles:**

In the case of the Autos portfolio, the Expected Loss calculated using the average parameters remains similar to the average of the actual losses since 2001.

**Chart 14.** Comparative analysis of expected loss: Automobiles



**SMEs and Developers:**

Due to a methodological change in LGD estimation, only the average loss from 2008 to the most recent date available is shown for the SME and Developer portfolios. It can be seen

that since the beginning, the observed losses are much higher than the expected losses in the cycle, using average parameters. This is because the major difficulties suffered by companies in the years of crisis, particularly those in the Construction and Development businesses. The chart also shows that the Expected Loss using average parameters is below the average observed losses. The reason is the use of an observation window which is unrepresentative of a complete economic cycle (the estimate would include comparatively more years of crisis than of economic growth).

**Chart 15.** Comparative analysis of expected loss: SMEs and Real Estate



**Mexico Credit Cards:**

In the case of BBVA Mexico’s card portfolio, we can see how the Expected Loss is in line with the average losses observed even though the information since 2007 may not include a complete economic cycle.

**Chart 16.** Comparative analysis of expected loss: Mexico Credit Cards



## Mexico Corporates:

Similarly to the Credit Card portfolio, Mexico's SME portfolio shows expected loss levels similar to the average observed loss despite the fact that information since 2007 may not include a full economic cycle.

**Chart 17:** Comparative analysis of expected loss: Mexico corporates



## 3.2.5.4. Risk weights of specialized lending exposure

The solvency regulation stipulates that the classification of specialized 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.

The following table shows the exposure assigned to each of the risk weightings of the specialized lending exposure (including counterparty credit risk) as of December 31, 2019 and December 31, 2018:

**Table 33.** EU CR10 (1) - IRB: specialized lending (Million Euros. 12-31-2019)

Regulatory categories	Remaining Maturity	Specialized lending					
		On-balance sheet amount <sup>(1)</sup>	Off-balance sheet amount <sup>(2)</sup>	RW	Exposure Amount <sup>(3)</sup>	RWAs	Expected Losses
Category 1	Less than 2.5 years	289	63	50%	333	166	-
Category 1	Equal to or more than 2.5 years	3,054	960	70%	3,833	2,683	15
Category 2	Less than 2.5 years	217	55	70%	253	177	1
Category 2	Equal to or more than 2.5 years	1,576	444	90%	1,923	1,731	15
Category 3	Less than 2.5 years	161	4	115%	163	187	5
Category 3	Equal to or more than 2.5 years	212	70	115%	276	318	8
Category 4	Less than 2.5 years	4	-	250%	4	10	0
Category 4	Equal to or more than 2.5 years	19	34	250%	53	133	4
Category 5	Less than 2.5 years	103	4		105	-	53
Category 5	Equal to or more than 2.5 years	40	1		41	-	21
<b>Total</b>	<b>Less than 2.5 years</b>	<b>774</b>	<b>126</b>		<b>859</b>	<b>542</b>	<b>58</b>
<b>Total</b>	<b>Equal to or more than 2.5 years</b>	<b>4,901</b>	<b>1,508</b>		<b>6,127</b>	<b>4,865</b>	<b>63</b>

<sup>(1)</sup> Corresponds to the exposure net of value adjustments and provisions

<sup>(2)</sup> 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

<sup>(3)</sup> Corresponde con el valor de la exposición tras CRM y CCF.

EU CR10 (1)- IRB: specialized lending (Million Euros. 12-31-2018)

Regulatory categories	Remaining Maturity	Specialized lending					
		On-balance sheet amount <sup>(1)</sup>	Off-balance sheet amount <sup>(2)</sup>	RW	Exposure Amount <sup>(3)</sup>	RWAs	Expected Losses
Category 1	Less than 2.5 years	-	-	50%	-	-	-
Category 1	Equal to or more than 2.5 years	2,994	709	70%	3,664	2,565	15
Category 2	Less than 2.5 years	315	52	70%	351	246	1
Category 2	Equal to or more than 2.5 years	1,791	434	90%	2,128	1,915	17
Category 3	Less than 2.5 years	243	15	115%	251	288	7
Category 3	Equal to or more than 2.5 years	681	175	115%	851	979	24
Category 4	Less than 2.5 years	12	1	250%	14	34	1
Category 4	Equal to or more than 2.5 years	83	39	250%	122	304	10
Category 5	Less than 2.5 years	110	6		113	-	57
Category 5	Equal to or more than 2.5 years	39	8		44	-	22
<b>Total</b>	<b>Less than 2.5 years</b>	<b>680</b>	<b>74</b>		<b>728</b>	<b>568</b>	<b>66</b>
<b>Total</b>	<b>Equal to or more than 2.5 years</b>	<b>5,588</b>	<b>1,364</b>		<b>6,808</b>	<b>5,763</b>	<b>87</b>

<sup>(1)</sup> Corresponds to the exposure net of value adjustments and provisions

<sup>(2)</sup> 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

<sup>(3)</sup> Corresponds to exposure value after CRM and CCF

### 3.2.5.5. Equity exposure by method

The following table shows equity exposure by the following approaches: internal, PD/LGD and simple (in this case, broken down by risk weights), as of December 31, 2019 and December 31, 2018.

**Table 34.** EU CR10 (2) - IRB: equity (Million Euros. 12-31-2019)

Categories	Equity under the IRB approach					
	On-balance sheet amount <sup>(1)</sup>	Off-balance sheet amount <sup>(2)</sup>	RW	Exposure Amount <sup>(3)</sup>	RWAs	Capital Requirements
Simple method - Private Equity Exposures	563	-	190%	563	1,070	86
Simple method - Exchange-traded equity exposures	290	-	290%	290	841	67
Simple method - Other Equity Exposures	108	-	370%	108	399	32
Exposures subject to 250% risk weight	3,142	-	250%	3,142	7,854	628
Internal model	138	-		138	449	36
PD/LGD method	2,883	-		2,883	5,554	444
<b>Total</b>	<b>7,124</b>	<b>-</b>		<b>7,124</b>	<b>16,167</b>	<b>1,293</b>

<sup>(1)</sup> Corresponds to the exposure net of value adjustments and provisions

<sup>(2)</sup> 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

<sup>(3)</sup> Corresponds to exposure value after CRM and CCF

EU CR10 (2) - IRB: equity (Million Euros. 12-31-2018)

Categories	Equity under the IRB approach					
	On-balance sheet amount <sup>(1)</sup>	Off-balance sheet amount <sup>(2)</sup>	RW	Exposure Amount <sup>(3)</sup>	RWAs	Capital Requirements
Simple method - Private Equity Exposures	343	-	190%	343	651	52
Simple method - Exchange-traded equity exposures	309	-	290%	309	897	72
Simple method - Other Equity Exposures	61	-	370%	61	224	18
Exposures subject to 250% risk weight	2,525	-	250%	2,525	6,314	505
Internal model	383	-		383	1,172	94
PD/LGD method	3,201	-		3,201	5,989	479
<b>Total</b>	<b>6,822</b>	<b>-</b>		<b>6,822</b>	<b>15,246</b>	<b>1,220</b>

<sup>(1)</sup> Corresponds to the exposure net of value adjustments and provisions

<sup>(2)</sup> 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

<sup>(3)</sup> Corresponds to exposure value after CRM and CCF

In addition, section 3.4 shows detailed information on structural equity risk.

## 3.2.6. 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.

### 3.2.6.1. Policies for managing counterparty risk

#### 3.2.6.1.1. 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 500 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 authorized for each subsidiary within the line item of treasury limits. It stipulates both the limit and the maximum maturity for the transaction.

Small businesses 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 capitalization (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.

#### **3.2.6.1.2. Policies for ensuring the effectiveness collateral and establishing the value adjustments for impairment 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 capitalization 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.

The MENTOR 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 an application 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 recognized, 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.

#### 3.2.6.1.3. 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.

#### 3.2.6.1.4. 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 capitalization (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.

#### 3.2.6.2. Amounts of counterparty risk

The original exposure for the counterparty risk of derivatives, according to Chapter 6 of the CRR, can be calculated using the following methods: original risk, mark-to-market valuation, standardized and internal models.

The Group calculates the value of exposure to risk through the mark-to-market method, obtained as the aggregated positive mark to market after contractual netting agreements plus the potential future risk of each transaction or instrument.

Below is a breakdown of the amount in terms of original exposure, EAD and RWAs:

**Table 35.** Positions subject to counterparty credit risk in terms of OE, EAD and RWAs (Million Euros. 12-31-2019)

Exposure Class and risk types	Securities financing transactions			Derivatives and transactions with deferred settlement			Total		
	OE	EAD	RWAs	OE	EAD	RWAs	OE	EAD	RWAs
Central governments or central banks	7,521	1,904	42	74	305	13	7,595	2,209	55
Regional governments or local authorities	-	-	-	74	3	1	74	3	1
Public sector entities	-	-	-	167	138	76	167	138	76
Multilateral Development Banks	-	-	-	-	-	-	-	-	-
Institutions	10,192	488	235	2,140	1,543	406	12,332	2,031	641
Corporates	1,773	257	255	1,184	1,157	1,173	2,957	1,414	1,428
Retail	465	-	-	58	57	41	523	57	41
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	1	1	1	1	1	1
Exposures associated with particularly high risk	-	-	-	32	32	48	32	32	48
Covered bonds	-	-	-	-	-	-	-	-	-
Short-term claims on institutions and corporate	-	-	-	-	-	-	-	-	-
Collective investments undertakings	10	0	0	1	1	1	12	2	2
Other exposures	-	4,136	-	-	-	-	-	4,136	-
<b>Total counterparty risk by standardized approach</b>	<b>19,961</b>	<b>6,785</b>	<b>533</b>	<b>3,733</b>	<b>3,237</b>	<b>1,761</b>	<b>23,693</b>	<b>10,022</b>	<b>2,294</b>
Central governments or central banks	1,558	1,558	3	41	41	6	1,599	1,599	9
Institutions	62,497	62,497	879	19,022	18,576	1,524	81,520	81,073	2,402
Corporates	116	116	0	3,806	3,806	2,010	3,922	3,922	2,010
Of which: SMEs	-	-	-	139	139	123	139	139	123
Of which: specialized lending	-	-	-	964	964	800	964	964	800
Of which: other	116	116	0	2,704	2,704	1,086	2,820	2,820	1,087
Retail	-	-	-	4	4	1	4	4	1
Of which: Secured by immovable property	-	-	-	-	-	-	-	-	-
Of which: Qualifying revolving	-	-	-	-	-	-	-	-	-
Of which: Other retail	-	-	-	4	4	1	4	4	1
Other retail: SMEs	-	-	-	-	-	-	-	-	-
Other retail: Non SMEs	-	-	-	4	4	1	4	4	1
<b>Total counterparty risk by IRB approach</b>	<b>64,171</b>	<b>64,171</b>	<b>882</b>	<b>22,874</b>	<b>22,428</b>	<b>3,540</b>	<b>87,045</b>	<b>86,599</b>	<b>4,423</b>
<b>Total credit risk</b>	<b>84,132</b>	<b>70,956</b>	<b>1,415</b>	<b>26,606</b>	<b>25,665</b>	<b>5,301</b>	<b>110,738</b>	<b>96,621</b>	<b>6,716</b>

Positions subject to counterparty credit risk in terms of EO, EAD and RWAs (Million Euros. 12-31-2018)

Exposure Class and risk types	Securities financing transactions			Derivatives and transactions with deferred settlement			Total		
	OE	EAD	RWAs	OE	EAD	RWAs	OE	EAD	RWAs
Central governments or central banks	7,616	746	299	231	276	14	7,846	1,022	313
Regional governments or local authorities	-	-	-	5	5	1	5	5	1
Public sector entities	-	-	-	1	1	0	1	1	0
Multilateral Development Banks	-	-	-	-	-	-	-	-	-
Institutions	4,364	834	178	3,371	2,370	1,034	7,735	3,205	1,212
Corporates	1,237	208	208	1,262	1,236	1,228	2,498	1,444	1,435
Retail	0	0	0	23	23	15	23	23	15
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	21	21	31	21	21	31
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-	-
Short-term claims on institutions and corporate	-	-	-	-	-	-	-	-	-
Collective investments undertakings	7	0	0	0	0	0	7	0	0
Other exposures	-	8,517	-	-	1,026	-	-	9,543	-
<b>Total counterparty risk by standardized approach</b>	<b>13,224</b>	<b>10,306</b>	<b>685</b>	<b>4,912</b>	<b>4,959</b>	<b>2,323</b>	<b>18,136</b>	<b>15,265</b>	<b>3,008</b>
Central governments or central banks	4,814	4,814	217	18	18	9	4,831	4,831	226
Institutions	50,179	50,179	425	17,511	17,331	1,365	67,690	67,510	1,790
Corporates	17	17	0	3,466	3,466	2,037	3,483	3,483	2,037
Of which: SMEs	-	-	-	114	114	96	114	114	96
Of which: specialized lending	-	-	-	1,036	1,036	909	1,036	1,036	909
Of which: other	17	17	0	2,316	2,316	1,032	2,333	2,333	1,032
Retail	-	-	-	7	7	3	7	7	3
Of which: Secured by immovable property	-	-	-	-	-	-	-	-	-
Of which: Qualifying revolving	-	-	-	-	-	-	-	-	-
Of which: Other retail	-	-	-	7	7	3	7	7	3
Other retail: SMEs	-	-	-	7	7	3	7	7	3
Other retail: Non SMEs	-	-	-	0	0	0	0	0	0
<b>Total counterparty risk by IRB approach</b>	<b>55,010</b>	<b>55,010</b>	<b>643</b>	<b>21,002</b>	<b>20,822</b>	<b>3,414</b>	<b>76,012</b>	<b>75,832</b>	<b>4,056</b>
<b>Total credit risk</b>	<b>68,234</b>	<b>65,316</b>	<b>1,327</b>	<b>25,914</b>	<b>25,780</b>	<b>5,737</b>	<b>94,148</b>	<b>91,096</b>	<b>7,065</b>

From the amounts shown in the table above, those referring to the counterparty risk of trading book exposures are shown below:

**Table 36.** Amounts of counterparty risk in the trading book (Million Euros)

Counterparty Risk Trading Book Activities	Capital requirements			
	2019		2018	
	Mtm Method	Internal Models (IMM)	Mtm Method	Internal Models (IMM)
Standardized Approach	169		193	
Advanced Approach	357		323	
<b>Total</b>	<b>526</b>		<b>516</b>	

The Group currently has a totally residual amount of bank capital requirements for the settlement risk of trading book exposures.

The following table shows the amounts (in millions of euros) relating to the counterparty risk of derivatives and securities financing transactions as of December 31, 2019 and December 31, 2018:

**Table 37.** CCR5-A - Impact of netting and collateral held on exposure values<sup>(1)</sup> (Million Euros. 12-31-2019)

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held <sup>(4)</sup>	Net credit exposure
Derivatives <sup>(2)</sup>	36,583	(23,265)	13,319	(6,440)	6,879
SFTs <sup>(3)</sup>	35,629	-	35,629	(32,394)	3,236
Cross-product netting					
<b>Total</b>	<b>72,213</b>	<b>(23,265)</b>	<b>48,948</b>	<b>(38,833)</b>	<b>10,115</b>

<sup>(1)</sup> With regard SFTs, it includes both financial guarantees included in the carrying amount and collaterals not included in the carrying amount as per accounting standards, but do reduce credit risk. Collaterals of derivatives correspond only to those eligible as credit risk mitigation techniques for capital purposes.

<sup>(2)</sup> Positive mark-to-market of derivatives is included

<sup>(3)</sup> Only the amount of reverse repurchase agreements is included.

<sup>(4)</sup> The collateral held amount includes volatility adjustments outlined in Title II, Chapter 4, Section 4 of the CRR

**CCR5-A - Impact of netting and collateral held on exposure values<sup>(1)</sup> (Million Euros. 12-31-2018)**

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held <sup>(4)</sup>	Net credit exposure
Derivatives <sup>(2)</sup>	35,349	(23,940)	11,409	(6,085)	5,324
SFTs <sup>(3)</sup>	27,758	-	27,758	(25,359)	2,399
Cross-product netting					
<b>Total</b>	<b>63,107</b>	<b>(23,940)</b>	<b>39,167</b>	<b>(31,444)</b>	<b>7,723</b>

<sup>(1)</sup> With regard SFTs, it includes both financial guarantees included in the carrying amount and collaterals not included in the carrying amount as per accounting standards, but do reduce credit risk. Collaterals of derivatives correspond only to those eligible as credit risk mitigation techniques for capital purposes.

<sup>(2)</sup> Positive mark-to-market of derivatives is included

<sup>(3)</sup> Only the amount of reverse repurchase agreements is included.

<sup>(4)</sup> The collateral held amount includes volatility adjustments outlined in Title II, Chapter 4, Section 4 of the CRR

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 38.** EU CCR1 - Analysis of CCR exposure by approach (Million Euros)

	12-31-2019				12-31-2019			
	Replacement Cost / Current market value	Potential future credit exposure	EAD post- CRM	RWAs	Replacement Cost / Current market value	Potential future credit exposure	EAD post- CRM	RWAs
Mark to market	13,174	10,153	20,157	5,119	11,082	11,020	20,278	5,569
Internal Model Method (for derivatives and SFTs)	-	-	-	-	-	-	-	-
Simple Approach for credit risk mitigation (for SFTs)	-	-	-	-	-	-	-	-
Comprehensive Approach for credit risk mitigation (for SFTs)	-	-	70,367	1,186	-	-	61,331	1,180
VaR for SFTs	-	-	-	-	-	-	-	-
<b>Total</b>	<b>13,174</b>	<b>10,153</b>	<b>90,524</b>	<b>6,305</b>	<b>11,082</b>	<b>11,020</b>	<b>81,609</b>	<b>6,749</b>

**3.2.6.2.1. Counterparty credit risk by standardized approach**

The following table shows a breakdown of exposure to counterparty credit risk (following credit risk mitigation and CCF techniques) calculated using the standardized approach, by exposure category and risk weights:

**Table 39.** EU CCR3 - Standardized approach - CCR exposures by regulatory portfolio and risk (Million Euros. 12-31-2019)

Exposure Class	Risk weight												Of which: unrated <sup>(1)</sup>
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total	
Central governments or central banks	2,066	-	-	-	62	76	-	-	5	-	-	2,209	1,660
Regional government or local authorities	-	-	-	-	3	1	-	-	-	-	-	3	3
Public sector entities	-	-	-	-	3	120	-	-	16	-	-	138	105
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-
International organizations	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	471	15	-	789	566	-	-	190	-	-	2,031	1,639
Corporates	-	-	-	-	2	5	-	-	1,369	37	-	1,414	1,353
Retail	-	-	-	-	-	-	-	57	-	-	-	57	57
Institutions and corporates with a short term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Other items	4,136	-	-	-	-	-	-	-	2	33	-	4,170	3,853
<b>Total</b>	<b>6,202</b>	<b>471</b>	<b>15</b>	<b>-</b>	<b>858</b>	<b>768</b>	<b>-</b>	<b>57</b>	<b>1,582</b>	<b>70</b>	<b>-</b>	<b>10,022</b>	<b>8,668</b>

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

EU CCR3 - Standardized approach - CCR exposures by regulatory portfolio and risk (Million Euros. 12-31-2018)

Exposure Class	Risk weight												Of which: unrated <sup>(1)</sup>
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total	
Central governments or central banks	649	-	-	-	71	8	-	-	295	-	-	1,022	193
Regional government or local authorities	-	-	-	-	4	-	-	-	-	-	-	5	5
Public sector entities	-	-	-	-	1	-	-	-	-	-	-	1	1
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-
International organizations	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	275	98	-	1,622	664	-	-	546	-	-	3,205	3,170
Corporates	-	-	-	-	1	12	-	-	1,428	2	-	1,444	1,423
Retail	-	-	-	-	-	-	-	23	-	-	-	23	23
Institutions and corporates with a short term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Other items	9,543	-	-	-	-	-	-	-	-	21	-	9,564	9,564
<b>Total</b>	<b>10,192</b>	<b>275</b>	<b>98</b>	<b>-</b>	<b>1,699</b>	<b>685</b>	<b>-</b>	<b>23</b>	<b>2,269</b>	<b>23</b>	<b>-</b>	<b>15,265</b>	<b>14,380</b>

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

## 3.2.6.2.2. Counterparty risk by advanced approach

The following table presents the relevant parameters used to calculate the capital requirements for counterparty credit risk

in the IRB models as of December 31, 2019 and December 31, 2018:

**Table 40.** EU CCR4 - IRB approach - CCR exposures by portfolio and PD scale (Million Euros, 12-31-2019)

PD scale as of 12-31-2019 <sup>(1)</sup>	EAD post-CRM	Average PD <sup>(2)</sup>	Number of Obligors	Average LGD <sup>(3)</sup>	Average Maturity (days) <sup>(4)</sup>	RWAs	RWA Density
<b>Prudential Portfolio- FIRB method<sup>(5)</sup></b>	<b>964</b>	<b>-</b>	<b>275</b>	<b>-</b>		<b>800</b>	<b>83%</b>
Corporate - Specialized lending	964	-	275	-	-	800	83%
<b>Prudential Portfolio- AIRB method</b>	<b>85,635</b>	<b>0.2%</b>	<b>3,368</b>	<b>11.7%</b>		<b>3,622</b>	<b>4%</b>
<b>Central governments or central banks</b>	<b>1,599</b>	<b>0.1%</b>	<b>5</b>	<b>2.1%</b>	<b>8</b>	<b>9</b>	<b>1%</b>
0,00 to <0,15	1,586	0.0%	4	1.8%	2	4	0%
0,15 to <0,25	13	0.2%	1	40.0%	782	5	38%
0,25 to <0,50	-	0.0%	-	0.0%	-	-	0%
0,50 to <0,75	-	0.0%	-	0.0%	-	-	0%
0,75 to <2,50	-	0.0%	-	0.0%	-	-	0%
2,50 to <10,00	-	0.0%	-	0.0%	-	-	0%
10,00 to <100,00	-	0.0%	-	0.0%	-	-	0%
100,00 (Default)	-	0.0%	-	0.0%	-	-	0%
<b>Institutions</b>	<b>81,073</b>	<b>0.1%</b>	<b>1,062</b>	<b>10.8%</b>	<b>115</b>	<b>2,402</b>	<b>3%</b>
0,00 to <0,15	62,300	0.1%	771	13.4%	144	1,984	3%
0,15 to <0,25	7,927	0.2%	71	2.5%	8	132	2%
0,25 to <0,50	7,164	0.3%	44	1.8%	31	124	2%
0,50 to <0,75	1,590	0.5%	21	4.1%	49	75	5%
0,75 to <2,50	1,854	1.3%	136	2.0%	9	66	4%
2,50 to <10,00	238	3.6%	15	3.2%	50	20	9%
10,00 to <100,00	0	36.3%	4	44.7%	1,726	1	296%
100,00 (Default)	-	0.0%	-	0.0%	-	-	0%
<b>Corporate - SMEs</b>	<b>139</b>	<b>32.8%</b>	<b>787</b>	<b>49.9%</b>	<b>462</b>	<b>123</b>	<b>89%</b>
0,00 to <0,15	4	0.1%	228	40.4%	470	1	14%
0,15 to <0,25	1	0.2%	50	41.0%	876	0	38%
0,25 to <0,50	5	0.3%	81	41.1%	777	2	44%
0,50 to <0,75	24	0.5%	79	40.5%	508	16	65%
0,75 to <2,50	32	1.2%	159	40.1%	722	27	84%
2,50 to <10,00	26	4.0%	128	39.5%	595	29	113%
10,00 to <100,00	4	20.5%	22	38.2%	314	9	235%
100,00 (Default)	43	100.0%	40	71.8%	134	40	92%
<b>Corporate - Non-SMEs</b>	<b>2,820</b>	<b>0.5%</b>	<b>847</b>	<b>39.7%</b>	<b>686</b>	<b>1,087</b>	<b>39%</b>
0,00 to <0,15	1,684	0.1%	283	37.8%	661	429	26%
0,15 to <0,25	284	0.2%	117	41.9%	661	107	38%
0,25 to <0,50	588	0.3%	209	43.8%	710	308	52%
0,50 to <0,75	93	0.5%	88	43.2%	631	64	69%
0,75 to <2,50	119	1.1%	74	36.7%	836	93	78%
2,50 to <10,00	48	5.1%	57	42.8%	1,144	77	159%
10,00 to <100,00	4	15.0%	11	43.6%	894	8	215%
100,00 (Default)	0	100.0%	8	41.4%	1,301	0	14%
<b>Retail - Other SMEs</b>	<b>4</b>	<b>23.0%</b>	<b>656</b>	<b>40.0%</b>	<b>-</b>	<b>1</b>	<b>27%</b>
0,00 to <0,15	0	0.1%	110	40.1%	-	0	10%
0,15 to <0,25	0	0.2%	30	40.0%	-	0	13%
0,25 to <0,50	1	0.3%	99	40.0%	-	0	16%
0,50 to <0,75	0	0.5%	57	40.0%	-	0	21%
0,75 to <2,50	1	1.1%	129	40.0%	-	0	33%
2,50 to <10,00	1	5.2%	164	40.0%	-	0	45%
10,00 to <100,00	0	17.0%	36	40.1%	-	0	61%
100,00 (Default)	1	100.0%	31	40.0%	-	0	14%
<b>Retail - Other Non-SMEs</b>	<b>0</b>	<b>0.1%</b>	<b>11</b>	<b>40.0%</b>	<b>-</b>	<b>0</b>	<b>7%</b>
0,00 to <0,15	0	0.1%	11	40.0%	-	0	7%
0,15 to <0,25	-	-	-	-	-	-	-
0,25 to <0,50	-	-	-	-	-	-	-
0,50 to <0,75	-	-	-	-	-	-	-
0,75 to <2,50	-	-	-	-	-	-	-
2,50 to <10,00	-	-	-	-	-	-	-
10,00 to <100,00	-	-	-	-	-	-	-
100,00 (Default)	-	-	-	-	-	-	-
<b>Total Advanced Approach</b>	<b>86,599</b>	<b>0.2%</b>	<b>3,643</b>	<b>11.7%</b>		<b>4,423</b>	<b>5%</b>

<sup>(1)</sup> PD Intervals recommended by the EBA Guidelines on Disclosure Requirements under Part Eight of the CRR.

