# 54. Risk Management

The Group is subject to several risks during the course of its business. The risks from different companies of the Group are managed centrally, in coordination with the local departments and considering the specific risks of each business.

The Group's risk-management policy is designed to permanently ensure an adequate relationship between its own funds and the business it develops, as well as the corresponding evaluation of the risk/return profile by business line. Under this scope, the monitoring and control of the main types of financial risks to which the Group's business is subject to – credit, market, liquidity and operational – is particularly relevant.

## Main types ok risk

Credit – Credit risk is associated with the degree of uncertainty of the expected returns as a result of the inability either of the borrower (and the guarantor, if any) or of the issuer of a security or of the counterparty to an agreement to fulfil their obligations.

Market – Market risks consist of the potential losses that might occur in a given portfolio as a result of changes in interest or exchange rates and/or in the prices of the different financial instruments of the portfolio, considering not only the correlations that exist between those instruments but also their volatility.

Liquidity – Liquidity risk reflects the Group's inability to meet its obligations at maturity without incurring in significant losses resulting from the deterioration of the funding conditions (funding risk) and/or from the sale of its assets below market value (market liquidity risk).

Operational – Operational risk consists in the potential losses resulting from failures or inadequacies in internal procedures, persons or systems, and also in the potential losses resulting from external events.

Real Estate market – Real Estate market risk is related to the potential loss in which the Bank may incur due to changes in the prices of real estate assets owned by the Group.

Pension fund – Pension fund risk consists in the potential losses in which the Bank may incur due to risk related to the uncertainty about required contributions for defined benefit pension plans or to market rates fluctuations that might cause direct financial losses or indirect in the pension fund's assets.

Business and strategy – The risk related to business and strategy consists in the potential losses due to unpredictable changes in the economic and competitive framework in which the Group develops its activity, changes in the business strategy, risk of depreciation on strategic shareholdings that are out of the consolidation perimeter, and misalignment between IT's structure and the Bank's strategy.

Legal and compliance - Legal and compliance risk is related to losses that the Bank may incur as a result of violations or non-compliance with laws and regulations, encompassing the risk of financial crime (related to violations or non-conformities arising from obligations in matters prevention of money laundering and financing of terrorism), the risk of conduct (related to violations or non-compliance with applicable legislation and regulations in force originating, in particular, from fraud, negligent behaviour or design of products and services), the risk associated with non-compliance with personal data protection and the risk of litigation.

Risk of foreign currency loans' conversion in Poland – This risk is related to eventual losses for the Group due to approval of law regarding rules of conversion into zlotys of loans originally based in foreign currency.

## Internal organisation

Banco Comercial Português Board of Directors is responsible for the definition of the risk policy, including the approval of the principles and rules of the highest level to be followed in risk management, as well as the guidelines dictating the allocation of capital to the business lines.

The Board of Directors, through the Audit Committee, ensures the existence of adequate risk control and of risk-management systems at Group level and for each entity. The Board of Directors also approves the risk-tolerance level acceptable to the Group, proposed by its Executive Committee.

The Risk Committee is responsible for monitoring the overall levels of risk incurred, ensuring that these are compatible with the goals and strategies approved for the business.

The Chief Risk Officer is responsible for the control of risks in all Group entities, for the identification of all risks to which the Group activity is exposed and for the proposal of measures to improve risks control. The Chief Risk Officer also ensures that risks are monitored on an overall basis and that there is alignment of concepts, practices and goals in risk management. The activity of every entity included within the Banco Comercial Português consolidation perimeter is governed by the principles and decisions established centrally by the Risk Committee and the main subsidiaries are provided with Risk Office structures which are established in accordance with the risks inherent to their particular business. A Risk Control Commission has been set up at each relevant subsidiary, responsible for the control of risks at local level, in which the Chief Risk Officer takes part.

The Group Head of Compliance is responsible for implementing systems for monitoring the compliance with legal obligations and responsibilities to which the Bank is subject, as well, the prevention, monitoring and reporting of risks in organizational processes, which include, among others, the prevention and repression of money laundering, combating financing of terrorism, prevention of conflicts of interest, issues related to abuse of market and compliance with the disclosure requirements to customers.

## Risk assessment

### Credit Risk

Credit granting is based on a prior classification of the customers' risk and on a thorough assessment of the level of protection provided by the underlying collateral. In order to do so, a single risk-notation system has been introduced, the Rating Master Scale, based on the expected probability of default, allowing greater discrimination in the assessment of the customers and better establishment of the hierarchies of the associated risk.

The Rating Master Scale also identifies those customers that show a worsening credit capacity and, in particular, those classified as being in default. All rating and scoring models used by the Group have been duly calibrated for the Rating Master Scale. The protection-level concept has been introduced as a crucial element of evaluation of the effectiveness of the collateral in credit-risk mitigation, leading to a more active collateralization of loans and to a better adequacy of pricing regarding the risk incurred.

The gross Group's exposure to credit risk (original exposure) is presented in the following table:

(Thousands of euros)

| Risk items | 2019 | 2018 |
|---|---|---|
| Central Governments or Central Banks | 15,734,930 | 15,231,511 |
| Regional Governments or Local Authorities | 818,986 | 806,871 |
| Administrative and non-profit Organisations | 301,479 | 144,656 |
| Multilateral Development Banks | 41,422 | 19,139 |
| Other Credit Institutions | 3,155,805 | 2,738,662 |
| Retail and Corporate customers | 66,252,288 | 60,735,561 |
| Other items (*) | 9,863,160 | 10,072,372 |
| | 96,168,070 | 89,748,772 |

Note: gross exposures of impairment and amortization, in accordance with the prudential consolidation perimeter. Includes securitization positions.

(*) In addition to positions in equity, collective investment and securitization, the Other items contain other assets subject to credit risk in accordance with article 134 of the CRR.

The evaluation of the risk associated to the loan portfolio and quantification of the respective losses expected, considers the following methodological notes.

### a) Collaterals and Guarantees

On the risk evaluation of an operation or of a group of operations, the mitigation elements of credit risk associated to those operations are considered in accordance with the rules and internal procedures that fulfil the requirements defined by the regulations in force, also reflecting the experience of the loans recovery areas and the Legal Department opinions with respect to the entailment of the various mitigation instruments.

The collaterals and the relevant guarantees can be aggregated in the following categories:

- financial collaterals, real estate collaterals or other collaterals;
- receivables;
- first demand guarantees, issued by banks or other entities with Risk Grade 7 or better on the Rating Master Scale;
- personal guarantees, when the persons are classified with Risk Grade 7 or better;
- credit derivatives.

The financial collaterals accepted are those that are traded in a recognised stock exchange, i.e., on an organized secondary market, liquid and transparent, with public bid-ask prices, located in countries of the European Union, United States, Japan, Canada, Hong Kong or Switzerland.

In this context, it is important to refer that the Bank's shares are not accepted as financial collaterals of new credit operations and are only accepted for the reinforcement of guarantees of existing credit operations, or in restructuring process associated to credit recoveries.

Regarding guarantees and credit derivatives, it can be applied the substitution principle by replacing the Risk Grade of the client by the Risk Grade of the guarantor, (if the Risk of Grade Degree of the guarantor is better than the client's), when the protection is formalized through:

- State, Financial Institutions or Mutual Guarantee Societies guarantees exist;
- personal guarantees (or, in the case of Leasing, there is a recovery agreement of the provider);
- Credit derivatives;
- Formalization of the clause of the contracting party in leasing contracts in which it is an entity that is in a relationship of dominion or group with the lessee.

An internal level of protection is attributed to all credit operations at the moment of the credit granting decision, considering the credit amount as well as the value and type of the collaterals involved. The protection level corresponds to the loss reduction in case of default that is linked to the various collateral types, considering their market value and the amount of the associated exposure.

In the case of financial collaterals, adjustments are made to the protection value by the use of a set of haircuts, in order to reflect the price volatility of the financial instruments.

In the case of real estate mortgages, the initial appraisal of the real estate value is done during the credit analysis and before decision process.

Either the initial evaluations or the subsequent reviews carried out are performed by external expert valuers and the ratification process is centralized in the Appraisals Unit, which is independent of the clients' areas.

In any case, they are the subject to a written report, in a standardized digital format, based on a group of predefined methods that are aligned with the sector practices – income, replacement cost and/or market comparative - mentioning the obtained value, for both the market value and for purposes of the mortgage guarantee, depending on the type of the real estate. The evaluations have a declaration/certification of an expert valuer since 2008, as requested by Regulation (EU) 575/2013 and Law 153/2015 of 14 September and are ratified by the Appraisals Unit.

Regarding residential real estate, after the initial valuation and in accordance with Notice n. 5/2006 of Bank of Portugal and e CRR 575/2013, the Bank monitors the respective values through market indexes. If the index is lower than 0.9, the Bank revaluates choosing one of the following two methods:

i) - depreciation of the property by direct application of the index, if the amount owed does not exceed Euros 300,000;
ii) - review of the property value by external valuators, depending on the value of the credit operation, and in accordance with the established standards from ECB and Bank of Portugal.

For all non-residential real estate, the Bank also monitors its values through market indexes and to the regular valuation reviews with the minimum periodicities in accordance with the Regulation (EU) 575/2013, in the case of offices, commercial spaces, warehouses and industrial premises.

For all real estate (residential or non-residential) for which the monitoring result in significant devaluation of the real estate value (more than 10%), a valuation review is subsequently carried out by an expert valuer, preserving the referred i) above.

For the remaining real estate (land or country side buildings for example) there are no market indexes available for the monitoring of appraisal values, after the initial valuations. Therefore, for these cases and in accordance with the minimum periodicity established for the monitoring and reviewing of this type of real estate, valuation reviews are carried out by expert valuers.

The indexes currently used are supplied to the Bank by an external specialized entity that, for more than a decade, has been collecting and processing the data upon which the indexes are built.

In the case of financial collaterals, their market value is daily and automatically updated, through the IT connection between the collaterals management system and the relevant financial markets data.

### b) Risk grades

Credit granting is based on the previous risk assessment of clients and also on a rigorous assessment of the protection level provided by the underlying collaterals. For this purpose, a single risk grading system is used - the Rating Master Scale - based on Probability of Default (PD), allowing for a greater discriminating power in clients' assessment and for a better hierarchy of the associated risk. The Rating Master Scale also allows to identify clients that show signs of degradation in their credit capacity and, in particular, those that are classified in a default situation. All rating systems and models used by the Group were calibrated for the Rating Master Scale.

Aiming at an adequate assessment of credit risk, the Group defined a set of macro segments and segments which are treated through different rating systems and models that relate the internal risk grades and the clients' PD, ensuring a risk assessment that considers the clients' specific features in terms of their respectively risk profiles.

The assessment made by these rating systems and models result in the risk grades of the Master Scale, that has fifteen grades, where the last three correspond to relevant downgrades of the clients' credit quality and are referred to by "procedural risk grades": 13, 14 and 15, that correspond, in this order, to situations of increased severity in terms default, as risk grade 15 is a Default situation.

The non-procedural risk grades are attributed by the rating systems through automatic decision models or by the Rating Division – a unit which is independent from the credit analysis and decision areas and bodies- and are reviewed/updated periodically or whenever this is justified by events.

The models within the various rating systems are regularly subject to validation, made by the Models Validation and Monitoring Office, which is independent from the units that are responsible for the development and maintenance of the rating models.

The conclusions of the validations by the Models Validation and Monitoring Office, as well the respective recommendations and proposal for changes and/or improvements, are analysed and ratified by a specific Validation Committee, composed in accordance to the type of model analysed. The proposals for models' changes originated by the Validation Committee are submitted to the approval of the Risk Committee.

The following table lists the recognised External Credit Assessment Institutions (ECAI) and the external ratings equivalence to the Rating Master Scale of the Group:

| | External ratings | | | |
|---|---|---|---|---|
| Internal risk grade | Fitch | S&P | Moody's | DBRS |
| 1 | AAA | AAA | Aaa | AAA |
| 1 | AA+ | AA+ | Aa1 | AA (high) |
| 2 | AA | AA | Aa2 | AA |
| 2 | AA- | AA- | Aa3 | AA (low) |
| 3 | A+ | A+ | A1 | A (high) |
| 3 | A | A | A2 | A |
| 4 | A- | A- | A3 | A (low) |
| 4 | BBB+ | BBB+ | Baa1 | BBB (high) |
| 5 | BBB | BBB | Baa2 | BBB |
| 6 | BBB- | BBB- | Baa3 | BBB (low) |
| 7 | BB+ | BB+ | Ba1 | BB (high) |
| 8 | BB | BB | Ba2 | BB |
| 9 | BB- | BB- | Ba3 | BB (low) |
| 10 | B+ | B+ | B1 | B (high) |
| 11 | B | B | B2 | B |
| 12 | ≤ B- | ≤ B- | ≤ B3 | ≤ B- |

### c) Impairment and Write-offs

The credit impairment calculation as at 31 December 2019 and 2018 integrates the general principles defined in International Financial Reporting Standards (IFRS 9) and the guidelines issued by the Bank of Portugal through a Circular Letter "CC/2018/00000062", in order to align the calculation process used in the Group with the best international practices in this area.

As at 31 December 2019, the financial instruments subject to impairment requirements under IFRS 9, (do not include equity instruments as accounting policy 1 C1.1.2), analysed by stage, are detailed in the following tables:

(Thousands of euros)

| | 2019 | | | | |
|---|---|---|---|---|---|
| | Gross exposure | | | | |
| **Category** | **Stage 1** | **Stage 2** | **Stage 3** | **POCI** | **Total** |
| Financial assets at amortised cost | | | | | |
| Loans and advances to credit institutions (note 20) | 890,357 | 3,006 | - | - | 893,363 |
| Loans and advances to customers (note 21) | 40,864,110 | 7,220,484 | 4,058,116 | 122,141 | 52,264,851 |
| Debt instruments (note 22) | 3,116,343 | 74,515 | 9,549 | - | 3,200,407 |
| Debt instruments at fair value | | | | | |
| through other comprehensive income (note 23) (*) | 13,179,281 | - | 1,177 | - | 13,180,458 |
| Guarantees and other commitments (note 45) | 12,022,296 | 1,793,631 | 483,094 | 123 | 14,299,144 |
| **Total** | 70,072,387 | 9,091,636 | 4,551,936 | 122,264 | 83,838,223 |

The gross exposure to guarantees and other commitments includes the balances of guarantees granted, irrevocable credit lines and revocable commitments, as detailed in note 45.

(Thousands of euros)

| | 2019 | | | | |
|---|---|---|---|---|---|
| | Impairment losses | | | | |
| **Category** | **Stage 1** | **Stage 2** | **Stage 3** | **POCI** | **Total** |
| Financial assets at amortised cost | | | | | |
| Loans and advances to credit institutions (note 20) | 161 | 207 | - | - | 368 |
| Loans and advances to customers (note 21) | 94,766 | 190,878 | 2,117,756 | 13,622 | 2,417,022 |
| Debt instruments (note 22) | 4,669 | 382 | 9,480 | - | 14,531 |
| Debt instruments at fair value | | | | | |
| through other comprehensive income (note 23) (*) | - | - | - | - | - |
| Guarantees and other commitments (note 38) | 10,329 | 6,330 | 99,899 | 2 | 116,560 |
| **Total** | 109,925 | 197,797 | 2,227,135 | 13,624 | 2,548,481 |

(Thousands of euros)

| | 2019 | | | | |
|---|---|---|---|---|---|
| | Net exposure | | | | |
| **Category** | **Stage 1** | **Stage 2** | **Stage 3** | **POCI** | **Total** |
| Financial assets at amortised cost | | | | | |
| Loans and advances to credit institutions (note 20) | 890,196 | 2,799 | - | - | 892,995 |
| Loans and advances to customers (note 21) | 40,769,344 | 7,029,606 | 1,940,360 | 108,519 | 49,847,829 |
| Debt instruments (note 22) | 3,111,674 | 74,133 | 69 | - | 3,185,876 |
| Debt instruments at fair value | | | | | |
| through other comprehensive income (note 23) (*) | 13,179,281 | - | 1,177 | - | 13,180,458 |
| Guarantees and other commitments (notes 38 and 45) | 12,011,967 | 1,787,301 | 383,195 | 121 | 14,182,584 |
| **Total** | 69,962,462 | 8,893,839 | 2,324,801 | 108,640 | 81,289,742 |

(*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 C1.5.1.2.

As at 31 December 2018, the financial instruments subject to impairment requirements under IFRS 9 (do not include equity instruments as accounting policy 1 C1.1.2), analysed by stage, are detailed in the following tables:

(Thousands of euros)

| | 2018 | | | | |
|---|---|---|---|---|---|
| | Gross Exposure | | | | |
| Category | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| Financial assets at amortised cost | | | | | |
| Loans and advances to credit institutions (note 20) | 880,560 | 10,657 | 669 | - | 891,886 |
| Loans and advances to customers (note 21) | 35,658,333 | 7,235,837 | 5,518,658 | 4 | 48,412,832 |
| Debt instruments (note 22) | 3,080,409 | 264,307 | 72,007 | - | 3,416,723 |
| Debt instruments at fair value | | | | | |
| through other comprehensive income (note 23) (*) | 13,797,971 | - | 4,887 | - | 13,802,858 |
| Guarantees and other commitments (note 45) | 10,702,195 | 1,491,003 | 640,274 | - | 12,833,472 |
| **Total** | 64,119,468 | 9,001,804 | 6,236,495 | 4 | 79,357,771 |

(Thousands of euros)

| | 2018 | | | | |
|---|---|---|---|---|---|
| | Impairment losses | | | | |
| Category | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| Financial assets at amortised cost | | | | | |
| Loans and advances to credit institutions (note 20) | 410 | 774 | 669 | - | 1,853 |
| Loans and advances to customers (note 21) | 94,542 | 183,932 | 2,573,432 | - | 2,851,906 |
| Debt instruments (note 22) | 4,542 | 507 | 36,660 | - | 41,709 |
| Guarantees and other commitments (note 38) | 10,632 | 6,615 | 170,463 | - | 187,710 |
| **Total** | 110,126 | 191,828 | 2,781,224 | - | 3,083,178 |

(Thousands of euros)

| | 2018 | | | | |
|---|---|---|---|---|---|
| | Net exposure | | | | |
| Category | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| Financial assets at amortised cost | | | | | |
| Loans and advances to credit institutions (note 20) | 880,150 | 9,883 | - | - | 890,033 |
| Loans and advances to customers (note 21) | 35,563,791 | 7,051,905 | 2,945,226 | 4 | 45,560,926 |
| Debt instruments (note 22) | 3,075,867 | 263,800 | 35,347 | - | 3,375,014 |
| Debt instruments at fair value | | | | | |
| through other comprehensive income (note 23) | 13,797,971 | - | 4,887 | - | 13,802,858 |
| Guarantees and other commitments (notes 38 and 45) | 10,691,563 | 1,484,388 | 469,811 | - | 12,645,762 |
| **Total** | 64,009,342 | 8,809,976 | 3,455,271 | 4 | 76,274,593 |

(*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 C1.5.1.2.

