# 48. Risk management

The Bank is subject to several risks during the course of its business.

The Bank'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 Bank'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 behavior or design of products and services), the risk associated with non-compliance with personal data protection and the risk of litigation.

## 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 at the very 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 Bank level and for each entity. The Board of Directors also approves the risk-tolerance level acceptable to the Bank, 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 Bank 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 Bank 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 Bank'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 8,884,919 6,545,332 Regional Governments or Local Authorities 726,228 750.240 Administrative and non-profit Organisations 174,550 105 Other Credit Institutions 2,019,120 3,973,609 Retail and Corporate customers 45,760,785 43,376,213 Other items (\*) 11,803,701 12,291,640 69,393,315 66,913,127

Note: gross exposures of impairment and amortization. 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 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 wit 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 (lan 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	А	А	A2	А			
4	Α-	A-	А3	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	ВВ	BB	Ba2	BB			
9	BB-	BB-	Ba3	BB (low)			
10	B+	B+	B1	B (high)			
11	В	В	B2	В			
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 as at 1 January 2018 and IAS 39 as at 31 December 2017) 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 (does not include equity instruments according to accounting policy 1 B1.1.2), analysed by stage, are detailed in the following tables:

				(Th	nousands of euros)	
	2019					
		ı	Gross exposure			
Category	Stage 1	Stage 2	Stage 3	POCI	Total	
Financial assets at amortised cost						
Loans and advances to credit institutions (note 18)	511,671	3,006	-	-	514,677	
Loans and advances to customers (note 19)	24,965,120	6,050,648	3,229,252	3,225	34,248,245	
Debt instruments (note 20)	2,377,300	74,515	9,549	-	2,461,364	
Debt instruments at fair value						
through other comprehensive income (note 21)(*)	8,006,771	-	-	-	8,006,771	
Guarantees and other commitments (note 40)	9,097,042	1,602,505	467,882	-	11,167,429	
Total	44,957,904	7,730,674	3,706,683	3,225	56,398,486	

(\*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 B1.5.1.2.

The gross exposure to guarantees and other commitments includes the balances of guarantees granted, irrevocable credit lines and revocable commitments, as detailed in note 40.

				(T	housands of euros)	
	2019					
		In	npairment losses			
Category	Stage 1	Stage 2	Stage 3	POCI	Total	
Financial assets at amortised cost						
Loans and advances to credit institutions (note 18)	160	208	-	-	368	
Loans and advances to customers (note 19)	23,898	138,780	1,699,216	-	1,861,894	
Debt instruments (note 20)	3,101	382	9,480	-	12,963	
Debt instruments at fair value						
through other comprehensive income (note 21)(*)	-	-	-	-	-	
Guarantees and other commitments (note 35)	1,272	4,170	96,626	-	102,068	
Total	28,431	143,540	1,805,322	-	1,977,293	

				(Tł	nousands 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 18)	511,511	2,798	-	-	514,309	
Loans and advances to customers (note 19)	24,941,222	5,911,868	1,530,036	3,225	32,386,351	
Debt instruments (note 20)	2,374,199	74,133	69	-	2,448,401	
Debt instruments at fair value						
through other comprehensive income (note 21)(*)	8,006,771	-	-	-	8,006,771	
Guarantees and other commitments (notes 35 and 40)	9,095,770	1,598,335	371,256	-	11,065,361	
Total	44,929,473	7,587,134	1,901,361	3,225	54,421,193	

As at 31 December 2018, the financial instruments subject to impairment requirements under IFRS 9 (does not include equity instruments according to accounting policy 1 B1.1.2), analysed by stage, are detailed in the following tables:

				(T	housands of euros)
			2018		
		1	Gross exposure		
Category	Stage 1	Stage 2	Stage 3	POCI	Total
Financial assets at amortised cost					
Loans and advances to credit institutions (note 18)	2,035,254	10,657	669	-	2,046,580
Loans and advances to customers (note 19)	22,915,268	5,758,902	4,607,650	4	33,281,824
Debt instruments (note 20)	2,345,182	264,307	72,007	-	2,681,496
Debt instruments at fair value					
through other comprehensive income (note 21)(*)	6,900,301	-	3,722	-	6,904,023
Guarantees and other commitments (note 40)	7,953,682	1,347,531	567,339	-	9,868,552
Total	42,149,687	7,381,397	5,251,387	4	54,782,475

(\*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 B1.5.1.2.