<sup>(2)</sup> Corresponds to obligor grade PD weighted by EAD post CRM.

<sup>(3)</sup> Corresponds to obligor grade LGD weighted by EAD post CRM.

<sup>(4)</sup> Corresponds to the obligor maturity in days weighted by EAD post CRM. According to Regulation (EU) No 680/2014, it is reported only for categories in which the average maturities are relevant for the calculation of RWAs.

<sup>(5)</sup> Exposure classified in the FIRB approach corresponds to specialized lending exposure. The Group has chosen to use the slotting criteria, in line with Article 153.5 of the CRR.

## EU CCR4 - IRB approach - CCR exposures by portfolio and PD scale (Million Euros. 12-31-2018)

PD scale as of 12-31-2019 <sup>(1)</sup>	EAD post-CRM	Average PD <sup>(2)</sup>	Number of Obligor	Average LGD <sup>(3)</sup>	Average Maturity (days) <sup>(4)</sup>	RWAs	RWA Density
<b>PrudentialB71:1128</b>	<b>1,036</b>	<b>-</b>	<b>307</b>	<b>-</b>		<b>909</b>	<b>88%</b>
Corporate - Specialized lending	1,036	-	307	-	-	909	88%
<b>Prudential Portfolio- AIRB method</b>	<b>74,796</b>	<b>0.2%</b>	<b>4,749</b>	<b>10.4%</b>		<b>3,147</b>	<b>4%</b>
<b>Central governments or central banks</b>	<b>4,831</b>	<b>0.2%</b>	<b>4</b>	<b>3.8%</b>	<b>23</b>	<b>226</b>	<b>5%</b>
0,00 to <0,15	4,643	0.1%	1	2.3%	6	14	0%
0,15 to <0,25	17	0.2%	1	40.0%	1,147	8	46%
0,25 to <0,50	-	-	-	-	-	-	-
0,50 to <0,75	-	-	-	-	-	-	-
0,75 to <2,50	-	-	-	-	-	-	-
2,50 a <10,00	172	4.4%	2	40.0%	365	204	119%
10,00 to <100,00	-	-	-	-	-	-	-
100,00 (Default)	-	-	-	-	-	-	-
<b>Institutions</b>	<b>67,510</b>	<b>0.2%</b>	<b>1,129</b>	<b>9.8%</b>	<b>212</b>	<b>1,790</b>	<b>3%</b>
0,00 to <0,15	54,373	0.1%	815	11.5%	238	1,422	3%
0,15 to <0,25	4,514	0.2%	78	2.8%	167	86	2%
0,25 to <0,50	4,786	0.3%	54	2.0%	47	85	2%
0,50 to <0,75	1,175	0.5%	23	5.3%	97	74	6%
0,75 to <2,50	2,199	1.3%	137	2.4%	131	90	4%
2,50 a <10,00	460	2.7%	18	3.1%	36	33	7%
10,00 to <100,00	2	21.2%	4	20.0%	539	1	42%
100,00 (Default)	-	-	-	-	-	-	-
<b>Corporate - SMEs</b>	<b>114</b>	<b>15.7%</b>	<b>1,545</b>	<b>41.2%</b>	<b>1,157</b>	<b>96</b>	<b>84%</b>
0,00 to <0,15	9	0.1%	221	40.1%	552	2	19%
0,15 to <0,25	5	0.2%	114	42.4%	436	1	27%
0,25 to <0,50	4	0.3%	146	40.6%	553	1	35%
0,50 to <0,75	5	0.5%	225	40.5%	880	3	54%
0,75 to <2,50	39	1.3%	399	41.4%	1,518	41	104%
2,50 a <10,00	36	4.5%	329	41.2%	1,252	43	120%
10,00 to <100,00	0	18.6%	32	40.3%	1,551	0	168%
100,00 (Default)	16	100.0%	79	41.3%	855	5	31%
<b>Corporate - Non-SMEs</b>	<b>2,333</b>	<b>0.3%</b>	<b>898</b>	<b>40.2%</b>	<b>899</b>	<b>1,032</b>	<b>44%</b>
0,00 to <0,15	1,290	0.1%	269	38.8%	764	343	27%
0,15 to <0,25	228	0.2%	141	41.0%	744	87	38%
0,25 to <0,50	331	0.3%	202	43.9%	1,417	237	72%
0,50 to <0,75	407	0.5%	97	40.8%	1,004	284	70%
0,75 to <2,50	47	1.1%	124	43.0%	1,023	45	97%
2,50 a <10,00	30	2.9%	49	43.9%	550	35	116%
10,00 to <100,00	0	11.9%	2	42.7%	1,290	0	208%
100,00 (Default)	1	100.0%	14	44.0%	1,282	0	14%
<b>Retail - Other SMEs</b>	<b>7</b>	<b>33.3%</b>	<b>1,135</b>	<b>40.4%</b>	<b>-</b>	<b>3</b>	<b>39%</b>
0,00 to <0,15	0	0.1%	116	40.0%	-	-	9%
0,15 to <0,25	0	0.2%	55	40.0%	-	-	13%
0,25 to <0,50	0	0.3%	57	40.0%	-	-	18%
0,50 to <0,75	0	0.5%	139	40.0%	-	-	24%
0,75 to <2,50	0	1.2%	232	40.0%	-	-	35%
2,50 a <10,00	2	5.9%	345	40.0%	-	1	47%
10,00 to <100,00	2	20.6%	104	40.0%	-	1	66%
100,00 (Default)	2	100.0%	87	41.6%	-	-	14%
<b>Retail - Other Non-SMEs</b>	<b>0</b>	<b>4.5%</b>	<b>38</b>	<b>40.0%</b>	<b>-</b>	<b>-</b>	<b>56%</b>
0,00 to <0,15	0	0.1%	18	40.0%	-	-	7%
0,15 to <0,25	-	-	-	-	-	-	-
0,25 to <0,50	-	-	-	-	-	-	-
0,50 to <0,75	-	-	-	-	-	-	-
0,75 to <2,50	0	0.9%	11	40.0%	-	-	50%
2,50 a <10,00	0	5.2%	9	40.0%	-	-	63%
10,00 to <100,00	-	-	-	-	-	-	-
100,00 (Default)	-	-	-	-	-	-	-
<b>Total Advanced Approach</b>	<b>75,832</b>	<b>0.2%</b>	<b>5,056</b>	<b>10.4%</b>		<b>4,056</b>	<b>5%</b>

<sup>(1)</sup> PD Intervals recommended by the EBA Guidelines on Disclosure Requirements under Part Eight of the CRR.

<sup>(2)</sup> Corresponds to obligor grade PD weighted by EAD post CRM.

<sup>(3)</sup> Corresponds to obligor grade LGD weighted by EAD post CRM.

<sup>(4)</sup> Corresponds to the obligor maturity in days weighted by EAD post CRM. According to Regulation (EU) No 680/2014, it is reported only for categories in which the average maturities are relevant for the calculation of RWAs

<sup>(5)</sup> Exposure classified in the FIRB approach corresponds to specialized lending exposure. The Group has chosen to use the slotting criteria, in line with Article 153.5 of the CRR.

### 3.2.6.2.3. 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, 2019 and December 31, 2018 is presented below:

**Table 41.** EU CCR5-B - Composition of collateral for exposure to Counterparty Credit Risk<sup>(1)</sup> (Million Euros. 12-31-2019)

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair Value of Collateral received		Fair Value of posted Collateral		Fair Value of Collateral received	Fair Value of posted Collateral
	Segregated <sup>(2)</sup>	Unsegregated <sup>(3)</sup>	Segregated <sup>(2)</sup>	Unsegregated <sup>(3)</sup>		
Cash- domestic currency	-	2,549	6	-	29,306	29,259
Cash- other currencies	-	1,113	6	1	16,601	6,371
Domestic sovereign debt	-	-	-	-	5,163	19,708
Other sovereign debt	-	5	-	-	7,947	14,411
Government agency debt	-	2	-	-	162	215
Corporate bonds	-	960	-	-	5,029	7,833
Equity securities	-	-	-	-	-	3,526
Other collateral	-	1,811	-	-	14,093	29
<b>Total</b>	<b>-</b>	<b>6,440</b>	<b>12</b>	<b>1</b>		

<sup>(1)</sup> Credit risk mitigation techniques are considered eligible according to Title II, Chapter 4, Section 2 of the CRR

<sup>(2)</sup> Refers to collateral that is held in a bankruptcy-remote manner

<sup>(3)</sup> Refers to collateral that is not held in a bankruptcy-remote manner

EU CCR5-B - Composition of collateral for exposure to Counterparty Credit Risk<sup>(1)</sup> (Million Euros. 12-31-2018)

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair Value of Collateral received		Fair Value of posted Collateral		Fair Value of Collateral received	Fair Value of posted Collateral
	Segregated <sup>(2)</sup>	Unsegregated <sup>(3)</sup>	Segregated <sup>(2)</sup>	Unsegregated <sup>(3)</sup>		
Cash- domestic currency	5	2,707	10	1	24,690	25,882
Cash- other currencies	0	1,146	12	88	13,900	1,841
Domestic sovereign debt	-	-	-	-	6,950	14,996
Other sovereign debt	-	6	-	-	8,760	16,301
Government agency debt	-	-	-	-	267	162
Corporate bonds	-	710	-	-	2,106	4,647
Equity securities	-	-	-	-	-	1,807
Other collateral	-	1,645	-	-	7,276	886
<b>Total</b>	<b>5</b>	<b>6,214</b>	<b>21</b>	<b>88</b>		

<sup>(1)</sup> Credit risk mitigation techniques are considered eligible according to Title II, Chapter 4, Section 2 of the CRR

<sup>(2)</sup> Refers to collateral that is held in a bankruptcy-remote manner

<sup>(3)</sup> Refers to collateral that is not held in a bankruptcy-remote manner

### 3.2.6.2.4. Credit Derivative transactions

The table below shows the amounts of credit derivative transactions, broken down into purchased and sold derivatives:

**Table 42.** EU CCR6 - Credit derivatives exposures (Million Euros. 12-31-2019)

	Credit derivative hedges		Other credit derivatives
	Protection Bought	Protection Sold	
<b>Notionals</b>	<b>12,431</b>	<b>16,646</b>	-
Single-name credit default swaps	5,718	6,934	-
Index credit default swaps	6,713	7,338	-
Total return swaps	-	2,225	-
Credit options	-	150	-
Other credit derivatives	-	-	-
<b>Fair Values</b>	<b>(218)</b>	<b>174</b>	-
Positive fair value (asset)	36	316	-
Negative fair value (liability)	(255)	(143)	-

EU CCR6 - Credit derivatives exposures (Million Euros. 12-31-2018)

	Credit derivative hedges		Other credit derivatives
	Protection Bought	Protection Sold	
<b>Notionals</b>	<b>11,248</b>	<b>14,204</b>	-
Single-name credit default swaps	4,925	5,622	-
Index credit default swaps	5,824	6,421	-
Total return swaps	-	2,161	-
Credit options	500	-	-
Other credit derivatives	-	-	-
<b>Fair Values</b>	<b>(118)</b>	<b>(59)</b>	-
Positive fair value (asset)	68	164	-
Negative fair value (liability)	(186)	(223)	-

As of year-end 2019 and 2018, the Group did not use credit derivative as collateral in brokerage activities.

### 3.2.6.3. 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:

- Standardized 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, 2019 and December 31, 2018, the Group has no surcharge for CVA calculated under the advanced approach.

#### Procedures for calculating the valuation adjustments and reserves

Credit valuation adjustments (CVA) and debit valuations adjustments (DVA) are incorporated into derivative valuations of both assets and liabilities, to reflect the impact on fair value of the counterparty credit risk and own credit risk, respectively. (See Note 8 of the Group's Consolidated Financial Statements for more information).

The credit valuation adjustments in millions of euros as of December 31, 2019 and December 31, 2018 are shown below:

**Table 43.** EU CCR2 - CVA Capital Charge (Million Euros. 12-31-2019)

	Exposure value	RWA
<b>Total portfolios subject to the advanced method</b>	-	-
(i) VaR component (included 3x multiplier)	-	-
(ii) SVaR component (included 3x multiplier)	-	-
All portfolios subject to the standardized method	7,283	1,529
<b>Total subject to the CVA capital charge</b>	<b>7,283</b>	<b>1,529</b>

EU CCR2 - CVA Capital Charge (Million Euros. 12-31-2018)

	Exposure value	RWA
<b>Total portfolios subject to the advanced method</b>	-	-
(i) VaR component (included 3x multiplier)	-	-
(ii) SVaR component (included 3x multiplier)	-	-
All portfolios subject to the standardized method	7,445	1,377
<b>Total subject to the CVA capital charge</b>	<b>7,445</b>	<b>1,377</b>

The flow statements of CVA RWAs during 2019 are below:

**Table 44.** Flow statements CVA RWAs (Million Euros)

CVA		
<b>RWAs as of December 31, 2018</b>		<b>1,377</b>
Effects	Asset size	152
<b>RWAs as of December 31, 2019</b>		<b>1,529</b>

As of December 31, 2019, the CVA risk-weighted assets remain at a similar level to those of December 2018.

### 3.2.6.4. 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 45.** EU CCR8 - Exposures to CCPs (Million Euros)

	12-31-2019		12-31-2018	
	EAD post CRM	RWA	EAD post CRM	RWA
<b>Exposures to QCCPs (total)</b>		<b>198</b>		<b>191</b>
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	5,823	139	6,219	146
(i) OTC Derivatives	4,939	121	5,022	123
(ii) Exchange-traded derivatives	520	10	443	9
(iii) Securities financing transactions (SFTs)	364	7	754	15
(iv) Netting sets where cross-product netting has been approved	-	-	-	-
Segregated initial margin	1,239		959	
Non-segregated initial margin	340	16	169	3
Pre-funded default fund contributions	111	44	71	41
Alternative calculation of own funds requirements for exposures		-		-
<b>Exposures to non-QCCPs (total)</b>		<b>690</b>		<b>174</b>
Exposures for trades at non-QCCPs (excluding initial margin and default to contributions); of which	273	273	484	169
(i) OTC Derivatives	42	42	30	30
(ii) Exchange-traded derivatives	6	9	7	7
(iii) Securities financing transactions (SFTs)	225	222	448	132
(iv) Netting sets where cross-product netting has been approved	-	-	-	-
Segregated initial margin	-		108	
Non-segregated initial margin	496	417	100	4
Pre-funded default fund contributions	1	0	0	0
Unfunded default fund contributions	-	-	-	-

## 3.2.7. Information on securitization

### 3.2.7.1. General characteristics of securitization

#### 3.2.7.1.1. Purposes of securitization

The Group's current securitization policy considers a recurrent issuance program with a deliberate diversification of securitized 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 authorizations obtained directly from the Board of Directors or from the Executive Committee.

The main objective of securitization is to serve as an instrument for the efficient management of the balance sheet, above all 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 securitization instruments, such as the freeing up of regulatory capital by transferring risk and the freeing of potential excess over the expected loss, provided it is allowed by the volume of the first-loss tranche and risk transfer.

Main risk exposed in securitization operations.

#### 1. Default risk

Default risk 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 installments).

In the particular case of securitization, the entities provide information to investors on the situation of the securitized loan portfolio. In this respect, it is worth noting that transactions transferred to the Securitization 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 securitized transactions. The rating agencies take this element closely into account when analyzing 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 favor 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) securitized loans, which could imply that the maturity of the securitization 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 securitizations, this risk is very limited, as the maturity date of the securitization Bonds is set according to the maturity of the last loan of the securitized 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 securitization processes.

Although an entity may not undertake contracts in the secondary market of Bonds issued by the Securitization Fund, and thus provide liquidity to the funds, the securitization process itself consists of converting illiquid assets that form part of the Bank's balance sheet into liquid assets in the form of securitization Bonds, which give the possibility for trading and transferring them in a regulated market. This would not be the case if they were not subject to the securitization process.

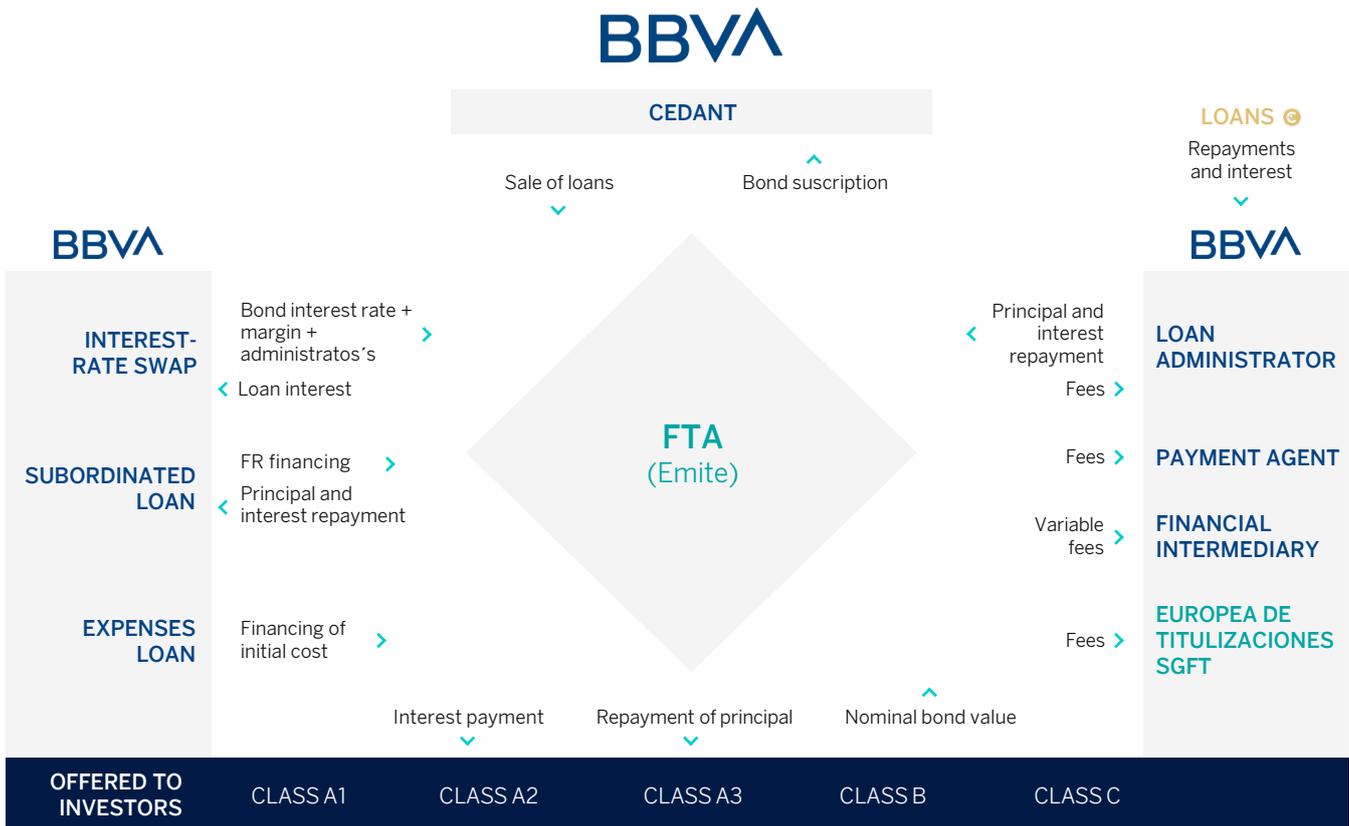
In addition, understanding liquidity risk as the possible time mismatch between the maturities of the collections generated by the loans and the payments the Bonds originate, BBVA has not so far made any securitization

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.