The maximum exposure to credit risk of financial assets not subject to impairment requirements is analysed as follows:

(Thousands of euros)

| | 2019 | 2018 |
|---|---|---|
| Financial assets held for trading (note 23) | | |
| Debt instruments | 255,313 | 220,047 |
| Derivatives | 763,611 | 696,943 |
| Financial assets designated at fair value through profit or loss - Debt instruments (note 23) | 31,496 | 33,034 |
| Financial assets not held for trading mandatorily at fair value through profit or loss | | |
| Debt instruments (note 23) | 1,037,480 | 1,108,605 |
| Hedging derivatives (note 24) | 87,677 | 185,525 |
| **Total** | 2,087,900 | 2,058,629 |

- In the case of financial assets, excluding derivatives, it is considered that its credit risk exposure is equal to its book value;
- In the case of derivatives, the maximum exposure to credit risk is its market value, plus its potential risk ("add-on").

During 2019, the changes occurred in Loans and advances to customers - gross amount are as follows:

(Thousands of euros)

| | 2019 | | | | |
|---|---|---|---|---|---|
| | Financial assets at amortised cost - Loans and advances to customers (gross) | | | | |
| | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| **Gross amount as at 1 January** | 35,658,333 | 7,235,837 | 5,518,658 | 4 | 48,412,832 |
| Changes in gross book value: | | | | | |
| Transfers from stage 1 to stage 2 | (1,580,942) | 1,580,942 | - | - | - |
| Transfers from stage 1 to stage 3 | (144,179) | - | 144,179 | - | - |
| Transfers from stage 2 to stage 1 | 1,713,624 | (1,713,624) | - | - | - |
| Transfers from stage 2 to stage 3 | - | (334,639) | 334,639 | - | - |
| Transfers from stage 3 to stage 1 | 46,668 | - | (46,668) | - | - |
| Transfers from stage 3 to stage 2 | - | 407,346 | (407,346) | - | - |
| Write-offs | (899) | (3,376) | (674,059) | - | (678,334) |
| Impact of acquisition/merger of Euro Bank | 2,610,511 | 74,423 | 46,962 | 120,733 | 2,852,629 |
| Net balance of new financial assets and derecognised financial assets and other variations | 2,560,994 | (26,425) | (858,249) | 1,404 | 1,677,724 |
| **Gross amount at the end of the year** | 40,864,110 | 7,220,484 | 4,058,116 | 122,141 | 52,264,851 |

During 2019, the changes occurred in Loans and advances to customers - impairment are as follows:

(Thousands of euros)

| | 2019 | | | | |
|---|---|---|---|---|---|
| | Financial assets at amortised cost - Loans and advances to customers impairment | | | | |
| | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| **Impairment losses as at 1 January** | 94,542 | 183,932 | 2,573,432 | - | 2,851,906 |
| Change in impairment losses: | | | | | |
| Transfer to Stage 1 | 39,801 | (35,498) | (4,303) | - | - |
| Transfer to Stage 2 | (7,291) | 47,833 | (40,542) | - | - |
| Transfer to Stage 3 | (1,712) | (18,508) | 20,220 | - | - |
| Changes occurred due to changes in credit risk | (52,163) | (18,260) | 105,185 | - | 34,762 |
| Write-offs | (719) | (3,376) | (674,059) | - | (678,154) |
| Impact of acquisition/merger of Euro Bank | 12,769 | 8,455 | 18,564 | 13,109 | 52,897 |
| Changes due to new financial assets and derecognised financial assets and other variations | 9,539 | 26,300 | 119,259 | 513 | 155,611 |
| **Impairment losses at the end of the year** | 94,766 | 190,878 | 2,117,756 | 13,622 | 2,417,022 |

During 2018, the changes occurred in Loans and advances to customers - gross amount are as follows:

(Thousands of euros)

| | 2018 | | | | |
|---|---|---|---|---|---|
| | Financial assets at amortised cost - Loans and advances to customers (gross) | | | | |
| | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| **Gross amount as at 1 January** | 34,511,663 | 7,177,992 | 6,960,474 | - | 48,650,129 |
| Changes in gross book value: | | | | | |
| Transfer from Stage 1 to Stage 2 | (1,805,394) | 1,805,394 | - | - | - |
| Transfer from Stage 1 to Stage 3 | (161,037) | - | 161,037 | - | - |
| Transfer from Stage 2 to Stage 1 | 1,359,489 | (1,359,489) | - | - | - |
| Transfer from Stage 2 to Stage 3 | - | (481,014) | 481,014 | - | - |
| Transfer from Stage 3 to Stage 1 | 40,611 | - | (40,611) | - | - |
| Transfer from Stage 3 to Stage 2 | - | 325,303 | (325,303) | - | - |
| Write-offs | (8,218) | (32,515) | (635,807) | - | (676,540) |
| Net balance of new financial assets and derecognised financial assets and other changes | 1,721,219 | (199,834) | (1,082,146) | 4 | 439,243 |
| **Gross amount at the end of the year** | 35,658,333 | 7,235,837 | 5,518,658 | 4 | 48,412,832 |

During 2018, the changes occurred in Loans and advances to customers - impairment are as follows:

(Thousands of euros)

| | 2018 | | | | |
|---|---|---|---|---|---|
| | Financial assets at amortised cost - Loans and advances to customers impairment | | | | |
| | Stage 1 | Stage 2 | Stage 3 | POCI | Total |
| **Impairment losses as at 1 January 2018** | 112,344 | 244,708 | 3,165,613 | - | 3,522,665 |
| Change in impairment losses: | | | | | |
| Transfer to Stage 1 | 39,995 | (34,753) | (5,242) | - | - |
| Transfer to Stage 2 | (8,140) | 52,265 | (44,125) | - | - |
| Transfer to Stage 3 | (4,487) | (32,534) | 37,021 | - | - |
| Changes occurred due to changes in credit risk | (48,233) | (2,782) | 393,564 | - | 342,549 |
| Write-offs | (8,218) | (32,515) | (635,807) | - | (676,540) |
| Changes due to new financial assets and derecognised financial assets and other variations | 11,281 | (10,457) | (337,592) | - | - (336,768) |
| **Impairment losses at the end of the year** | 94,542 | 183,932 | 2,573,432 | - | 2,851,906 |

The modified financial assets that do not result in derecognition (with impairment losses based on expected lifetime losses) are analysed as follows:

(Thousands of euros)

| **Financial assets modified** | **2019** | **2018** |
|---|---|---|
| Amortised cost before changes | 669,892 | 547,969 |
| Impairment losses before changes | (270,074) | (171,010) |
| Net amortised cost before changes | 399,818 | 376,959 |
| Net gain / loss arising on changes | (8,979) | (13,348) |
| Net amortised cost after changes | 390,839 | 363,611 |

The financial assets changed since the initial recognition at a time when the impairment loss was measured based on the expected credit losses lifetime, are analysed as f

(Thousands of euros)

| Financial assets changed | 2019 | 2018 |
|---|---|---|
| Amortised cost of financial assets for which credit losses expected to go from "lifetime" to 12 months | - | 67,709 |

As at 31 December 2019, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments, analysed by segment and stage, are as follows:

(Thousands of euros)

| | 2019 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 2 | | | | Stage 3 | | | | |
| Segment | Stage 1 | No delays | Days past due <= 30 days | Days past due > 30 days | Total | Days past due <= 90 days | Days past due > 90 days | Total | POCI | Total |
| **Gross Exposure** | | | | | | | | | | |
| Individuals-Mortgage | 22,353,466 | 2,409,116 | 153,136 | 53,818 | 2,616,070 | 290,423 | 336,520 | 626,943 | 21,869 | 25,618,348 |
| Individuals-Other | 7,915,090 | 722,034 | 108,364 | 63,299 | 893,697 | 243,799 | 333,221 | 577,020 | 100,373 | 9,486,180 |
| Financial Companies | 3,142,152 | 436,539 | 87 | 9 | 436,635 | 217,568 | 253,927 | 471,495 | - | 4,050,282 |
| Non-financial comp. - Corporate | 8,062,174 | 994,988 | 515 | 448 | 995,951 | 443,269 | 630,343 | 1,073,612 | - | 10,131,737 |
| Non-financial comp.- SME-Corporate | 9,541,235 | 2,369,242 | 22,412 | 4,655 | 2,396,309 | 793,661 | 323,413 | 1,117,074 | - | 13,054,618 |
| Non-financial comp. -SME-Retail | 4,091,815 | 1,232,296 | 36,575 | 13,744 | 1,282,615 | 409,553 | 207,741 | 617,294 | 22 | 5,991,746 |
| Non-financial comp.-Other | 463,226 | 122,636 | 14 | - | 122,650 | 9,677 | 57,553 | 67,230 | - | 653,106 |
| Other loans | 1,323,948 | 347,709 | - | - | 347,709 | 90 | 1 | 91 | - | 1,671,748 |
| **Total** | 56,893,106 | 8,634,560 | 321,103 | 135,973 | 9,091,636 | 2,408,040 | 2,142,719 | 4,550,759 | 122,264 | 70,657,765 |
| **Impairment** | | | | | | | | | | |
| Individuals-Mortgage | 5,926 | 10,390 | 2,875 | 3,531 | 16,796 | 28,620 | 71,542 | 100,162 | 416 | 123,300 |
| Individuals-Other | 36,710 | 16,884 | 11,416 | 11,523 | 39,823 | 94,004 | 187,494 | 281,498 | 13,203 | 371,234 |
| Financial Companies | 1,976 | 5,198 | 10 | 1 | 5,209 | 142,056 | 203,236 | 345,292 | - | 352,477 |
| Non-financial comp. - Corporate | 22,635 | 19,230 | 3 | 34 | 19,267 | 269,938 | 386,084 | 656,022 | - | 697,924 |
| Non-financial comp.- SME-Corporate | 32,913 | 78,768 | 2,213 | 615 | 81,596 | 260,117 | 232,087 | 492,204 | - | 606,713 |
| Non-financial comp. -SME-Retail | 7,767 | 27,831 | 2,036 | 1,178 | 31,045 | 194,031 | 124,383 | 318,414 | 5 | 357,231 |
| Non-financial comp.-Other | 239 | 370 | - | - | 370 | 1,314 | 32,229 | 33,543 | - | 34,152 |
| Other loans | 1,759 | 3,691 | - | - | 3,691 | - | - | - | - | 5,450 |
| **Total** | 109,925 | 162,362 | 18,553 | 16,882 | 197,797 | 990,080 | 1,237,055 | 2,227,135 | 13,624 | 2,548,481 |
| **Net exposure** | | | | | | | | | | |
| Individuals-Mortgage | 22,347,540 | 2,398,726 | 150,261 | 50,287 | 2,599,274 | 261,803 | 264,978 | 526,781 | 21,453 | 25,495,048 |
| Individuals-Other | 7,878,380 | 705,150 | 96,948 | 51,776 | 853,874 | 149,795 | 145,727 | 295,522 | 87,170 | 9,114,946 |
| Financial Companies | 3,140,176 | 431,341 | 77 | 8 | 431,426 | 75,512 | 50,691 | 126,203 | - | 3,697,805 |
| Non-financial comp. - Corporate | 8,039,539 | 975,758 | 512 | 414 | 976,684 | 173,331 | 244,259 | 417,590 | - | 9,433,813 |
| Non-financial comp.- SME-Corporate | 9,508,322 | 2,290,474 | 20,199 | 4,040 | 2,314,713 | 533,544 | 91,326 | 624,870 | - | 12,447,905 |
| Non-financial comp. -SME-Retail | 4,084,048 | 1,204,465 | 34,539 | 12,566 | 1,251,570 | 215,522 | 83,358 | 298,880 | 17 | 5,634,515 |
| Non-financial comp.-Other | 462,987 | 122,266 | 14 | - | 122,280 | 8,363 | 25,324 | 33,687 | - | 618,954 |
| Other loans | 1,322,189 | 344,018 | - | - | 344,018 | 90 | 1 | 91 | - | 1,666,298 |
| **Total** | 56,783,181 | 8,472,198 | 302,550 | 119,091 | 8,893,839 | 1,417,960 | 905,664 | 2,323,624 | 108,640 | 68,109,284 |
| **% of impairment coverage** | | | | | | | | | | |
| Individuals-Mortgage | 0.03% | 0.43% | 1.88% | 6.56% | 0.64% | 9.85% | 21.26% | 15.98% | 1.90% | 0.48% |
| Individuals-Other | 0.46% | 2.34% | 10.54% | 18.20% | 4.46% | 38.56% | 56.27% | 48.78% | 13.15% | 3.91% |
| Financial Companies | 0.06% | 1.19% | 11.49% | 10.79% | 1.19% | 65.29% | 80.04% | 73.23% | 0.00% | 8.70% |
| Non-financial comp. - Corporate | 0.28% | 1.93% | 0.63% | 7.55% | 1.93% | 60.90% | 61.25% | 61.10% | 0.00% | 6.89% |
| Non-financial comp.- SME-Corporate | 0.34% | 3.32% | 9.88% | 13.22% | 3.41% | 32.77% | 71.76% | 44.06% | 0.00% | 4.65% |
| Non-financial comp. -SME-Retail | 0.19% | 2.26% | 5.57% | 8.57% | 2.42% | 47.38% | 59.87% | 51.58% | 24.69% | 5.96% |
| Non-financial comp.-Other | 0.05% | 0.30% | 0.32% | 0.16% | 0.30% | 13.58% | 56.00% | 49.89% | 0.00% | 5.23% |
| Other loans | 0.13% | 1.06% | 0.00% | 86.57% | 1.06% | 0.34% | 25.74% | 0.65% | 0.00% | 0.33% |
| **Total** | 0.19% | 1.88% | 5.78% | 12.42% | 2.18% | 41.12% | 57.73% | 48.94% | 11.14% | 3.61% |

As at 31 December 2019, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments, analysed by sector of activity and stage, are as follows:

(Thousands of euros)