The gross exposure to guarantees and other commitments includes the balances of guarantees granted, irrevocable credit lines and revocable commitments, as detailed in note 40.

				(T	housands of euros)	
	2018					
		In	npairment losses			
Category	Stage 1	Stage 2	Stage 3	POCI	Total	
Financial assets at amortised cost						
Loans and advances to credit institutions (note 18)	407	774	669	-	1,850	
Loans and advances to customers (note 19)	25,460	125,218	2,142,808	-	2,293,486	
Debt instruments (note 20)	3,039	507	36,659	-	40,205	
Debt instruments at fair value						
through other comprehensive income (note 21)(*)	-	-	-	-	-	
Guarantees and other commitments (note 35)	1,209	3,883	158,271	-	163,363	
Total	30,115	130,382	2,338,407	-	2,498,904	

				Γ)	housands 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 18)	2,034,847	9,883	-	-	2,044,730
Loans and advances to customers (note 19)	22,889,808	5,633,684	2,464,842	4	30,988,338
Debt instruments (note 20)	2,342,143	263,800	35,348	-	2,641,291
Debt instruments at fair value					
through other comprehensive income (note 21)(*)	6,900,301	-	-	-	6,900,301
Guarantees and other commitments (notes 35 and 40)	7,952,473	1,343,648	409,068	-	9,705,189
Total	42,119,572	7,251,015	2,909,258	4	52,279,849

(\*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 B1.5.1.2.

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

	(Th	ousands of euros)
	2019	2018
Financial assets held for trading (note 21)		
Debt instruments	51,452	57,942
Derivatives	698,629	849,247
Hedging derivatives (note 22)	69,051	214,185
Financial assets designated at fair value through profit or loss (note 21)		
Debt instruments	31,496	33,034
Financial assets not held for trading mandatorily at fair value through profit or loss (note 21)		
Debt instruments	1,444,772	1,589,899
Total	2,295,400	2,744,307

#### Notes:

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

(Thousands of euros)

	Financial assets at amortised cost - Loans and advances to custom				stomers
	Stage 1	Stage 2	Stage 3	POCI	Total
Impairment losses as at 31 December 2018	25,460	125,218	2,142,808	-	2,293,486
Balances BII (integration into BCP)	90	894	48,195	-	49,179
Impairment losses as at 1 January 2019	25,550	126,112	2,191,003	-	2,342,665
Change in impairment losses:					
Transfer to Stage 1	17,491	(15,859)	(1,632)	-	-
Transfer to Stage 2	(3,237)	38,654	(35,417)	-	-
Transfer to Stage 3	(463)	(6,482)	6,945	-	-
Changes occurred due to changes in credit risk	(17,941)	(22,957)	21,815	-	(19,083)
Write-offs	(690)	(3,280)	(558,820)	-	(562,790)
Changes due to new financial assets and derecognised					
financial assets and other variations	3,188	22,592	75,322	-	101,102
Impairment losses as at 31 December 2019	23,898	138,780	1,699,216	-	1,861,894

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

(Thousands of euros)

	Financial assets at amortised cost - Loans and advances to customers				stomers
	Stage 1	Stage 2	Stage 3	POCI	Total
Impairment losses as at 1 January 2018	30,329	114,014	2,751,818	-	2,896,161
Change in impairment losses:					
Transfer to Stage 1	12,376	(10,532)	(1,844)	-	-
Transfer to Stage 2	(3,803)	42,550	(38,747)	-	-
Transfer to Stage 3	(668)	(7,366)	8,034	-	-
Changes occurred due to changes in credit risk	(20,462)	(18,171)	297,775	-	259,142
Write-offs	(364)	(1,918)	(536,229)	-	(538,511)
Changes due to new financial assets and derecognised					
financial assets and other variations	8,052	6,641	(337,999)	-	(323,306)
Impairment losses as at 31 December 2018	25,460	125,218	2,142,808	-	2,293,486

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

(Thousands of euros)