**3.2.7.1.2. Functions performed by the securitization process and degree of involvement**

The Group’s degree of involvement in its securitization funds is not usually restricted to the mere role of assignor and administrator of the securitized portfolio.

**Chart 18.** 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, with the former being the one that finances the first-loss tranche, and the latter financing the fund’s fixed expenditure.
- Administrative agent of the securitized portfolio.

The Group has not assumed the role of sponsor of securitization originated by third-party institutions.

The Group’s balance sheet maintains the first-loss tranches of all securitization that has been carried out.

It is worth noting that the Group has maintained a consistent line on generating securitization operations since the credit crunch, which began in July 2007.

In addition, the Group has performed various Synthetic Securitization operations to date, introducing this new operation as an additional source of regulatory capital release.

### 3.2.7.1.3. Methods used for the calculation of risk-weighted exposure in securitization transactions.

When securitization positions meet the criteria for significant and effective risk transfer as defined by Articles 244 and 245 of Regulation 2017/2401, the Group calculates the capital requirements of these securitizations by applying the following methods, which apply to both originated securitizations and investment positions in securitization funds originated by third parties:

- The standardized approach: When this approach is used for securitized exposure, in full or in a predominant manner if it involves a mixed portfolio.
- The IRB approach: When internal models are used for securitized exposure, in full or in a predominant manner. Within the alternatives of the IRB approach, use is made of the model based on external ratings.

As indicated in the Regulatory Framework section, for originated securitizations since January 1, 2019, the new securitization framework methods should be used, as defined in EU Regulation 2017/2401, which will replace the methods described above. The methods for the new framework are as follows:

- IRBA method (Article 259): When according to the securitization features, all information on the underlying loans of the securitized portfolio is accessible, 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 securitized 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 securitization loans is not accessible, and it is necessary to use external rating data.

During the year, the Group has invested in securitization positions originated in 2019, whose capital requirements are calculated by the ERBA method.

### 3.2.7.1.4. Transfer of risk in securitization activities and criteria for recognition of gains on sales

The Group considers that the risks and benefits of the securitizations are substantially retained if the subordinated bonds are held and/or if subordination funding has been granted to those securitization funds, which means that the credit loss risk of the securitized assets will be assumed. Consequently, the Group is not derecognizing those transferred loan portfolios.

In addition, the Group recognizes the gains on sales of securitized assets when they are derecognized from the balance sheet, which implies to comply with the substantial transfer of risks and benefits requirements described above.

The result will be recognized 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.

For more information on securities accounting see Note 2.2.2 of the Group's Consolidated Financial Statements.

### 3.2.7.2. Securitization exposure in the banking and trading book

The Group has carried out two traditional securitizations without risk transfer during 2019. The first in July, of a portfolio of consumer loans (Consumer 10 FT) amounting to 2.0 billion euros and the second in November, also amounting to 2.0 billion euros (RMBS 19 FT), based on a residential mortgage portfolio. Since there is no risk transfer, these two operations are not included in the securitization framework defined by the CRR, with the calculation of their risk-weighted assets based on the underlying loans.

In addition, in October, the VELA SME 2017-1 Synthetic Securitization, consisting of loans to SMEs, was early canceled by executing the –Time Call<sup>8</sup>– clause provided for in the contract.

<sup>8</sup> Time call: Early termination clause of an issue through which a date is fixed, normally linked to the average life of the transaction, from which the option of amortizing such issue may be exercised in advance.

The table below shows the amounts in terms of EAD of securitization positions for the banking:

**Table 46.** SEC1: Securitization exposures in the banking book (Million Euros. 12-31-2019)

	Bank acts as originator			Bank acts as sponsor			Bank acts as investor		
	Traditional	Synthetic	Subtotal	Traditional	Synthetic	Subtotal	Traditional	Synthetic	Subtotal
<b>Retail (total)- of which</b>	<b>788</b>	<b>-</b>	<b>788</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>474</b>	<b>-</b>	<b>474</b>
Residential mortgage	-	-	-	-	-	-	474	-	474
Credit card	-	-	-	-	-	-	-	-	-
Other retail exposures	788	-	788	-	-	-	-	-	-
Re-Securitization	-	-	-	-	-	-	-	-	-
<b>Wholesale (total)- of which</b>	<b>65</b>	<b>1,447</b>	<b>1,511</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>75</b>	<b>-</b>	<b>75</b>
Loans to corporates	23	1,447	1,470	-	-	-	44	-	44
Commercial mortgage	-	-	-	-	-	-	1	-	1
Lease and receivables	42	-	42	-	-	-	-	-	-
Other wholesale	-	-	-	-	-	-	30	-	30
Re-Securitization	-	-	-	-	-	-	-	-	-

SEC1- Securitization exposures in the banking book (Million Euros. 12-31-2018)

	Bank acts as originator			Bank acts as sponsor			Bank acts as investor		
	Traditional	Synthetic	Subtotal	Traditional	Synthetic	Subtotal	Traditional	Synthetic	Subtotal
<b>Retail (total)- of which</b>	<b>789</b>	<b>-</b>	<b>789</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,912</b>	<b>-</b>	<b>4,912</b>
Residential mortgage	-	-	-	-	-	-	4,748	-	4,748
Credit card	-	-	-	-	-	-	165	-	165
Other retail exposures	789	-	789	-	-	-	-	-	-
Re-Securitization	-	-	-	-	-	-	-	-	-
<b>Wholesale (total)- of which</b>	<b>95</b>	<b>3,917</b>	<b>4,012</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>291</b>	<b>-</b>	<b>291</b>
Loans to corporates	53	3,917	3,970	-	-	-	49	-	49
Commercial mortgage	-	-	-	-	-	-	1	-	1
Lease and receivables	42	-	42	-	-	-	-	-	-
Other wholesale	-	-	-	-	-	-	241	-	241
Re-Securitization	-	-	-	-	-	-	-	-	-

As of December 31, 2019 and December 31, 2018, the Group has no securitization exposures in the trading book.

### 3.2.7.3. Invested securitization- Group acting as investor

The table below shows the EAD and RWAs of securitization positions where the Group acts as investor by type of exposure, tranches and weighting ranges and their corresponding capital requirements as of December 31, 2019 and December 31, 2018.



During 2019, exposure to securitizations credit risk has been significantly reduced as a result of the recognition of sovereign guarantees, mainly in the United States, according to the credit risk reduction framework (Chapter 4 CRR) in securitization positions (Article 247 CRR).

### 3.2.7.4. Originated securitization – Group acting as originator

#### 3.2.7.4.1. Rating agencies used

The external credit assessment institutions (ECAI) involved in the rating of those securitizations originated by the Group which fulfill the criteria of risk transfer and falling within the securitization solvency framework are, generally, Fitch, Moody's, S&P and DBRS. The types of securitization 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 SMEs and small companies, consumer finance and cars and leasing.

In all the securitization 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 depreciation of series subordinated to AAA and depreciation of the reserve fund, amongst others).

For each issue, in addition to the initial rating, the agencies carry out regular quarterly monitoring.

#### 3.2.7.4.2. Positions in securitization originated by the Group

The table below shows the EAD and RWAs of securitization positions originated by the Group broken down by type of exposure, tranches and weighting ranges and their corresponding capital requirements as of December 31, 2019 and December 31, 2018.

Table 48. SEC3: Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor (Million Euros. 12-31-2019)

	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	IRB RBA (including IAA)	IRB SFA	SA/SSFA	1250%	IRB RBA (including IAA)	IRB SFA	SA/SSFA	1250% <sup>(1)</sup>	IRB RBA (including IAA)	IRB SFA	SA/SSFA	1250%
<b>Total Exposures</b>	<b>2,150</b>	<b>33</b>	<b>-</b>	<b>1</b>	<b>116</b>	<b>785</b>	<b>1,398</b>	<b>-</b>	<b>116</b>	<b>86</b>	<b>98</b>	<b>-</b>	<b>634</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>51</b>
<b>Traditional Securitization</b>	<b>752</b>	<b>33</b>	<b>-</b>	<b>1</b>	<b>67</b>	<b>785</b>	<b>-</b>	<b>-</b>	<b>67</b>	<b>86</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>2</b>
Of which Securitization	752	33	-	1	67	785	-	-	67	86	-	-	24	7	-	-	2
Of which retail underlying	752	33	-	1	3	785	-	-	3	86	-	-	-	7	-	-	-
Of which wholesale	-	-	-	-	65	-	-	-	65	-	-	-	24	-	-	-	2
Of which re-Securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Synthetic Securitization</b>	<b>1,398</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49</b>	<b>-</b>	<b>1,398</b>	<b>-</b>	<b>49</b>	<b>-</b>	<b>98</b>	<b>-</b>	<b>610</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49</b>
Of which Securitization	1,398	-	-	-	49	-	1,398	-	49	-	-	-	610	-	-	-	49
Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which wholesale	1,398	-	-	-	49	-	1,398	-	49	-	98	-	610	-	-	-	49
Of which re-Securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>(1)</sup> As of December 31, 2019, securitization exposure with a RW of 1250% are calculated under the IRB RBA approach

SEC3- Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor (Million Euros. 12-31-2018)

	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	IRB RBA (including IAA)	IRB SFA	SA/SSFA	1250%	IRB RBA (including IAA)	IRB SFA	SA/SSFA	1250% <sup>(1)</sup>	IRB RBA (including IAA)	IRB SFA	SA/SSFA	1250%
<b>Total Exposures</b>	<b>4,573</b>	<b>33</b>	<b>-</b>	<b>1</b>	<b>195</b>	<b>785</b>	<b>3,821</b>	<b>-</b>	<b>195</b>	<b>86</b>	<b>267</b>	<b>-</b>	<b>1,253</b>	<b>7</b>	<b>21</b>	<b>-</b>	<b>100</b>
<b>Traditional Securitization</b>	<b>752</b>	<b>33</b>	<b>-</b>	<b>1</b>	<b>99</b>	<b>785</b>	<b>-</b>	<b>-</b>	<b>99</b>	<b>86</b>	<b>-</b>	<b>-</b>	<b>56</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>4</b>
Of which Securitization	752	33	-	1	99	785	-	-	99	86	-	-	56	7	-	-	4
Of which retail underlying	752	33	-	1	4	785	-	-	4	86	-	-	10	7	-	-	1
Of which wholesale	-	-	-	-	95	-	-	-	95	-	-	-	46	-	-	-	4
Of which re-Securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Synthetic Securitization</b>	<b>3,821</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>96</b>	<b>-</b>	<b>3,821</b>	<b>-</b>	<b>96</b>	<b>-</b>	<b>267</b>	<b>-</b>	<b>1,197</b>	<b>-</b>	<b>21</b>	<b>-</b>	<b>96</b>
Of which Securitization	3,821	-	-	-	96	-	3,821	-	96	-	267	-	1,197	-	21	-	96
Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which wholesale	3,821	-	-	-	96	-	3,821	-	96	-	267	-	1,197	-	21	-	96
Of which re-Securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>(1)</sup> As of December 31, 2019, securitization exposure with a RW of 1250% are calculated under the IRB RBA approach

### 3.2.7.4.3. Breakdown of securitized positions by type of asset

The table below shows the outstanding amount, non-performing exposures and impairment losses recognized in the period by underlying assets of originated securitization operations which meet the risk transfer criteria, broken down by asset type as of December 31, 2019 and December 31, 2018.

**Table 49.** Breakdown of securitized balances by type of asset (Million Euros. 12-31-2019)

Type of asset	Outstanding amount	Of which: Non-performing Exposures	Total impairment losses for the period
Commercial and residential mortgages	-	-	-
Credit cards	-	-	-
Financial leasing	25	2	2
Lending to corporates and SMEs	1,350	13	0
Consumer finance	736	12	12
Receivables	-	-	-
Securitization balances	-	-	-
Others	-	-	-
<b>Total</b>	<b>2,110</b>	<b>27</b>	<b>14</b>

Breakdown of securitized balances by type of asset (Million Euros. 12-31-2018)

Type of asset	Outstanding amount	Of which: Non-performing Exposures	Total impairment losses for the period
Commercial and residential mortgages	-	-	-
Credit cards	-	-	-
Financial leasing	43	5	4
Lending to corporates and SMEs	3,647	19	2
Consumer finance	746	2	3
Receivables	-	-	-
Securitization balances	-	-	-
Others	-	-	-
<b>Total</b>	<b>4,435</b>	<b>26</b>	<b>9</b>

The table below shows the outstanding balance corresponding to the underlying assets of securitization originated by the Group, which do not meet the risk transfer criteria, and which, therefore, are not included in the securitization framework, but rather for which the capital calculation of the exposure is carried out as if it had not been securitized:

**Table 50.** Outstanding balance corresponding to the underlying assets of the Group's originated securitizations, in which risk transfer criteria are not fulfilled (Million Euros)

Type of asset	Outstanding amount	
	2019	2018
Commercial and residential mortgages	26,058	26,277
Credit cards	-	-
Financial leasing	-	-
Lending to corporates and SMEs	25	261
Consumer finance	3,483	2,356
Receivables	-	-
Securitization balances	-	-
Mortgage-covered bonds	-	-
Others	-	-
<b>Total</b>	<b>29,567</b>	<b>28,894</b>

## 3.2.8. Hedging and risk reduction policies. Supervision strategies and processes

Maximum exposure to credit risk may be reduced by the existence of real guarantees, credit improvements and other actions that mitigate the Group's exposure. The Group applies a credit risk hedging and mitigation policy derived from its understanding of the banking business focused on relationship banking.

The existence of guarantees could be a necessary but not sufficient instrument for accepting risk, as the assumption of risk by the Group requires the verification of the debtor's capacity for repayment, or that the debtor can generate sufficient resources to reduce the risk incurred under the agreed terms.

For further details on the hedging in the Group's credit risk policy and its typology, see Note 7.1.3 of the Group's Consolidated Financial Statements.

## 3.2.9. Information on credit risk mitigation techniques

### 3.2.9.1. 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 recognized amounts, and the intention of settling the net amount or of realizing the asset and simultaneously paying the liability.

### 3.2.9.2. Hedging based on collateral

#### 3.2.9.2.1. 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 the collateral is governed by prudential principles and thoroughness, carried out with the necessary information to determine it and maximum prudence in the use of appraisal valuation, assessments of independent experts, market price for shares, quoted share price for stakes in a mutual fund, etc.

The milestones under which the valuations of the collaterals must be updated in accordance with local regulation are established under these prudential principles.

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.

All collateral is to be properly recorded in the corresponding policies, duly kept and prepared in the formats and by the bodies established for this purpose.

#### 3.2.9.2.2. 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 favor of the latter.
  - Life insurance policies pledged in favor 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.

#### 3.2.9.3. 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.

An overview of the credit risk mitigation techniques used by the Group as of December 31, 2019 is presented below:

Table 51. CR3 - CRM techniques - overview<sup>(1)</sup> (Million Euros. 12-31-2019)

	Exposures unsecured - carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral <sup>(2)</sup>	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total Loans	261,510	171,932	119,608	23,885	-
Total debt securities	51,863	19,005	-	5,650	-
<b>Total exposures</b>	<b>313,374</b>	<b>190,936</b>	<b>119,608</b>	<b>29,535</b>	<b>-</b>
<b>Of which: defaulted</b>	<b>4,157</b>	<b>3,698</b>	<b>2,910</b>	<b>179</b>	<b>-</b>

<sup>(1)</sup> Excludes securitization exposures and includes reverse repurchase agreements.

<sup>(2)</sup> Loans secured by real estate and other secured loans are included, as well as those in the IRB model of credit risk that do not reduce exposure, but rather impact the APRs through the parameters of the internal models.

EU CR3 - CRM techniques - overview<sup>(1)</sup> (Million Euros. 12-31-2018)

	Exposures unsecured - carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral <sup>(2)</sup>	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total Loans	230,723	190,257	114,596	24,552	-
Total debt securities	48,508	14,055	8,517	6,584	-
<b>Total exposures</b>	<b>279,231</b>	<b>204,312</b>	<b>123,113</b>	<b>31,137</b>	<b>-</b>
<b>Of which: defaulted</b>	<b>3,292</b>	<b>5,285</b>	<b>3,823</b>	<b>349</b>	<b>-</b>

<sup>(1)</sup> Excludes securitization exposures and includes reverse repurchase agreements.

<sup>(2)</sup> Loans secured by real estate and other loans with collateral are included. The December 2018 table has also been restated, including mortgage guarantees by the IRB model of credit risk that do not reduce exposure, but have an impact on the APRs through the parameters of the internal models.

### 3.2.9.4. 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.

In particular, measurement and monitoring criteria are established for large exposure at the level of individual concentrations, concentrations of retail portfolios and wholesale sectors.

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 CET1; 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 do 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.

### 3.2.10. RWA density by geographic areas

A summary of the average weights by exposure category in the main geographic areas where the Group operates is

shown below for credit risk and counterparty credit risk. The purpose is getting an overview of the entity's risk profile in terms of RWAs.

**Table 52.** Breakdown of RWA density by geographical area and approach (Million Euros. 12-31-2019)

Category of exposure	RWA density <sup>(1)(2)</sup>						
	Total	Spain <sup>(3)</sup>	Turkey	Mexico	USA	South America	Other areas <sup>(4)</sup>
Central governments or central banks	20%	19%	48%	11%	2%	53%	4%
Regional governments or local authorities	23%	20%	100%	50%	20%	73%	20%
Public sector entities	44%	-	79%	64%	20%	61%	-
Multilateral Development Banks	5%	-	-	-	-	10%	-
International organizations	-	-	-	-	-	-	-
Institutions	40%	39%	69%	52%	21%	75%	29%
Corporates	97%	78%	98%	91%	100%	100%	97%
Retail	70%	62%	68%	72%	74%	73%	71%
Secured by mortgages on immovable property	38%	32%	43%	36%	36%	42%	36%
Exposures in default	111%	118%	112%	100%	121%	103%	117%
Exposures associated with particularly high risk	150%	150%	150%	150%	150%	150%	150%
Covered bonds	-	-	-	-	-	-	-
Short-term claims on institutions and corporate	96%	-	-	-	-	96%	-
Collective investments undertakings	100%	100%	-	100%	100%	-	100%
Other exposures	49%	79%	45%	52%	71%	33%	2%
Securitization exposures	45%	-	-	50%	44%	-	-
<b>Total credit risk by standardized approach</b>	<b>52%</b>	<b>31%</b>	<b>74%</b>	<b>38%</b>	<b>62%</b>	<b>71%</b>	<b>36%</b>
Central governments or central banks	5%	5%	1%	10%	2%	9%	7%
Institutions	7%	10%	115%	27%	11%	30%	5%
Corporates	50%	52%	77%	66%	33%	61%	41%
Retail	22%	16%	11%	95%	18%	25%	25%
Securitization exposures	27%	27%	-	-	-	-	-
<b>Total credit risk by IRB approach</b>	<b>27%</b>	<b>27%</b>	<b>60%</b>	<b>72%</b>	<b>22%</b>	<b>38%</b>	<b>16%</b>
<b>Total credit risk dilution and delivery</b>	<b>40%</b>	<b>28%</b>	<b>74%</b>	<b>48%</b>	<b>54%</b>	<b>69%</b>	<b>20%</b>

<sup>(1)</sup> Does not include equity exposures

<sup>(2)</sup> Calculated as RWAs/EAD

<sup>(3)</sup> In Spain, the category of Central Governments or Central Banks includes deferred tax assets net of deferred tax liabilities

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

## Breakdown of RWA density by geographical area and approach (Million Euros, 12-31-2018)

Category of exposure	RWA density <sup>(1)(2)</sup>						
	Total	Spain <sup>(3)</sup>	Turkey	Mexico	USA	South America	Other areas <sup>(4)</sup>
Central governments or central banks	22%	16%	53%	14%	4%	66%	4%
Regional governments or local authorities	21%	-	70%	26%	20%	56%	20%
Public sector entities	39%	-	39%	48%	20%	66%	-
Multilateral Development Banks	2%	-	-	-	-	14%	-
International organizations	-	-	-	-	-	-	-
Institutions	32%	20%	55%	43%	17%	35%	25%
Corporates	98%	92%	100%	92%	99%	97%	95%
Retail	70%	66%	67%	70%	73%	72%	72%
Secured by mortgages on immovable property	38%	31%	43%	38%	37%	40%	37%
Exposures in default	115%	124%	110%	100%	133%	104%	116%
Exposures associated with particularly high risk	150%	150%	150%	150%	150%	150%	150%
Covered bonds	-	-	-	-	-	-	-
Short-term claims on institutions and corporate	66%	-	-	20%	-	68%	-
Collective investments undertakings	100%	100%	-	100%	100%	-	100%
Other exposures	39%	70%	43%	18%	58%	33%	135%
Securitization exposures	21%	-	-	50%	20%	-	-
<b>Total credit risk by standardized approach</b>	<b>51%</b>	<b>28%</b>	<b>73%</b>	<b>37%</b>	<b>64%</b>	<b>69%</b>	<b>44%</b>
Central governments or central banks	5%	5%	1%	10%	3%	35%	4%
Institutions	7%	10%	109%	23%	11%	19%	5%
Corporates	53%	54%	75%	74%	35%	52%	43%
Retail	19%	13%	29%	96%	21%	26%	28%
Securitization exposures	31%	31%	-	-	-	-	-
<b>Total credit risk by IRB approach</b>	<b>27%</b>	<b>25%</b>	<b>55%</b>	<b>79%</b>	<b>21%</b>	<b>38%</b>	<b>17%</b>
<b>Total credit risk dilution and delivery</b>	<b>41%</b>	<b>26%</b>	<b>73%</b>	<b>50%</b>	<b>57%</b>	<b>67%</b>	<b>23%</b>

<sup>(1)</sup> Does not include equity exposures

<sup>(2)</sup> Calculated as RWAs/EAD

<sup>(3)</sup> In Spain, the category of Central Governments or Central Banks includes deferred tax assets net of deferred tax liabilities

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

## 3.3. Market Risk

### 3.3.1. 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 in trading activity.

The main market risks can be classified into the following groups: interest rate risk, equity risk, exchange rate risk, credit spread risk, and volatility risk.

The metrics developed to control and monitor market risk in the Group are aligned with best practices in the market 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 book of the Group's Global Markets units, both under ordinary circumstances and in stress situations.

For more information on market risk governance, see Note 7.2.1 of the Group's Consolidated Financial Statements.

In addition, in Chapter 3.3.4 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 bank capital requirements on trading portfolios is detailed. For the other geographic areas (South America, BBVA Garanti and BBVA USA), the calculation of own funds requirements for trading portfolios is carried out using the standardized approach.

Analysis of the Group's RWA structure shows that 4% corresponds to Market Risk (including structural exchange risk).

### 3.3.2. 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.

The definition of the financial assets held for trading is included in Note 2.2.1. of the Group's Consolidated Financial Statements.

### 3.3.3. Standardized approach

Market risk-weighted assets under the standardized approach (excluding structural exchange rate risk) account for 21% of total market risk-weighted assets.