| | 2019 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 2 | | | | Stage 3 | | | | |
| Sector of activity | Stage 1 | No delays | Days past due <= 30 days | Days past due > 30 days | Total | Days past due <= 90 days | Days past due > 90 days | Total | POCI | Total |
| **Gross Exposure** | | | | | | | | | | |
| Loans to individuals | 30,268,556 | 3,131,150 | 261,500 | 117,117 | 3,509,767 | 534,222 | 669,741 | 1,203,963 | 122,242 | 35,104,528 |
| Non-financial comp.- Trade | 4,582,666 | 699,541 | 15,539 | 2,875 | 717,955 | 162,472 | 90,839 | 253,311 | 5 | 5,553,937 |
| Non-financial comp.- Construction | 1,818,997 | 661,929 | 5,314 | 1,413 | 668,656 | 497,493 | 223,261 | 720,754 | 7 | 3,208,414 |
| Non finan. comp.- Manufacturing indust. | 4,923,011 | 776,824 | 12,375 | 5,430 | 794,629 | 144,757 | 127,568 | 272,325 | - | 5,989,965 |
| Non-financial comp.-Other activities | 1,430,987 | 406,038 | 4,623 | 917 | 411,578 | 162,545 | 11,707 | 174,252 | - | 2,016,817 |
| Non-financial comp.- Other services | 9,402,789 | 2,174,830 | 21,665 | 8,212 | 2,204,707 | 688,893 | 765,675 | 1,454,568 | 10 | 13,062,074 |
| Other Services /Other activities | 4,466,100 | 784,248 | 87 | 9 | 784,344 | 217,658 | 253,928 | 471,586 | - | 5,722,030 |
| **Total** | 56,893,106 | 8,634,560 | 321,103 | 135,973 | 9,091,636 | 2,408,040 | 2,142,719 | 4,550,759 | 122,264 | 70,657,765 |
| **Impairment** | | | | | | | | | | |
| Loans to individuals | 42,636 | 27,274 | 14,291 | 15,054 | 56,619 | 122,624 | 259,036 | 381,660 | 13,619 | 494,534 |
| Non-financial comp.- Trade | 14,704 | 12,532 | 935 | 378 | 13,845 | 77,103 | 50,035 | 127,138 | 1 | 155,688 |
| Non-financial comp.- Construction | 5,965 | 8,362 | 616 | 90 | 9,068 | 135,666 | 168,096 | 303,762 | 1 | 318,796 |
| Non-financial comp.- Manufacturing indus | 16,042 | 17,799 | 1,021 | 759 | 19,579 | 51,759 | 52,406 | 104,165 | - | 139,786 |
| Non-financial comp.-Other activities | 3,162 | 11,014 | 76 | 121 | 11,211 | 75,129 | 4,224 | 79,353 | - | 93,726 |
| Non-financial comp.- Other services | 23,681 | 76,492 | 1,604 | 479 | 78,575 | 385,743 | 500,022 | 885,765 | 3 | 988,024 |
| Other Services /Other activities | 3,735 | 8,889 | 10 | 1 | 8,900 | 142,056 | 203,236 | 345,292 | - | 357,927 |
| **Total** | 109,925 | 162,362 | 18,553 | 16,882 | 197,797 | 990,080 | 1,237,055 | 2,227,135 | 13,624 | 2,548,481 |
| **Net exposure** | | | | | | | | | | |
| Loans to individuals | 30,225,920 | 3,103,876 | 247,209 | 102,063 | 3,453,148 | 411,598 | 410,705 | 822,303 | 108,623 | 34,609,994 |
| Non-financial comp.- Trade | 4,567,962 | 687,009 | 14,604 | 2,497 | 704,110 | 85,369 | 40,804 | 126,173 | 4 | 5,398,249 |
| Non-financial comp.- Construction | 1,813,032 | 653,567 | 4,698 | 1,323 | 659,588 | 361,827 | 55,165 | 416,992 | 6 | 2,889,618 |
| Non finan. comp.- Manufacturing indust. | 4,906,969 | 759,025 | 11,354 | 4,671 | 775,050 | 92,998 | 75,162 | 168,160 | - | 5,850,179 |
| Non-financial comp.-Other activities | 1,427,825 | 395,024 | 4,547 | 796 | 400,367 | 87,416 | 7,483 | 94,899 | - | 1,923,091 |
| Non-financial comp.- Other services | 9,379,108 | 2,098,338 | 20,061 | 7,733 | 2,126,132 | 303,150 | 265,653 | 568,803 | 7 | 12,074,050 |
| Other Services /Other activities | 4,462,365 | 775,359 | 77 | 8 | 775,444 | 75,602 | 50,692 | 126,294 | - | 5,364,103 |
| **Total** | 56,783,181 | 8,472,198 | 302,550 | 119,091 | 8,893,839 | 1,417,960 | 905,664 | 2,323,624 | 108,640 | 68,109,284 |
| **% of impairment coverage** | | | | | | | | | | |
| Loans to individuals | 0.14% | 0.87% | 5.47% | 12.85% | 1.61% | 22.95% | 38.68% | 31.70% | 11.14% | 1.41% |
| Non-financial comp.- Trade | 0.32% | 1.79% | 6.02% | 13.16% | 1.93% | 47.46% | 55.08% | 50.19% | 19.52% | 2.80% |
| Non-financial comp.- Construction | 0.33% | 1.26% | 11.59% | 6.39% | 1.36% | 27.27% | 75.29% | 42.15% | 17.98% | 9.94% |
| Non finan. comp.- Manufacturing indust. | 0.33% | 2.29% | 8.25% | 13.97% | 2.46% | 35.76% | 41.08% | 38.25% | 0.00% | 2.33% |
| Non-financial comp.-Other activities | 0.22% | 2.71% | 1.63% | 13.20% | 2.72% | 46.22% | 36.08% | 45.54% | 0.00% | 4.65% |
| Non-financial comp.- Other services | 0.25% | 3.52% | 7.41% | 5.83% | 3.56% | 55.99% | 65.30% | 60.90% | 32.25% | 7.56% |
| Other Services /Other activities | 0.08% | 1.13% | 11.49% | 12.31% | 1.13% | 65.27% | 80.04% | 73.22% | 0.00% | 6.26% |
| **Total** | 0.19% | 1.88% | 5.78% | 12.42% | 2.18% | 41.12% | 57.73% | 48.94% | 11.14% | 3.61% |

As at 31 December 2019, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments, analysed by geography and stage, are as follows:

(Thousands of euros)

| | 2019 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 2 | | | | Stage 3 | | | | |
| Geography | Stage 1 | No delays | Days past due <= 30 days | Days past due > 30 days | Total | Days past due <= 90 days | Days past due > 90 days | Total | POCI | Total |
| **Gross Exposure** | | | | | | | | | | |
| Portugal | 37,360,242 | 7,539,145 | 213,859 | 50,683 | 7,803,687 | 2,091,146 | 1,634,199 | 3,725,345 | 4 | 48,889,278 |
| Poland | 17,805,331 | 637,164 | 103,279 | 83,608 | 824,051 | 280,998 | 375,142 | 656,140 | 122,260 | 19,407,782 |
| Mozambique | 1,223,817 | 458,251 | 3,965 | 1,682 | 463,898 | 32,342 | 133,378 | 165,720 | - | 1,853,435 |
| Switzerland | 503,716 | - | - | - | - | 3,554 | - | 3,554 | - | 507,270 |
| **Total** | 56,893,106 | 8,634,560 | 321,103 | 135,973 | 9,091,636 | 2,408,040 | 2,142,719 | 4,550,759 | 122,264 | 70,657,765 |
| **Impairment** | | | | | | | | | | |
| Portugal | 29,491 | 135,225 | 6,309 | 2,365 | 143,899 | 862,601 | 946,988 | 1,809,589 | - | 1,982,979 |
| Poland | 76,111 | 20,991 | 11,359 | 14,078 | 46,428 | 115,442 | 222,327 | 337,769 | 13,624 | 473,932 |
| Mozambique | 3,966 | 6,146 | 885 | 439 | 7,470 | 8,488 | 67,740 | 76,228 | - | 87,664 |
| Switzerland | 357 | - | - | - | - | 3,549 | - | 3,549 | - | 3,906 |
| **Total** | 109,925 | 162,362 | 18,553 | 16,882 | 197,797 | 990,080 | 1,237,055 | 2,227,135 | 13,624 | 2,548,481 |
| **Net exposure** | | | | | | | | | | |
| Portugal | 37,330,751 | 7,403,920 | 207,550 | 48,318 | 7,659,788 | 1,228,545 | 687,211 | 1,915,756 | 4 | 46,906,299 |
| Poland | 17,729,220 | 616,173 | 91,920 | 69,530 | 777,623 | 165,556 | 152,815 | 318,371 | 108,636 | 18,933,850 |
| Mozambique | 1,219,851 | 452,105 | 3,080 | 1,243 | 456,428 | 23,854 | 65,638 | 89,492 | - | 1,765,771 |
| Switzerland | 503,359 | - | - | - | - | 5 | - | 5 | - | 503,364 |
| **Total** | 56,783,181 | 8,472,198 | 302,550 | 119,091 | 8,893,839 | 1,417,960 | 905,664 | 2,323,624 | 108,640 | 68,109,284 |
| **% of impairment coverage** | | | | | | | | | | |
| Portugal | 0.08% | 1.79% | 2.95% | 4.67% | 1.84% | 41.25% | 57.95% | 48.58% | 0.00% | 4.06% |
| Poland | 0.43% | 3.29% | 11.00% | 16.84% | 5.63% | 41.08% | 59.26% | 51.48% | 11.14% | 2.44% |
| Mozambique | 0.32% | 1.34% | 22.33% | 26.10% | 1.61% | 26.25% | 50.79% | 46.00% | 0.00% | 4.73% |
| Switzerland | 0.07% | 0.00% | 0.00% | 0.00% | 0.00% | 99.87% | 0.00% | 99.87% | 0.00% | 0.77% |
| **Total** | 0.19% | 1.88% | 5.78% | 12.42% | 2.18% | 41.12% | 57.73% | 48.94% | 11.14% | 3.61% |

As at 31 December 2019, the gross exposure, by type of financial instrument, internal rating (attributed in Portugal and in Poland) and stage, is analysed as follows:

(Thousands of euros)

| | 2019 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Gross Exposure | | | | | | | |
| | Higher quality (GR 1-6) | Average quality (GR 7-9) | Lower quality (GR 10-12) | Procedural (GR 13/14/15) | Not classified (without risk grade) | Total | Impairment losses | Net exposure |
| Financial assets at amortised cost | | | | | | | | |
| stage 1 | 27,229,156 | 9,199,924 | 3,325,337 | 24,978 | 3,593,623 | 43,373,018 | 96,281 | 43,276,737 |
| stage 2 | 1,156,108 | 1,649,110 | 2,999,799 | 498,649 | 615,424 | 6,919,090 | 184,280 | 6,734,810 |
| stage 3 | 1,054 | 3,425 | 66,159 | 3,757,614 | 75,746 | 3,903,998 | 2,048,079 | 1,855,919 |
| POCI | 434 | 536 | 456 | 112,054 | 8,662 | 122,142 | 13,622 | 108,520 |
| | 28,386,752 | 10,852,995 | 6,391,751 | 4,393,295 | 4,293,455 | 54,318,248 | 2,342,262 | 51,975,986 |
| Debt instruments at fair value through other comprehensive income (*) | | | | | | | | |
| stage 1 | 12,732,509 | 88,792 | 184 | - | 276,641 | 13,098,126 | - | 13,098,126 |
| stage 2 | - | - | - | - | - | - | - | - |
| stage 3 | - | - | - | - | - | - | - | - |
| | 12,732,509 | 88,792 | 184 | - | 276,641 | 13,098,126 | - | 13,098,126 |
| Guarantees and other commitments | | | | | | | | |
| stage 1 | 7,431,539 | 2,938,347 | 940,101 | 235 | 482,333 | 11,792,555 | 9,321 | 11,783,234 |
| stage 2 | 206,446 | 342,793 | 640,031 | 65,466 | 453,912 | 1,708,648 | 6,047 | 1,702,601 |
| stage 3 | 9 | 9 | 18,415 | 457,458 | 1,596 | 477,487 | 99,279 | 378,208 |
| | 7,637,994 | 3,281,149 | 1,598,547 | 523,159 | 937,841 | 13,978,690 | 114,647 | 13,864,043 |
| **Total** | 48,757,255 | 14,222,936 | 7,990,482 | 4,916,454 | 5,507,937 | 81,395,064 | 2,456,909 | 78,938,155 |

(*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 C1.5.1.2.

The gross exposure includes the guarantees granted, irrevocable credit lines and revocable commitments, as detailed in note 45.

As at 31 December 2018, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments, analysed by segment and stage, are as follows:

(Thousands of euros)

| | 2018 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 2 | | | | Stage 3 | | | | |
| Segment | Stage 1 | No delays | Days past due <= 30 days | Days past due > 30 days | Total | Days past due <= 90 days | Days past due > 90 days | Total | POCI | Total |
| **Gross Exposure** | | | | | | | | | | |
| Individuals-Mortgage | 19,749,462 | 2,536,079 | 197,808 | 46,836 | 2,780,723 | 429,851 | 551,741 | 981,592 | - | 23,511,777 |
| Individuals-Other | 5,552,362 | 714,557 | 102,982 | 32,516 | 850,055 | 267,829 | 371,734 | 639,563 | 4 | 7,041,984 |
| Financial Companies | 2,968,123 | 363,896 | - | - | 363,896 | 283,266 | 372,289 | 655,555 | - | 3,987,574 |
| Non-financial comp. - Corporate | 7,633,705 | 1,230,536 | 6,688 | 202 | 1,237,426 | 599,083 | 637,974 | 1,237,057 | - | 10,108,188 |
| Non-financial comp.- SME-Corporate | 9,015,943 | 2,041,249 | 25,862 | 3,241 | 2,070,352 | 1,088,217 | 622,686 | 1,710,903 | - | 12,797,198 |
| Non-financial comp. -SME-Retail | 3,381,566 | 1,151,099 | 64,964 | 6,624 | 1,222,687 | 558,034 | 357,637 | 915,671 | - | 5,519,924 |
| Non-financial comp.-Other | 282,342 | 173,104 | 351 | 143 | 173,598 | 31,802 | 58,226 | 90,028 | - | 545,968 |
| Other loans | 1,737,994 | 302,936 | 43 | 88 | 303,067 | 11 | 1,228 | 1,239 | - | 2,042,300 |
| **Total** | 50,321,497 | 8,513,456 | 398,698 | 89,650 | 9,001,804 | 3,258,093 | 2,973,515 | 6,231,608 | 4 | 65,554,913 |
| **Impairment** | | | | | | | | | | |
| Individuals-Mortgage | 6,527 | 10,629 | 7,063 | 2,865 | 20,557 | 32,951 | 103,478 | 136,429 | - | 163,513 |
| Individuals-Other | 28,974 | 16,796 | 10,419 | 5,249 | 32,464 | 109,544 | 216,385 | 325,929 | - | 387,367 |
| Financial Companies | 2,266 | 7,318 | - | - | 7,318 | 187,600 | 280,991 | 468,591 | - | 478,175 |
| Non-financial comp. - Corporate | 23,010 | 33,240 | 109 | 5 | 33,354 | 346,914 | 378,883 | 725,797 | - | 782,161 |
| Non-financial comp.- SME-Corporate | 37,788 | 53,270 | 1,829 | 1,250 | 56,349 | 347,670 | 362,971 | 710,641 | - | 804,778 |
| Non-financial comp. -SME-Retail | 8,906 | 29,055 | 2,047 | 760 | 31,862 | 216,571 | 165,252 | 381,823 | - | 422,591 |
| Non-financial comp.-Other | 775 | 3,716 | 11 | 13 | 3,740 | 17,295 | 13,479 | 30,774 | - | 35,289 |
| Other loans | 1,880 | 6,184 | - | - | 6,184 | 11 | 1,229 | 1,240 | - | 9,304 |
| **Total** | 110,126 | 160,208 | 21,478 | 10,142 | 191,828 | 1,258,556 | 1,522,668 | 2,781,224 | - | 3,083,178 |
| **Net exposure** | | | | | | | | | | |
| Individuals-Mortgage | 19,742,935 | 2,525,450 | 190,745 | 43,971 | 2,760,166 | 396,900 | 448,263 | 845,163 | - | 23,348,264 |
| Individuals-Other | 5,523,388 | 697,761 | 92,563 | 27,267 | 817,591 | 158,285 | 155,349 | 313,634 | 4 | 6,654,617 |
| Financial Companies | 2,965,857 | 356,578 | - | - | 356,578 | 95,666 | 91,298 | 186,964 | - | 3,509,399 |
| Non-financial comp. - Corporate | 7,610,695 | 1,197,296 | 6,579 | 197 | 1,204,072 | 252,169 | 259,091 | 511,260 | - | 9,326,027 |
| Non-financial comp.- SME-Corporate | 8,978,155 | 1,987,979 | 24,033 | 1,991 | 2,014,003 | 740,547 | 259,715 | 1,000,262 | - | 11,992,420 |
| Non-financial comp. -SME-Retail | 3,372,660 | 1,122,044 | 62,917 | 5,864 | 1,190,825 | 341,463 | 192,385 | 533,848 | - | 5,097,333 |
| Non-financial comp.-Other | 281,567 | 169,388 | 340 | 130 | 169,858 | 14,507 | 44,747 | 59,254 | - | 510,679 |
| Other loans | 1,736,114 | 296,752 | 43 | 88 | 296,883 | - | (1) | (1) | - | 2,032,996 |
| **Total** | 50,211,371 | 8,353,248 | 377,220 | 79,508 | 8,809,976 | 1,999,537 | 1,450,847 | 3,450,384 | 4 | 62,471,735 |
| **% of impairment coverage** | | | | | | | | | | |
| Individuals-Mortgage | 0.03% | 0.42% | 3.57% | 6.12% | 0.74% | 7.67% | 18.75% | 13.90% | 0.00% | 0.70% |
| Individuals-Other | 0.52% | 2.35% | 10.12% | 16.14% | 3.82% | 40.90% | 58.21% | 50.96% | 0.00% | 5.50% |
| Financial Companies | 0.08% | 2.01% | 7.10% | 21.98% | 2.01% | 66.23% | 75.48% | 71.48% | 0.00% | 11.99% |
| Non-financial comp. - Corporate | 0.30% | 2.70% | 1.63% | 2.67% | 2.70% | 57.91% | 59.39% | 58.67% | 0.00% | 7.74% |
| Non-financial comp.- SME-Corporate | 0.42% | 2.61% | 7.07% | 38.58% | 2.72% | 31.95% | 58.29% | 41.54% | 0.00% | 6.29% |
| Non-financial comp. -SME-Retail | 0.26% | 2.52% | 3.15% | 11.47% | 2.61% | 38.81% | 46.21% | 41.70% | 0.00% | 7.66% |
| Non-financial comp.-Other | 0.27% | 2.15% | 3.17% | 8.86% | 2.15% | 54.38% | 23.15% | 34.18% | 0.00% | 6.46% |
| Other loans | 0.11% | 2.04% | 1.04% | 0.22% | 2.04% | 100.00% | 99.92% | 99.92% | 0.00% | 0.46% |
| **Total** | 0.22% | 1.88% | 5.39% | 11.31% | 2.13% | 38.63% | 51.21% | 44.63% | 0.00% | 4.70% |

As at 31 December 2018, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments, analysed by sector of activity and stage, are as follows:

(Thousands of euros)

| | 2018 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 2 | | | | Stage 3 | | | | |
| Sector of activity | Stage 1 | No delays | Days past due <= 30 days | Days past due > 30 days | Total | Days past due <= 90 days | Days past due > 90 days | Total | POCI | Total |
| **Gross Exposure** | | | | | | | | | | |
| Loans to individuals | 25,301,824 | 3,250,636 | 300,790 | 79,352 | 3,630,778 | 697,680 | 923,475 | 1,621,155 | 4 | 30,553,761 |
| Non-financial comp.- Trade | 4,247,942 | 642,117 | 14,849 | 2,904 | 659,870 | 230,067 | 157,920 | 387,987 | - | 5,295,799 |
| Non-financial comp.- Construction | 1,574,944 | 525,725 | 7,678 | 2,245 | 535,648 | 705,122 | 457,206 | 1,162,328 | - | 3,272,920 |
| Non finan. comp.- Manufacturing indust. | 4,474,126 | 903,046 | 16,952 | 1,291 | 921,289 | 146,016 | 169,215 | 315,231 | - | 5,710,646 |
| Non-financial comp.-Other activities | 1,349,242 | 320,945 | 2,313 | 502 | 323,760 | 212,992 | 18,897 | 231,889 | - | 1,904,891 |
| Non-financial comp.- Other services | 8,667,302 | 2,204,155 | 56,073 | 3,268 | 2,263,496 | 982,939 | 873,285 | 1,856,224 | - | 12,787,022 |
| Other Services /Other activities | 4,706,117 | 666,832 | 43 | 88 | 666,963 | 283,277 | 373,517 | 656,794 | - | 6,029,874 |
| **Total** | 50,321,497 | 8,513,456 | 398,698 | 89,650 | 9,001,804 | 3,258,093 | 2,973,515 | 6,231,608 | 4 | 65,554,913 |
| **Impairment** | | | | | | | | | | |
| Loans to individuals | 35,501 | 27,425 | 17,482 | 8,114 | 53,021 | 142,495 | 319,863 | 462,358 | - | 550,880 |
| Non-financial comp.- Trade | 14,814 | 16,075 | 783 | 902 | 17,760 | 92,613 | 92,945 | 185,558 | - | 218,132 |
| Non-financial comp.- Construction | 6,299 | 5,719 | 1,099 | 550 | 7,368 | 265,322 | 263,502 | 528,824 | - | 542,491 |
| Non-financial comp.- Manufacturing indus | 17,935 | 18,086 | 1,039 | 132 | 19,257 | 52,154 | 88,621 | 140,775 | - | 177,967 |
| Non-financial comp.-Other activities | 2,407 | 10,089 | 75 | 70 | 10,234 | 90,586 | 8,189 | 98,775 | - | 111,416 |
| Non-financial comp.- Other services | 29,024 | 69,312 | 1,000 | 374 | 70,686 | 427,775 | 467,328 | 895,103 | - | 994,813 |
| Other Services /Other activities | 4,146 | 13,502 | - | - | 13,502 | 187,611 | 282,220 | 469,831 | - | 487,479 |
| **Total** | 110,126 | 160,208 | 21,478 | 10,142 | 191,828 | 1,258,556 | 1,522,668 | 2,781,224 | - | 3,083,178 |
| **Net exposure** | | | | | | | | | | |
| Loans to individuals | 25,266,323 | 3,223,211 | 283,308 | 71,238 | 3,577,757 | 555,185 | 603,612 | 1,158,797 | 4 | 30,002,881 |
| Non-financial comp.- Trade | 4,233,128 | 626,042 | 14,066 | 2,002 | 642,110 | 137,454 | 64,975 | 202,429 | - | 5,077,667 |
| Non-financial comp.- Construction | 1,568,645 | 520,006 | 6,579 | 1,695 | 528,280 | 439,800 | 193,704 | 633,504 | - | 2,730,429 |
| Non finan. comp.- Manufacturing indust. | 4,456,191 | 884,960 | 15,913 | 1,159 | 902,032 | 93,862 | 80,594 | 174,456 | - | 5,532,679 |
| Non-financial comp.-Other activities | 1,346,835 | 310,856 | 2,238 | 432 | 313,526 | 122,406 | 10,708 | 133,114 | - | 1,793,475 |
| Non-financial comp.- Other services | 8,638,278 | 2,134,843 | 55,073 | 2,894 | 2,192,810 | 555,164 | 405,957 | 961,121 | - | 11,792,209 |
| Other Services /Other activities | 4,701,971 | 653,330 | 43 | 88 | 653,461 | 95,666 | 91,297 | 186,963 | - | 5,542,395 |
| **Total** | 50,211,371 | 8,353,248 | 377,220 | 79,508 | 8,809,976 | 1,999,537 | 1,450,847 | 3,450,384 | 4 | 62,471,735 |
| **% of impairment coverage** | | | | | | | | | | |
| Loans to individuals | 0.14% | 0.84% | 5.81% | 10.23% | 1.46% | 20.42% | 34.64% | 28.52% | 0.00% | 1.80% |
| Non-financial comp.- Trade | 0.35% | 2.50% | 5.28% | 31.06% | 2.69% | 40.25% | 58.86% | 47.83% | 0.00% | 4.12% |
| Non-financial comp.- Construction | 0.40% | 1.09% | 14.31% | 24.49% | 1.38% | 37.63% | 57.63% | 45.50% | 0.00% | 16.58% |
| Non finan. comp.- Manufacturing indust. | 0.40% | 2.00% | 6.13% | 10.20% | 2.09% | 35.72% | 52.37% | 44.66% | 0.00% | 3.12% |
| Non-financial comp.-Other activities | 0.18% | 3.14% | 3.25% | 13.99% | 3.16% | 42.53% | 43.34% | 42.60% | 0.00% | 5.85% |
| Non-financial comp.- Other services | 0.33% | 3.14% | 1.78% | 11.46% | 3.12% | 43.52% | 53.51% | 48.22% | 0.00% | 7.78% |
| Other Services /Other activities | 0.09% | 2.02% | 1.04% | 0.32% | 2.02% | 66.23% | 75.56% | 71.53% | 0.00% | 8.08% |
| **Total** | 0.22% | 1.88% | 5.39% | 11.31% | 2.13% | 38.63% | 51.21% | 44.63% | 0.00% | 4.70% |

As at 31 December 2018, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments, analysed by geography and stage, are as follows:

(Thousands of euros)

| | 2018 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 2 | | | | Stage 3 | | | | |
| Geography | Stage 1 | No delays | Days past due <= 30 days | Days past due > 30 days | Total | Days past due <= 90 days | Days past due > 90 days | Total | POCI | Total |
| **Gross Exposure** | | | | | | | | | | |
| Portugal | 35,135,414 | 7,451,625 | 241,597 | 40,889 | 7,734,111 | 2,966,505 | 2,524,585 | 5,491,090 | 4 | 48,360,619 |
| Poland | 13,457,252 | 622,012 | 137,888 | 45,848 | 805,748 | 260,144 | 316,334 | 576,478 | - | 14,839,478 |
| Mozambique | 1,250,611 | 439,819 | 19,213 | 2,913 | 461,945 | 27,866 | 132,596 | 160,462 | - | 1,873,018 |
| Switzerland | 478,220 | - | - | - | - | 3,578 | - | 3,578 | - | 481,798 |
| **Total** | 50,321,497 | 8,513,456 | 398,698 | 89,650 | 9,001,804 | 3,258,093 | 2,973,515 | 6,231,608 | 4 | 65,554,913 |
| **Impairment** | | | | | | | | | | |
| Portugal | 31,379 | 124,608 | 5,442 | 1,429 | 131,479 | 1,126,917 | 1,272,926 | 2,399,843 | - | 2,562,701 |
| Poland | 67,895 | 24,838 | 12,879 | 7,398 | 45,115 | 108,280 | 200,123 | 308,403 | - | 421,413 |
| Mozambique | 10,094 | 10,762 | 3,157 | 1,315 | 15,234 | 20,652 | 49,619 | 70,271 | - | 95,599 |
| Switzerland | 758 | - | - | - | - | 2,707 | - | 2,707 | - | 3,465 |
| **Total** | 110,126 | 160,208 | 21,478 | 10,142 | 191,828 | 1,258,556 | 1,522,668 | 2,781,224 | - | 3,083,178 |
| **Net exposure** | | | | | | | | | | |
| Portugal | 35,104,035 | 7,327,017 | 236,155 | 39,460 | 7,602,632 | 1,839,588 | 1,251,659 | 3,091,247 | 4 | 45,797,918 |
| Poland | 13,389,357 | 597,174 | 125,009 | 38,450 | 760,633 | 151,864 | 116,211 | 268,075 | - | 14,418,065 |
| Mozambique | 1,240,517 | 429,057 | 16,056 | 1,598 | 446,711 | 7,214 | 82,977 | 90,191 | - | 1,777,419 |
| Switzerland | 477,462 | - | - | - | - | 871 | - | 871 | - | 478,333 |
| **Total** | 50,211,371 | 8,353,248 | 377,220 | 79,508 | 8,809,976 | 1,999,537 | 1,450,847 | 3,450,384 | 4 | 62,471,735 |
| **% of impairment coverage** | | | | | | | | | | |
| Portugal | 0.09% | 1.67% | 2.25% | 3.49% | 1.70% | 37.99% | 50.42% | 43.70% | 0.00% | 5.30% |
| Poland | 0.50% | 3.99% | 9.34% | 16.14% | 5.60% | 41.62% | 63.26% | 53.50% | 0.00% | 2.84% |
| Mozambique | 0.81% | 2.45% | 16.43% | 45.16% | 3.30% | 74.11% | 37.42% | 43.79% | 0.00% | 5.10% |
| Switzerland | 0.16% | 0.00% | 0.00% | 0.00% | 0.00% | 75.66% | 0.00% | 75.66% | 0.00% | 0.72% |
| **Total** | 0.22% | 1.88% | 5.39% | 11.31% | 2.13% | 38.63% | 51.21% | 44.63% | 0.00% | 4.70% |

As at 31 December 2018, the gross exposure, by type of financial instrument, internal rating (attributed in Portugal and in Poland) and stage, is analysed as follows:

(Thousands of euros)

| | 2018 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Gross Exposure | | | | | | | |
| | Higher quality (GR 1-6) | Average quality (GR 7-9) | Lower quality (GR 10-12) | Procedural (GR 13/14/15) | Not classified (without risk grade) | Total | Impairment losses | Net exposure |
| Financial assets at amortised cost | | | | | | | | |
| stage 1 | 25,159,396 | 8,953,561 | 2,853,215 | 35 | 1,181,364 | 38,147,571 | 90,088 | 38,057,483 |
| stage 2 | 1,205,609 | 1,583,594 | 3,037,028 | 474,487 | 774,553 | 7,075,271 | 170,144 | 6,905,127 |
| stage 3 | 2,549 | 10,477 | 96,250 | 5,246,346 | 73,159 | 5,428,781 | 2,538,296 | 2,890,485 |
| POCI | - | - | - | - | 4 | 4 | - | 4 |
| | 26,367,554 | 10,547,632 | 5,986,493 | 5,720,868 | 2,029,080 | 50,651,627 | 2,798,528 | 47,853,099 |
| Debt instruments at fair value through other comprehensive income (*) | | | | | | | | |
| stage 1 | 13,708,187 | 83,940 | - | - | 5,843 | 13,797,970 | - | 13,797,970 |
| stage 3 | - | - | - | - | 4,887 | 4,887 | - | 4,887 |
| | 13,708,187 | 83,940 | - | - | 10,730 | 13,802,857 | - | 13,802,857 |
| Guarantees and other commitments | | | | | | | | |
| stage 1 | 6,664,521 | 2,619,025 | 759,108 | 24 | 402,415 | 10,445,093 | 9,186 | 10,435,907 |
| stage 2 | 205,729 | 304,644 | 609,108 | 49,856 | 295,250 | 1,464,587 | 6,451 | 1,458,136 |
| stage 3 | 60 | 5 | 25,145 | 609,961 | 3,617 | 638,788 | 169,948 | 468,840 |
| | 6,870,310 | 2,923,674 | 1,393,361 | 659,841 | 701,282 | 12,548,468 | 185,585 | 12,362,883 |
| **Total** | 46,946,051 | 13,555,246 | 7,379,854 | 6,380,709 | 2,741,092 | 77,002,952 | 2,984,113 | 74,018,839 |

(*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 C1.5.1.2.

The gross exposure includes the guarantees granted, irrevocable credit lines and revocable commitments, as detailed in note 45.

As at 31 December 2019, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments subject to individual and collective impairment, by segment, by sector of activity and by geography, are presented in the following tables:

(Thousands of euros)

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Gross Exposure | | | Impairment losses | | |
| Segment | Individual | Collective | Total | Individual | Collective | Total |
| Individuals-Mortgage | 29,015 | 25,589,333 | 25,618,348 | 10,216 | 113,084 | 123,300 |
| Individuals-Other | 115,704 | 9,370,476 | 9,486,180 | 29,834 | 341,400 | 371,234 |
| Financial Companies | 458,198 | 3,592,084 | 4,050,282 | 344,870 | 7,607 | 352,477 |
| Non-financial comp. - Corporate | 1,044,443 | 9,087,294 | 10,131,737 | 649,682 | 48,242 | 697,924 |
| Non-financial comp.- SME-Corporate | 902,774 | 12,151,844 | 13,054,618 | 452,958 | 153,755 | 606,713 |
| Non-financial comp. -SME-Retail | 438,601 | 5,553,145 | 5,991,746 | 255,339 | 101,892 | 357,231 |
| Non-financial comp.-Other | 61,862 | 591,244 | 653,106 | 33,358 | 794 | 34,152 |
| Other loans | - | 1,671,748 | 1,671,748 | - | 5,450 | 5,450 |
| Total | 3,050,597 | 67,607,168 | 70,657,765 | 1,776,257 | 772,224 | 2,548,481 |

(Thousands of euros)

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Gross Exposure | | | Impairment losses | | |
| Sector of activity | Individual | Collective | Total | Individual | Collective | Total |
| Loans to individuals | 144,718 | 34,959,810 | 35,104,528 | 40,050 | 454,484 | 494,534 |
| Non-financial comp.- Trade | 167,971 | 5,385,966 | 5,553,937 | 98,054 | 57,634 | 155,688 |
| Non-financial comp.- Construction | 605,188 | 2,603,226 | 3,208,414 | 281,705 | 37,091 | 318,796 |
| Non finan. comp.- Manufacturing indust. | 170,689 | 5,819,276 | 5,989,965 | 82,803 | 56,983 | 139,786 |
| Non-financial comp.-Other activities | 152,241 | 1,864,576 | 2,016,817 | 75,203 | 18,523 | 93,726 |
| Non-financial comp.- Other services | 1,351,591 | 11,710,483 | 13,062,074 | 853,573 | 134,451 | 988,024 |
| Other Services /Other activities | 458,199 | 5,263,831 | 5,722,030 | 344,869 | 13,058 | 357,927 |
| Total | 3,050,597 | 67,607,168 | 70,657,765 | 1,776,257 | 772,224 | 2,548,481 |

(Thousands of euros)

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Gross Exposure | | | Impairment losses | | |
| Geography | Individual | Collective | Total | Individual | Collective | Total |
| Portugal | 2,732,595 | 46,156,683 | 48,889,278 | 1,626,492 | 356,487 | 1,982,979 |
| Poland | 181,361 | 19,226,421 | 19,407,782 | 83,898 | 390,034 | 473,932 |
| Mozambique | 133,087 | 1,720,348 | 1,853,435 | 62,318 | 25,346 | 87,664 |
| Switzerland | 3,554 | 503,716 | 507,270 | 3,549 | 357 | 3,906 |
| Total | 3,050,597 | 67,607,168 | 70,657,765 | 1,776,257 | 772,224 | 2,548,481 |

The balances Gross Exposure and Collective Impairment include the loans subject to individual analysis for which the Group has concluded that there is no objective evidence of impairment.

As at 31 December 2018, financial assets at amortised cost, guarantees granted, irrevocable credit lines and revocable commitments subject to individual and collective impairment, by segment, by sector of activity and by geography, are presented in the following tables:

(Thousands of euros)

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Gross Exposure | | | Impairment losses | | |
| Segment | Individual | Collective | Total | Individual | Collective | Total |
| Individuals-Mortgage | 32,543 | 23,479,234 | 23,511,777 | 12,377 | 151,136 | 163,513 |
| Individuals-Other | 158,089 | 6,883,895 | 7,041,984 | 63,796 | 323,571 | 387,367 |
| Financial Companies | 639,580 | 3,347,994 | 3,987,574 | 465,963 | 12,212 | 478,175 |
| Non-financial comp. - Corporate | 1,220,815 | 8,887,373 | 10,108,188 | 720,016 | 62,145 | 782,161 |
| Non-financial comp.- SME-Corporate | 1,343,991 | 11,453,207 | 12,797,198 | 603,860 | 200,918 | 804,778 |
| Non-financial comp. -SME-Retail | 670,617 | 4,849,307 | 5,519,924 | 297,013 | 125,578 | 422,591 |
| Non-financial comp.-Other | 84,175 | 461,793 | 545,968 | 28,034 | 7,255 | 35,289 |
| Other loans | 1,238 | 2,041,062 | 2,042,300 | 1,238 | 8,066 | 9,304 |
| Total | 4,151,048 | 61,403,865 | 65,554,913 | 2,192,297 | 890,881 | 3,083,178 |

(Thousands of euros)

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Gross Exposure | | | Impairment losses | | |
| Sector of activity | Individual | Collective | Total | Individual | Collective | Total |
| Loans to individuals | 190,631 | 30,363,130 | 30,553,761 | 76,174 | 474,706 | 550,880 |
| Non-financial comp.- Trade | 258,813 | 5,036,986 | 5,295,799 | 141,116 | 77,016 | 218,132 |
| Non-financial comp.- Construction | 985,308 | 2,287,612 | 3,272,920 | 471,588 | 70,903 | 542,491 |
| Non finan. comp.- Manufacturing indust. | 199,963 | 5,510,683 | 5,710,646 | 105,874 | 72,093 | 177,967 |
| Non-financial comp.-Other activities | 201,314 | 1,703,577 | 1,904,891 | 90,656 | 20,760 | 111,416 |
| Non-financial comp.- Other services | 1,674,201 | 11,112,821 | 12,787,022 | 839,687 | 155,126 | 994,813 |
| Other Services /Other activities | 640,818 | 5,389,056 | 6,029,874 | 467,202 | 20,277 | 487,479 |
| Total | 4,151,048 | 61,403,865 | 65,554,913 | 2,192,297 | 890,881 | 3,083,178 |

(Thousands of euros)

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Gross Exposure | | | Impairment losses | | |
| Geography | Individual | Collective | Total | Individual | Collective | Total |
| Portugal | 3,833,290 | 44,527,329 | 48,360,619 | 2,046,861 | 515,840 | 2,562,701 |
| Poland | 172,336 | 14,667,142 | 14,839,478 | 87,960 | 333,453 | 421,413 |
| Mozambique | 141,844 | 1,731,174 | 1,873,018 | 54,769 | 40,830 | 95,599 |
| Switzerland | 3,578 | 478,220 | 481,798 | 2,707 | 758 | 3,465 |
| Total | 4,151,048 | 61,403,865 | 65,554,913 | 2,192,297 | 890,881 | 3,083,178 |

The balances Gross Exposure and Collective Impairment include the loans subject to individual analysis for which the Group has concluded that there is no objective evidence of impairment.