	Financial assets at amortised cost - Loans and advances to customers				
	Stage 1	Stage 2	Stage 3	POCI	Total
Gross amount as at 31 December 2018	22,915,268	5,758,902	4,607,650	4	33,281,824
Balances BII (integration into BCP)	765,464	252,664	164,404	-	1,182,532
Gross amount as at 1 January 2019	23,680,732	6,011,566	4,772,054	4	34,464,356
Changes in gross book value:					
Transfer from Stage 1 to Stage 2	(1,183,502)	1,183,502	-	_	-
Transfer from Stage 1 to Stage 3	(61,191)	-	61,191	-	-
Transfer from Stage 2 to Stage 1	1,370,214	(1,370,214)	-	-	-
Transfer from Stage 2 to Stage 3	-	(230,310)	230,310	-	-
Transfer from Stage 3 to Stage 1	40,513	-	(40,513)	-	-
Transfer from Stage 3 to Stage 2	-	392,825	(392,825)	-	-
Write-offs	(690)	(3,280)	(558,821)	-	(562,791)
Net balance of new financial assets and derecognised					
financial assets and other changes	1,119,044	66,559	(842,144)	3,221	346,680
Gross amount as at 31 December 2019	24,965,120	6,050,648	3,229,252	3,225	34,248,245

Gross amount as at 31 December 2018

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

(Thousands of euros) Financial assets at amortised cost - Loans and advances to customers Stage 1 Stage 3 POCI Total Stage 2 Gross amount as at 1 January 2018 22,641,799 5,404,518 6,045,353 34,091,670 Changes in gross book value: Transfer from Stage 1 to Stage 2 (1,382,216) 1,382,216 Transfer from Stage 1 to Stage 3 (70,216)70,216 Transfer from Stage 2 to Stage 1 937,473 (937,473)Transfer from Stage 2 to Stage 3 (281,617) 281,617 Transfer from Stage 3 to Stage 1 26,654 (26,654)Transfer from Stage 3 to Stage 2 295,637 (295,637)Write-offs (364)(1,918)(536,229) (538,511) Net balance of new financial assets and derecognised financial assets and other changes 762,138 (102,461)(931,016) (271,335)

22,915,268

4,607,650

33,281,824

5,758,902

The modified financial assets that do not result in derecognition are analysed as follows:

lifetime losses)	2019	2018
Amortised cost before changes	591,639	531,426
Impairment losses before changes	(262,730)	(167,591
Net amortised cost before changes	328,909	363,835
Net gain / loss arising on changes	(11,600)	(12,847
Net amortised cost after changes	317,309	350,988
	(Tho	usands of euros

was measured based on the expected credit losses lifetime	2019	2018
Amortised cost of financial assets for which credit losses		
expected to go from "lifetime" to 12 months	53,080	43,170