The amounts in terms of RWAs and market risk capital requirements calculated by standardized approach as of December 31, 2019 and December 31, 2018 are below.

**Table 53.** EU-MR1 - Market risk under the standardized approach (Million Euros. 12-31-2019)

	RWAs	Capital Requirements
<b>Outright Products</b>		
Interest Rate Risk	2,461	197
Equity Risk	248	20
Foreign Exchange Risk	3,596	288
Commodity Risk	24	2
<b>Options</b>		
Simplified approach	-	-
Delta-plus method	-	-
Scenario approach	-	-
<b>Securitization</b>	<b>21</b>	<b>2</b>
<b>Correlation trading portfolio</b>	<b>641</b>	<b>51</b>
<b>Total</b>	<b>6,991</b>	<b>559</b>

EU-MR1 - Market risk under the standardized approach (Million Euros. 12-31-2018)

	RWAs	Capital Requirements
<b>Outright Products</b>		
Interest Rate Risk	1,940	155
Equity Risk	136	11
Foreign Exchange Risk	2,271	182
Commodity Risk	18	1
<b>Options</b>		
Simplified approach	-	-
Delta-plus method	-	-
Scenario approach	-	-
<b>Securitization</b>	<b>13</b>	<b>1</b>
<b>Correlation trading portfolio</b>	<b>670</b>	<b>54</b>
<b>Total</b>	<b>5,048</b>	<b>404</b>

Market risk RWAs under the standardized approach have increased by 1,943 million euros, of which 1,325 million corresponds to the structural exchange rate risk. The latter is generated, among others, mainly by the structural position in Mexican peso and Turkish lira which have had a strong earning generation.

### 3.3.4. Internal models

#### 3.3.4.1. 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 Treasury Rooms.

As explained in Note 7.2.1 of the Group's Consolidated Financial Statements, 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.

This Note specifies the accounting headings of the consolidated balance sheets as of December 31, 2019 and 2018 in the geographic areas with an approved Internal Model where there is market risk in the trading activity subject to this measurement.

#### 3.3.4.2. 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 ("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. The market risk analysis considers various risks, such as credit spread risk, basis risk, as well as volatility and correlation risk.

With respect to the risk measurement models used in the Group, the supervisor has authorized the use of the internal model to determine the bank capital requirements deriving from risk positions on the BBVA, S.A. and BBVA Mexico trading book, which together, account for around 72% of the market risk of the Group's trading book market risk.

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.

VaR figures are estimated following two methodologies:

- VaR without smoothing, which awards equal weight to the daily information for the previous two years. This is currently the official methodology for measuring market risk for the purpose of monitoring compliance with risk limits.
- VaR with smoothing, which weighs more recent market information more heavily. This model adjusts the historical information of each market variable to reflect the differences between historical volatility and current volatility. This metric is complementary to the one above.

VaR with smoothing adapts more swiftly to the changes in financial market conditions, whereas VaR without smoothing

is, in general, a more stable metric that will tend to exceed VaR with smoothing when the markets show less volatile trends, but be lower when they present upturns in uncertainty.

Furthermore, and following the guidelines established by Spanish and European regulators, BBVA incorporates additional VaR metrics to fulfill the regulatory requirements issued by the supervisor for the purpose of calculating bank capital for the trading book. Specifically, the new measures incorporated in the Group since December 2011 (which follow the guidelines set out by Basel 2.5) are as follows:

- VaR: In regulatory terms, the charge for VaR Stress is added to the charge for VaR and the sum of both (VaR and VaR Stress) is calculated. This quantifies the losses associated with movements in the risk factors inherent in market operations (interest rate, FX, RV, credit, etc.).

Both VaR and VaR Stress are rescaled by a regulatory multiplier set at three and by the square root of ten to calculate the capital charge.

- Specific Risk: Incremental Risk Capital (IRC). Quantification of the risk of default and the risk of a downgrade in the credit rating of the positions on bonds and credit derivatives held in the portfolio. The specific risk capital for IRC is a charge exclusively for those geographical areas with an approved internal model (BBVA S.A. and BBVA Mexico).

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 & Poors 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 liquidity horizons of less than one year.

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 on the banking book.

- **Specific Risk: securitization and correlation portfolios.** Capital charge for securitization and for the Correlation portfolio for potential losses associated with the rating level of a given credit structure (rating). Both are calculated using the standardized approach. The perimeter of the correlation portfolios is referred to First-to-default (FTD) type market operations and/or market CDO tranches, and only for positions with an active market and hedging capacity.

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 Value at Risk (VaR), economic capital (based on VaR measurements) and VaR sub-limits, 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 analyzed by the GRMC and the Risks and Compliance Committee (RCC). 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 (R<sup>2</sup>) 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.

### 3.3.4.2.1. Valuation methodology and description of the independent price verification process

Fair value is the price that would be received for selling an asset or paid for transferring a liability in an orderly transaction between market participants. It is therefore a market-based measurement, and not specific to each entity.

The fair value is reached without making any deduction in transaction costs that might be incurred due to sale or disposal by other means.

The process of determining fair value established in the Group ensures that assets and liabilities are valued correctly. At the level of geographic areas, BBVA has established a structure of New Product Committees responsible for validating and approving new products or classes of assets and liabilities before they are contracted. The committee members are the local areas, independent of the business, who are responsible for their valuation (see Note 8 of the Group's Consolidated Financial Statements).

These areas are responsible for ensuring as a prior step to approval that the technical and human capacities are in place, and that sufficient sources of information are available to value the assets and liabilities, in accordance with the criteria established by the Global Valuation Area and using models validated and approved by the Risk Analytics Area, which answers to Global Risk Management.

In addition, for assets and liabilities in which significant elements of uncertainty are detected in the inputs or parameters of the models used, which may affect their valuation, criteria are established to measure this uncertainty and limits are set on activity based on them. Finally, valuations obtained in this way are, as far as possible, checked against other sources, such as the valuations obtained by the business teams or other market participants.

In the initial entry, the best evidence of fair value is the share price on an active market. When these prices are not available, recent transactions on the same instrument will be consulted or the valuation will be made using mathematical valuation models that are sufficiently tried and trusted by the international financial community. In subsequent valuations, fair value will be obtained by one of the following methods:

- **Level 1:** Valuation using the observable share price for the financial instrument in question, referring to market assets (as defined by the Group's internal policies), secured from independent sources.
- **Level 2:** Valuation that applies techniques whose significant variables are observable market data.
- **Level 3:** Valuation that applies techniques that use significant variables not obtained from market observable data. The choice and validation of the valuation models used was carried out by independent control units in the market areas.

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). Below is a detailed breakdown of the method for calculating PVAs for the Group:

**Table 54.** Prudent Valuation Adjustments<sup>(1)</sup> (Million Euros. 12-31-2019)

	Equity	Interest Rates	FX	Credit	Commodities	Diversification Adjustment	Total	Of which: in the trading book	Of which: in the banking book
Close-out uncertainty, of which:	106	301	30	12	-	(193)	257	121	135
Mid-market value	27	146	9	7	-	(98)	91	50	41
Close-out cost	37	115	21	5	-	(94)	84	63	21
Concentration	42	39	-	-	-	-	82	8	73
Early termination	-	1	-	-	-	-	1	1	-
Model risk	15	4	-	1	-	(17)	3	10	(7)
Operational risk	-	7	-	-	-	-	7	0	6
Investing and funding costs	-						28	-	-
Unearned credit spreads	-						4	-	-
Future administrative costs	-	3	-	-	-	-	3	3	1
Other	-	-	-	-	-	-	-	-	-
<b>Total Adjustment</b>	<b>121</b>	<b>315</b>	<b>30</b>	<b>13</b>	<b>-</b>	<b>(210)</b>	<b>302</b>	<b>135</b>	<b>136</b>

<sup>(1)</sup> Template disclosed on the basis of Technical Regulation EBA/RTS/2014/06, breaking down the composition of Prudent Valuation Adjustments in line with the PV1 template disclosed by the BCBS

Prudent Valuation Adjustments<sup>(1)</sup> (Million Euros. 12-31-2018)

	Equity	Interest Rates	FX	Credit	Commodities	Diversification Adjustment	Total	Of which: in the trading book	Of which: in the banking book
Close-out uncertainty, of which:	130	349	29	7	-	(197)	317	174	143
Mid-market value	41	155	5	2	-	(104)	100	56	45
Close-out cost	41	104	23	5	-	(93)	80	66	14
Concentration	48	90	-	-	-	-	137	53	85
Early termination	-	1	-	-	-	-	1	1	-
Model risk	11	5	-	2	-	(12)	6	12	(7)
Operational risk	-	6	-	-	-	-	6	-	6
Investing and funding costs	-						18	-	-
Unearned credit spreads	-						6	-	-
Future administrative costs	-	3	-	-	-	-	3	3	3
Other	-	-	-	-	-	-	-	-	-
<b>Total Adjustment</b>	<b>141</b>	<b>363</b>	<b>29</b>	<b>9</b>	<b>-</b>	<b>(210)</b>	<b>356</b>	<b>191</b>	<b>144</b>

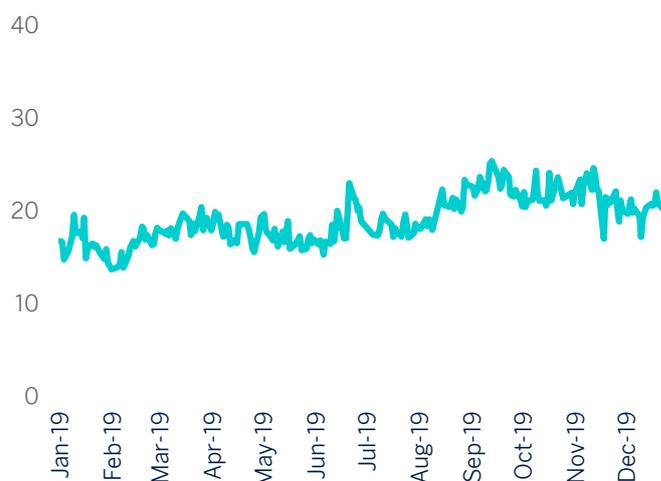
<sup>(1)</sup> Template disclosed on the basis of Technical Regulation EBA/RTS/2014/06, breaking down the composition of Prudent Valuation Adjustments in line with the PV1 template disclosed by the BCBS

### 3.3.4.2.2. Market risk developments in 2019

During 2019, the average VaR stood at 19 million euros, levels lower than in the 2018 financial year, with a maximum level in the year reached on September 13, when rose to 25 million euros.

VaR without smoothing by risk factor for the Group is below:

**Chart 19.** Trading book. Trends in VaR without smoothing



**Table 55.** 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 <sup>(1)</sup>	Total
<b>December 2019</b>						
Average VaR for the period	21	6	4	9	(20)	19
Maximum VaR for the period	28	6	3	9	(21)	25
Minimum VaR for the period	13	5	5	9	(18)	14
<b>VaR at the end of the period</b>	<b>24</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>(22)</b>	<b>20</b>
<b>December 2018</b>						
Average VaR for the period	20	6	4	9	(20)	21
Maximum VaR for the period	23	7	6	11	(21)	26
Minimum VaR for the period	17	6	4	7	(18)	16
<b>VaR at the end of the period</b>	<b>19</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>(17)</b>	<b>17</b>

<sup>(1)</sup> 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 in the Group continues to be that linked to interest rates, with a weight of 58% of the total at the end of 2019 (this figure includes the spread risk), increasing the relative weight compared to 2018 end (55%).

On the other hand, the foreign exchange risk represents 13%, slightly dropping the same proportion with respect to 2018 (14%), while that of equity and that of volatility and correlation decrease, presenting a weight of 29% at the end of 2019 (vs. 31% at year-end 2018).

In accordance with Article 455 d) and e) of the CRR, corresponding to the breakdown of information on internal market risk models, the elements comprising the own funds

requirements referred to in Articles 364 and 365 of the CRR are presented below.

**Table 56.** EU-MR3 - IMA values for trading portfolios (Million Euros)

IMA values for trading portfolios (2019) <sup>(1)(2)</sup>		
<b>VaR (10 day 99%)</b>		
1	Maximum value	90
2	Average value	53
3	Minimum value	34
4	Period value	52
<b>SVaR (10 day 99%)</b>		
5	Maximum value	203
6	Average value	131
7	Minimum value	82
8	Period value	170
<b>Incremental Risk Charge (99.9%)</b>		
9	Maximum value	170
10	Average value	143
11	Minimum value	108
12	Period value	115

<sup>(1)</sup> Data concerning the last semester of 2019

<sup>(2)</sup> The amounts reported do not include additional capital charges specifically required by the supervisor, i.e. multiplier factor

**EU MR3- IMA values for trading portfolios (Million Euros)**

IMA values for trading portfolios (2018) <sup>(1)(2)</sup>		
<b>VaR (10 day 99%)</b>		
1	Maximum value	84
2	Average value	55
3	Minimum value	38
4	Period value	56
<b>SVaR (10 day 99%)</b>		
5	Maximum value	202
6	Average value	139
7	Minimum value	87
8	Period value	136
<b>Incremental Risk Charge (99.9%)</b>		
9	Maximum value	127
10	Average value	92
11	Minimum value	61
12	Period value	91

<sup>(1)</sup> Data concerning the last semester of 2019

<sup>(2)</sup> The amounts reported do not include additional capital charges specifically required by the supervisor, i.e. multiplier factor

**Table 57.** EU MR2-A - Market risk under the IMA (Million Euros. 12-31-2019)

	RWAs	Capital Requirements
<b>VaR</b>	<b>2,095</b>	<b>168</b>
Previous day's VaR	653	52
Average of the daily VaR on each of the preceding sixty business days (VaRavg) x multiplication factor	2,095	168
<b>SVaR</b>	<b>4,680</b>	<b>374</b>
Latest SVaR	2,126	170
Average of the SVaR during the preceding sixty business days (sVaRavg) x multiplication factor (mc)	4,680	374
<b>Incremental risk charge - IRC</b>	<b>2,301</b>	<b>184</b>
Most recent IRC value	2,301	184
Average of the IRC number over the preceding 12 weeks	1,934	155
<b>Comprehensive Risk Measure- CRM</b>	-	-
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	-	-
<b>Others</b>	-	-
<b>Total</b>	<b>9,075</b>	<b>726</b>

EU MR2-A - Market risk under the IMA (Million Euros. 12-31-2018)

	RWAs	Capital Requirements
<b>VaR</b>	<b>2,015</b>	<b>161</b>
Previous day's VaR	705	56
Average of the daily VaR on each of the preceding sixty business days (VaRavg) x multiplication factor	2,015	161
<b>SVaR</b>	<b>5,112</b>	<b>409</b>
Latest SVaR	1,704	136
Average of the SVaR during the preceding sixty business days (sVaRavg) x multiplication factor (mc)	5,112	409
<b>Incremental risk charge - IRC</b>	<b>1,141</b>	<b>91</b>
Most recent IRC value	1,141	91
Average of the IRC number over the preceding 13 weeks	1,121	90
<b>Comprehensive Risk Measure- CRM</b>	-	-
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	-	-
<b>Others</b>	-	-
<b>Total</b>	<b>8,268</b>	<b>661</b>

The main changes in the market RWAs, calculated using the method based on internal models are below:

**Table 58.** EU MR2-B - RWA flow statements of market risk exposures under the IMA (Million Euros)

RWA flow statements of market risk exposure under IMA	VaR	SVaR	IRC	CRM	Other	Total RWAs	Total Capital Requirements
<b>RWAs as of December 31, 2018</b>	<b>2,015</b>	<b>5,112</b>	<b>1,141</b>	-	-	<b>8,268</b>	<b>661</b>
Movement in risk levels	66	(517)	1,293	-	-	843	67
Model updates/changes	-	-	-	-	-	-	-
Methodology and policy	-	-	-	-	-	-	-
Acquisitions and disposals	-	-	-	-	-	-	-
Foreign Exchange movements	13	84	46	-	-	144	12
Other	-	-	(180)	-	-	(180)	(14)
<b>RWAs as of December 31, 2019</b>	<b>2,095</b>	<b>4,680</b>	<b>2,301</b>	-	-	<b>9,075</b>	<b>726</b>

During 2019, the evolution of market risk capital requirements under IMA are affected mainly by the prudential surcharge of 863 million in December 2019 imposed after the internal model review process previously discussed ("TRIM").

- Increase in market regulatory capital at BBVA SA of 0.3% compared to December 2018 (+10% including the impact of TRIM).
- Increase in market regulatory capital in BBVA Mexico of 1.1% compared to December 2018 (15% including the impact of TRIM), mainly due to an increase on risk levels under IRC.

### 3.3.4.2.3. 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.

Several different stress-test exercises are performed on the Group's trading portfolios. Both local and global historical scenarios are used, which replicate the behavior of a past extreme event, for example, the collapse of Lehman Brothers or the "Tequila crisis". These stress exercises are supplemented with simulated scenarios which aim to generate scenarios that have a significant impact on the different portfolios, but without being restricted to a specific historical scenario.

Lastly, for certain portfolios or positions, fixed stress test exercises are also prepared that have a significant impact on the market variables that affect those positions.

### Historical scenarios

The baseline historical stress scenario in the Group is that of Lehman Brothers, whose sudden collapse in September 2008 had a significant impact on the behavior of financial markets at a global level. The following are the most relevant effects of this historical scenario:

1. Credit shock: reflected mainly in the increase in credit spreads and downgrades of credit ratings.

2. Increased volatility in most financial markets.
3. Liquidity shock in the financial systems, reflected in major fluctuations in interbank curves, particularly in the shortest terms of the euro and dollar curves.

**Table 59.** Trading Book. Impact on earnings in Lehman scenario (Million Euros)

Impact on earnings in Lehman scenario	12-31-2019	12-31-2018
GM Europe, NY & Asia	(38)	(28)
GM Mexico	(19)	(2)
GM Argentina	(1)	(1)
GM Chile	-	-
GM Colombia	(3)	(2)
GM Peru	(7)	(4)
GM Venezuela	-	-

### Simulated scenarios

Unlike the historical scenarios, which are fixed and, thus, do not adapt to the composition of portfolio risk at any given time, the scenario used to perform the economic stress exercises is based on the resampling method. This methodology uses dynamic scenarios that are recalculated regularly according to the main types of risk held in the trading portfolios. A simulation exercise is carried out in a data window that is sufficiently extensive to include different periods of stress (data is taken from January 1, 2008 until the day of assessment), using a resampling of the historical observations. This generates a distribution of profit and loss that allows an analysis of the most extreme events occurring within the selected historical window.

The advantage of this methodology is that the stress period is not pre-established, but rather a function of the portfolio held at any given time; and the large number of simulations (10,000) means that the expected shortfall analysis can include richer information than that available in scenarios included in the VaR calculation.

The main characteristics of this methodology are as follows:

- The simulations generated respect the data correlation structure.
- It provides flexibility in terms of including new risk factors.
- It enables a great deal of variability to be introduced in simulations (which is desirable for considering extreme events).

The impact of the stress tests by simulated scenarios (Stress VaR 95% at 20 days, Expected Shortfall 95% at 20 days and Stress VaR 99% at 1 day) is shown below.

**Table 60.** Trading Book. Stress resampling (Million Euros. 12-31-2019)

	Europe	Mexico	Peru	Venezuela	Argentina	Colombia	Turkey	The United States
Expected impact	(112)	(68)	(23)	-	(4)	(5)	(9)	(3)
	<b>Stress VaR</b>	<b>Expected Shortfall</b>	<b>Stress Period</b>	<b>Stress VaR 1D</b>				
	2019	95 20 D	95 20 D	99% Resampling				
<b>Total</b>								
GM Europe, NY and Asia	(71)	(112)	01/02/2008 - 12/02/2009	(42)				
GM Mexico	(53)	(53)	05/09/2008 - 05/06/2010	(13)				

#### 3.3.4.2.4. 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 determined by 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 characterized 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 close of December 31, 2019, the model is in the green zone of acceptance of the model.

### 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 and each day of 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.

At the close of December 31, 2019, the actual negative P&L of May/30/2019 exceeded the VaR within the last 250 top-of-house level observations in BBVA S.A., thus presenting one exception in the BBVA S.A. Actual Backtesting.

At the close of December 31, 2019, the actual negative P&L did not exceed the VaR within the last 250 top-of-house level observations in BBVA Mexico thus presenting zero Exceptions in the BBVA Mexico Actual Backtesting.

### 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.

At the close of December 31, 2019, the hypothetical negative P&L did not exceed the VaR within the last 250 top-of-house level observations in BBVA SA thus presenting zero exceptions in the BBVA SA Hypothetical Backtesting.

At the close of December 31, 2019, the hypothetical negative P&L did not exceed the VaR within the last 250 top-of-house level observations in BBVA Mexico thus presenting zero exceptions in the BBVA Mexico Hypothetical Backtesting.

**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 SA and BBVA Mexico.

All the positions belonging to the Banking Book, the portfolios under the Standardized 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 close of December 31, 2019, there is one exception in Real Backtesting in the last 250 BBVA SA observations.

At the close of December 31, 2019, there are no exceptions in Real Backtesting or Hypothetical Backtesting in the last 250 BBVA Mexico observations.