As at 31 December 2019, the following table includes the loans portfolio by segment and by year of production (date of the beginning of the operations, in the portfolio at the date of balance sheet - it does not include restructured loans):

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| Year of production | Construction and CRE | Companies - Oth. Activities | Mortgage loans | Individuals - Other | Other loans | Total |
| **2009 and previous** | | | | | | |
| Number of operations | 17,070 | 27,744 | 324,486 | 611,691 | 385 | 981,376 |
| Value (Euros '000) | 1,098,178 | 3,889,372 | 13,295,414 | 1,053,292 | 22,035 | 19,358,291 |
| Impairment constituted (Euros '000) | 104,226 | 130,808 | 105,157 | 18,205 | 182 | 358,578 |
| **2010** | | | | | | |
| Number of operations | 1,675 | 3,557 | 21,269 | 98,942 | 42 | 125,485 |
| Value (Euros '000) | 155,253 | 385,822 | 979,221 | 177,869 | 6,340 | 1,704,505 |
| Impairment constituted (Euros '000) | 10,486 | 12,877 | 5,437 | 2,869 | 370 | 32,039 |
| **2011** | | | | | | |
| Number of operations | 1,725 | 4,645 | 15,104 | 112,267 | 19 | 133,760 |
| Value (Euros '000) | 78,994 | 411,266 | 650,922 | 185,559 | 1,312 | 1,328,053 |
| Impairment constituted (Euros '000) | 9,134 | 14,440 | 3,869 | 4,264 | 12 | 31,719 |
| **2012** | | | | | | |
| Number of operations | 1,629 | 5,250 | 13,289 | 120,107 | 209 | 140,484 |
| Value (Euros '000) | 98,151 | 318,169 | 530,220 | 167,261 | 15,625 | 1,129,426 |
| Impairment constituted (Euros '000) | 4,763 | 16,965 | 5,676 | 6,264 | 663 | 34,331 |
| **2013** | | | | | | |
| Number of operations | 2,331 | 6,893 | 13,349 | 142,202 | 44 | 164,819 |
| Value (Euros '000) | 125,157 | 864,816 | 584,262 | 192,277 | 74,566 | 1,841,078 |
| Impairment constituted (Euros '000) | 13,095 | 49,704 | 7,744 | 10,635 | 37,955 | 119,133 |
| **2014** | | | | | | |
| Number of operations | 2,446 | 9,630 | 11,529 | 166,901 | 114 | 190,620 |
| Value (Euros '000) | 137,239 | 924,371 | 555,774 | 246,849 | 223,382 | 2,087,615 |
| Impairment constituted (Euros '000) | 8,951 | 49,380 | 6,418 | 17,301 | 694 | 82,744 |
| **2015** | | | | | | |
| Number of operations | 3,791 | 15,509 | 13,989 | 255,641 | 248 | 289,178 |
| Value (Euros '000) | 205,091 | 1,377,949 | 760,503 | 484,927 | 118,968 | 2,947,438 |
| Impairment constituted (Euros '000) | 22,617 | 64,782 | 4,524 | 33,907 | 7,293 | 133,123 |
| **2016** | | | | | | |
| Number of operations | 4,352 | 21,555 | 15,876 | 272,966 | 204 | 314,953 |
| Value (Euros '000) | 296,587 | 2,108,876 | 904,586 | 674,725 | 112,707 | 4,097,481 |
| Impairment constituted (Euros '000) | 16,843 | 102,965 | 4,418 | 40,701 | 2,702 | 167,629 |
| **2017** | | | | | | |
| Number of operations | 5,514 | 27,110 | 25,886 | 300,210 | 279 | 358,999 |
| Value (Euros '000) | 561,497 | 2,446,356 | 1,763,007 | 830,302 | 164,562 | 5,765,724 |
| Impairment constituted (Euros '000) | 42,394 | 84,823 | 5,317 | 40,748 | 3,229 | 176,511 |
| **2018** | | | | | | |
| Number of operations | 9,199 | 39,431 | 33,391 | 556,652 | 508 | 639,181 |
| Value (Euros '000) | 1,375,058 | 4,168,601 | 2,626,272 | 1,607,824 | 578,385 | 10,356,140 |
| Impairment constituted (Euros '000) | 13,609 | 59,314 | 3,537 | 50,647 | 8,488 | 135,595 |
| **2019** | | | | | | |
| Number of operations | 18,526 | 180,431 | 36,975 | 1,253,320 | 4,142 | 1,493,394 |
| Value (Euros '000) | 1,775,386 | 7,322,607 | 3,095,865 | 2,983,482 | 459,630 | 15,636,970 |
| Impairment constituted (Euros '000) | 14,784 | 122,409 | 4,174 | 46,290 | 1,770 | 189,427 |
| **Total** | | | | | | |
| Number of operations | 68,258 | 341,755 | 525,143 | 3,890,899 | 6,194 | 4,832,249 |
| Value (Euros '000) | 5,906,591 | 24,218,205 | 25,746,046 | 8,604,367 | 1,777,512 | 66,252,721 |
| Impairment constituted (Euros '000) | 260,902 | 708,467 | 156,271 | 271,831 | 63,358 | 1,460,829 |

In the year of the current production, are included operations that, by their nature, are contractually subject to renewals. In these cases, the date of the last renewal is considered, namely for overdraft operations, secured current account and factoring operations.

As at 31 December 2018, the following table includes the loans portfolio by segment and by year of production (date of the beginning of the operations, in the portfolio at the date of balance sheet - it does not include restructured loans):

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| Year of production | Construction and CRE | Companies - Oth. Activities | Mortgage loans | Individuals - Other | Other loans | Total |
| **2008 and previous** | | | | | | |
| Number of operations | 17,356 | 27,714 | 322,834 | 611,393 | 478 | 979,775 |
| Value (Euros '000) | 1,084,845 | 3,584,254 | 13,454,506 | 1,034,717 | 50,947 | 19,209,269 |
| Impairment constituted (Euros '000) | 168,452 | 163,012 | 135,942 | 26,295 | 771 | 494,472 |
| **2009** | | | | | | |
| Number of operations | 2,077 | 3,273 | 18,789 | 73,636 | 64 | 97,839 |
| Value (Euros '000) | 237,103 | 685,307 | 903,711 | 114,823 | 7,638 | 1,948,582 |
| Impairment constituted (Euros '000) | 23,915 | 14,271 | 7,467 | 4,585 | 176 | 50,414 |
| **2010** | | | | | | |
| Number of operations | 2,001 | 4,058 | 20,615 | 106,117 | 64 | 132,855 |
| Value (Euros '000) | 183,439 | 488,464 | 1,014,984 | 192,961 | 9,896 | 1,889,744 |
| Impairment constituted (Euros '000) | 19,436 | 15,042 | 6,723 | 3,872 | 594 | 45,667 |
| **2011** | | | | | | |
| Number of operations | 1,960 | 5,450 | 13,584 | 122,165 | 43 | 143,202 |
| Value (Euros '000) | 98,288 | 464,657 | 618,493 | 193,887 | 11,437 | 1,386,762 |
| Impairment constituted (Euros '000) | 13,435 | 14,889 | 4,167 | 5,624 | 568 | 38,683 |
| **2012** | | | | | | |
| Number of operations | 1,861 | 5,812 | 11,104 | 132,350 | 259 | 151,386 |
| Value (Euros '000) | 108,842 | 514,859 | 457,504 | 182,500 | 17,890 | 1,281,595 |
| Impairment constituted (Euros '000) | 9,720 | 90,442 | 6,146 | 7,281 | 338 | 113,927 |
| **2013** | | | | | | |
| Number of operations | 2,833 | 8,494 | 11,479 | 167,727 | 116 | 190,649 |
| Value (Euros '000) | 139,013 | 966,916 | 514,301 | 230,884 | 144,862 | 1,995,976 |
| Impairment constituted (Euros '000) | 21,422 | 54,113 | 7,606 | 14,703 | 17,363 | 115,207 |
| **2014** | | | | | | |
| Number of operations | 3,216 | 13,391 | 8,545 | 212,415 | 224 | 237,791 |
| Value (Euros '000) | 181,713 | 1,074,423 | 436,849 | 313,691 | 220,795 | 2,227,471 |
| Impairment constituted (Euros '000) | 9,084 | 43,856 | 6,413 | 24,582 | 819 | 84,754 |
| **2015** | | | | | | |
| Number of operations | 4,850 | 20,901 | 9,886 | 292,179 | 448 | 328,264 |
| Value (Euros '000) | 265,538 | 1,782,911 | 586,031 | 517,277 | 224,327 | 3,376,084 |
| Impairment constituted (Euros '000) | 32,095 | 145,900 | 4,230 | 41,267 | 7,020 | 230,512 |
| **2016** | | | | | | |
| Number of operations | 5,389 | 27,322 | 13,692 | 289,145 | 382 | 335,930 |
| Value (Euros '000) | 416,921 | 2,528,360 | 858,463 | 693,072 | 206,116 | 4,702,932 |
| Impairment constituted (Euros '000) | 31,960 | 119,846 | 4,202 | 37,250 | 4,137 | 197,395 |
| **2017** | | | | | | |
| Number of operations | 6,189 | 31,197 | 25,233 | 306,462 | 440 | 369,521 |
| Value (Euros '000) | 696,026 | 3,046,700 | 1,834,789 | 877,639 | 262,900 | 6,718,054 |
| Impairment constituted (Euros '000) | 45,668 | 92,627 | 5,114 | 31,016 | 6,008 | 180,433 |
| **2018** | | | | | | |
| Number of operations | 14,010 | 132,610 | 32,879 | 634,048 | 4,017 | 817,564 |
| Value (Euros '000) | 1,942,173 | 8,159,206 | 2,723,382 | 1,933,972 | 803,583 | 15,562,316 |
| Impairment constituted (Euros '000) | 29,250 | 143,454 | 4,332 | 31,428 | 17,731 | 226,195 |
| **Total** | | | | | | |
| Number of operations | 61,742 | 280,222 | 488,640 | 2,947,637 | 6,535 | 3,784,776 |
| Value (Euros '000) | 5,353,901 | 23,296,057 | 23,403,013 | 6,285,423 | 1,960,391 | 60,298,785 |
| Impairment constituted (Euros '000) | 404,437 | 897,452 | 192,342 | 227,903 | 55,525 | 1,777,659 |

In the year of the current production, are included operations that, by their nature, are contractually subject to renewals. In these cases, the date of the last renewal is considered, namely for overdraft operations, secured current account and factoring operations.

As at 31 December 2019, the following table includes the fair value of the collaterals (not limited by the value of the collateral) associated to the loans portfolio by segments Construction and CRE, Companies - Other Activities and Mortgage loans:

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Construction and CRE | | Companies - Other Activities | | Mortgage loans | |
| Fair Value | Real Estate | Other real Collateral (*) | Real Estate | Other real Collateral (*) | Real Estate | Other real Collateral (*) |
| **< 0.5 M€** | | | | | | |
| Number | 6,437 | 9,745 | 10,791 | 74,567 | 453,331 | 413 |
| Value (Euros '000) | 833,563 | 228,720 | 1,526,932 | 1,608,063 | 52,185,423 | 22,193 |
| **>= 0.5 M€ and < 1 M€** | | | | | | |
| Number | 685 | 46 | 1,366 | 279 | 4,234 | 6 |
| Value (Euros '000) | 476,576 | 29,484 | 952,816 | 192,906 | 2,747,545 | 3,487 |
| **>= 1 M€ and < 5 M€** | | | | | | |
| Number | 910 | 895 | 1,104 | 276 | 848 | 12 |
| Value (Euros '000) | 1,274,189 | 240,034 | 2,146,890 | 422,576 | 845,945 | 3,606 |
| **>= 5 M€ and < 10 M€** | | | | | | |
| Number | 86 | 8 | 126 | 24 | 6 | - |
| Value (Euros '000) | 588,600 | 62,474 | 850,782 | 157,821 | 39,768 | - |
| **>= 10 M€ and < 20 M€** | | | | | | |
| Number | 42 | 4 | 60 | 16 | - | - |
| Value (Euros '000) | 576,221 | 50,642 | 803,455 | 240,773 | - | - |
| **>= 20 M€ and < 50 M€** | | | | | | |
| Number | 33 | 4 | 24 | 3 | - | - |
| Value (Euros '000) | 869,417 | 73,324 | 709,533 | 96,262 | - | - |
| **>= 50 M€** | | | | | | |
| Number | 3 | - | 12 | 4 | - | - |
| Value (Euros '000) | 171,131 | - | 924,316 | 863,177 | - | - |
| **Total** | | | | | | |
| Number | 8,196 | 10,702 | 13,483 | 75,169 | 458,419 | 431 |
| Value (Euros '000) | 4,789,697 | 684,678 | 7,914,724 | 3,581,578 | 55,818,681 | 29,286 |

(*) Includes, namely, securities, deposits and fixed assets pledges.

As at 31 December 2018, the following table includes the fair value of the collaterals (not limited by the value of the collateral) associated to the loans portfolio by segments Construction and CRE, Companies - Other Activities and Mortgage loans:

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Construction and CRE | | Companies - Other Activities | | Mortgage loans | |
| Fair Value | Real Estate | Other real Collateral (*) | Real Estate | Other real Collateral (*) | Real Estate | Other real Collateral (*) |
| **< 0.5 M€** | | | | | | |
| Number | 7,509 | 8,674 | 10,699 | 67,843 | 412,381 | 471 |
| Value (Euros '000) | 926,993 | 221,851 | 1,531,245 | 1,583,305 | 45,077,642 | 24,357 |
| **>= 0.5 M€ and < 1 M€** | | | | | | |
| Number | 638 | 57 | 1,314 | 293 | 2,450 | 5 |
| Value (Euros '000) | 432,714 | 36,504 | 915,079 | 205,129 | 1,586,158 | 2,876 |
| **>= 1 M€ and < 5 M€** | | | | | | |
| Number | 436 | 56 | 1,055 | 224 | 372 | 2 |
| Value (Euros '000) | 875,232 | 99,842 | 2,081,256 | 425,434 | 561,752 | 2,916 |
| **>= 5 M€ and < 10 M€** | | | | | | |
| Number | 68 | 3 | 118 | 24 | 4 | - |
| Value (Euros '000) | 479,873 | 19,280 | 803,674 | 162,992 | 24,124 | - |
| **>= 10 M€ and < 20 M€** | | | | | | |
| Number | 32 | 4 | 59 | 17 | - | - |
| Value (Euros '000) | 430,715 | 58,495 | 791,756 | 255,092 | - | - |
| **>= 20 M€ and < 50 M€** | | | | | | |
| Number | 26 | - | 27 | 3 | - | - |
| Value (Euros '000) | 757,027 | - | 802,373 | 86,423 | - | - |
| **>= 50 M€** | | | | | | |
| Number | 3 | - | 8 | 2 | - | - |
| Value (Euros '000) | 176,677 | - | 669,380 | 688,193 | - | - |
| **Total** | | | | | | |
| Number | 8,712 | 8,794 | 13,280 | 68,406 | 415,207 | 478 |
| Value (Euros '000) | 4,079,231 | 435,972 | 7,594,763 | 3,406,568 | 47,249,676 | 30,149 |

(*) Includes, namely, securities, deposits and fixed assets pledges.