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) 31 December 2019 Stage 2 Stage 3 Days past Days past Days past Days past due due due due Seament Stage 1 No delays <= 30 days > 30 days Total <= 90 days > 90 days Total **POCI** Total **Gross Exposure** Individuals-Mortgage 14,212,753 2,287,388 120,935 25,992 2,434,315 241,184 271,844 513,028 3,221 17,163,317 Individuals-Other 3.330.637 526 860 34 229 8 761 569 850 78.517 115 927 194 444 4 4.094.935 Financial Companies 2,274,746 425.519 85 425,613 217,568 253,927 471,495 3,171,854 Non-financial comp. - Corporate 791,966 401.462 5,548,424 500 437 792.903 537,404 938,866 7,280,193 Non-financial comp.- SME-Corporate 6,662,320 2,129,450 20,122 3,489 2,153,061 748,748 269,881 1,018,629 9,834,010 Non-financial comp. -SME-Retail 3,538,444 1,163,769 35,113 11,062 1,209,944 393,672 167,721 561,393 5,309,781 Non-financial comp.-Other 8,827 411,377 22,676 9 7,006 1,821 442,889 22,685 Other loans 972,432 122,303 122,303 1,094,736 Total 210,993 2,088,157 1,618,526 36,951,133 7.469.931 49.750 7.730.674 3.706.683 3.225 48,391,715 Impairment Individuals-Mortgage 590 5.639 671 194 6.504 5,434 36.218 41,652 48,746 Individuals-Other 2,163 6,734 1,621 782 9,137 23,768 56,064 79,832 91,132 Financial Companies 1,498 5,198 10 5,209 142,056 203,236 345,292 351,999 Non-financial comp. - Corporate 16.254 2 34 16.290 255.891 341.085 596.976 619.189 5.923 Non-financial comp.- SME-Corporate 12,988 2,103 575 208,182 453,307 74,365 77,043 245,125 543,338 Non-financial comp. -SME-Retail 4,687 25.442 1,851 702 27.995 189,071 96,347 285,418 318,100 Non-financial comp.-Other 18 228 228 1,111 1,734 2,845 3,091 Other loans 564 1,134 1,134 1,698 Total 28,431 134,994 6,258 2,288 143,540 862,456 942,866 1,805,322 1,977,293 Net exposure Individuals-Mortgage 14,212,163 2.281.749 120.264 25,798 2,427,811 235,750 235,626 471,376 3.221 17,114,571 Individuals-Other 3,328,474 520,126 32,608 7,979 560,713 54,749 59,863 114,612 4,003,803 Financial Companies 75 8 75,512 2,273,248 420,321 420,404 50,691 126,203 2,819,855 Non-financial comp. - Corporate 5,542,501 775,712 498 403 776,613 145,571 196,319 341,890 6,661,004 Non-financial comp.- SME-Corporate 6,649,332 2,055,085 18,019 2.914 2,076,018 503,623 61,699 565,322 9,290,672 Non-financial comp. -SME-Retail 33,262 10,360 3.533.757 1.138.327 1.181.949 204.601 71.374 275.975 4.991.681 Non-financial comp.-Other 411,359 22,448 22,457 5,895 5,982 439,798 Other loans 1,093,038 971.868 121.169 121.169 Total 204,735 675,660 36,922,702 7,334,937 47,462 7,587,134 1,225,701 1,901,361 3,225 46,414,422 % of impairment coverage Individuals-Mortgage 0.00% 0.25% 0.55% 0.75% 0.27% 2.25% 13.32% 8.12% 0.00% 0.28% Individuals-Other 0.06% 1.28% 4.74% 8.93% 1.60% 30.27% 48.36% 41.06% 0.00% 2.23% Financial Companies 0.07% 1.22% 11.76% 11.11% 1.22% 65.29% 80.04% 73.23% 0.00% 11.10% Non-financial comp. - Corporate 0.11% 2.05% 0.40% 7.78% 2.05% 63.74% 63.47% 63.58% 0.00% 8.51% Non-financial comp.- SME-Corporate 3.49% 10.45% 16.48% 3.58% 32.74% 44.50% 0.00% 5.53% 0.19% 77.14% Non-financial comp. -SME-Retail 0.13% 2.19% 5.27% 6.35% 2.31% 48.03% 57.44% 50.84% 0.00% 5.99% Non-financial comp.-Other 0.00% 1.01% 0.00% 0.00% 1.01% 15.86% 95.22% 32.23% 0.00% 0.70% Other loans 0.06% 0.93% 0.00% 0.00% 0.93% 0.00% 0.00% 0.00% 0.00% 0.16% Total 48.70% 4.09% 0.08% 1.81% 2.97% 4.60% 1.86% 41.30% 58.25% 0.00%