**Chart 20.** Trading book. Market Risk Model Validation for BBVA S.A. Hypothetical Backtesting (EU – MR4)

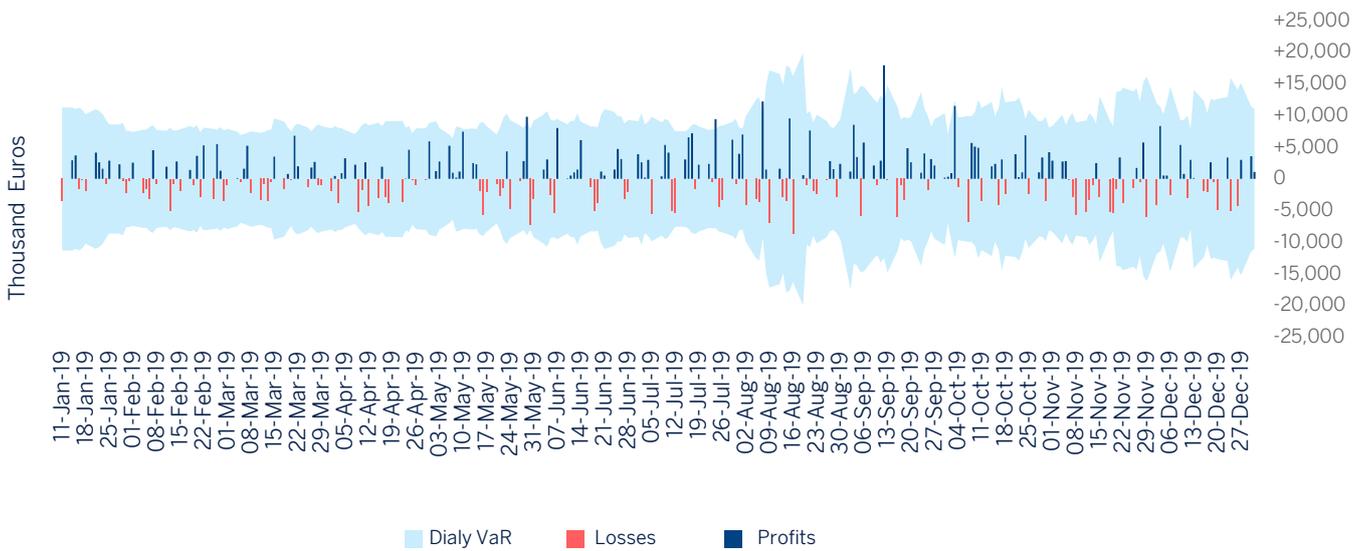


Chart 21. Trading book. Market Risk Model Validation for BBVA S.A. Real Backtesting (EU – MR4)

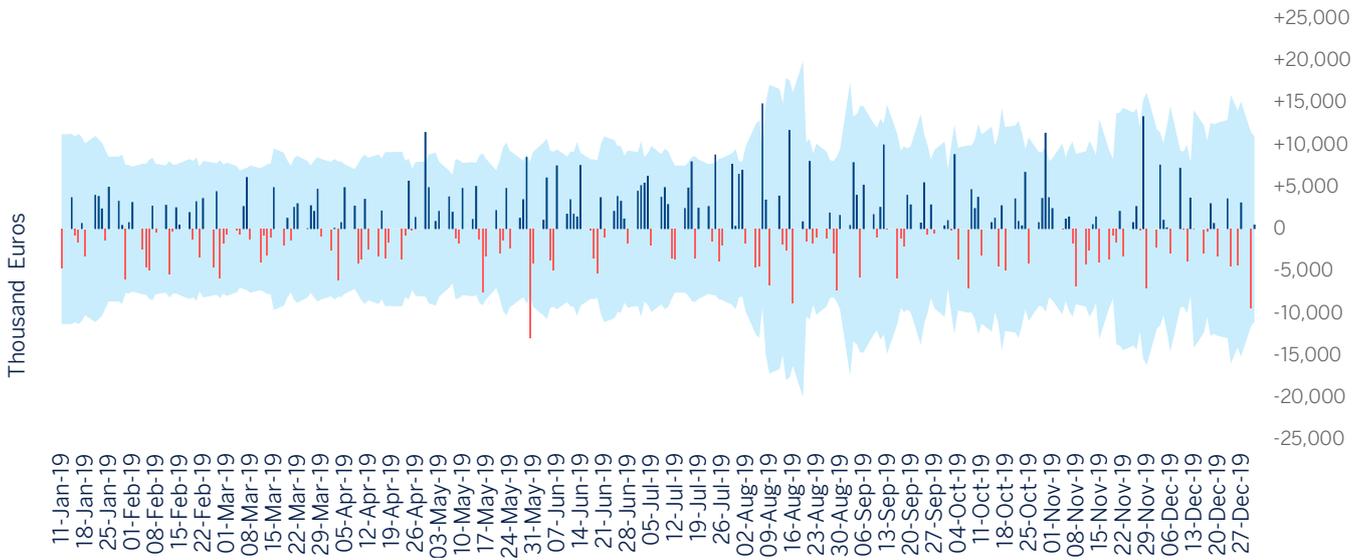
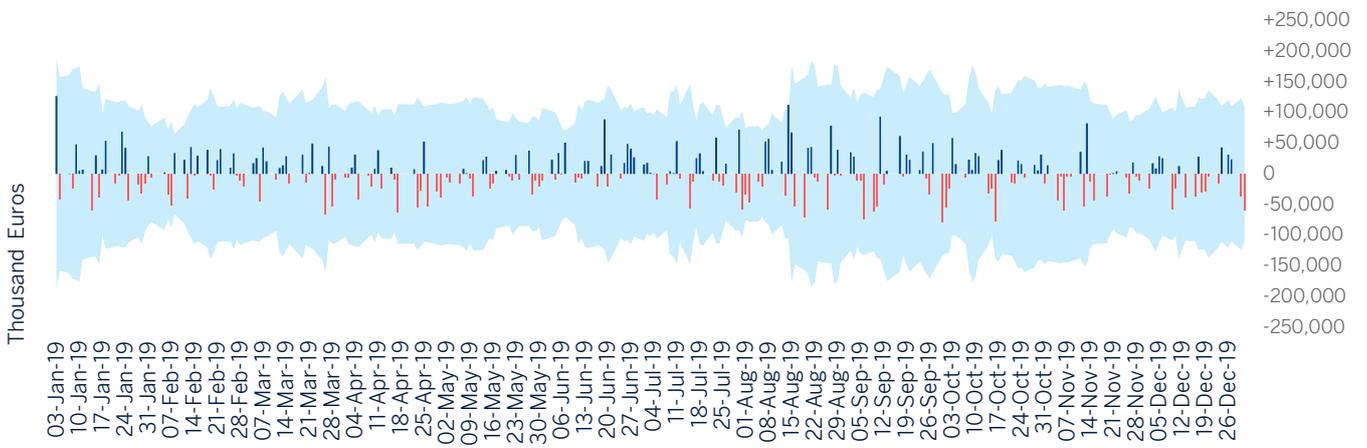
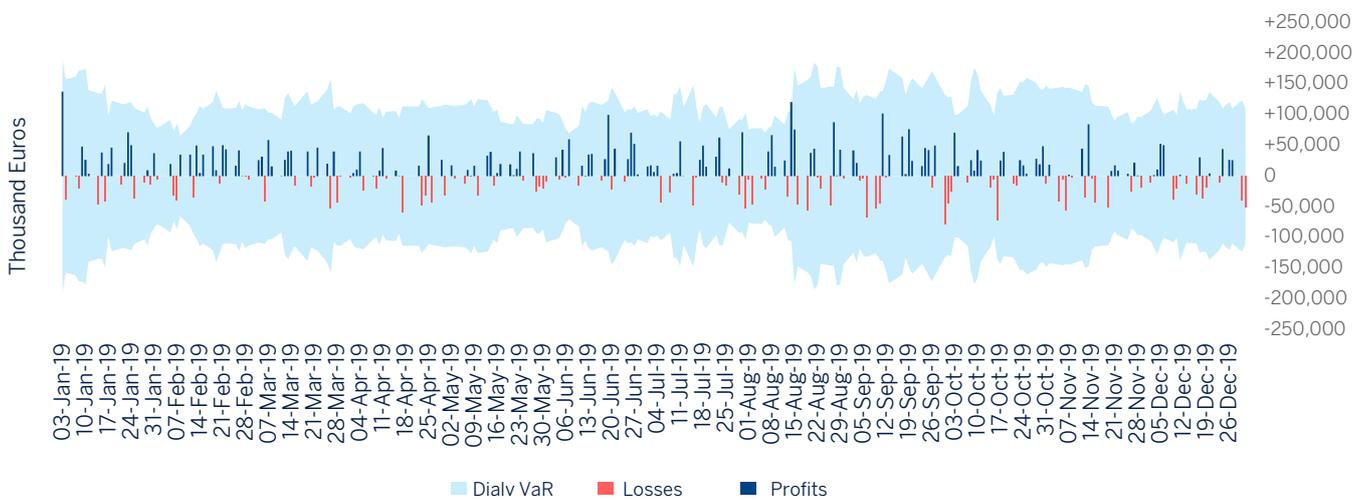


Chart 22. Trading book. Market Risk Model Validation for BBVA Mexico. Hypothetical Backtesting (EU – MR4)



**Chart 23.** Trading book. Market Risk Model Validation for BBVA Mexico. Real Backtesting (EU – MR4)

### 3.3.4.3. 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 organization (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.
  - 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.

## 3.4. Structural risk

The structural risks are defined, in general terms, as the possibility of sustaining losses due to adverse movements in market risk factors as a result of mismatches in the financial structure of an entity's balance sheet.

In the Group, the following types of structural risk are defined according to nature and market factors: Interest rate, exchange rate and equity.

The scope of structural risk in the Group is limited to the banking book, excluding market risk of the trading book, which is clearly defined and separated and makes up the Market Risks.

The Assets and Liabilities Committee (ALCO) is the main responsible body for the management of structural risks regarding liquidity/ funding interest rate, 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 for managing them for its approval. These management proposals are made proactively by the Finance area, taking into account the risk appetite framework and with the aim of guaranteeing recurrent earnings and financial stability and preserving the entity's solvency. All balance 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.

Global Risk Management (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.

For more information on governance regarding structural risk, see Note 7.3 of the Group's Consolidated Financial Statements.

### 3.4.1. Structural interest rate risk

The structural interest rate risk is related to the potential impact that variations in market interest rates have on an entity's net interest income and equity.

A financial institution's exposure to adverse changes in market rates is a risk inherent in the banking business, while at the same time representing an opportunity to generate value. That is why the structural interest rate risk should be managed effectively and have a reasonable relation both to the entity's bank capital and the expected economic result.

As described above, the structural interest rate risk in the banking book (IRRBB) is within the entity's risk management framework and is included within the internal capital assessment process as part of Pillar 2 of the Basel framework.

During 2019, the Group has worked on improving the control and management model in accordance with the guidelines established by the European Banking Authority (EBA) on the management of interest rate risk in the banking book. It is worth mentioning, among other aspects, the reinforcement of stress analyses by incorporating the impact assessment into the Group's main balance sheets that could be derived from the range of interest rate scenarios defined in accordance with the above-mentioned EBA guidelines.

For more information on the nature of interest-rate risk, see Note 7.3.2 of the Group's Consolidated Financial Statements. For information on interest rate variations in 2019, see Note 7.3.1 to the Group's Consolidated Financial Statements

### 3.4.2. Structural exchange rate risk

Structural exchange rate risk, inherent to the business of international banking groups that develop their activities in different geographies and currencies, 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.

In the BBVA Group, 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.

For more information on exchange rate management and governance, see Note 7.3.2 of the Group's Consolidated Financial Statements.

The Group's structural exchange-rate risk exposure level has slightly increased since the end of 2018 driven by the effect of currencies appreciation. The hedging policy intends to keep low levels of sensitivity to movements in the exchange rates of emerging markets currencies against the euro and focuses mainly on the Mexican peso and the Turkish lira. The risk mitigation level in the capital ratio due to the book value of the BBVA Group's holdings in foreign emerging markets currencies stood at around 65% and, as of the end of 2019, CET1 ratio sensitivity to the depreciation of 10% in the euro exchange rate for each currency was: USD +11 bp; Mexican peso -4 bps; Turkish Lira -2 bps; other currencies -1 bp (excluding hyperinflation economies). On the other hand, hedging of emerging markets currency denominated earnings in 2019 was 52%, concentrated in Mexican peso, Turkish lira and the main Latin American currencies.

The evolution of the capital requirements on structural exchange rate risk during 2019 is shown in paragraph 3.3.3. of this Report.

### 3.4.3. Structural equity risk

Structural equity risk 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. 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.

For more information on equity management, see Note 7.3.3 of the Group's Consolidated Financial Statements.

#### 3.4.3.1. 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.

For further details, see Note 2.1 of the Group's Consolidated Financial Statements.

The remaining capital instruments not held for trading are classified as financial assets at fair value through other comprehensive income and non-trading financial assets mandatory at fair value through profit or loss, depending on the business model and the contractual cash flow assessment, commonly known as "Solely Payments of Principal and Interest (SPPI)".

The detailed description of the classification and valuation of capital instruments is found in Section 2.2.1 of the Group's Consolidated Financial Statements.

#### 3.4.3.2. Carrying amount and exposure of investments in associates and capital instruments contained in aforementioned portfolios

The accompanying table shows the carrying amount, exposure and RWAs of equity exposures by portfolio class:

**Table 61.** Breakdown of book value, EAD and RWAs of equity investments and capital instruments (Million Euros)

	Equity investments and capital instruments <sup>(1)</sup>							
	2019				2018			
	Book value	OE	EAD	RWAs	Book value	OE	EAD	RWAs
Investments in associates	4,577	4,577	4,577	11,819	3,972	3,972	3,972	10,336
Financial assets at fair value through other comprehensive income	2,108	2,108	2,108	3,355	2,443	2,443	2,443	3,784
Non - trading financial assets mandatorily at fair value through profit or loss	439	439	439	994	407	407	407	1,125
<b>Total</b>	<b>7,124</b>	<b>7,124</b>	<b>7,124</b>	<b>16,167</b>	<b>6,822</b>	<b>6,822</b>	<b>6,822</b>	<b>15,246</b>

<sup>(1)</sup> Financial assets at fair value through profit or loss portfolio has no balance.

The accompanying table shows the types, nature and amounts of the original exposure in investments in associates and capital instruments listed or unlisted on a stock market,

with an item differentiating sufficiently diversified portfolios and other unlisted instruments:

**Table 62.** Exposure in equity investments and capital instruments (Million Euros)

	Nature of Exposure <sup>(1)</sup>			
	2019		2018	
	Non-derivatives	Derivatives	Non-derivatives	Derivatives
Exchange-traded instruments	2,481	88	2,850	231
Non-exchange traded instruments	4,555	-	3,741	-
Included in sufficiently diversified portfolios	4,555	-	3,741	-
Other instruments	-	-	-	-
<b>Total</b>	<b>7,036</b>	<b>88</b>	<b>6,590</b>	<b>231</b>

<sup>(1)</sup> Depending on their nature, equity instruments not included in trading book activity will be separated into derivatives and non-derivatives. The amount shown refers to Original Exposure, i.e. gross exposure of value corrections through asset impairment and provisions, before applying risk mitigation techniques

### 3.4.3.3. Risk-weighted assets of investments in associates and capital instruments

A breakdown of the RWAs by the method applicable to investments in associates and capital instruments by accounting portfolio as of December 31, 2019 and December 31, 2018 is shown below:

**Table 63.** Breakdown of RWAs, equity investments and capital instruments by applicable approach (Million Euros)

Concept		RWA's (Million Euros)			Total
		Internal Models	Simple method	PD/LGD method	
12-31-2019	Investments in associates	-	8,253	3,566	11,819
	Financial assets at fair value through other comprehensive income	289	1,077	1,988	3,355
	Non - trading financial assets mandatorily at fair value through profit or loss	160	834	-	994
12-31-2018	Investments in associates	-	6,691	3,646	10,336
	Financial assets at fair value through other comprehensive income	700	741	2,343	3,784
	Non - trading financial assets mandatorily at fair value through profit or loss	472	653	-	1,125

The table below shows the main variations in RWA of equity credit risk as of December 31, 2019:

**Table 64.** Variation in RWAs for Equity Risk (Million Euros)

Equity Risk		
RWAs as of December 31, 2018		15,246
Effects	Asset size	906
	Acquisitions and disposals	-
	Foreign exchange movements	15
	Other	-
RWAs as of December 31, 2019		16,167

As of December 31, 2019, equity credit risk-weighted assets amount to 16,167 million euros, which represent a slight growth from December 2018, mainly explained by the increase in the value of insurance companies. In this respect, it should be noted that the Group's investments in insurance companies consolidate in the prudential perimeter through the equity method.

### 3.4.3.4. Profit and loss and valuation adjustments of investments in associates and capital instruments

Below is a breakdown of the profit and loss made by the sale and liquidation of investments in associates and capital instruments and by applicable portfolio type as of December 31, 2019 and December 31, 2018, as well as the valuation adjustments for latent revaluation of investments in associates and capital instruments:

**Table 65.** Realized profit and loss from sales and settlements of equity investments and capital instruments (Million Euros)

	2019			2018		
	Losses	Gains	Net	Losses	Gains	Net
Investments in associates	2	18	16	23	35	13
Financial assets at fair value through other comprehensive income	0	18	17	2	4	2
Non - trading financial assets mandatorily at fair value through profit or loss	28	198	170	43	79	36

**Table 66.** Valuation adjustments for latent revaluation of equity investments and capital instruments (Million Euros)

Valuation adjustments for latent revaluation		FVOCI
December 2018		(155)
Transactions		(247)
December 2019		(402)

## 3.5. Liquidity Risk

Liquidity and funding risk is defined as the incapacity of a bank in meeting its payment commitments for missing resources or that, to face those commitments, should have to make use of funding under burdensome terms.

Liquidity and Funding risk management is aimed to ensure a solid balance sheet structure that allows for a sustainable business model with the short term aim of preventing the entity from having difficulties in meeting its payment commitments in due time and form, or having to resort to obtaining funds under burdensome terms that damage the image or reputation of the entity in order to meet them. In the medium term the aim is to ensure that the Group's financing structure is ideal and that it is moving in the right direction with respect to the economic situation, the markets and regulatory changes.

This management of structural finance and liquidity is based on the principle of financial self-sufficiency of the entities that make it up. This approach helps prevent and limit liquidity risk by reducing the Group's vulnerability during periods of high risk.

The core objectives of the Group in terms of liquidity risk and funding are determined through Liquidity Coverage Ratio (LCR) and the Loan to Stable Customer Deposits ratio (LtSCD).

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 2019:

"From the internal assessment exercise conducted, the Board of Directors concludes that the liquidity and funding management model is robust, with a medium-low liquidity and funding risk profile supported by the prevailing Risk Appetite Framework and the liquidity and funding planning, that contemplates the necessary liquid funds and measures to maintain such risk profile over the planning horizon."

For more information on Liquidity Risk and Funding see Note 7.4 of the Group's Consolidated Financial Statements.

### 3.5.1. Liquidity and funding prospects

The Group faces 2020 with a comfortable liquidity situation in all the territories it operates in. The financing structure based on stable customer deposits and biased toward 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 is a breakdown of wholesale financing maturities of the most significant units of the Group according to their nature:

**Table 67.** Maturity of wholesale issues of Balance Euro by nature (Million Euros)

Type of issuance	2020	2021	2022	After 2022	Total
Senior debt	2,349	1,875	2,977	3,185	10,386
Non preferred senior debt	-	-	1,500	5,790	7,290
Mortgage-covered bonds	2,264	3,173	1,615	7,780	14,832
Public-covered bonds	-	-	300	200	500
Preferred shares <sup>(1)</sup>	1,695	1,000	500	3,780	6,975
Subordinated debt <sup>(1)</sup>	135	-	68	3,035	3,238
<b>Total</b>	<b>6,443</b>	<b>6,048</b>	<b>6,960</b>	<b>23,770</b>	<b>43,221</b>

<sup>(1)</sup> Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortization option

**Table 68.** Maturity of wholesale issues of BBVA Mexico by nature (Million Euros)

Type of issuance	2020	2021	2022	After 2022	Total
Senior debt	622	212	370	1,744	2,948
Subordinated debt <sup>(1)</sup>	668	668	1,335	1,736	4,407
Other long term financial instruments	-	-	-	17	17
<b>Total</b>	<b>1,290</b>	<b>880</b>	<b>1,705</b>	<b>3,497</b>	<b>7,372</b>

<sup>(1)</sup> Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortization option

**Table 69.** Maturity of wholesale issues of BBVA USA by nature (Million Euros)

Type of issuance	2020	2021	2022	After 2022	Total
Senior debt	-	1,024	668	534	2,226
Subordinated debt <sup>(1)</sup>	203	19	-	686	908
<b>Total</b>	<b>203</b>	<b>1,043</b>	<b>668</b>	<b>1,220</b>	<b>3,134</b>

<sup>(1)</sup> Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortization option

**Table 70.** Maturity of wholesale issues of BBVA Garanti by nature (Million Euros)

Type of issuance	2020	2021	2022	After 2022	Total
Senior debt	-	450	504	601	1,555
Mortgage-covered bonds	-	-	126	22	148
Subordinated debt <sup>(1)</sup>	-	-	-	705	705
Securitizations	400	407	352	1,900	3,059
Syndicated loans	1,551	-	-	-	1,551
Other long term financial instruments	364	128	291	233	1,016
<b>Total</b>	<b>2,315</b>	<b>985</b>	<b>1,273</b>	<b>3,461</b>	<b>8,034</b>

<sup>(1)</sup> Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortization option

**Table 71.** Maturity of wholesale issues of South America by nature (Million Euros)

Type of issuance	2020	2021	2022	After 2022	Total
Senior debt	408	307	872	450	2,037
Subordinated debt <sup>(1)</sup>	-	47	22	969	1,038
<b>Total</b>	<b>408</b>	<b>354</b>	<b>894</b>	<b>1,419</b>	<b>3,075</b>

<sup>(1)</sup> Regulatory capital instruments are classified in this table by terms according to their contractual maturity or nearest amortization option

Going into 2020, 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 risk, including stress scenarios.

## 3.5.2. LCR disclosure

A breakdown of the LCR disclosure as of December 31, 2019 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, beginning September 2017. 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 72.** EU LIQ1: Liquidity Coverage Ratio disclosure (Rounded Million Euros)

End of the quarter	Total unweighted value (average)				Total weighted value (average)			
	March 03-31-2019	June 06-30-2019	September 09-30-2019	December 12-31-2019	March 03-31-2019	June 06-30-2019	September 09-30-2019	December 12-31-2019
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
<b>High-quality liquid assets</b>								
Total high-quality liquid assets (HQLA)					87,424	86,820	88,585	88,618
<b>Cash-outflows</b>								
Retail deposits and deposits from small business customers, of which:								
Stable deposits	205,309	208,075	212,808	217,211	14,860	15,045	15,442	15,791
Less stable deposits	138,531	140,907	143,501	146,132	6,927	7,045	7,175	7,307
Unsecured wholesale funding	66,778	67,168	69,307	71,079	7,933	7,999	8,267	8,484
Operational deposits (all counterparties) and deposits in networks of cooperative banks	126,935	127,310	128,285	128,179	54,239	54,174	54,829	54,670
Non-operational deposits (all counterparties)	52,871	52,539	51,358	51,478	11,986	11,969	11,679	11,700
Unsecured debt	72,037	72,986	75,053	74,928	40,226	40,420	41,276	41,197
Secured wholesale funding	2,027	1,785	1,874	1,773	2,027	1,785	1,874	1,773
Additional requirements					3,648	3,399	3,577	3,864
Outflows related to derivative exposures and other collateral requirements <sup>(1)</sup>	108,774	107,385	103,235	99,050	15,949	15,802	15,564	15,134
Outflows related to loss of funding on debt products	7,463	7,223	6,705	6,016	7,378	7,131	6,613	5,946
Credit and liquidity facilities	67	67	60	51	67	67	60	51
Other contractual funding obligations	101,244	100,095	96,470	92,983	8,504	8,604	8,891	9,137
Other contingent funding obligations	12,104	11,861	12,853	13,095	1,499	1,142	1,368	1,365
<b>Total cash outflows</b>	<b>1,914</b>	<b>8,019</b>	<b>26,519</b>	<b>45,264</b>	<b>92,109</b>	<b>91,607</b>	<b>93,148</b>	<b>93,532</b>
<b>Cash - inflows</b>								
Secured lending (e.g. reverse repos)	14,359	15,967	18,460	19,381	702	763	867	870
Inflows from fully performing exposures	30,806	30,975	30,888	30,762	19,783	20,149	20,091	19,830
Other cash inflows	3,554	3,717	3,848	3,823	3,554	3,717	3,848	3,823
(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)								
(Excess inflows from a related specialized credit institutions)								
<b>Total cash inflows</b>	<b>48,719</b>	<b>50,659</b>	<b>53,196</b>	<b>53,966</b>	<b>24,039</b>	<b>24,629</b>	<b>24,806</b>	<b>24,523</b>
Fully exempt inflows								
Inflows subject to 90% cap								
Inflows subject to 75% cap	48,719	50,660	53,195	53,967	24,039	24,629	24,805	24,524
<b>Total adjusted value</b>								
<b>Liquidity buffer</b>					<b>87,424</b>	<b>86,820</b>	<b>88,585</b>	<b>88,618</b>
<b>Total net cash outflows</b>					<b>68,069</b>	<b>66,978</b>	<b>68,343</b>	<b>69,009</b>
<b>Liquidity coverage ratio (%)</b>					<b>128.5%</b>	<b>129.6%</b>	<b>129.7%</b>	<b>128.4%</b>

<sup>(1)</sup> Includes the amount of the collateral that the entity would have to provide in case of a credit downgrade, according to CRR Article 449(d)

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 financing needs covered in the local markets in which they operate.