As at 31 December 2019, the following table includes the LTV ratio by segments Construction and Commercial Real Estate (CRE), Companies - Other Activities and Mortgage loans:

(Thousands of euros)

| | 2019 | | | | |
|---|---|---|---|---|---|
| Segment/Ratio | Number of properties | Stage 1 | Stage 2 | Stage 3 | Impairment |
| **Construction and CRE** | | | | | |
| Without associated collateral | n.a. | 2,086,625 | 768,657 | 442,944 | 202,585 |
| <60% | 17,242 | 558,709 | 241,261 | 63,333 | 15,699 |
| >=60% and <80% | 3,389 | 675,660 | 97,461 | 26,694 | 10,938 |
| >=80% and <100% | 1,538 | 163,759 | 85,336 | 112,415 | 26,182 |
| >=100% | 8,068 | 436,551 | 190,209 | 370,532 | 195,285 |
| **Companies - Other Activities** | | | | | |
| Without associated collateral | n.a. | 14,681,508 | 2,224,191 | 1,597,121 | 1,045,994 |
| <60% | 47,980 | 1,374,701 | 447,465 | 233,219 | 80,416 |
| >=60% and <80% | 16,575 | 902,710 | 244,641 | 151,310 | 51,077 |
| >=80% and <100% | 13,894 | 709,089 | 202,621 | 143,773 | 70,388 |
| >=100% | 8,657 | 1,115,491 | 357,817 | 723,141 | 487,563 |
| **Mortgage loans** | | | | | |
| Without associated collateral | n.a. | 231,962 | 5,098 | 10,469 | 7,999 |
| <60% | 272,952 | 8,057,885 | 952,664 | 201,100 | 30,362 |
| >=60% and <80% | 145,013 | 7,210,271 | 1,031,242 | 236,650 | 29,324 |
| >=80% and <100% | 67,132 | 3,286,948 | 616,158 | 251,569 | 29,570 |
| >=100% | 28,216 | 1,343,396 | 219,650 | 375,142 | 115,204 |

As at 31 December 2018, the following table includes the LTV ratio by segments Construction and Commercial Real Estate (CRE), Companies - Other Activities and Mortgage loans:

(Thousands of euros)

| | 31 December 2018 | | | | |
|---|---|---|---|---|---|
| Segment/Ratio | Number of properties | Stage 1 | Stage 2 | Stage 3 | Impairment |
| **Construction and CRE** | | | | | |
| Without associated collateral | n.a. | 1,919,046 | 714,764 | 537,137 | 234,797 |
| <60% | 9,267 | 397,422 | 217,356 | 90,602 | 31,083 |
| >=60% and <80% | 4,269 | 490,779 | 82,968 | 109,921 | 23,882 |
| >=80% and <100% | 2,132 | 162,694 | 54,044 | 96,652 | 29,928 |
| >=100% | 15,197 | 263,815 | 151,302 | 819,524 | 428,196 |
| **Companies - Other Activities** | | | | | |
| Without associated collateral | n.a. | 14,681,508 | 2,224,191 | 1,597,121 | 1,045,994 |
| <60% | 47,980 | 1,374,701 | 447,465 | 233,219 | 80,416 |
| >=60% and <80% | 16,575 | 902,710 | 244,641 | 151,310 | 51,077 |
| >=80% and <100% | 13,894 | 709,089 | 202,621 | 143,773 | 70,388 |
| >=100% | 8,657 | 1,115,491 | 357,817 | 723,141 | 487,563 |
| **Mortgage loans** | | | | | |
| Without associated collateral | n.a. | 231,962 | 5,098 | 10,469 | 7,999 |
| <60% | 272,952 | 8,057,885 | 952,664 | 201,100 | 30,362 |
| >=60% and <80% | 145,013 | 7,210,271 | 1,031,242 | 236,650 | 29,324 |
| >=80% and <100% | 67,132 | 3,286,948 | 616,158 | 251,569 | 29,570 |
| >=100% | 28,216 | 1,343,396 | 219,650 | 375,142 | 115,204 |

As at 31 December 2019, the following table includes the fair value and the net book value of the properties classified as Non-current assets held for sale (note 26), by type of asset:

(Thousands of euros)

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Assets arising from recovered loans results (note 26) | | Assets belong to investments funds and real estate companies (note 26) | | Total | |
| **Asset** | Appraised value | Book value | Appraised value | Book value | Appraised value | Book value |
| **Land** | | | | | | |
| Urban | 462,441 | 367,128 | 252,190 | 252,190 | 714,631 | 619,318 |
| Rural | 20,104 | 15,065 | 3,398 | 3,398 | 23,502 | 18,463 |
| **Buildings in development** | | | | | | |
| Commercials | 1,468 | 767 | 34,176 | 34,176 | 35,644 | 34,943 |
| Mortgage loans | 4,000 | 3,043 | - | - | 4,000 | 3,043 |
| Other | 61 | 61 | - | - | 61 | 61 |
| **Constructed buildings** | | | | | | |
| Commercials | 288,983 | 233,049 | 21,467 | 21,467 | 310,450 | 254,516 |
| Mortgage loans | 312,807 | 251,777 | 2,948 | 2,948 | 315,755 | 254,725 |
| Other | 6,827 | 6,502 | 2,659 | 2,659 | 9,486 | 9,161 |
| **Other assets** | 3,894 | 3,894 | - | - | 3,894 | 3,894 |
| | 1,100,585 | 881,286 | 316,838 | 316,838 | 1,417,423 | 1,198,124 |

As at 31 December 2018, the following table includes the fair value and the net book value of the properties classified as Non-current assets held for sale (note 26), by type of asset:

(Thousands of euros)

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Assets arising from recovered loans results (note 26) | | Assets belong to investments funds and real estate companies (note 26) | | Total | |
| **Asset** | Appraised value | Book value | Appraised value | Book value | Appraised value | Book value |
| **Land** | | | | | | |
| Urban | 623,010 | 477,795 | 267,943 | 267,943 | 890,953 | 745,738 |
| Rural | 33,188 | 26,466 | 32,760 | 32,760 | 65,948 | 59,226 |
| **Buildings in development** | | | | | | |
| Commercials | 28,401 | 23,348 | 34,754 | 34,754 | 63,155 | 58,102 |
| Mortgage loans | 55,406 | 44,107 | - | - | 55,406 | 44,107 |
| Other | 61 | 61 | - | - | 61 | 61 |
| **Constructed buildings** | | | | | | |
| Commercials | 394,885 | 307,941 | 23,692 | 23,692 | 418,577 | 331,633 |
| Mortgage loans | 499,889 | 417,164 | 6,994 | 6,994 | 506,883 | 424,158 |
| Other | 6,123 | 6,050 | 2,851 | 2,851 | 8,974 | 8,901 |
| **Other assets** | 4,081 | 4,050 | - | - | 4,081 | 4,050 |
| | 1,645,044 | 1,306,982 | 368,994 | 368,994 | 2,014,038 | 1,675,976 |

## Credit concentration risk

The Group's policy relating to the identification, measurement and evaluation of the concentration risk in credit risk is defined and described in the document *Credit Principles and Guidelines*, approved by the Bank's management body. This policy applies to all Group entities by the transposition of the respective definitions and requirements into the internal rulings of each entity. Through the document mentioned above, the Group defined the following guidelines relating to the control and management of credit concentration risk:

The monitoring of the concentration risk and the follow-up of major risks is made, at Group level, based on the concept of "Economic Groups" and "Customer Groups" - sets of connected Customers (individual persons or companies), which represent a single entity from a credit risk perspective, such that if one of them is affected by financial problems, one or all of the others, will probably face difficulties to fulfil their debtor obligations. The Customer connections that originate a Customer group include the formal participation on the same economic group, the evidence that a direct or indirect control relationship exists, including the control by an individual Customer (criteria of capacity of control) of a company or the existence of a strong commercial interdependency or common sources of funding that cannot be replaced on a short term (criteria of economic dependency).The identification of connected clients is an integral part of the credit granting and monitoring processes of each entity.

For the control of credit concentration risk and limit the exposure to this risk, there are limits defined for:

1) Exposures to Sovereigns;
2) Exposures to Institutions (Banks/financial institutions);
3) Single-name exposures (Large Corporate exposures);
4) Geographic concentration (country risk);
5) Exposure to sectors of activity.

These limits apply to the 'Net exposures' at stake(*), relating either to a counterparty or a group of counterparties – cases for 1), 2) and 3) – or to the set of exposures to an activity sector or to a country (the counterparty country of residence) – cases for 4) and 5). The measurement of geographic concentration excludes the countries in which the Group operates (Portugal, Poland and Mozambique).

Except for exposure to sectors of activity, the concentration limits are established by taking into consideration the credit worthiness of the debtors at stake in what concerns their rating grades/probability of Default (PD) (internal or external ratings; country rating in the case of geographic concentration).

The concentration limits for Corporate single-name exposures apply only to non-NPE positions, since the NPE(**) positions are covered by the NPE reduction Plan.

The limits in force as at 31 December 2019, for the exposure to Sovereigns, Institutions, Single-name and geographical (for a given Customer/Group of Customers in the second and third cases) are the following, in terms of the Net Exposure weight over the Consolidated Own Funds:

| | | Limit = Max. % of Net Exposure over the Consolidated Own Funds | | |
|---|---|---|---|---|
| **Risk quality** | **Risk grades** | **Sovereigns** | **Institutions** | **Countries (geog.)** |
| 1st Tier | 1 - 3 | 25.0% | 10.0% | 40.0% |
| 2nd Tier | 4 - 6 | 10.0% | 5.0% | 20.0% |
| 3rd Tier | 7 - 12 | 7.5% | 2.5% | 10.0% |

| Risk quality | Risk grade | *Single-name* |
|---|---|---|
| High quality | 1 - 5 | 7.0% |
| Average/good quality | 6 - 7 | 4.5% |
| Average low/quality | 8 - 9 | 3.0% |
| Low quality | 10 - 11 | 0.7% |
| Restricted credit | 12 - 13 | 0.3% |

(*) Net exposure = EAD x LGD, considering LGD=45% whenever own estimates for LGD are not available or applicable. EAD = Exposure at default ; LGD = Loss given Default;

(**) NPE = Non-performing exposures

As at 31 December 2019:

- There were no exposure excesses to Sovereigns, Institutions or countries;
- There were 3 Economic Groups with net exposure above the established Single-name limits for their respective risk grade, the same number as by the end of 2018. For each client with an exposure excess a specific plan is prepared, aiming at reducing the exposure and bringing it within the established limits.

It should also be referred that the assessment of the Single-name concentration is also performed within the Group RAS (Risk Appetite Statement) scope.

In what concerns the limit for exposure to sectors of activity, in force on 31 December 2019, this is defined as a maximum of 40% per sector of activity, in terms of the weight of the Net Exposure for each sector of activity over the Own Funds of each Group Entity. As of 31 December 2019, there was no excess over this limit.

The Bank's management body and the Risk Assessment Committee are regularly informed on the evolution of the credit concentration risk metrics (against the mentioned limits) and on major risks, which are assessed by measuring the weights of the net exposure values in question in terms of the consolidated Own Funds level. For such measurements, the Risk Office uses a database on credit exposures (the Risk Office Datamart), monthly updated by the Group's systems, which also feeds a simulation tool for supporting the analysis of the impact on changes on the Customers exposures in the consumption of the respective concentration limits, used by the Credit Division within the scope of credit analysis for large clients.

## Market risk

Market risks consist of the potential losses that might occur in a given portfolio as a result of changes in interest or exchange rates and/or in the prices of the different financial instruments of the portfolio, considering not only the correlations that exist between those instruments but also their volatility.

For purposes of profitability analysis and market risks quantification and control, the following management areas are defined for each entity of the Group:

- Trading - Management of positions whose objective is the achievement of short term gains, through sale or revaluation. These positions are actively managed, tradable without restriction and may be valued frequently and accurately. The positions in question include securities and derivatives of sales activities;
- Funding - Management of institutional funding (wholesale funding) and money market positions;
Investment - Management of all the positions in securities to be held to maturity (or for a longer period of time) or positions which are not tradable on liquid markets;
- Commercial - Management of positions arising from commercial activity with Customers;
- Structural - Management of balance sheet items or operations which, due to their nature, are not directly related to any of the management areas referred to above; and
- ALM - Assets and Liabilities Management.

The definition of these areas allows for an effective management separation of the trading and banking books, as well as for the correct allocation of each operation to the most suitable management area, according to its respective context and strategy.

In order to ensure that the risk levels incurred in the different portfolios of the Group comply with the predefined levels of tolerance to risk, various market risks limits are established, at least yearly, being applicable to all portfolios of the risk management areas over which the risks are incident. These limits are monitored on a daily basis (or intra-daily, in the case of financial markets) by the Risk Office.

Stop Loss limits are also defined for the financial markets areas, based on multiples of the risk limits defined for those areas, aimed at limiting the maximum losses that might occur. When these limits are reached, a review of the strategy and of the assumptions relative to the management of the positions in question is mandatory.

## Trading book market risks (Positions allocated to the Trading Management Area and not, specifically, to the accounting Trading Book)

The Group uses an integrated market risk measurement that allows for the monitoring all of the risk subtypes that are considered relevant. This measurement includes the assessment of the general risk, specific risk, non-linear risk and commodity risk. Each risk subtype is measured individually using an appropriate risk model and the integrated measurement is built from the measurements of each subtype without considering any kind of diversification between the four subtypes (worst-case scenario approach).

For the daily measurement of general market risk - including interest rate risk, exchange rate risk, equity risk and price risk of credit default swaps (indexes) - a VaR (value-at-risk) model is used, considering a time horizon of 10 business days and a significance level of 99%.

For non-linear risk, an internally-developed methodology is applied, replicating the effect that the main non-linear elements of options might have in P&L results of the different portfolios in which these are included, similarly to what is considered by the VaR methodology, using the same time horizon and significance level.

Specific and commodity risks are measured through standard methodologies defined in the applicable regulations, with an appropriate change of the time horizon considered.

The table below presents the amounts at risk for the Trading Book, between 31 December 2019 and 31 December 2018, measured by the methodologies referred to above:

(Thousands of euros)

| | December 2019 | Max of global risk in the period | Min of global risk in the period | December 2018 |
|---|---|---|---|---|
| **Generic Risk ( VaR )** | 2,094 | 5,490 | 884 | 3,039 |
| Interest Rate Risk | 1,876 | 5,596 | 714 | 3,125 |
| FX Risk | 1,170 | 306 | 415 | 363 |
| Equity Risk | 81 | 32 | 7 | 34 |
| *Diversification effects* | *(1,033)* | *(444)* | *(252)* | *(483)* |
| **Specific Risk** | 3 | 15 | 10 | 47 |
| **Non-Linear Risk** | - | - | - | - |
| **Commodities Risk** | 5 | 2 | 3 | 5 |
| **Global Risk** | 2,102 | 5,507 | 897 | 3,091 |

In order to check the appropriateness of the internal VaR model to the assessment of the risks involved in the positions held, several validations are conducted over time, of different scopes and frequency, which include back testing, the estimation of the effects of diversification and the analysis of the comprehensiveness of the risk factors.

As a complement to the VaR assessment, the Group continuously tests a broad range of stress scenarios analysing the respective results with a view to identifying risk concentrations that have not been captured by the VaR model and, also, to test for other possible dimensions of loss.

## Interest rate risk

The evaluation of interest rate risk derived from Banking Book operations is assessed through a process of risk sensitivity analysis, undertaken every month, covering all the operations included in the Group's consolidated Balance Sheet and discriminated by exposure currency.

Variations of market interest rates influence the Group's net interest income, both in the short term and medium/long term, affecting its economic value in a long term perspective. The main risk factors arise from the repricing mismatch of portfolio positions (repricing risk) and from the risk of variation in market interest rates (yield curve risk). Besides this, although with less impact, there is the risk of unequal variations in different reference rates with the same repricing period (basis risk).

In order to identify the exposure of the Group's banking book to these risks, the monitoring of the interest rate risk takes into consideration the financial characteristics of each of the relevant contracts, with the respective expected cash-flows (principal and interest, without the spread component but including costs for liquidity, capital, operational and other) being projected according to the repricing dates, thus calculating the impact on economic value resulting from alternative scenarios of change of market interest rate curves.

The interest rate sensitivity of the balance sheet, by currency, is calculated as the difference between the present value of the interest rate mismatch discounted at market interest rates and the discounted value of the same cash flows simulating parallel shifts of the market interest rates.

The following tables show the expected impact on the banking book economic value of parallel shifts of the yield curve by +/- 100 and +/- 200 basis points, for each of the main currencies in which the Group holds material positions:

(Thousands of euros)

| | 2019 | | | |
|---|---|---|---|---|
| Currency | - 200 bp (*) | - 100 bp (*) | + 100 bp | + 200 bp |
| CHF | 2,075 | 2,075 | 2,906 | 6,406 |
| EUR | 67,754 | 66,915 | 8,699 | 27,583 |
| PLN | 69,034 | 37,128 | (34,785) | (67,405) |
| USD | (21,837) | (12,593) | 12,160 | 23,930 |
| | 117,026 | 93,525 | (11,020) | (9,486) |

(*) Decrease in rates scenario, limited to non-negative rates (which implies effective variations of lesser amplitude than 100 bp, especially in shorter periods).

(Thousands of euros)

| | | | | 2,018 |
|---|---|---|---|---|
| Currency | - 200 bp (*) | - 100 bp (*) | + 100 bp | + 200 bp |
| CHF | 1,822 | 1,822 | 2,879 | 5,694 |
| EUR | (20,095) | (24,812) | 128,633 | 251,343 |
| PLN | 16,936 | 7,841 | (7,100) | (13,523) |
| USD | (28,136) | (13,800) | 13,280 | 26,077 |
| | (29,473) | (28,949) | 137,692 | 269,591 |

(*) Decrease in rates scenario, limited to non-negative rates (which implies effective variations of lesser amplitude than 100 bp, especially in shorter periods).

As described in accounting policy 1 B), the financial statements of the Group's subsidiaries and associates placed abroad are prepared in their functional currency and translated into Euros at the end of each financial period. The exchange rates used for the conversion of balance sheet foreign currency amounts are the ECB reference rates at the end of each period. In foreign currency conversion of results, are calculated average exchange rates according to the closing exchange rates of each month of the year. The rates used by the Group are as follows:

| | Closing exchange rates (Balance sheet) | | Average exchange rates (Income statement) | |
|---|---|---|---|---|
| Currency | 2019 | 2018 | 2019 | 2018 |
| AOA | 541.2770 | 352.8610 | 412.0225 | 298.2603 |
| BRL | 4.5114 | 4.4377 | 4.3958 | 4.3064 |
| CHF | 1.0872 | 1.1267 | 1.1132 | 1.1518 |
| MOP | 9.0080 | 9.2211 | 9.0080 | 9.2211 |
| MZN | 70.0750 | 70.5000 | 69.9398 | 71.6463 |
| PLN | 4.2518 | 4.2966 | 4.2954 | 4.2635 |
| USD | 1.1225 | 1.1434 | 1.1201 | 1.1828 |

## Foreign exchange and equity risk in the banking book

The exchange rate risk of the banking book is transferred internally to the Trading area, in accordance with the risk specialization model followed by the Group for the management of the exchange rate risk of the Balance Sheet. The exposures to exchange rate risk that are not included in this transfer – the financial holdings in subsidiaries, in foreign currency - are hedged on a case-by-case basis through market operations, taking into consideration the defined policy and the conditions and availability of instruments.

As at 31 December 2019, the Group's investments in convertible foreign currencies were fully hedged. On a consolidated basis, these hedges are identified, in accounting terms, as 'Net investment hedges', in accordance with the IFRS nomenclature. On an individual basis, hedge accounting is also carried out, in this case through a 'Fair Value Hedge' methodology.

Regarding equity risk, the Group maintains a set of positions of small size and low risk equity positions, essentially in the investment portfolio, which are not held for trading purposes. The management of these positions is carried out by a specific area of the Group, with the respective risk being controlled on a daily basis, through the indicators and limits defined for market risks' control.

As at 31 December 2019, the information of net investments, considered by the Group in total or partial hedging strategies on subsidiaries and on hedging instruments used, is as follows:

| | | 2019 | | | |
|---|---|---|---|---|---|
| | | Net Investment | Hedging instruments | Net Investment | Hedging instruments |
| Company | Currency | Currency '000 | Currency '000 | Euros '000 | Euros '000 |
| Banque Privée BCP (Suisse) S.A. | CHF | 76,493 | 76,493 | 70,355 | 70,355 |
| Bank Millennium, S.A. | PLN | 2,570,017 | 2,570,017 | 604,454 | 604,454 |

The information on the gains and losses in exchange rates on the loans to cover the investments in foreign institutions, accounted for as exchange differences, is presented in the statement of changes in equity. These hedging relationships were considered effective during the first semester of 2019, as referred in the accounting policy 1 C4.