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) 31 December 2019 Stage 2 Stage 3 Days past Days past Days past Days past due due due due Sector of activity No delays <= 30 days > 30 days <= 90 days > 90 days POCI Stage 1 Total Total Total **Gross Exposure** Loans to individuals 17.543.390 2.814.248 155.163 34.752 3.004.163 319.702 387.771 707.473 3.225 21.258.251 Non-financial comp.- Trade 2,925,641 492,828 13,433 2,158 508,419 144,383 56,115 200,498 3,634,558 Non-financial comp.- Construction 489,727 198,132 687,859 1,378,484 629,234 5,150 1,008 635,392 2,701,735 Non-finan. comp.- Manufacturing ind. 3,367,167 613,710 12,101 5,264 631,075 97,026 57,647 154,673 4,152,915 Non-financial comp.-Other activities 1,135,697 382,994 4,567 493 388,054 158,705 9,716 168,421 1,692,172 Non-financial comp.- Other services 20,494 6,066 661,048 7,353,576 1,989,093 2,015,653 655,214 1,316,262 10,685,491 Other Services /Other activities 3,247,178 547,824 85 9 547,918 217,568 253,929 471,497 4,266,593 Total 36.951.133 210.993 49.750 2.088.159 1.618.524 3.225 48,391,715 7.469.931 7.730.674 3.706.683 Impairment Loans to individuals 2 2 9 2 976 92 282 121 484 139 879 2 7 5 4 12 373 15 641 29 202 Non-financial comp.- Trade 4,309 10,766 807 251 11,824 68,296 31,078 99,374 115,507 Non-financial comp.- Construction 2,950 7,780 589 32 8,401 134,212 151,023 285,235 296,586 Non-finan. comp.- Manufacturing ind. 5,743 15,025 1,004 720 16,749 21,829 63,998 86,490 42,169 Non-financial comp.-Other activities 1,094 10,848 92 11,009 72,393 2,799 75,192 87,295 69 Non-financial comp.- Other services 216 374,127 9.520 71.871 1.486 73.573 814.747 897.840 440.620 Other Services /Other activities 2.061 6.332 10 6.343 142.056 203.236 345.292 353.696 Total 6.257 2.288 1,977,293 28.431 134,995 143,540 862.455 942.867 1.805.322 Net exposure Loans to individuals 17,540,636 2,801,875 152,871 33,776 2,988,522 290,500 295,489 585,989 3,225 21,118,372 Non-financial comp.- Trade 2,921,332 482,062 1,907 496,595 76,087 12,626 25,037 101,124 3,519,051 Non-financial comp.- Construction 1,375,534 402,624 621,454 4,561 976 626,991 355,515 47,109 2,405,149 Non-finan. comp.- Manufacturing ind. 4,544 3,361,424 598.685 11.097 614,326 54.857 35.818 90.675 4,066,425 Non-financial comp.-Other activities 1,134,603 372,146 4,498 401 377,045 86,312 6,917 93,229 1,604,877 Non-financial comp.- Other services 7,344,056 1,917,222 19,008 5,850 1,942,080 286,921 214,594 501,515 9,787,651 Other Services /Other activities 541,575 3,245,117 541,492 75 75,512 50,693 126,205 3,912,897 Total 36,922,702 7,334,936 204,736 47,462 7,587,134 1,225,704 675,657 1,901,361 3,225 46,414,422 % of impairment coverage Loans to individuals 0.44% 17.17% 0.00% 0.02% 1.48% 2.81% 0.52% 9.13% 23.80% 0.66% Non-financial comp.- Trade 2.18% 6.01% 47.30% 49.56% 0.00% 3.18% 0.15% 11.63% 2.33% 55.38% Non-financial comp.- Construction 0.21% 1.24% 11.44% 3.17% 1.32% 27.41% 76.22% 41.47% 0.00% 10.98% Non-finan. comp.- Manufacturing ind. 0.17% 2.45% 8.30% 13.68% 2.65% 43.46% 37.87% 41.38% 0.00% 2.08% Non-financial comp.-Other activities 0.10% 2.83% 1.51% 18.66% 2.84% 45.61% 28.81% 44.65% 0.00% 5.16% Non-financial comp.- Other services 0.13% 3.61% 7.25% 3.56% 3.65% 56.60% 67.25% 61.90% 0.00% 8.40%