For those LMUs operating in dollarized 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%.

Regarding the sustainability of wholesale financing 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, 2019, except for the positions against central clearing houses and the financing operation of the ECB TLTROII and III (Targeted Longer-Term Refinancing Operations) in the Euro balance sheet, the Group has no counterparties that maintain balances greater than 1% of the Group's total liabilities and the weight of the first 10 counterparties per balance represents 5%.

### 3.5.3. Net Stable Funding Ratio

The Net Stable Funding Ratio (NSFR), defined as the ratio between the amount of stable funding available and the amount of stable funding required, is one of the Basel Committee's essential reforms, and requires 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.

This requirement was defined by the Basel Committee in October 2014, and following the final approval of the Capital Requirements Regulation II (CRR II) or Regulation (EU) 2019/876 amending the CRR, the transposition of the Basel requirement will be effective in June 2021.

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%. In this respect, the NSFR of the Group as of December 31, 2019 was 120%.

For information on the NSFR of the main LMUs, see Note 7.4 of the Group's Consolidated Financial Statements.

### 3.5.4. Encumbered assets in funding operations

In relation to the management of encumbered liquid assets<sup>9</sup>, all LMUs maintain adequate positions not only to cover the minimum survival periods established in a stress situation, but also uncollateralized 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 Funding 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 financing model is low because the financing is based on stable customer deposits, the dependence on short term financing is reduced, and a robust financing 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, 2019 is:

**Table 73.** Encumbered assets over total assets

	12-31-2019
<b>BBVA Group</b>	<b>19%</b>
LMU Euro	24%
LMU Mexico	15%
LMU Compass	12%
LMU Garanti	6%

The Group mainly has the following pledging sources:

#### ■ Guaranteed bonds

The issue of guaranteed bonds is one of the main sources of guaranteed financing which give the holders a high degree of protection. Issues are backed by on-balance sheet assets that are susceptible to being curbed (pooled) and have a joint guarantee from the Entity that will support the issue in the event that the underlying assets cannot cope with the payments. The products through which this type of financing is implemented are mortgage-covered bonds, public covered bonds and internationalization bonds.

#### ■ Assets sold under repurchase agreement

Co-financing operations collateralized by assets sold under repurchase agreement are among the short term sources of financing. These operations play an important role in the type of encumbered assets in the Group.

#### ■ Assets pledged with Central Banks

The role of central banks as suppliers of liquidity ultimately constitutes one of the key contingent financing resources in the event of there being tensions in the financial markets. In this regard, in accordance with the principles established for management of collateral, the Group's strategy consists of maintaining broad credit policies with the central banks concerned by pledging assets as collateral in geographical areas where these instruments are used as part of monetary policy. The impact of this funding source is low within the Group.

#### ■ Management of collateral agreements

The use of collateral is one of the most effective techniques to mitigate exposure to Credit Risk arising from operations with Derivatives or in operations with repurchase agreements or Value Loans. The assets currently used as collateral are: cash, fixed-income and credit letters.

<sup>9</sup> 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 an encumbered 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.

### ■ Securitization

The issuance of securitization represents one of the main potential sources of risk for pledged assets on the balance sheet. According to the type of assets supporting the securitization, 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.

The projects subject to overcollateralization are:

- Mortgage-covered bonds.

These are mortgage bonds issued with first-rank mortgage loan collateral constituted in favor of the bank. In the case of BBVA S.A., which accounts for more than 95% of the issuance of mortgage-covered bonds in the Group, the bonds have to be overcollateralized at 125% of their nominal value, and the amount of loans that back them cannot be more than 80% of the value of the collateral. The other geographic area that issues these types of product (to a residual extent) is Garanti BBVA.

- Public covered bonds.

Public covered bonds are similar to mortgage-covered bonds. They are backed by loans and credit granted by the issuer to the State, to central and regional governments, local authorities and autonomous bodies that answer to them, as well as other public-sector entities in the European Economic Area. In this case, the issues have to be overcollateralized at 143% of their nominal value. BBVA SA accounts for 100% of this type of issue.

- Internationalization bonds.

These are securities guaranteed by loans and credit linked to the financing of contracts for the export of goods and services or to the internationalization of companies. The level of overcollateralization is the same as for public covered bonds. BBVA SA accounts for 100% of this type of issue. The weight of this type of issue is very residual.

Within the Group there are units responsible for the execution, monitoring and control of issues of this type, as well as the calculation of the capacity for additional issuance, with the aim of ensuring that the Entity is not over-issued and complies with the established limits of the Encumbered Asset Ratio.

The following table shows assets contributed as collateral (loans) underlying the issue of mortgage-covered bonds, public covered bonds and internationalization bonds, as well as the total issued and excess issuance capacity as of December 31, 2019:

**Table 74.** Mortgage-covered bonds (Million Euros. 12-31-2019)

<b>Withheld</b>	
Withheld applied	12,504
Withheld not applied	5,086
<b>Issued to Market</b>	<b>14,832</b>
<b>Total mortgage-covered bonds issued</b>	<b>32,422</b>
<b>Eligible collateral to consider</b>	<b>43,568</b>
Maximum to issue	34,854
<b>Capacity to issue</b>	<b>2,433</b>

**Table 75.** Public-covered bonds (Million Euros. 12-31-2019)

<b>Withheld</b>	
Withheld applied	6,040
Withheld not applied	1,500
<b>Issued to Market</b>	<b>500</b>
<b>Total mortgage-covered bonds issued</b>	<b>8,040</b>
<b>Eligible collateral to consider</b>	<b>13,316</b>
Maximum to issue	9,321
<b>Capacity to issue</b>	<b>1,281</b>

**Table 76.** Internationalization-covered bonds. (Million Euros. 12-31-2019)

<b>Withheld</b>	
Withheld applied	1,500
Withheld not applied	-
<b>Issued to Market</b>	<b>-</b>
<b>Total internationalization-covered bonds issued</b>	<b>1,500</b>
<b>Eligible collateral to consider</b>	<b>3,620</b>
Maximum to issue	2,534
<b>Capacity to issue</b>	<b>1,034</b>

The assets on the balance sheet and the collaterals received that, as of December 31, 2019, is encumbered (provided as collateral or security with respect to certain liabilities) and 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 pledged and unpledged guarantees received. The balances are calculated as annual medians using as a sample the four quarters of the last year.

**Table 77.** Encumbered and unencumbered Assets (Million Euros. 12-31-2019)

	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
<b>Institution's assets</b>	<b>109,189</b>	<b>32,142</b>			<b>570,814</b>	<b>105,564</b>		
Equity instruments	2,664	1,635			7,269	3,862		
Debt securities	32,119	30,491	33,255	30,673	73,893	64,130	73,766	64,850
Of which: covered bonds	46	44	45	44	693	691	683	681
Of which: ABSs	22	-	22	-	193	-	231	-
Of which: issued by general governments	27,802	28,109	28,879	28,290	61,515	58,527	61,457	59,219
Of which: issued by financial corporations	2,751	1,369	2,823	1,375	7,545	4,840	7,473	4,855
Of which: issued by non- financial corporations	1,289	971	1,280	971	2,564	732	2,578	745
Loans and Other assets	74,232	-			486,199	37,056		
Of which: Loans and advances	74,232	-			396,488	31,073		
Of which: Other assets	-	-			89,710	5,253		

**Table 78.** Collateral received (Million Euros. 12-31-2019)

	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	
<b>Collateral received</b>	<b>33,705</b>	<b>28,795</b>	<b>10,301</b>	<b>6,724</b>
Loans on demand	-	-	0	-
Equity instruments	125	77	67	27
Debt securities	33,582	28,750	10,217	6,689
Of which: covered bonds	640	146	91	10
Of which: ABSs	136	-	175	-
Of which: issued by general governments	28,575	26,591	6,008	5,558
Of which: issued by financial corporations	3,105	599	2,989	1,068
Of which: issued by non- financial corporations	692	153	360	74
Loans and advances other than loans on demand	-	-	4	-
Other collateral received	-	-	-	-
Own debt securities issued other than own mortgage-covered bonds or ABSs	13	-	82	-
Own mortgage-covered bonds and ABSs issued and not yet pledged			19,311	-
<b>Total assets, collateral received and own debt securities issued</b>	<b>139,930</b>	<b>-</b>		

Below are the pledging sources with associated collateral as of December 31, 2019:

**Table 79.** Sources of encumbrance (Million Euros. 12-31-2019)

	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
<b>Carrying amount of selected financial liabilities</b>	<b>120,985</b>	<b>135,005</b>
Derivatives	13,345	12,914
Repos and other collateralized deposits	89,895	99,999
Debt securities	17,882	21,865
Other sources of encumbrance	465	4,925

The assets without associated liabilities shown in the table above correspond to securities issued as guarantee and in order to be able to operate in certain markets, as well as assets mainly encumbered in security lending operations.

The collateral received off the balance sheet is mostly reverse repurchase agreements, of which more than 90% are sovereign securities.

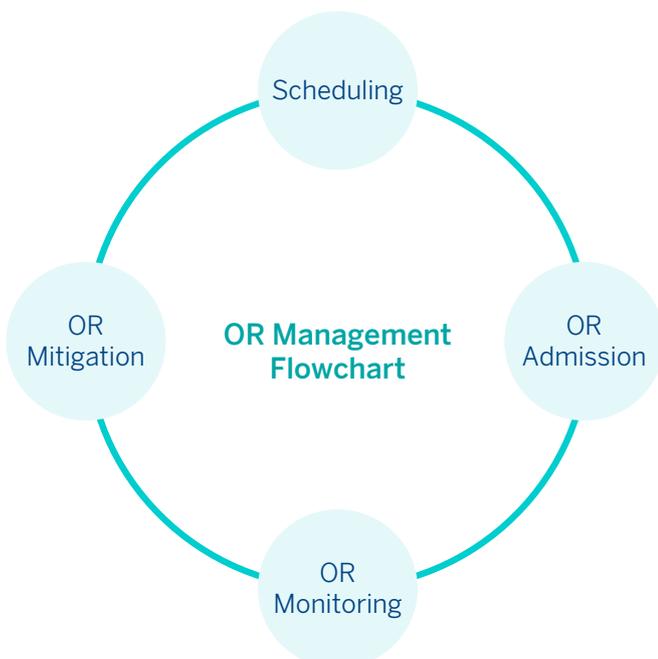
## 3.6. Operational Risk

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; failures, interruptions or flaws in systems or communications; inadequate data management; legal risk; and finally, as a result of external events, including cyberattacks, third-party fraud, disasters and defective service provided by suppliers.

Operational risk management is oriented towards the identification of the root causes to avoid their occurrence and mitigate possible consequences, so that the risk level falls within defined tolerance limits.

Operational risk management is based on a number of components similar to those adopted for other types of risk.

**Chart 24.** Operational Risk Management Processes



All these elements, as well as the operational risk oversight, are described in the “Risk Management – Operational Risk” section of the Management Report accompanying the Group’s Consolidated Financial Statements.

### 3.6.1. Capital calculation methods used

As set out in Regulation (EU) 575/2013 of the European Parliament and of the Council, for calculating the regulatory capital for operational risk under Basel 1, Advanced Measurement Approaches (AMA) are used for a very significant part of the banking perimeter<sup>10</sup>. Specifically, this method is used in Spain and Mexico, which accumulate most of the Group’s assets.

Except for the case of Bolivia, for which the basic approach is applied, the standardized approach is used to calculate capital in the rest of the geographic areas. In addition, it is remarkable that during 2019, the operational risk management model has been significantly strengthened in Garanti BBVA, which would allow switching from the use of the basic model to the use of the standardized approach from December 2019.

#### 3.6.1.1. Description of advanced measurement approaches

The advanced internal model quantifies capital at a confidence level of 99.9% following the LDA (Loss Distribution Approach) methodology. This methodology estimates the distribution of losses by operational event by convoluting the frequency distribution and the loss given default (LGD) distribution of these events.

Calculations are made using internal historical loss data from the Group as the main source of information. To enrich the data from this internal database and to take into account the impact of possible events not yet considered therein, external databases (ORX consortium) are used and operational risk scenarios are also included.

The distribution of losses is constructed for each of the different types of operational risk, which are defined as per Basel Accord cells; i.e. a cross between business line and risk type. In cases where there is not sufficient data for a sound analysis, it becomes necessary to undertake cell aggregations, and to do so the business line is chosen as the axis.

In certain cases, a greater disaggregation of the Basel cell has been selected. The objective consists of identifying statistically homogeneous groups and a sufficient amount of data for proper modeling. The definition of these groupings is regularly reviewed and updated.

Solvency regulations establish that regulatory capital for operational risk is determined as the sum of individual estimates by type of risk, but allowing the option of

<sup>10</sup> In March 2010, the BBVA Group received authorization from the supervisor to apply advanced approaches for calculating regulatory capital by operational risk in Spain and Mexico.

incorporating the effect of the correlation among them. This impact has been taken into consideration in BBVA estimates with a conservative approach.

The model of calculating capital in both Spain and Mexico incorporates factors that reflect the business environment and situation of internal control systems. Thus the calculation obtained is higher or lower according to how these factors change in anticipating the result.

The Group has insurance policies that basically cover the

risk of cyberattacks, natural and/or provoked disasters and external and internal fraud. For the purpose of calculating capital by the AMA the mitigating effect of the insurance contracted is not included.

The following table shows the operational risk capital requirements broken down according to the calculation models used and by geographic area, to provide a global vision of capital consumption for this type of risk:

**Table 80.** Regulatory capital for Operational Risk (Million Euros)

Regulatory capital for operational risk	Capital requirements		RWAs	
	2019	2018	2019	2018
Advanced	1,746	1,718	21,822	21,476
Spain	1,382	1,364	17,270	17,050
Mexico	364	354	4,552	4,425
Standardized	1,220	747	15,250	9,341
Basic	64	473	805	5908
<b>BBVA Group total</b>	<b>3,030</b>	<b>2,938</b>	<b>37,877</b>	<b>36,725</b>

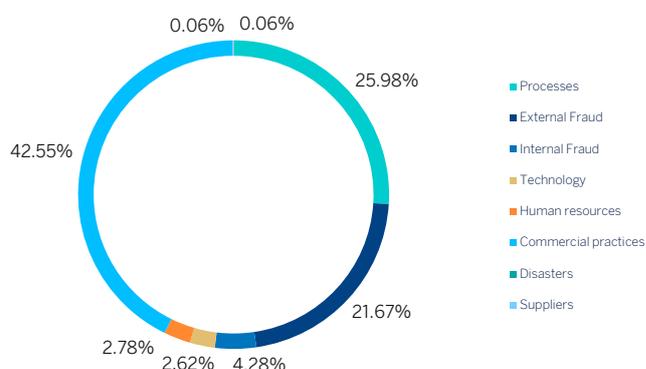
The main variations in the bank capital requirements for operational risk are due to:

- Advanced methods:** in Spain, basically, due to the greater impact of the losses recorded in the event of "Retroactivity of floor clauses" the RWAs increased by 225 million euros. In Mexico, the increase in recognized RWA was 125 million euros, mainly due to the appreciation of the Mexican peso against the euro; excluding this effect, the RWA would have been reduced by approximately 135 million euros.
- Basic and standard approaches:** In 2019 the group has begun to apply the standard operating risk model at Garanti BBVA for the purposes of calculating consolidated requirements, which has explained the reduction in capital requirements in the basic model. In turn, the growth of the relevant revenues in the geographic areas where the Group was applying standardized approach together with the change of model in Garanti BBVA determine the evolution of the magnitudes of that model during 2019. The net effect of the change of model at Garanti BBVA has been a reduction in RWAs of approximately 600 million.

### 3.6.2. Operational Risk Profile

BBVA's operational risk profile is shown below by risk type after assessing the risk, resulting in the following distribution:

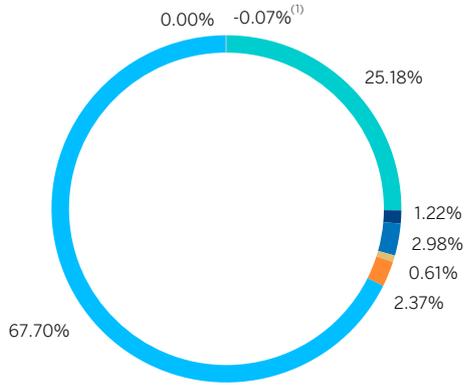
**Chart 25.** Operational Risk Profile of BBVA Group



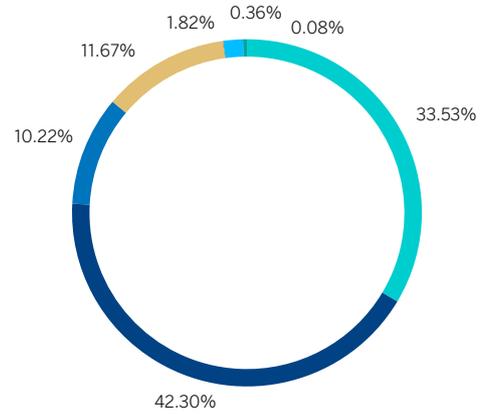
The following charts reflect the distribution of operational losses by risk class and country for 2019.

**Chart 26.** Operational Risk by risk and country

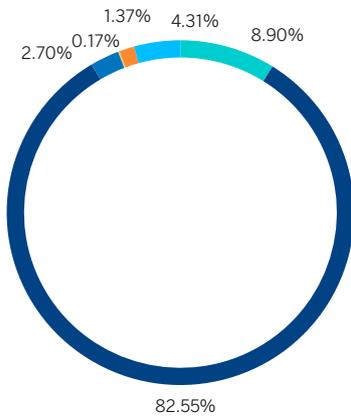
**Spain**



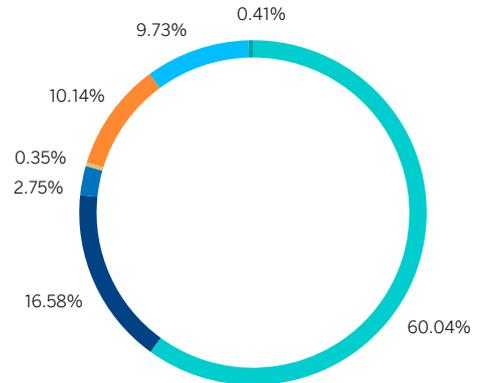
**Mexico**



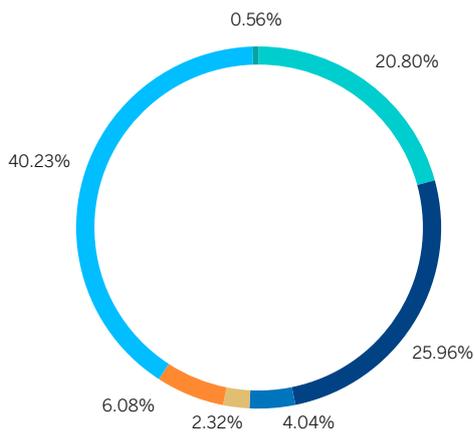
**USA**



**Turkey**



**Others**



- Processes
- External Fraud
- Internal Fraud
- Technology
- Human resources
- Commercial practices
- Disasters
- Suppliers

<sup>(1)</sup> An amount greater than the loss that occurred this year has been recovered by insurance of events of previous years

# 4. Leverage ratio

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## 4.1. 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.

In January 2014, the Basel Committee on Banking Supervision published the final version of the “Basel III leverage ratio framework and disclosure requirements”, which has been included through a delegated act that amends the definition of leverage ratio in the CRR regulation.

Pursuant to Article 451, section 2 of the CRR, on June 15, 2015 the EBA published the final draft of the Implementing Technical Standard (ITS) on disclosures of the Leverage Ratio for breaking down the leverage ratio, which has been applied in this report.

The leverage ratio is defined as the quotient of eligible Tier 1 bank capital and exposure.

Described below are the elements making up the leverage ratio, in accordance with the “EBA final draft Implementing Technical Standards on disclosure of the leverage ratio under Article 451(2) of Regulation (EU) No. 575/2013 (Capital Requirements Regulation – CRR) - Second submission following the EC’s Delegated Act specifying the LR” published by the EBA on June 15, 2015:

- Tier 1 capital (letter h in the following table): Section 2.2. of this Document presents details of the bank capital, calculated based on the criteria defined in the CRR.
- Exposure: As set out in Article 429 of the CRR, the exposure measurement 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.
  - Measurement 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 Group’s leverage ratio is composed by the sum of the following items:

- Asset Balance: the asset balance corresponding to the financial statements.
- Adjustments for reconciliation between the accounting perimeter and the solvency perimeter: the balance resulting from the difference between the accounting balance sheet and the regulatory balance sheet is included.
- Exposure in derivatives: in addition to the account balance (or replacement cost), which is adjusted by the cash variation margin, the netting effects (as permitted by the CRR) and the notional cash amounts, the exposure also includes and add-on to collect the future potential credit risk.
- Securities Financing Transactions (SFTs): as well as the book value, the difference between this and the exposure value is included, corresponding to an additional counterparty risk surcharge, determined in accordance with Article 429 of the CRR.
- 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 CRR Article 429.10 (a).
- 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 the CRR and indicated in section 2.1 of this report.

The table below shows a breakdown of the items making up the leverage ratio as of December 31, 2019 and December 31, 2018.