The transfer to Portugal of funds, including dividends, which are owed by BCP's subsidiaries or associates in third countries, particularly outside the European Union, are, by their nature, subject to the exchange restrictions and controls that are in force at any time in the country of subsidiaries or associates. In particular, as regards Angola and Mozambique, countries in which the Group holds a minority investment in Banco Millennium Angola and a majority investment in BIM - Banco Internacional de Moçambique, being the case of, export of foreign currency requires prior authorization of the competent authorities, which depends, namely, on the availability of foreign exchange by the central bank of each country. At the date of preparation of this report, there are no outstanding amounts due to the aforementioned requirements.

## Liquidity risk

The evaluation of the Group's liquidity risk is carried out using indicators defined by the supervisory authorities on a regular basis and other internal metrics for which exposure limits are also defined.

The monitoring of the liquidity position of the Group's operations in short-term time horizons (up to 3 months) is based on two internally defined indicators (immediate liquidity and quarterly liquidity). These indicators are calculated on a daily basis, taking into account the impact in the liquidity buffers available to discount with the respective central banks at the reference date of future estimated cash flows for each of the respective time horizon (3 days or 3 months) considering the set of transactions intermediated by the market areas, including in this context transactions with clients of the Corporate and Private networks, which, due to their size, must be quoted by the Trading Room. The remaining buffer in each time bucket is then compared to the amount of customer deposits, being the indicators assessed against exposure limits defined in the Bank's regulations.

In parallel, the evolution of the Group's liquidity position is calculated on a regular basis identifying all the factors that justify the variations that occur. This analysis is submitted to the Capital and Assets and Liabilities Committee (CALCO) for appraisal, in order to enable the decision making that leads to the maintenance of financing conditions adequate to the continuation of the business.

In addition, the Risk Commission is responsible for controlling the liquidity risk. This control is reinforced through the monthly execution of stress tests, to characterize the Bank's risk profile and to ensure that the Group and each of its subsidiaries fulfil its obligations in the event of a liquidity crisis. These tests are also used to support the liquidity contingency plan and management decisions.

In 2019, net wholesale financing needs decreased by Euros 2,346,095,000 in consolidated terms, attributable to a decrease of Euro 2.739.569.000 in the Portuguese operation and an increase of Euros 393,474,000 in Bank Millennium, in this case mainly as a result of the acquisition of Euro Bank SA. In Portugal, the variation was due, by decreasing order of materiality, to the reductions in the commercial gap and investments in sovereign debt, cash flow from operations, sale of other assets and reduction of the corporate securities portfolio.

From a funding structure perspective, the reduction in the liquidity needs of the operation in Portugal was carried out through decreases in the resort to net funding from the ECB (Euros 2,368,613,000, to Euros 283,385,000) and money market instruments (Euros 1,249,982,000, split between interbank market and repos, in this case to a zero balance) against a reinforcement totaling Euros 850,000,000 of its medium-term component eligible for MREL, already foreseen in the Group Liquidity Plan for 2019. Thus, in January BCP placed an issue of Additional Tier 1 worth Euros 400,000,000 and returned to the market in September with a new issue of Euros 450,000,000 of subordinated debt securities eligible as Tier 2, with the operation placed on a very diverse set of European institutional investors. Bank Millennium, in turn, issued PLN 830,000,000 subordinated bonds to strengthen its financial structure in view of the acquisition of Euro Bank, also assuming long-term liabilities originating in that entity in the amount of PLN 878,000,000. The overall amount of debt placed on the market by the Group amounts to Euro Euros 2,590,681,000 at the end of 2019. The medium-long-term funding component was further strengthened by an increase of Euros 131,407,000 of the balance of loan agreements, to Euros 1,886,747,000, split between Bank Millennium (Euros 89,895,000 ) and BCP (Euros 41,512,000).

The value of collateralized borrowings with the ECB remained at Euros 4,000,000,000 euros, corresponding to the balance of targeted longer-term refinancing operations, called TLTRO, which will mature in 2020. Net debt with the ECB, which deducts from the value of the gross borrowings the liquidity deposited with the Bank of Portugal euros in excess of the minimum cash reserves, other liquidity denominated in euros and accrued interest to be received, reached the lowest value since the Bank borrows from the central bank at Euros 283,385,000, a reduction of Euros 2,368,613,000 over the previous year.

The evolution of the central bank’s liquidity buffers held by the three main operations of the Group showed a favorable evolution throughout 2019, assuming in any case a very comfortable dimension in relation to total of customer deposits, an indicator internally used by the Group to assess the resilience of the liquidity buffer to a scenario of financial stress.

In Portugal, the joint evolution of liquidity held at the central bank and the portfolio of eligible assets with the ECB has substantially increased the Eurosystem's liquidity buffer by Euros 2,516,214,000, to Euros 16,776,747,000.

Although Bank Millennium's liquidity buffer with the Central Bank of Poland was reduced by Euros 1,169,465,000 at the end of May, to pay for the acquisition of Euro Bank SA, the balance at the end of 2019 was similar to that observed one year earlier (Euros 5,088,019,000).

Throughout 2019, BIM maintained a strong liquidity position, with the central bank buffer increasing at year end by Euros 79,058,000 vs. 2018, to a total of Euros 800,306,000.

On a consolidated basis and considering the implementation of the 2020 Liquidity Plan issuance plan, future refinancing needs will remain at low materiality levels over the next five years, exceeding Euros 1,000,000,000 just once, in 2022. Even in this case, it will involve the repayment of a Euros 1,000,000,000 issuance which pledged collateral will be free for discount with the ECB at maturity, thus meaning a minor loss of liquidity.

The pool of eligible assets for funding operations in the European Central Bank and other central banks, after haircuts, is detailed as follows:

(Thousands of euros)

| | 2019 | 2018 |
|---|---|---|
| European Central Bank | 7,328,153 | 7,248,348 |
| Other Central Banks | 5,888,324 | 5,608,093 |
| | 13,216,477 | 12,856,441 |

As at 31 December 2019, the amount discounted with the European Central Bank amounts to Euros 4,000,000,000 (31 December 2018: Euros 4,000,000,000). On 31 December 2019 the amount discounted from the Bank of Mozambique was Euros 2,426,000 (Euros 1,275,000 as of 31 December 2018). There were no discounted amounts with other central banks. The amount of assets eligible for discount with the European Central Bank includes securities issued by the SPE from securitization operations whose assets have not been derecognised in the Group's consolidated view, so that the securities are not recognized in the securities portfolio.

The evolution of the ECB's Monetary Policy Pool, the net borrows at the ECB and liquidity buffer is analysed as follows:

(Thousands of euros)

| | 2019 | 2018 |
|---|---|---|
| Collateral eligible for ECB, after haircuts: | | |
| The pool of ECB monetary policy (i) | 7,328,153 | 7,248,348 |
| Outside the pool of ECB monetary policy | 9,731,980 | 9,664,184 |
| | 17,060,133 | 16,912,532 |
| Net borrowing at the ECB (ii) | 283,385 | 2,651,998 |
| Liquidity buffer (iii) | 16,776,748 | 14,260,534 |

i) Corresponds to the amount reported in COLMS (Bank of Portugal application).
ii) Includes, as at 31 December 2019, the value of funding with ECB net of interest associated with negative financing rate applied to TLTRO (Euros 56,428,000) of deposits with the Bank of Portugal and other liquidity of the Eurosystem (Euros 4,039,694,000), plus the minimum cash reserves (Euros 379,507,000).
iii) Collateral eligible for ECB, after haircuts, less net financing at the ECB.

## Loans to deposits ratio

The BCP Group structurally improved its liquidity profile by recording as at 31 December 2019 a credit transformation ratio on deposits calculated in accordance with Bank of Portugal Instruction No. 16/2004 (current version) of 86% and as at 31 December 2018 this ratio was set at 87% (according to the current version of the Instruction as at 31 December 2019).

## Liquidity coverage ratio

The Basel Committee published the definition of the Liquidity Coverage Ratio (LCR) in 2014, and the Delegated Act by the European Commission was adopted in early October 2015, which introduced, in relation to CRD IV / CRR, new metrics and calculation criteria implemented in the European Union. The adoption of the new framework defines a minimum requirement of 100% from1 January 2018. The LCR ratio of the BCP Group comfortably stood above the reglementary limit indicating 216% at the end of December 2019 (31 December 2018: 218%), supported by highly liquid asset portfolios of value compatible with prudent management of the Group's short-term liquidity.

## Net stable funding ratio

The definition of the Net Stable Funding Ratio (NSFR) was approved by the Basel Committee in October 2014. The Group has a stable financing base, obtained by the high weight of customer deposits in the funding structure, collateralised financing, medium and long-term instruments and a strengthened regulatory capital structure, that allow to adequately support the stable financing requirements of the medium and long-term business model, including tangible and intangible assets, customers loans and the securities portfolio that partly serves the purpose of maintaining a highly liquid assets buffer to cover liquidity outflows in adverse situations. The NFSR stood at 135 % as at 31 December 2019 (which compares to 133% by 31 December 2018).

## Encumbered and Unencumbered assets

Within the scope of the European Banking Authority's guidance on the disclosure of encumbered assets and unencumbered assets, taking into account the recommendation made by the European Systemic Risk Committee, the following information is presented in accordance with Commission Delegated Regulation (EU) 2017/2295 of 4 September 2017 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for disclosure of encumbered and unencumbered assets.

(Thousands of euros)

| | 2019 (1) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Carrying amount of encumbered assets | | Fair value of encumbered assets | | Carrying amount of unencumbered assets | | Fair value of unencumbered assets | |
| | | of which notionally eligible EHQLA and HQLA (2) | | of which notionally eligible EHQLA and HQLA (2) | | of which EHQLA and HQLA (2) | | of which EHQLA and HQLA (2) |
| **Assets of the reporting institution** | 10,459,171 | 1,043,266 | n/a | n/a | 70,539,049 | 16,449,753 | n/a | n/a |
| Equity instruments | - | - | n/a | n/a | 86,033 | - | n/a | n/a |
| **Debt securities** | 1,137,566 | 1,043,266 | 1,136,379 | 1,042,273 | 17,762,092 | 12,773,551 | 17,764,516 | 12,774,818 |
| of which: | | | | | | | | |
| issued by general governments | 765,468 | 666,166 | 765,468 | 666,166 | 12,312,751 | 11,902,959 | 12,319,695 | 11,905,154 |
| issued by financial corporations | 32,938 | 32,938 | 32,938 | 32,938 | 1,975,150 | 23,492 | 1,970,819 | 23,492 |
| issued by non-financial corporations | 336,757 | 336,757 | 336,064 | 336,064 | 2,726,570 | 496,101 | 2,726,817 | 495,520 |
| **Other assets of which:** | 9,321,605 | - | n/a | n/a | 52,690,924 | 3,676,202 | n/a | n/a |
| Loans on demand | - | - | n/a | n/a | 3,430,440 | 3,130,931 | n/a | n/a |
| Loans and advances other than loans on demand | 9,061,854 | - | n/a | n/a | 41,740,048 | - | n/a | n/a |
| Other | 259,751 | - | n/a | n/a | 7,520,436 | 545,271 | n/a | n/a |

(1) Table's figures are calculated by the median of the values disclosed in the regulatory information for the 4 quarters of the year.
(2) Disclosure of encumbered and unencumbered assets EHQLA and HQLA is presented in accordance with the liquidity criterion defined in Commission Delegated Regulation (EU) 2015/61, which differs from regulatory reporting by pointing to an operational criterion - central bank eligibility.

(Thousands of euros)

| | 2019 (1) | | | |
|---|---|---|---|---|
| | Fair value of encumbered collateral received or own debt securities issued | | Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance | |
| | | of which notionally eligible EHQLA and HQLA (2) | | of which EHQLA and HQLA (2) |
| **Collateral received by the reporting institution** | - | - | 32,476 | 32,476 |
| **Debt securities** | - | - | 32,476 | 32,476 |
| of which: | | | | |
| issued by general governments | - | - | 32,476 | 32,476 |
| **Own covered bonds and asset-backed securities issued and not yet pledged** | n/a | n/a | 3,616,373 | 3,616,373 |
| **Total assets, Collateral Received and Own Debt Securities Issued** | 10,459,171 | 1,043,266 | n/a | n/a |

(1) Table's figures are calculated by the median of the values disclosed in the regulatory information for the 4 quarters of the year.
(2) Disclosure of encumbered and unencumbered assets EHQLA and HQLA is presented in accordance with the liquidity criterion defined in Commission Delegated Regulation (EU) 2015/61, which differs from regulatory reporting by pointing to an operational criterion - central bank eligibility.

(Thousands of euros)

| | 2019 (1) | |
|---|---|---|
| Sources of encumbrance | Matching liabilities, contingent liabilities or securities lent | Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered |
| Carrying amount of selected financial liabilities | 6,768,487 | 10,056,710 |

(1) Table's figures are calculated by the median of the values disclosed in the regulatory information for the 4 quarters of the year.

At the end of 2019, and according to the EBA methodology, the total encumbered assets represents 12% of the Group's total balance sheet assets. The encumbered Loans to customers represent 81%, while Debt securities represents 12%.

The encumbered assets are mostly related with the Group's funding operations - namely with the ECB and via REPO operations - through the issuance of mortgage bonds and securitisation programs. The type of assets used as collateral for these financing transactions are different Loans to Customers' portfolios, supporting securitisation programs and mortgage bonds issues, either placed outside of the Group or intended to reinforce the collateral pool with the ECB and to collateralise REPO operations from the money markets. Another part of the collateralisation of operations of the latter type, as well as financing from the European Investment Bank, is obtained though sovereign debt eligible for central banks, together with bonds issued by public sector companies.

On 31 December 2019, the Other assets: Other, in the amount of Euros 7,520,436,000, although not encumbered, are mostly related to the Group's activity, namely, to: investments in associated companies and subsidiaries, tangible assets and investment properties, intangible assets, assets associated with derivatives and current and deferred taxes.

On 31 December 2019, the Group has an Euros 12.5 billion BCP Covered Bond Programme ("BCP Programme") with Euros 8.2 billion of covered bonds outstanding. The BCP Programme is backed by a Euros 11.7 billion portfolio of residential mortgages, providing an overcollateralization ("OC") of 42.3% that is above the minimum of 14% currently required by rating agencies. The former BII covered bond programme finished on 28 March 2019.

The Portuguese covered bond legislation ensures covered bond holders the benefit of dual-recourse over the issuer, together with a special preferential claim over the respectively assigned residential mortgage portfolios, with precedence over any other creditors, covered bond law superseding the general bankruptcy regulation. Residential mortgages in a cover pool are subject to certain eligibility criteria inscribed in the Portuguese covered bond legislation, which include a maximum LTV of 80%, delinquency of no more than 90 days and first lien mortgages (or, if otherwise, all preceding liens being included in the cover pool) over properties located in the EU. Both the BCP Programme and the BII Programme documentation limit property location to Portugal.

The analysis of the balance sheet items by maturity dates is as follows:

(Thousands of euros)

| | 2019 | | | | | | |
|---|---|---|---|---|---|---|---|
| | At sight | Up to 3 months | 3 months to 1 year | 1 year to 5 years | Over 5 years | Undetermined maturity | Total |
| **Assets** | | | | | | | |
| Cash and deposits at Central Banks | 5,166,551 | - | - | - | - | - | 5,166,551 |
| Loans and advances to CI | | | | | | | |
| Repayable on demand | 320,857 | - | - | - | - | - | 320,857 |
| Other loans and advances (a) | - | 875,286 | 8,077 | 10,000 | - | - | 893,363 |
| Loans and advances to customers (a) | - | - | 8,954,416 | 10,395,257 | 31,329,587 | 1,585,591 | 52,264,851 |
| Other financial assets (b) | - | 1,285,847 | 1,727,517 | 8,506,399 | 3,284,829 | 727,452 | 15,532,044 |
| | 5,487,408 | 2,161,133 | 10,690,010 | 18,911,656 | 34,614,416 | 2,313,043 | 74,177,666 |
| **Liabilities** | | | | | | | |
| Resources from CI | - | 836,401 | 4,163,310 | 1,062,395 | 304,852 | - | 6,366,958 |
| Resources from costumers | 37,083,367 | 11,734,834 | 9,693,643 | 554,915 | 60,246 | - | 59,127,005 |
| Debt securities issued | - | 23,213 | 153,995 | 1,232,885 | 184,631 | - | 1,594,724 |
| Subordinated debt | - | 52,722 | 103,604 | 299,322 | 1,100,023 | 22,035 | 1,577,706 |
| | 37,083,367 | 12,647,170 | 14,114,552 | 3,149,517 | 1,649,752 | 22,035 | 68,666,393 |

(a) Gross of impairment
(b) Financial assets at fair value through profit or loss and Financial assets at fair value through other comprehensive income.

### Operational Risk

The operational risk management system adopts the "3 Lines of Defence" model and is based on an integrated structure of end-to-end processes, considering that a vision which is transversal to the functional units of the organisational structure is the most suitable approach for the perception of risks and to estimate the effects of the corrective measures introduced for their mitigation. Furthermore, these processes model also underlies other strategic initiatives related to the management of this risk such as the actions to improve operating efficiency and the management of business continuity. Hence, the most relevant Group subsidiaries have their own processes structure, which is periodically adjusted according to business evolution, in order to ensure suitable coverage of the business activities (or business support activities) developed, ensuring thus, the replication of the 3 Lines of Defence model in the management of operational risk.

The responsibility for the day-to-day processes' management lies with the 1st Line of Defence: the process owners (seconded by process managers), whose mission is to characterise the operational losses captured under their processes, to monitor the respective Key Risk Indicators (KRI), to perform the Risks Self-Assessment (RSA) exercises, as well as to identify and implement suitable actions to mitigate operational risk exposures, thus contributing to the strengthening of control mechanisms and the improvement of the internal control environment. The periodic revision of the main processes in each geography is ensured by local structure units.