1.16%

1.86%

80.04%

58.25%

65.29%

41.30%

73.23%

48.70%

0.00%

0.00%

8.29%

4.09%

Other Services /Other activities

Total

0.06%

0.08%

1.16%

1.81%

11.76%

2.97%

11.11%

4.60%



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) 31 December 2018 Stage 2 Stage 3 Days past Days past Days past Days past due due due due Segment <= 30 days > 30 days <= 90 days POCI Stage 1 No delays > 90 days Total Total Total **Gross Exposure** Individuals-Mortgage 436 981 15 768 891 12.653.990 2 207 678 102 414 21 965 2 332 057 345 863 782 844 Individuals-Other 4 3,000,000 517,213 33.084 9.036 559.333 123,448 179.223 302.671 3,862,008 Financial Companies 3,809,710 339,220 339,220 283,266 364,107 647,373 4,796,303 Non-financial comp. - Corporate 5,332,214 1,127,867 3,001 1,130,868 546,595 561,170 1,107,765 7,570,847 Non-financial comp.- SME-Corporate 6,221,020 1,754,475 23,453 2,162 1,780,090 1,037,058 525,546 1,562,604 9,563,714 Non-financial comp. -SME-Retail 2,878,645 1,077,395 62,091 4,137 1,143,623 499,262 309,197 808,459 4,830,727 Non-financial comp.-Other 45,326 9 31,572 4,376 35,948 354,587 233 45,568 436,103 Other loans 999,220 50 638 50 638 1.049.859 Total 35,249,386 7,119,812 224,276 37,309 7,381,397 2,867,064 2,380,601 5,247,665 4 47,878,452 Impairment Individuals-Mortgage 823 6,632 532 192 7,356 8,836 65,690 74,526 82,705 Individuals-Other 2,939 8,154 1,391 471 10,016 48,457 94,931 143,388 156,343 Financial Companies 7.317 7.317 187.600 276.782 464.382 473.941 2.242 Non-financial comp. - Corporate 30,859 30,894 687,356 7,312 35 312,545 336,605 649,150 Non-financial comp.- SME-Corporate 11,165 43,894 1.678 501 46.073 331,828 316,367 648,195 705,433 Non-financial comp. -SME-Retail 5,043 24,297 1,671 184 26,152 205,835 133,305 339,140 370,335 Non-financial comp.-Other 294 1,419 8 2 1,429 17,251 2,375 19,626 21,349 Other loans 297 1.145 1.145 1.442 Total 30,115 123,717 5,315 1,350 130,382 1,112,352 1,226,055 2,338,407 2,498,904 Net exposure Individuals-Mortgage 12,653,167 2,201,046 101,882 21,773 2,324,701 337,027 371,291 708,318 15,686,186 Individuals-Other 509,059 8,565 74,991 159,283 4 2,997,061 31,693 549,317 84,292 3,705,665 Financial Companies 3,807,468 331,903 331,903 95,666 87,325 182,991 4,322,362 Non-financial comp. - Corporate 5,324,902 1,097,008 2,966 1,099,974 234,050 224,565 458,615 6,883,491 Non-financial comp.- SME-Corporate 6.209.855 1.710.581 21.775 1.661 705.230 209.179 914,409 8.858.281 1.734.017 Non-financial comp. -SME-Retail 2,873,602 1,053,098 60,420 3,953 1,117,471 293,427 175,892 469,319 4,460,392 Non-financial comp.-Other 354.293 43.907 225 7 44.139 14.321 2.001 16.322 414.754 Other loans 998,923 49,493 49,493 1,048,417 Total 1,154,546 35,219,271 6,996,095 218,961 35,959 7,251,015 1,754,712 2,909,258 4 45,379,548 % of impairment coverage Individuals-Mortgage 0.01% 0.30% 0.52% 0.87% 0.32% 2.55% 15.03% 9.52% 0.00% 0.52% Individuals-Other 0.10% 1.58% 4.20% 5.21% 1.79% 39.25% 52.97% 47.37% 0.00% 4.05% Financial Companies 2.16% 0.00% 0.00% 2.16% 76.02% 71.73% 0.00% 9.88% 0.06% 66.23% Non-financial comp. - Corporate 2.74% 0.00% 59.98% 0.00% 9.08% 0.14% 1.17% 2.73% 57.18% 58.60% Non-financial comp.- SME-Corporate 0.18% 2.50% 7.15% 23.17% 2.59% 32.00% 60.20% 41.48% 0.00% 7.38% Non-financial comp. -SME-Retail 0.18% 2.26% 2.69% 4.45% 2.29% 41.23% 43.11% 41.95% 0.00% 7.67% Non-financial comp.-Other 0.08% 3.13% 3.43% 22.22% 3.14% 54.64% 54.27% 54.60% 0.00% 4.90% Other loans 0.03% 2.26% 0.00% 0.00% 2.26% 0.00% 0.00% 0.00% 0.00% 0.14% Total 0.09% 1.74% 2.37% 3.62% 1.77% 38.80% 51.50% 44.56% 0.00% 5.22%