**Table 81.** LRSum - Summary reconciliation of accounting assets and exposure corresponding to the Leverage Ratio (Million Euros)

Summary table of accounting assets and leverage ratio exposure conciliation	12-31-2019 Phased-in	12-31-2019 Fully Loaded	12-31-2018 Phased-in	12-31-2018 Fully Loaded
(a) Total assets as published financial statements	698,690	698,690	676,689	676,689
(b) Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(21,636)	(21,636)	(19,570)	(19,570)
(c) Adjustments for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429 (13) of Regulation (EU) No 575/2013				
(d) Adjustments for derivative financial instruments	(7,124)	(7,124)	(7,410)	(7,410)
(e) Adjustments for securities financing transactions "SFTs"	1,840	1,840	3,193	3,193
(f) Adjustment for off-balance sheet items <sup>(1)</sup>	67,165	67,165	61,409	61,409
(g) Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013	-	-	-	-
(h) Other adjustments	(7,847)	(8,656)	(9,012)	(10,080)
<b>Leverage ratio total exposure measure</b>	<b>731,087</b>	<b>730,279</b>	<b>705,299</b>	<b>704,231</b>
(h) Capital Tier 1	49,701	48,775	45,947	45,047
<b>Leverage ratio total exposure measure</b>	<b>731,087</b>	<b>730,279</b>	<b>705,299</b>	<b>704,231</b>
<b>Leverage ratio</b>	<b>6.80%</b>	<b>6.68%</b>	<b>6.51%</b>	<b>6.40%</b>

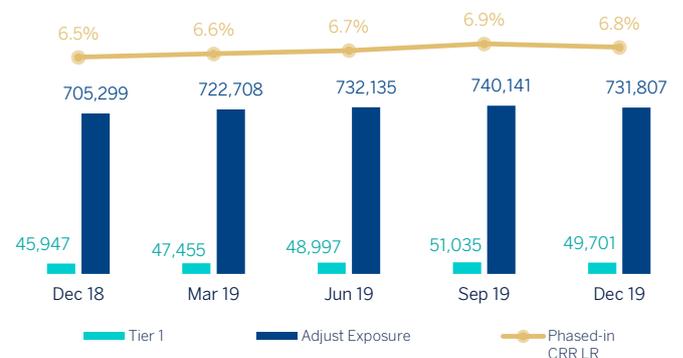
<sup>(1)</sup> This corresponds to off-balance sheet exposure after application of the conversion factors obtained in accordance with Article 429.10 of the CRR.

As shown above, the Group maintains a phased-in leverage ratio of 6.80% and a fully loaded ratio of 6.68%, well above the minimum level required.

## 4.2. Evolution of the ratio

The phased-in leverage ratio has increased during the year by 28 basis points. Breaking down by components, Tier 1 increases by approximately €3.75 billion, with an impact of +53 basis points and, exposures increase by approximately €26.0 billion with an impact of -25 basis points.

The leverage level reflects the nature of the business model that is geared toward the retail sector.

**Chart 27.** Trends in the leverage ratio

## 4.3. Governance

The activities making up the Group's regulatory reporting include monthly measurement and control of the leverage ratio by assessing and monitoring this measurement in its more restrictive version (fully loaded), to guarantee that leverage remains far from the minimum levels (which could be considered risky levels), without undermining the return on investment.

The estimates and development of the leverage ratio are reported on a regular basis to different governing bodies and committees to guarantee adequate control of the entity's

leverage levels and ongoing monitoring of the main capital indicators.

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.



# 5. Information on remuneration

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In accordance with Article 85 of Act 10/2014, of June 26, on the regulation, supervision and solvency of credit institutions (the "LOSS"), and in Article 93 of Royal Decree 84/2015, of February 13 implementing said Act, and pursuant to the provisions of 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 to the public and periodically update it, 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 Group's risk profile (hereinafter, the "Identified Staff" or "Risk Takers").

## 5.1. Information on the decision-making process used to establish remuneration policy for the Identified Staff

In accordance with the provisions contained in BBVA's Bylaws, the BBVA Board of Directors Regulations grants to this body, among others, the powers to approve the remuneration policy of directors, for submission to the General 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 other conditions that must remain in compliance with their contracts.

In addition, among the Committees constituted to support the Board in carrying out its duties, the Remunerations Committee assists this body in remuneration matters related to directors, senior management and the rest of the Identified Staff, ensuring observance of the remuneration policies established.

Thus, in accordance with Article 5 of the Remunerations 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, the Remunerations Committee performs, on a general basis, the following functions:

1. Propose directors' remuneration policy to the Board, for submission to the General 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 director's 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 director's remuneration policy, submitting the corresponding proposals to the Board.
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. Analyze, 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, prior report of the corresponding committees in each case.
6. Annually submit the proposal of the annual report on the remuneration of the Bank's directors to the Board, which will be submitted to the Annual General Shareholders' Meeting in accordance with the provisions of the applicable law.
7. Propose to the Board 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 abovementioned Staff.
8. Submit a proposal 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 the basic contractual conditions for senior managers, including their remuneration and severance in the event of termination.
10. Directly supervise the remuneration of senior managers.
11. Ensure observance with the remuneration policies established by the Entity 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 to adequate control and management of risks, and that they attend to the principle of pay equity. In particular, ensure that the remuneration policies established by the Entity are subject to internal, central and independent review at least once a year.

12. Verify all information concerning 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 remuneration matters, ensuring that any potential conflicts of interest do not impair the independence of the advice provided.

During the 2019 financial year, the Remunerations Committee is composed of five members; all of them have the status of non-executive directors, with the majority being independent, including the Chair. The names, positions and conditions of the members of the Remunerations Committee are detailed in the following table:

**Table 82.** Composition of the Remunerations Committee

Name and surname(s)	Position	Status
Belén Garijo López	Chair	Independent
Tomás Alfaro Drake	Member of the board	External
Carlos Loring Martínez de Irujo	Member of the board	External
Lourdes Máiz Carro	Member of the board	Independent
Ana Peralta Moreno	Member of the board	Independent

The Remunerations Committee performs its functions with full operational autonomy, meeting as often as necessary to carry out its duties, led by its Chair, and convened on a total of 7 occasions during the 2019 financial year.

In order to adequately perform its functions, the Committee uses the advice provided by the Bank's internal services, and may also take the external advice needed to establish criteria on matters within its remit. To this end, during 2019, the Committee has relied on information provided by the leading global consulting firm on compensation of directors and senior managers, Willis Towers Watson.

In addition, the Board's Risks and Compliance Committee 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 risk that might exceed the level tolerated by the Group. During 2019, the Risks and Compliance Committee included one of the members of the Remunerations Committee.

Since 2011, BBVA has a specific remuneration system applicable to the members of the Identified Staff, 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.

As regards the members of the Board of Directors, BBVA has a specific remuneration policy applicable to its directors (the "BBVA Directors' Remuneration Policy") which distinguishes between the remuneration system applicable to non-executive directors and that applicable to executive directors

in accordance with the provisions of the BBVA Bylaws. The remuneration system for executive directors corresponds, in general, to that applicable to the members of the Identified Staff, of which they form a part, including certain specific characteristics derived from their status as directors. The remuneration system of non-executive directors is based on the criteria of responsibility, dedication and incompatibilities inherent to the position they hold, and consists exclusively of fixed elements, not receiving any type of variable remuneration.

As indicated above, the Remunerations Committee counts among its functions proposing the directors' remuneration policy to the Board, for submission to the General Meeting, likewise submitting the corresponding report, in the terms established by applicable law at any time.

The BBVA Directors' Remuneration Policy applicable during 2019 was approved by the General Shareholders' Meeting held on March 15, 2019 and is available on the Bank's corporate website ([www.bbva.com](http://www.bbva.com)).

With regard to the rest of the Identified Staff, it is also the responsibility of the Remunerations Committee to submit to the Board the remuneration policy for senior managers and other employees who are members of this Staff in the Group.

The latest update of the remuneration policy applicable to the Identified Staff within the Group, including Senior Management took place in 2017, in order to adapt it to the requirements established in the applicable regulations, and particularly the Bank of Spain Circular 2/2016 and the European Banking Authority Guidelines on sound remuneration policies of June 27, 2016.

This policy is integrated within the remuneration policy applicable in general to the entire staff of BBVA and the subsidiaries that form part of its consolidated group (the "BBVA Group Remuneration Policy") and includes, in a specific chapter, the special characteristics of the remuneration system applicable to the members of the Identified Staff of the Group, as well as the procedure for their identification, in accordance with that established in the applicable regulations, as detailed in the following sections.

The BBVA Group Remuneration Policy, approved by the Board upon the proposal of the Remunerations Committee, is coordinated at the corporate level by BBVA's Talent and Culture area, and actively and regularly cooperates with the supervisory functions of the Group in its design and oversight, in accordance with the powers conferred by applicable legislation. Thus, the Board of Directors periodically reviews the general principles of the Policy and oversees its implementation, based on the information and reports received from the Talent and Culture area and the various control functions that apply, thus guaranteeing that this Policy is applied properly and in a manner consistent with BBVA's corporate governance system.

Over the course of the 2019 financial year, the Remunerations Committee has analyzed the remuneration proposals necessary for the development and implementation of these remuneration policies, and, in particular, for the implementation of the settlement and payment system of the annual variable remuneration of the members of the Identified Staff.

Thus, the Remunerations Committee has analyzed the adequacy of the annual performance indicators used for the calculation of the 2019 annual variable remuneration for executive directors and their corresponding weightings, as well as the targets and scales of achievement associated with these indicators, by submitting the corresponding proposals to the Board for approval.

Furthermore, the Committee has analyzed the minimum thresholds of Attributed Profit and Capital Ratio established as ex ante adjustments to determine the generation of annual variable remuneration for the 2019 financial year of the executive directors and the rest of the Identified Staff, as well as their corresponding scales.

Likewise, the Remunerations Committee has determined, for its submission to the Board, the multi-year performance indicators established as ex-post adjustments, applicable to the deferred annual variable remuneration for the 2019 financial year of the executive directors and the rest of the Identified Staff, including senior managers, having, for this purpose, the previous analysis carried out by the Risk and Compliance Committee, which ensured its adequacy to the Bank's risk profile.

On the other hand, within the framework of the function attributed to the Remunerations Committee for the observance and periodic review of the established remuneration policy applicable to the Identified Staff, it has carried out the review of the BBVA Group Remuneration Policy in the 2018 financial year, in accordance with applicable regulations and recommendations. To this end, this review has analyzed the BBVA Group's Remuneration Policy, which includes the remuneration policy of the Identified Staff, as well as their identification process, based on the central and independent internal review carried out by the Bank's Internal Audit department, with the foregoing being duly reported to the Board.

The Committee has also received information on the application of the identification process the Identified Staff in the BBVA Group in the 2019 financial year from the technical areas of the Bank, in accordance with the criteria established under the applicable regulations and the internal criteria established by the Bank, including both the number of persons included in the Identified Staff and the information involving the excluded members, duly reporting on such to the Board.

In addition, in 2019, the Remunerations Committee has submitted the proposal to the Board for its submission to the 2019 General Shareholders' Meeting regarding the increase of the maximum variable remuneration level of up to 200% of the fixed component of the total remuneration for a certain group of employees whose professional activities have a significant impact on the Group's risk profile, and also submits to the Board the Report that accompanies this agreement and which was made available to the shareholders of the Bank.

Lastly, in accordance with the proposal raised by the Remunerations Committee, the Board approved the Annual Report on Remuneration of the Directors of BBVA, according to the model established by the National Securities Market Commission, which was submitted to an advisory vote on the Board General Shareholders' Meeting held in 2019, pursuant to Article 541 of the Corporate Enterprises Act, and which is available on the Bank's corporate website ([www.bbva.com](http://www.bbva.com)) from the date of the announcement of the General Meeting.

The Annual Report on BBVA Directors' Remuneration contains a description of the basic principles of the remuneration policy of the Bank with regard to members of the Board, both executive and non-executive, as well as a detailed presentation of the various elements and amounts that make up their remuneration.

All of the issues discussed above, along with other matters within its scope, are detailed in the Remunerations Committee Activity Report for the 2019 financial year, published on the Bank's corporate website on the occasion of the announcement of the 2020 General Meeting ([www.bbva.com](http://www.bbva.com)).

Thus, as indicated above, BBVA employs a decision-making system in the field of remuneration, which features the Remunerations Committee as its central element, in charge of determining the remuneration policy applicable to the Identified Staff, and submitting the corresponding proposals for approval to the Board. All of the above ensures an adequate decision-making process in terms of remuneration.

The members of the Remunerations Committee who have held such position during the 2019 financial year have received a total amount of 278 thousand euros for their membership. In addition, the Annual Report on BBVA Directors' Remuneration pertaining to said financial year includes the individual remuneration of each director, broken down by remuneration items.

## 5.2. Description of the different types of employees included in the Identified Staff

In accordance with the BBVA Group's Remuneration Policy, the selection of the persons who make up the Identified Staff within the Group is part of an annual process, the determination of which is based on the qualitative and quantitative criteria established under the (EU) Delegated Regulations No. 604/2014 of March 4, 2014 supplementing Directive 2013/36/EU of the European Parliament and of the Council as regards regulatory technical standards in relation to the qualitative criteria and appropriate quantitative criteria to identify categories of staff whose professional activities have material impact on an institution's risk profile (the "Delegated Regulation 604/2014"). 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 responsibility of the position (for example, members of the BBVA Board of Directors, members of BBVA Senior Management, personnel 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 establishes that employees have a significant impact on the Group's risk profile based on the total remuneration granted, unless BBVA determines that, in fact, the activity of such personnel has no significant impact on the risk profile, in accordance with the provisions contained in Article 4 of Delegated Regulation 604/2014. In relation to the quantitative criteria, the Identification Process shall take into account the total remuneration granted in the previous financial year or that which is established by the applicable rules at all times.

The Identification Process is updated during the year and

takes all BBVA Group personnel into consideration, allowing the inclusion of personnel in the Identified Staff who meet or are likely to meet the qualitative criteria established under Article 3 of Delegated Regulation 604/2014 for at least three months out of a given financial year.

All the companies that form part of the BBVA Group will actively participate in the Identification Process carried out by BBVA, providing all information necessary in order to adequately identify the personnel having a significant impact on the Group's risk profile.

In accordance with the detailed Identification Process, a total of 580 Risk Takers were identified at year-end 2019, including:

- Members of the BBVA Board of Directors <sup>11</sup>.
- Members of BBVA Senior Management.
- Risk Takers by function: staff defined by the functions that correspond to the qualitative criteria established under Article 3 of Delegated Regulation 604/2014 of the European Commission, between points 4 and 15, both inclusive, as well as those Risk Takers identified according to Bank's internal criteria.
- Risk Takers by remuneration: composed of those employees who meet the quantitative criteria of Article 4 of the aforementioned Delegated Regulation 604/2014.

The total number of Risk Takers identified in 2019 financial year has remained at a level similar to the previous year, in which the total number of members identified amounted to 578 persons; this figure has not, therefore, experienced significant changes.

Notwithstanding the foregoing, BBVA will adapt the definition 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.

## 5.3. Key features of the remuneration system

As detailed in section 5.1, at the proposal of the Remunerations Committee, the Board approved the Remuneration Policy of the BBVA Group in 2017, which includes the remuneration system applicable to the Identified Staff, as well as the Identification Process detailed in section 5.2 above.

The BBVA Group Remuneration Policy is oriented toward the recurrent generation of value for the Group, seeking, at the same time, alignment of the interests of its employees and shareholders with sound risk management.

11. Regarding non-executive directors, they are defined as Risk Takers by virtue of the provisions of Article 3 of Delegated Regulation 604/2014, although, as detailed in Section 5.3, below, they are subject to a specific remuneration system, different from the one applicable to executive directors and they do not receive variable remuneration.

This policy is one of the elements designed by the Board as part of BBVA's Corporate Governance System to guarantee adequate management of the Group and it is based on the following principles:

- long-term value creation;
- rewarding achievement of results based on sound and responsible risk-assumption;
- attract and retain the best professionals;
- reward the level of responsibility and professional track record;
- ensure internal equity and external competitiveness; and
- ensure transparency of the remuneration model.

Based on the general principles mentioned above, BBVA has defined the Group's Remuneration Policy by, in addition to the necessary compliance with the legal requirements applicable to credit institutions and in the different sectors in which it operates, taking into consideration alignment with best market practices, including elements aimed at reducing exposure to excessive risk and adjusting the remuneration to the Group's objectives, values and long-term interests.

In line with this, the policy addresses the following premises:

- it is compatible with and promotes sound and effective risk management, not offering incentives to encourage risk-taking that exceed the levels tolerated by BBVA Group;
- it is in line with BBVA Group's business strategy, objectives, values and long-term interests and will include measures to avoid conflicts of interest;
- it clearly distinguishes the criteria for the establishment of fixed remuneration and variable remuneration;
- it promotes equal treatment for all staff, not discriminating due to gender or other personal characteristics; and
- it seeks to ensure that remuneration is not based exclusively or primarily on quantitative criteria and considers adequate qualitative criteria, which reflect compliance with the applicable rules.

In accordance with the above, the remuneration scheme generally applicable to all of the Group's employees is implemented through the following:

- a. A fixed remuneration, which takes into account levels of responsibility, functions performed, and the professional trajectory of each employee, as well as the principles of internal equity and the value of the function in the market, constituting a relevant part of the total compensation.

The grant and the amount of the fixed remuneration are based on predetermined and non-discretionary objective criteria.

- b. Variable remuneration, constituted by those payments or benefits additional to the fixed remuneration, monetary

or not, that turn on variable parameters. Variable remuneration shall not limit the ability of the Group to strengthen its capital base in any way in accordance with regulatory requirements and shall consider current and future risks as well as the necessary capital and liquidity costs reflecting sustainable income and adapted to risk.

Guaranteed variable remuneration will not make up part of the Group's variable remuneration models in any form. BBVA may only grant guaranteed variable remuneration on an exceptional basis, and solely within the framework of the conditions established under applicable regulations.

Within this remuneration model for general application, the BBVA Group Remuneration Policy includes certain special characteristics applicable, on the one hand, to staff who exercise supervisory functions and, on the other hand, to personnel involved in the provision of services to clients. Thus:

- i. Staff who exercise control functions are independent of the business units that they supervise, have the necessary authority, and are remunerated according to the achievement of certain objectives related to their functions, regardless of the results of the business areas that they supervise.

In order to reinforce the independence and objectivity of these functions, the fixed components of their remuneration have a greater weight than that of the variable components, the latter being related, for the most part, to the objectives of the function.

In addition, the remuneration of BBVA senior managers in independent control functions, including compliance and risk management functions, is directly overseen by the BBVA Remunerations Committee, just as with the other members of Senior Management.

- ii. In designing and establishing the remuneration of the staff involved in the provision of services to customers, care must be taken to protect their interests and the quality of the services provided, so that:

- responsible business conduct and fair treatment of customers is encouraged;
- no incentives should be established that could induce staff to put their own interests or those of the BBVA Group in possible opposition to the interests of their customers;
- remuneration is not linked primarily or exclusively with the sale of a product or a particular category or type of products, such as certain products that are more profitable for the entity or the employee, with other factors coming into play such as the needs of the customer, without one objective being assigned greater weight in the determination of remuneration; and
- an adequate balance is maintained between the fixed and variable components of remuneration.

Based on the principles and premises mentioned above, and in compliance with the regulatory requirements established by the LOSS and its development regulations, BBVA has defined the particularities of the remuneration policy applicable to the Identified Staff, designing an incentive system specifically oriented to maintain the alignment of their remuneration with risks, as well as with the Group's long-term objectives and interests. The result is a remuneration scheme for the Identified Staff based on the following fundamental characteristics:

- Balance between the fixed components and the variable components of the overall 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, depending on the situation, up to their entirety. The proportion between the two components has been established taking into account the type of functions carried out by each beneficiary (business, support or supervision) and, consequently, their impact on the Group's risk profile, adapting to the reality existing in the different countries or functions in each particular case.
- The variable remuneration of the members of the Identified Staff will be based on an effective management of the risk and linked to the degree of achievement of previously established financial and non-financial objectives, as defined at the Group, Area and Individual level, taking into account current and future risks assumed and the Group's long-term interests.
- Variable remuneration of Identified Staff members for each financial year is subject to ex ante adjustments, so that it shall be reduced at the time of the performance of their role in the event of negative performance of the Group's results or other parameters such as the level of achievements of budgeted targets, and it will not accrue, or will accrue in a reduced amount, should a certain level of profit and capital ratios not be obtained.
- The calculation of the annual variable remuneration for each member of the Identified Staff will be performed on the basis of: (i) annual performance indicators of the Group, area, and individual (financial and non-financial); (ii) the corresponding achievement scales, according to the weighting allocated to each indicator; and (iii) an "target" annual variable remuneration, which represents the amount of annual variable remuneration if 100% of the pre-established targets are met. The resulting amount will constitute the annual variable remuneration of each beneficiary (hereinafter, the "Annual Variable Remuneration").
- The financial and non-financial indicators for the annual performance will be aligned with the Group's most relevant management metrics and related to strategic priorities.
- In the event of termination of the contractual relationship of a member of the Identified Staff before the closing date of the financial year to which the Annual Variable Remuneration has accrued, the latter shall be entitled to receive, if conditions are met, the proportional installment

of said Annual Variable Remuneration, calculated pro rata for the length of the service during said financial year and being subject, in any case, to the same system of settlement and payment that would be applicable if it had remained active, in accordance with the rules indicated below. The foregoing shall not apply to the circumstances of termination of the contractual relationship due to voluntary resignation or lawful dismissal, in which case the employee shall not be eligible for Annual Variable Remuneration.

- The Annual Variable Remuneration for the members of the Identified Staff shall be subject to specific rules of settlement and payment, and in particular:
  - 60% of the Annual Variable Remuneration will be paid, if necessary, for the following financial year (the "Upfront Portion"). For executive directors, members of Senior Management and those members of the Identified Staff with variable remunerations of particularly high amounts, the Upfront Portion will correspond to 40% of the overall Annual Variable Remuneration.
  - The remaining part will be deferred over time (hereinafter the "Deferred Portion") for a period of 5 years, for executive directors and Senior Management, and 3 years for the remaining risk takers.
  - 50% of the Annual Variable Remuneration, both of the Upfront and Deferred Portion, will be fixed in BBVA shares. For executive directors and members of Senior Management, a Deferred Portion will be fixed in shares (60%).
  - Shares received as Annual Variable Remuneration will be withheld for a period of one year after delivery, except for those shares which sale would be required to honour the payment of taxes accruing on the shares delivered.
  - The Deferred Portion of the Annual Variable Remuneration may be reduced even in its entirety, but never increased, based on the result of multi-year performance indicators aligned with the Group's core risk management and control metrics related to solvency, capital, liquidity or profitability, or to the share performance and recurring Group's results.

The multi-year performance indicators are approved by the Board, at the proposal of the Remunerations Committee, and subsequent to analysis by the Risk and Compliance Committee, which ensures that they are adequate to align differed remuneration with prudent risk management.

The indicators approved for 2019 are as follows:

**Table 83.** Multi-annual performance indicators

Indicator	Weight
Common Equity Tier (CET) 1 fully loaded	40%
Liquidity Coverage Ratio (LCR)	10%
Loan to Stable Customer Deposits (LtSCD)	10%
Return on Equity (ROE)	20%
(Operating Income - Loan-loss provisions) / Average Total Assets	10%
Total Shareholder Return (TSR)	10%

These multi-year performance indicators are associated with scales of achievement, approved by the Board at the proposal of the Remunerations Committee, so that, if the objectives established for each of the indicators are not achieved in the three-year measurement period from the beginning of the deferral period, the Deferred Portion of the Annual Variable Remuneration for 2019 may be reduced, even in its entirety, but never be increased.