The risk management system (SGR) – role of Risk Management (Risk Office) and Compliance (Compliance Office) – represents the 2nd Line of Defence and is responsible for implementing the risk policy defined for the Group, proposing and developing approaches for managing this risk, supervising their implementation and challenging the 1st Line of Defence regarding the risk levels incurred.

In 2019, the usual operational risk management activities continued to be carried out by the various players involved in the management of this risk, aiming at an efficient and systematic identification, evaluation, mitigation and control of exposures, as well as at the appropriate reporting tasks, either to the Group's management bodies or within regulatory duties. The results of the RSA exercises evidence a robust control environment, demonstrating the Group's commitment to operational risk management through the continuous development of improvement actions that help mitigate exposures to this risk. Regarding the operational losses registered, it should be highlighted that their pattern was not different from what is usual and expected, with a higher frequency of losses of low amounts, without concentration in significant amounts. It should also be noted that the average ratio between gross losses and the relevant indicator for TSA (gross income) has consistently presented values below 1%, which compares very favourably with international benchmarking and attests the robustness of the operational control environment of the Group. The monitoring of KRI has allowed to identify opportunities for improvement that, together with the RSA exercises and the process of identification and registration of losses, provide for an effective management of this risk.

The Bank's mobilization to reinvent the banking experience, based on the digitization and use of new technologies, entails relevant challenges in the management of operational risk, which include the reinforcement of the security of digital banking channels, the reinforcement of mechanisms for the prevention and detection of potential fraud, proper management of personal data and compliance with the information duties legally provided for in sales through digital banking channels. In order to strengthen mechanisms for more efficient control of operational risk, several initiatives were launched, of which we highlight:

- Integrated assessment of operational risks and conduct risks in the analysis and approval of new products and services;
- The strengthening of the monitoring of the risk of conflicts of interest and the evaluation and monitoring of service provision contracts under an outsourcing regime considered critical;
- Conducting a new IT Risk self-assessment exercise;
- Redesign of the operational risk self-assessment methodology, to include aspects and quantitative indicators monitored by internal controls on compliance and conduct risks;
- Reinforcement of the weight of operational risk indicators in the RAS metrics, namely in the monitoring of digital channels;
- Improvement of the rules for validating the quality of regulatory reports related to Operational Risk.

## Covenants

The contractual terms of instruments of wholesale funding encompass obligations assumed by entities belonging to the Group as debtors or issuers, concerning general duties of societary conduct, maintenance of banking activity and the inexistence of special guarantees constituted for the benefit of other creditors ("negative pledge"). These terms reflect essentially the standards internationally adopted for each type of instrument.

The terms of the Group's participation in securitization operations involving its own assets are subject to mandatory changes in case the Group stops respecting certain rating criteria. The criteria established in each transaction results mainly from the existing risk analysis at the moment that the transaction was set, being these methodologies usually applied by each rating agency in a standardised way to all the securitization transactions involving the same type of assets.

Regarding the Covered Bond Programs of Banco Comercial Português, there are no relevant covenants related to a possible downgrade of BCP.

## Hedge accounting

As at 31 December 2019, the table below includes the detail of the hedging instruments used in the Group's hedging strategies and accounted at the Balance sheet item - Hedging derivatives:

(Thousands of euros)

| | 2019 | | | |
|---|---|---|---|---|
| | Hedging instruments | | | |
| | | Book value | | |
| Type of hedging | Notional | Assets | Liabilities | Change in fair value (A) |
| **Fair value hedge** | | | | |
| Interest rate risk | | | | |
| Interest rate swaps | 4,536,385 | 17,131 | 46,122 | (106,219) |
| | 4,536,385 | 17,131 | 46,122 | (106,219) |
| **Cash flows hedging** | | | | |
| Foreign exchange risk | | | | |
| Currency swap | 83,090 | 185 | 172 | 48 |
| Currency and interest rate swap | 3,005,625 | 8,853 | 98,300 | 4,019 |
| Interest rate risk | | | | |
| Interest rate swaps | 11,883,933 | 18,972 | 77,272 | (123,578) |
| | 14,972,648 | 28,010 | 175,744 | (119,511) |
| **Hedging of net investments in foreign entities** | | | | |
| Foreign exchange risk | | | | |
| Currency and interest rate swap | 598,795 | - | 8,057 | (6,303) |
| | 598,795 | - | 8,057 | (6,303) |
| **Total** | 20,107,828 | 45,141 | 229,923 | (232,033) |

(A) Changes in fair value used to calculate the ineffectiveness of the hedge

As at 31 December 2018, the table below includes the detail of the hedging instruments used in the Group's hedging strategies and accounted at the Balance sheet item - Hedging derivatives:

(Thousands of euros)

| | 2018 | | | |
|---|---|---|---|---|
| | Hedging instruments | | | |
| | | Book value | | |
| Type of hedging | Notional | Assets | Liabilities | Change in fair value (A) |
| **Fair value hedge** | | | | |
| Interest rate risk | | | | |
| Interest rate swaps | 4,001,174 | 12,662 | 77,787 | (32,377) |
| | 4,001,174 | 12,662 | 77,787 | (32,377) |
| **Cash flows hedging** | | | | |
| Foreign exchange risk | | | | |
| Currency and interest rate swap | 3,516,676 | 28,051 | 87,700 | 5,068 |
| Interest rate risk | | | | |
| Interest rate swaps | 12,725,086 | 81,677 | 7,604 | 107,337 |
| | 16,241,762 | 109,728 | 95,304 | 112,405 |
| **Hedging of net investments in foreign entities** | | | | |
| Foreign exchange risk | | | | |
| Currency and interest rate swap | 596,165 | 664 | 4,809 | 17,333 |
| | 596,165 | 664 | 4,809 | 17,333 |
| **Total** | 20,839,101 | 123,054 | 177,900 | 97,361 |

(A) Changes in fair value used to calculate the ineffectiveness of the hedge

As at 31 December 2019, the table below includes the detail of the hedged items:

(Thousands of euros)

| | | 2019 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Hedged items | | | | | | |
| | | Book value | | Cumulative value of the adjustments | | | Cash flow hedge reserve / Currency translation reserve | |
| Type of hedging | Balance sheet item | Assets | Liabilities | Assets | Liabilities | Change in fair value (A) | Hedging relationships in effect | Hedging relationships discontinued |
| **Fair value hedge** | | | | | | | | |
| Interest rate risk | | | | | | | | |
| Interest rate swaps | (B) | 449,137 | - | 5,102 | - | 623 | n.a. | n.a. |
| | (H) | 89,953 | - | 856 | - | 856 | n.a. | n.a. |
| | (C) | 2,217,744 | - | (26,417) | - | 105,005 | n.a. | n.a. |
| | (D) | - | 260,000 | - | 9,950 | 1,470 | n.a. | n.a. |
| | (E) | - | 180,650 | - | 5,149 | (6,407) | n.a. | n.a. |
| | (F) | - | 2,554 | - | 54 | (43) | n.a. | n.a. |
| | (G) | - | 441,389 | - | (6,974) | 6,974 | n.a. | n.a. |
| | | 2,756,834 | 884,593 | (20,459) | 8,179 | 108,478 | n.a. | n.a. |
| **Cash flows hedging** | | | | | | | | |
| Foreign exchange risk | | | | | | | | |
| Currency and interest rate swap | (B) | 3,181,707 | - | - | - | (4,067) | (10,302) | (2,598) |
| Interest rate risk | | | | | | | | |
| Interest rate swaps | (B) | 11,883,933 | - | - | - | 123,592 | (60,371) | 217,308 |
| | | 15,065,640 | - | - | - | 119,525 | (70,673) | 214,710 |
| **Hedging of net investments in foreign entities** | | | | | | | | |
| Foreign exchange risk | | | | | | | | |
| - Bank Millennium, S.A. | | n.a. | n.a. | n.a. | n.a. | 6,303 | (6,303) | - |
| **Total** | | 17,822,474 | 884,593 | (20,459) | 8,179 | 234,306 | (76,976) | 214,710 |

(A) Fair value changes used to calculate the ineffectiveness of the hedge

(B) Financial assets at amortised cost - Loans and advances to customers

(C) Financial assets at fair value through other comprehensive income

(D) Financial liabilities at amortised cost - Resources from credit institutions

(E) Financial liabilities at amortised cost - Resources from customers

(F) Financial liabilities at amortised cost - Non subordinated debt securities issued

(G) Financial liabilities at amortised cost - Subordinated debt

(H) Debt securities held not associated with credit operations

As at 31 December 2018, the table below includes the detail of the hedged items:

(Thousands of euros)

| | | 2018 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Hedged items | | | | | | |
| | | | | | | | Cash flow hedge reserve / Currency translation reserve | |
| | Balance | Book value | | Cumulative value of the adjustments | | Change in | Hedging relationships | Hedging relationships |
| Type of hedging | sheet item | Assets | Liabilities | Assets | Liabilities | fair value (A) | in effect | discontinued |
| **Fair value hedge** | | | | | | | | |
| Interest rate risk | | | | | | | | |
| Interest rate swaps | (B) | 462,400 | - | 5,306 | - | 444 | n.a. | n.a. |
| | (C) | 3,484,435 | - | (65,176) | - | 37,021 | n.a. | n.a. |
| | (D) | - | 260,000 | - | 2,797 | (3,796) | n.a. | n.a. |
| | (E) | - | 180,650 | - | 7,417 | 1,679 | n.a. | n.a. |
| | (F) | - | 2,517 | - | 11 | 20 | n.a. | n.a. |
| | (G) | - | 7,685 | - | 137 | 196 | n.a. | n.a. |
| | | 3,946,835 | 450,852 | (59,870) | 10,362 | 35,564 | n.a. | n.a. |
| **Cash flows hedging** | | | | | | | | |
| Foreign exchange risk | | | | | | | | |
| Currency and interest rate swap | (B) | 3,577,938 | - | - | - | (5,068) | (9,074) | (7,051) |
| Interest rate risk | | | | | | | | |
| Interest rate swaps | (B) | 12,214,683 | - | - | - | (107,337) | 63,219 | 50,648 |
| | | 15,792,621 | - | - | - | (112,405) | 54,145 | 43,597 |
| **Hedging of net investments in foreign entities** | | | | | | | | |
| Foreign exchange risk | | | | | | | | |
| Bank Millennium, S.A. | | n.a. | n.a. | n.a. | n.a. | (17,333) | 17,333 | n.a. |
| **Total** | | 19,739,456 | 450,852 | (59,870) | 10,362 | (94,174) | 71,478 | 43,597 |

(A) Changes in fair value used to calculate the ineffectiveness of the hedge
(B) Financial assets at amortised cost - Loans and advances to customers
(C) Financial assets at fair value through other comprehensive income
(D) Financial liabilities at amortised cost - Resources from credit institutions
(E) Financial liabilities at amortised cost - Resources from customers
(F) Financial liabilities at amortised cost - Non subordinated debt securities issued
(G) Financial liabilities at amortised cost - Subordinated debt

The reconciliation of each equity component and an analysis of other comprehensive income attributable to hedge accounting, with reference to 31 December 2019 and 2018, is as follows:

(Thousands of euros)

| | Cash flow hedge reserve | | Exchange differences | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| **Balance as at 1 January** | (16,126) | (26,514) | 21,783 | 4,450 |
| **Amounts recognised in other comprehensive income:** | | | | |
| Hedging cash flows - foreign exchange risk | | | | |
| Changes in fair value of currency swaps | 4,067 | 4,951 | - | - |
| Foreign exchange changes | (170) | 746 | - | - |
| Ineffectiveness of coverage recognised in results | 4,514 | 4,691 | - | - |
| Others | 1,130 | - | - | - |
| Hedging of net investments - foreign exchange risk | | | | |
| Reclassified to the income statement | - | - | (6,303) | 17,333 |
| **Balance at the end of the year** | (6,585) | (16,126) | 15,480 | 21,783 |

The table below includes information on the effectiveness of hedging relationships, as well as impacts on results and other comprehensive income, with reference to 31 December 2019:

(Thousands of euros)

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | | | | Amounts reclassified from reserves to results for the following reasons: | | |
| Type of hedging | Income statement item (A) | Gains / (losses) recognised in Other comprehensive income | Hedging ineffectiveness recognised in Income statement (A) | Income statement item (B) | Cash flows that were being hedged (C) | Hedged item with an impact on results |
| **Fair value hedge** | | | | | | |
| Interest rate risk | | | | | | |
| Interest rate swaps | (D) | n.a. | 2,259 | | n.a. | n.a. |
| | | n.a. | 2,259 | | n.a. | n.a. |
| **Cash flows hedging** | | | | | | |
| Foreign exchange risk | | | | | | |
| Currency and interest rate swap | (D) | 6,020 | (4,514) | | - | - |
| Interest rate risk | | | | | | |
| Interest rate swaps | (D) | (62) | (129) | (E) | 44,882 | - |
| | | 5,958 | (4,643) | | 44,882 | - |
| **Hedging of net investments in foreign entities** | | | | | | |
| Foreign exchange risk | | | | | | |
| Currency and interest rate swap | (F) | (6,303) | - | | - | - |
| | | (6,303) | - | | - | - |
| **Total** | | (345) | (2,384) | | 44,882 | - |

The table below includes information on the effectiveness of hedging relationships, as well as impacts on results and other comprehensive income, with reference to 31 December 2018:

(Thousands of euros)

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | | | | Amounts reclassified from reserves to results for the following reasons: | | |
| Type of hedging | Income statement item (A) | Gains / (losses) recognised in Other comprehensive income | Hedging ineffectiveness recognised in Income statement (A) | Income statement item (B) | Cash flows that were being hedged (C) | Hedged item with an impact on results |
| **Fair value hedge** | | | | | | |
| Interest rate risk | | | | | | |
| Interest rate swaps | (D) | n.a. | 3,187 | | n.a. | n.a. |
| | | n.a. | 3,187 | | n.a. | n.a. |
| **Cash flows hedging** | | | | | | |
| Foreign exchange risk | | | | | | |
| Currency and interest rate swap | (D) | 5,068 | (4,636) | | - | - |
| Interest rate risk | | | | | | |
| Interest rate swaps | (D) | 43 | - | (E) | 23,004 | - |
| | | 5,111 | (4,636) | | 23,004 | - |
| **Hedging of net investments in foreign entities** | | | | | | |
| Foreign exchange risk | | | | | | |
| Currency and interest rate swap | (F) | 17,333 | - | - | - | - |
| | | 17,333 | - | | - | - |
| **Total** | | 22,444 | (1,449) | | 23,004 | - |

(A) Income Statement item in which the ineffectiveness of the hedge was recognised
(B) Income Statement item in which the reclassified amount was recognised
(C) but which are no longer expected to occur
(D) Net gains / (losses) from hedge accounting operations
(E) Interest income
(F) Net gains / (losses) from foreign exchange

The table below shows the detail of hedging instruments, as at 31 December 2019, by maturity:

(Thousands of euros)

| | 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Remaining period | | | | Fair value | |
| Type of hedging | Up to 3 months | 3 months to 1 year | Over 1 year | Total | Assets | Liabilities |
| **Fair value hedging derivatives related to interest rate risk changes:** | | | | | | |
| OTC Market: | | | | | | |
| Interest rate swaps | | | | | | |
| Notional | 52,919 | 1,420,269 | 3,063,197 | 4,536,385 | 17,131 | 46,122 |
| Fixed interest rate (average) | 1.98% | -0.05% | 1.19% | 0.81% | | |
| **Cash flow hedging derivatives related to interest rate risk changes:** | | | | | | |
| OTC Market: | | | | | | |
| Interest rate swaps | 65,854 | 111,717 | 11,706,362 | 11,883,933 | 18,972 | 77,272 |
| **Cash flow hedging derivatives related to currency risk changes:** | | | | | | |
| OTC Market: | | | | | | |
| Currency swap | 83,090 | - | - | 83,090 | 185 | 172 |
| Currency and interest rate swap | 469,804 | 930,004 | 1,605,817 | 3,005,625 | 8,853 | 98,300 |
| **Hedging derivatives related to net investment in foreign operations:** | | | | | | |
| OTC Market: | | | | | | |
| Currency and interest rate swap | - | 462,072 | 136,723 | 598,795 | - | 8,057 |
| **Total derivatives traded by** OTC Market: | 671,667 | 2,924,062 | 16,512,099 | 20,107,828 | 45,141 | 229,923 |

The table below shows the detail of hedging instruments, as at 31 December 2018, by maturity:

(Thousands of euros)

| | 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Remaining period | | | | Fair value | |
| Type of hedging | Up to 3 months | 3 months to 1 year | Over 1 year | Total | Assets | Liabilities |
| **Fair value hedging derivatives related to interest rate risk changes:** | | | | | | |
| OTC Market: | | | | | | |
| Interest rate swaps | | | | | | |
| Notional | - | 24,500 | 3,976,674 | 4,001,174 | 12,662 | 77,787 |
| Fixed interest rate (average) | | 3.44% | 1.05% | 1.07% | | |
| **Cash flow hedging derivatives related to interest rate risk changes:** | | | | | | |
| OTC Market: | | | | | | |
| Interest rate swaps | 52,367 | 205,511 | 12,467,208 | 12,725,086 | 81,677 | 7,604 |
| **Cash flow hedging derivatives related to currency risk changes:** | | | | | | |
| OTC Market: | | | | | | |
| Foreign exchange rate and interest rate swap | 336,794 | 570,475 | 2,609,407 | 3,516,676 | 28,051 | 87,700 |
| **Hedging derivatives related to net investment in foreign operations:** | | | | | | |
| OTC Market: | | | | | | |
| Currency and interest rate swap | 58,059 | 76,034 | 462,072 | 596,165 | 664 | 4,809 |
| **Total derivatives traded by** OTC Market: | 447,220 | 876,520 | 19,515,361 | 20,839,101 | 123,054 | 177,900 |