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) 31 December 2018 Stage 3 Stage 2 Days past Days past Days past Days past due due due due Sector of activity <= 30 days > 30 days <= 90 days Stage 1 No delays > 90 days POCI Total Total Total **Gross Exposure** Loans to individuals 15.653.991 135 498 31 002 2.891.391 469 311 616.204 1.085.515 4 19.630.901 2.724.891 Non-financial comp.- Trade 2,786,536 442.003 13,798 1.281 457.082 205,138 123.002 328,140 3,571,758 Non-financial comp.- Construction 1,188,756 495,756 7,403 1.735 504,894 650,915 401,028 1,051,943 2,745,593 Non finan. comp.- Manufacturing indust 3,045,313 716,165 16,080 1,133 733,378 125,823 117,449 4,021,963 243,272 Non-financial comp.-Other activities 1,170,779 315,876 2,206 370 318,452 208,942 15,486 224,428 1,713,659 Non-financial comp.- Other services 6,595,081 2,035,263 49,291 1,788 2,086,342 923,669 743,324 1,666,993 10,348,416 Other Services /Other activities 4,808,930 389,858 389,858 283,266 364,108 5,846,162 647,374 35,249,386 7,119,812 224.276 37.309 7,381,397 2.867.064 2.380.601 4 47,878,452 5,247,665 Impairment Loans to individuals 3,761 14,785 1,923 663 17,371 57,293 160,621 217,914 239,046 Non-financial comp.- Trade 11,300 40 11,992 81,016 75,492 173,038 4,538 652 156,508 Non-financial comp.- Construction 2,330 4,924 1,044 432 6,400 249,181 224,058 473,239 481,969 Non finan. comp.- Manufacturing indust 5,291 94 13.789 12.703 992 45.527 66.452 111,979 131,059 Non-financial comp.-Other activities 1,236 9,826 67 42 9,935 87,916 6,456 94,372 105,543 Non-financial comp.- Other services 10,421 61,717 636 79 62,432 403,821 416,191 820,012 892,865 Other Services /Other activities 2,538 8,463 8,463 187,600 276,783 464,383 475,384 Total 30,115 123,718 5,314 1,350 130,382 1,112,354 1,226,053 2,338,407 2,498,904 Net exposure Loans to individuals 15,650,230 2,710,106 133,575 30,339 2,874,020 412,018 455,583 867,601 19,391,855 Non-financial comp.- Trade 2,781,998 430.703 13,146 1,241 445.090 124,122 47,510 171,632 3,398,720 Non-financial comp.- Construction 1,186,426 490,832 6,359 1,303 498,494 401,734 176,970 578,704 2,263,624 Non finan. comp.- Manufacturing indust 3,040,022 703,462 15,088 1,039 719,589 80,296 50,997 131,293 3,890,904 Non-financial comp.-Other activities 1,169,543 306,050 2,139 328 308,517 121,026 9,030 130,056 1,608,116 Non-financial comp.- Other services 6,584,660 1,973,546 48,655 1,709 2,023,910 519,848 327,133 846,981 9,455,551 Other Services /Other activities 4.806.392 381.395 182,991 381.395 95.666 87.325 5.370.778 Total 35,219,271 6,996,094 218,962 35,959 7,251,015 1,754,710 1,154,548 2,909,258 45,379,548 % of impairment coverage Loans to individuals 0.02% 0.54% 1.42% 2.14% 0.60% 12.21% 26.07% 20.07% 0.00% 1.22% Non-financial comp.- Trade 0.16% 2.56% 4.73% 3.12% 2.62% 39.49% 61.37% 47.70% 0.00% 4.84% Non-financial comp.- Construction 0.20% 0.99% 14.10% 24.90% 1.27% 38.28% 55.87% 44.99% 0.00% 17.55% Non finan. comp.- Manufacturing indust 0.17% 1.77% 6.17% 8.30% 1.88% 36.18% 56.58% 46.03% 0.00% 3.26% Non-financial comp.-Other activities 0.00% 0.11% 3.11% 3.04% 11.35% 3.12% 42.08% 41.69% 42.05% 6.16% Non-financial comp.- Other services 3.03% 2.99% 55.99% 49.19% 0.00% 8.63% 0.16% 1.29% 4.42% 43.72% Other Services /Other activities 0.00% 8.13% 0.05% 2.17% 0.00% 0.00% 2.17% 66.23% 76.02% 71.73% Total 0.09% 1.74% 2.37% 3.62% 1.77% 38.80% 51.50% 44.56% 0.00% 5.22%