In the case of executive directors and members of the Senior Management, the Deferred Portion of the Annual Variable Remuneration, subject to the multi-year performance indicators, which must be paid, will be delivered, if the conditions are met, according to the following schedule: 60% after the third year of deferral, 20% after the fourth year of deferral, and 20% after the fifth year of deferral.

- The cash amounts of the Deferred Portion of the Annual Variable Remuneration subject to the multi-year performance indicators, which are finally paid, will be updated by applying the Consumer Price Index (CPI) measured as the year-on-year change in prices, in accordance with that established by the Board of Directors.
- The entire Annual Variable Remuneration will be subject to malus and clawback arrangements throughout the whole deferral and retention period, under the terms indicated below.
- No personal hedging strategies or insurance may be used in connection with remuneration and liability that may undermine the effects of alignment with prudent risk management.
- The variable component of the remuneration corresponding to a financial year shall be limited to a maximum amount of 100% of the fixed component of the total remuneration, unless the General Shareholders' Meeting resolves to increase such percentage up to a maximum of 200%. As explained in detail in section 5.7 of this report, the General Meeting held on March 15, 2019 authorized the increase of this threshold, up to 200%, to a maximum of 285 Risk Takers.

In addition, as regards executive directors, the BBVA Directors' Remuneration Policy also provides that, upon receipt of the shares, executive directors will not be allowed to transfer a number of shares equivalent to twice their annual fixed remuneration for at least three years after their delivery.

In addition, as indicated above, up to 100% of the Annual Variable Remuneration of each member of the Identified Staff corresponding to each year will be subject to malus and 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 the 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 the member of the Identified Staff.
- b. Regulatory sanctions or judicial convictions due to events that could be attributable to a specific unit or to the staff responsible for such events.
- c. Significant failures of risk management committed by the Bank or by a business or risk control unit, to which the wilful misconduct or gross negligence of the member of the Identified Staff was a contributing factor.
- d. Restatement of the Bank's annual accounts, except where such restatement is due to a change in applicable accounting regulations.

To this end, the Bank will compare the performance assessment carried out for the member of the Identified Staff with the ex post behavior of some of the criteria that contributed to achieve the targets. Both malus and clawback will apply to the Annual Variable Remuneration corresponding to the year in which the event giving rise to the application of the arrangement occurred, and will remain in force during the deferral and retention period applicable to said Annual Variable Remuneration.

Notwithstanding the foregoing, in the event that the above scenarios give rise to a dismissal or termination of contract due to serious and guilty breach of duties of the member of the Identified Staff, malus arrangements may apply to the entire deferred Annual Variable Remuneration pending payment at the date on which the dismissal or termination decision is adopted, in light of the extent of the damage caused.

In any case, variable remuneration will be paid or will vest only if it is sustainable in accordance with the situation of the BBVA Group as a whole, and if justified based on the results of the Bank, the business unit, and the member of the Identified Staff concerned.

On the other hand, in accordance with the provisions of the BBVA Group's 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. Under no circumstances will poor results or misconduct be rewarded, and compensation may not be granted in cases where there have been clear and serious breaches that justify the immediate termination of the contract or the dismissal of the member of the Identified Staff. With regard to BBVA directors, the Bank has no commitments to pay severance indemnity.

As regards the pension policy, this shall remain compatible at all times with the entity's long-term business strategy, objectives and interests. To this end, BBVA maintains a pension system, which is arranged based on the geographies and coverage offered to different groups of employees. In general, the Bank's pension schemes to cover the retirement contingency are defined-contribution. Contributions to the

pension schemes of the Group's employees will be carried out within the framework of applicable labor regulations and individual or group agreements applicable in each entity, sector or geographic area. BBVA determines the characteristics of the pension commitments based on the different professional categories of employees, including the pensionable salary.

The basis for the calculation of the benefits (commitments for retirement, death and disability) reflect fixed annual amounts; no temporary fluctuations exist derived from variable components or individual results.

With regard to executive directors and members of Senior Management, these shall be subject to the specificities set out in applicable regulations regarding "discretionary pension benefits." Thus, 15% of the annual contributions agreed to cover the pension commitments will be based on variable components, and will be considered as "discretionary pension benefits", subject to share delivery, retention and clawback conditions established under applicable regulations and remuneration policies. Detailed information on the implementation of the obligations contracted in terms of pensions during the financial year can be found in Note 54 of the Annual Report corresponding to the Bank's Consolidated Financial Statements for the year 2019, which is available on the Bank's corporate website ([www.bbva.com](http://www.bbva.com)).

With regard to BBVA's non-executive directors, a detailed description of its remuneration system is included in the Directors' Remuneration Policy. A description of the implementation of this system is outlined in the Annual Report on the Remuneration of BBVA Directors for 2019, both documents are available on the Bank's corporate website ([www.bbva.com](http://www.bbva.com)).

As set out in those documents, non-executive directors do not receive variable remuneration; they receive a fixed annual amount in cash as member 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 relative amount of remuneration shall be set by the Board, at the proposal of the Remunerations Committee, depending on the nature of the assigned functions and the dedication and responsibility required in each case.

In addition, the Bank has a remuneration system in BBVA shares with deferred delivery to non-executive directors, which has been approved by the General Meeting. This system comprises the annual allocation to non-executive directors, as part of their fixed remuneration, of a number of "theoretical shares" of the Bank, which will vest, where applicable, after they leave directorship on grounds other than serious breach of duties. The annual number of "theoretical shares" to be allocated to each non-executive director shall be equivalent to 20% their total remuneration in cash received the previous year, according to the average closing prices of the BBVA share during the 60 trading sessions prior to the Annual General Shareholders' Meetings approving the corresponding financial statements for each financial year.

## 5.4. 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's Remuneration Policy provides for the entitlement by the members of the Identified Staff to 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 objectives 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 linked to the results of the BBVA Group and varies depending on them.

Thus, the application of the scales of achievement defined for each indicator, based on the established objectives, has determined the amount of the Annual Variable Remuneration of the executive directors. With regard to remaining members of the Identified Staff, in addition to the results of the Group's annual performance indicators, the amount of their Annual Variable Remuneration has been determined in accordance with the level of achievement of strategic objectives (both financial and non-financial) set at the level of each area and for each individual, according to the weights associated with each indicator and, as previously indicated, have been determined depending on the types of functions carried out by each beneficiary (business, support, or control).

During the 2019 financial year, the BBVA Group achieved a profit without extraordinary items of 4,830 million euros, an increase of 2.7% compared to 2018. Among other reasons, this result is due to the increase in recurring revenue and to the containment of operating costs. This profit is the figure that has been considered for incentive purposes and does not include the negative impact of 1,318 million euros derived from the accounting of the deterioration in the valuation of the BBVA USA goodwill, given that it does not affect either the net tangible equity, capital or liquidity, nor the ability to distribute dividends, nor the amount of dividends paid by BBVA Group.

Consequently, the result and the evolution of the annual performance indicators for 2019 Annual Variable Remuneration, in the case of executive directors, and also included as Group indicators for the remaining members

of the Identified Staff, has represented an improvement compared to the previous year in the four financial indicators (Attributable Profit, RORC, Efficiency Ratio and Tangible Book Value), exceeding the objective established by the Board for the financial year.

Regarding the non-financial indicators, the Digital Sales indicator had an achievement of 113.12 points. The achievement of the Net Promoter Score (IreNe) has remained slightly below target.

Accordingly, the Annual Variable Remuneration of the members of the Identified Staff is linked to 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 5.3 of this report.

## 5.5. Description of the criteria used to take into consideration present and future risk in the remuneration processes

In line with section 5.3 of this report, the remuneration policy applicable to Risk Takers in 2019 includes the following elements:

- Balance between the fixed and variable components of total remuneration.
- *Ex-ante* adjustments, compliance with which have been verified prior to the accrual and determination of the Annual Variable Remuneration.
- The use of financial indicators for the evaluation of results, which incorporate adjustments for current and future risk.
- Consideration, in the measurement of the 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 that carry out control functions, to reinforce the independence and objectivity of these functions.
- At least 50% of the Annual Variable Remuneration is established in shares.
- Deferral clauses, designed so that a substantial portion of the Annual Variable Remuneration – 60% in the case of executive directors, 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. The deferral period established for the Annual Variable Remuneration for 2019 financial year is five years for executive directors and Senior Management and three years for the remaining Risk Takers.
- Incorporation of multi-year performance indicators, measured over a period of three years from the beginning of the deferral period, to which weightings have been assigned and for which scales of achievement have been established, so that, in the event that the objectives set for each indicator are not obtained, the Deferred Portion of the Annual Variable Remuneration may be reduced, even in its entirety, yet never be increased.
- Mandatory retention periods of any shares delivered as Annual Variable Remuneration, so that the beneficiaries cannot freely dispose of them until one year after their delivery date, except for those which sale would be required to honour the payment of taxes accruing on the shares delivered.
- Prohibition of carrying out personal hedging strategies or insurance related to remuneration and liability.
- Limitation of the variable component of the remuneration for the year to 100% of the fixed component of total remuneration, except for the maximum of 285 employees for whom the BBVA General Meeting, authorized the application of a maximum ratio of 200%, as explained in detail in section 5.7 of this report.
- Submission of the entire Annual Variable Remuneration to malus and clawback arrangements during the whole deferral and retention period, under the terms indicated in Section 5.3.

## 5.6. Main parameters and motivation of any component of the possible variable compensation plans and other non-cash benefits

The main parameters of 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.

## 5.7. Ratios between fixed and variable remuneration of the Identified Staff

As detailed in section 5.3 above, the fixed components and the variable components of total 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 even 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, adapted in each case to the reality existing in the different countries in which the members of the Identified Staff perform their activities or functions.

To this end, the Bank has defined "target" ratios between fixed remuneration and "target" 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, as set forth under applicable legislation, the variable component of the remuneration of the Identified Staff corresponding to a financial year shall be limited to a maximum amount of 100% of the fixed component of total remuneration, except for those functions for which the General Meeting resolves to increase this percentage up to a maximum of 200%.

For these purposes, the General Meeting held on March 15, 2019 resolved to raise 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 accordance with the Report issued by the Board of Directors for these purposes on February 11, 2019. Thus, the Bank 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 Group's risk profile, enabling subsidiaries of Banco Bilbao Vizcaya Argentaria, S.A., to likewise apply said maximum level to their professionals, pursuant to the Report issued in this regard by the Board of Directors of Banco Bilbao Vizcaya Argentaria, S.A., on February 11, 2019, and which has been made available to shareholders as of the date on which this General Meeting was convened".*

This resolution was approved by the General Meeting for a maximum of 285 Risk Takers, with a favorable vote of 98.24% on 64.29% of the capital present or represented at said General Meeting.

The proposal submitted to the General Shareholders' Meeting included the detailed recommendation of the Board, explaining the reasons and scope of the decision 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 Report of the Board, the persons for whom approval of the higher level of remuneration for 2019 financial year was requested performed one of the following functions:

- Members of the BBVA Board of Directors who are executive 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, South America countries, 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 assigned to a business area, including activities focused on digital transformation.

## 5.8. Quantitative information on remuneration of the Identified Staff

After year-end 2019, in accordance with the results obtained, described in Section 5.4 above, the Annual Variable Remuneration of the members of the Identified Staff corresponding to said year was calculated.

In accordance with the settlement and payment system of the Annual Variable Remuneration for 2019 financial year for the Identified Staff:

- The Upfront Portion will be paid, if the conditions are met, in 2020, 40% in the case of 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 subject to the multi-year performance indicators mentioned in section 5.3 of this report, to be paid, if conditions are met, in 2023. For executive directors and members of Senior Management, the Deferred Portion will be paid, if applicable, according to the following schedule: 60% in 2023, 20% in 2024, and the remaining 20% in 2025.

This gives rise, among other things, to the amounts presented in the following table, broken down by types of employees:

**Table 84.** Remuneration of the Identified Staff for the 2019 financial year (Thousand Euros or number of shares)

Remuneration for Identified Staff in 2019	Executive Directors	Non-executive Directors	Senior Management <sup>(1)</sup>	Rest of Identified Staff	Total Identified Staff
Number of beneficiaries of fixed remuneration	3	12	15	550	580
Amount of total fixed remuneration for 2019 <sup>(2)</sup>	7,037	4,239	14,652	209,897	235,825
Number of beneficiaries of variable remuneration	3	-	15	528	546
Amount of total variable remuneration for 2019 <sup>(3)</sup>	6,411	-	6,363	89,564	102,338
In cash	2,821	-	2,811	44,630	50,262
Number of BBVA shares	713,891	-	709,473	8,994,881	10,418,245
Variable remuneration corresponding to 2019 payable in 2020	2,564	-	2,583	51,721	56,868
In cash	1,282	-	1,291	25,861	28,434
Number of BBVA shares	254,960	-	257,907	5,176,666	5,689,533
Outstanding deferred variable remuneration corresponding to 2019 <sup>(4)</sup>	3,847	-	3,780	37,842	45,469
In cash	1,539	-	1,520	18,769	21,827
Number of BBVA shares	458,931	-	451,566	3,818,215	4,728,712

<sup>(1)</sup> Includes information of the members of Senior Management, excluding executive directors, that had such condition until December 31, 2019.

<sup>(2)</sup> Fixed remuneration received in 2019, including cash and in kind, except as regards benefit schemes.

In the case of executive directors and members of the Senior Management, contributions made by the Bank in 2019 in relation to pension commitments are detailed in Note 54 of the Annual Report of BBVA's Consolidated Financial Statements.

In the case of non-executive directors, they have a fixed remuneration system with deferred delivery of shares after the termination. Information regarding such system, including the number of "theoretical shares" allocated in 2019 (corresponding to 20% their fixed compensation received the previous year), is displayed in Note 54 of the Annual Report of BBVA's Consolidated Financial Statements.

<sup>(3)</sup> Total variable remuneration for the 2019 financial year is included (including Annual Variable Remuneration and other payments considered variable in accordance with applicable regulations). With regard to "discretionary pension benefits" (15% of the annual contribution agreed to cover the retirement contingency for executive directors and senior management), the details are included in Note 54 of the Annual Report corresponding to the BBVA Consolidated Annual Accounts, in the section on pension obligations.

<sup>(4)</sup> Includes variable remuneration corresponding to 2019, that is deferred and pending payment. This remuneration is subject to multi-year performance indicators related to the Risk Appetite Framework and the return to shareholders, that can reduce, even in its entirety (but never increase), the outstanding deferred amounts.

<sup>(5)</sup> Provisional data for Turkey.

**Table 85.** Extraordinary remuneration of the Identified Staff for the 2019 financial year (Thousand Euros)

Extraordinary remuneration	Executive Directors	Non-executive directors	Senior Management	Rest of Identified Staff	Total Identified Staff
Number of beneficiaries of guaranteed bonuses	-	-	-	1	1
Total amount of guarantees bonuses granted in 2019	-	-	-	360	360
Number of beneficiaries of hiring incentives	-	-	-	2	2
Total amount of hiring incentives paid in 2019	-	-	-	1,088	1,088
Number of beneficiaries of severance indemnity	-	-	4	23	27
Total amount of severance indemnity paid in 2019 <sup>(1)</sup>	-	-	9,568	23,174	32,742
Upfront payment	-	-	8,368	19,164	27,532
Deferred amount	-	-	1,199	4,010	5,210

<sup>(1)</sup> Includes the amount of the mandatory indemnity in accordance with labour regulations, as well as, if applicable, the additional amount to this legal indemnity (which is considered variable remuneration in accordance with the solvency regulations applicable to this group) and, if applicable, the amounts corresponding to the notice clauses, all in accordance with that contained in the contracts of certain members of the Identified Group.

On the other hand, non-competition agreements have been signed with some beneficiaries for a total amount of 19,031 thousand euros, that will be paid periodically from the moment the member of the Identified Collective leaves, during the non-competition period.

Of the total indemnities paid in 2019, the highest paid to a single member amounts to €5,602 thousand.

Furthermore, in accordance with Rule 40.1 of Circular 2/2016 of the Bank of Spain, it is stated that of the 27 cases of payments for early termination of contract, there is no single case in which the amount has exceeded two annuities of the fixed remuneration.

Furthermore, in 2019, the amounts deferred from prior years were paid in arrears for the financial year. The following table shows the amounts paid in both cash and shares, as well as the deferred amounts that remain outstanding as of December 31, 2019:

**Table 86.** Deferred variable remuneration from financial years prior to 2019 (Thousand Euros or number of shares)

Deferred variable remuneration for years prior to 2019 for the Identified Staff	Executive Directors <sup>(5)</sup>	Non-executive directors	Senior Management <sup>(6)</sup>	Rest of Identified Staff	Total Identified Staff
<b>Vested<sup>(1)</sup></b>					
In cash	725	-	1,263	24,505	26,493
Number of BBVA shares	93,824	-	163,215	3,198,608	3,455,647
<b>Outstanding<sup>(2)</sup></b>					
In cash	2,873	-	3,068	63,933	69,875
Number of BBVA shares	611,308	-	621,783	10,743,341	11,976,432
<b>Implicit ex-post adjustments applied in the year<sup>(3)</sup></b>	<b>(135)</b>	<b>-</b>	<b>(227)</b>	<b>(3,744)</b>	<b>(4,105)</b>
<b>Explicit ex-post adjustments applied in the year<sup>(4)</sup></b>	<b>(13)</b>	<b>-</b>	<b>(5,266)</b>	<b>(416)</b>	<b>(5,694)</b>

<sup>(1)</sup> Includes the amounts paid in 2019 of the deferred variable remuneration corresponding to previous years and their updating (total amount of the deferred variable remuneration for the year 2015 including the downward adjustment for long-term indicators).

<sup>(2)</sup> The amounts pending payment at 31 December 2019 of deferred variable remuneration corresponding to previous years are included (the total amount of variable remuneration deferred from 2016, 2017 and 2018).

<sup>(3)</sup> Adjustment derived from the decrease in the value of the shares of deferred variable remuneration corresponding to previous years and delivered in 2019.

<sup>(4)</sup> Adjustment derived from the result of the multi-year indicators, which meant a 1% reduction in the deferred amounts of variable remuneration for the year 2015 paid in 2019.

<sup>(5)</sup> The amounts of deferred variable remuneration corresponding to previous years, paid in 2019, are detailed, individually for each executive director, in Note 54 of the Annual Report of BBVA's Consolidated Financial Statements. As regards outstanding deferred variable remuneration at the end of 2019, the amounts corresponding to each executive director are as follows: - The entire 2016 deferred annual variable remuneration: 591 thousand and 91,915 BBVA shares in the case of the President; 124 thousand euros and 32,047 BBVA shares in the case of the CEO; and 89 thousand euros and 13,768 BBVA shares in the case of the Director of GE&PA.

- The entire 2017 deferred annual variable remuneration: 675 thousand euros and 139,488 BBVA shares for the President; 319 thousand euros and 39,796 BBVA shares for the CEO and 105 thousand euros and 21,654 BBVA shares for the Director of GE&PA.

- The entire 2018 deferred annual variable remuneration: 574 thousand euros and 180,785 BBVA shares in the case of the Chairman; 305 thousand euros and 61,901 BBVA shares in the case of the CEO and 95 thousand euros and 29,954 BBVA shares in the case of the Director of GE&PA.

<sup>(6)</sup> Includes information of the members of Senior Management, excluding executive directors, that had such condition until December 31, 2019.

The following table shows the total remuneration of the Identified Staff in 2019 by activity area:

**Table 87.** Remuneration of the Identified Staff for the 2019 financial year, by activity areas (Thousand Euros)

Activity area	Number of people	2019 total remuneration <sup>(1)</sup>	Average variable/fixed ratio
Executive Directors	3	13,448	81%
Non-executive Directors	12	4,239	0%
Senior Management <sup>(2)</sup>	15	21,015	42%
Commercial Banking <sup>(3)</sup>	177	110,635	45%
Investment Banking <sup>(4)</sup>	101	58,111	66%
Asset Management <sup>(5)</sup>	24	12,489	57%
Corporate functions <sup>(6)</sup>	132	73,541	36%
Control functions <sup>(7)</sup>	116	44,684	25%
<b>Total Identified Staff</b>	<b>580</b>	<b>338,163</b>	

<sup>(1)</sup> Fixed remuneration paid in 2019 and variable remuneration accrued in 2019.

<sup>(2)</sup> Includes information of the members of Senior Management, excluding executive directors, that had such condition until December 31st, 2019.

<sup>(3)</sup> Includes Retail, Business, Corporate and Insurance activities.

<sup>(4)</sup> Includes trading and other Investment Banking activities.

<sup>(5)</sup> Includes Asset Management and Private Banking activities.

<sup>(6)</sup> Includes support areas of the BBVA Group and business support areas (Finance, Legal, Human Resources, etc.).

<sup>(7)</sup> Includes Risk Management, Internal Audit and Compliance activities.

<sup>(8)</sup> Provisional data for Turkey.

On the other hand, the number of employees with a remuneration equal to or greater than 1 million euros is as follows:

**Table 88.** Number of individuals with total remuneration exceeding €1 million during the 2019 financial year

<b>Total remuneration in 2019<sup>(1)</sup></b>	<b>Number of individuals</b>
Between 6 million and 7 million euro	1
Between 5 million and 6 million euro	1
Between 4.5 million and 5 million euro	0
Between 4 million and 4.5 million euro	1
Between 3.5 million and 4 million euro	1
Between 3 million and 3.5 million euro	1
Between 2.5 million and 3 million euro	2
Between 2 million and 2.5 million euro	5
Between 1.5 million and 2 million euro	7
Between 1 million and 1.5 million euro	40
<b>Total</b>	<b>59</b>

<sup>(1)</sup> Sum of fixed compensation for the year 2019 and variable compensation accrued in 2019. The deferred component of variable compensation is subject to multi-year indicators and targets which could reduce (never increase) such deferred component and, therefore, total compensation for the year 2019.

<sup>(2)</sup> Provisional data for Turkey.

# 6. Information on the corporate governance system

As well as the information that has already been dealt with in this Report and in relation to the other information on the corporate governance system in Part Eight of the CRR, readers are referred to the Annual Corporate Governance Report for the 2019 financial year. This is an integral part of the Management Report accompanying the BBVA Group's

Consolidated Annual Accounts and the Policy on the Board of Directors' Recruitment, Appointment, Renewal and Diversity both of which are accessible on the corporate website ([www.bbva.com](http://www.bbva.com)).



# 7. Additional information

There is an uncertainty about the consequences of the so-called COVID-19 pandemic (Coronavirus) that started in China, but spread to other countries, and about the impact it may have on the global economy, the deterioration of the global assets and the increase in global financial volatility.

In this regard, various national and supranational authorities are taking measures to mitigate its effects. Among others, on March 12, 2020, the EBA and ECB have announced transitional measures to mitigate the impacts of COVID-19 on the European banking sector.