As at 31 December 2019, the exposure by type of financial instrument, internal rating and by stage, is analysed as follows:

(Thousands of euros) 31 December 2019 **Gross Exposure** Not Procedural Higher Average Lower classified quality quality quality (GR (without risk Impairment Net (GR 1-6) (GR 7-9) (GR 10-12) 13/14/15) grade) Total losses exposure Financial assets at amortised cost - stage 1 19,301,643 6,266,627 2,277,314 8,506 27,854,091 27,159 27,826,932 - stage 2 322 561 498 908 1.064.753 1,497,166 2.744.781 6.128.169 139 370 5.988.799 - stage 3 66,081 3,094,211 74,120 3,238,801 1,708,696 1,040 3,349 1,530,105 POCI 43 3,178 3,225 3,225 20,367,436 7,767,142 5,088,219 3,419,951 581,538 37,224,286 1,875,225 35,349,061 Debt instruments at fair value through other comprehensive income (\*) 88,792 184 8,006,771 8,006,771 7,917,745 50 - stage 2 - stage 3 7,917,745 88,792 184 8,006,771 50 8,006,771 Guarantees and other commitments - stage 1 6,203,291 2,112,908 650,278 130,565 9,097,042 1,272 9,095,770 - stage 2 150,984 316,279 621,382 63,260 450,600 1,602,505 4,170 1,598,335 - stage 3 1,596 18.415 447.853 467.882 96.626 9 371,256 6,354,284 11,167,429 102,068 2,429,196 1,290,075 511,113 582,761 11,065,361

(°) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 B1.5.1.2.

10,285,130

6,378,478

3,931,064

1,164,349

56,398,486

1,977,293

As at 31 December 2018, the exposure by type of financial instrument, internal rating and by stage, is analysed as follows:

34,639,465

Total

(Thousands of euros)

54,421,193

				31 Decen	nber 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	19,042,210	6,186,746	2,028,356	-	38,392	27,295,704	28,906	27,266,798
- stage 2	1,063,658	1,362,969	2,648,657	282,774	675,808	6,033,866	126,499	5,907,367
- stage 3	2,418	10,106	89,009	4,507,587	71,206	4,680,326	2,180,136	2,500,190
POCI	-	-	-	-	4	4	-	4
	20,108,286	7,559,821	4,766,022	4,790,361	785,410	38,009,900	2,335,541	35,674,359
Debt instruments at fair value through other comprehe	ensive income (*)							
- stage 1	6,810,518	83,940	-	-	5,843	6,900,301	_	6,900,301
- stage 2	-	-	-	-	-	-	-	-
- stage 3	-	-	-	-	3,722	3,722	-	3,722
	6,810,518	83,940	-	-	9,565	6,904,023	-	6,904,023
Guarantees and other commitments								
- stage 1	5,325,858	1,906,677	568,012	-	153,135	7,953,682	1,209	7,952,473
- stage 2	161,389	265,287	580,507	47,460	292,888	1,347,531	3,883	1,343,648
- stage 3	60	5	25,144	538,513	3,617	567,339	158,271	409,068
	5,487,307	2,171,969	1,173,663	585,973	449,640	9,868,552	163,363	9,705,189
Total	32,406,111	9,815,730	5,939,685	5,376,334	1,244,615	54,782,475	2,498,904	52,283,571

(\*) For financial assets at fair value through other comprehensive income, impairment is recorded in accordance with the requirements indicated in the accounting policy 1 B1.5.1.2.

The gross exposure includes the guarantees granted, irrevocable credit lines and revocable commitments, as detailed in note 40.

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, are presented in the following tables:

(Thousands of euros) 31 December 2019 Impairment losses **Gross Exposure** Individual Individual Collective Collective Total Total Segment Individuals-Mortgage 4,135 17,159,182 17,163,317 1,295 47,451 48,746 Individuals-Other 76,805 4,018,130 4,094,935 15,850 75,282 91,132 **Financial Companies** 458,198 2,713,656 3,171,854 344,870 7,129 351,999 933,779 7,280,193 619,189 Non-financial comp. - Corporate 6,346,414 593,163 26,026 Non-financial comp.- SME-Corporate 821,781 9,012,229 9,834,010 416,835 126,503 543,338 Non-financial comp. -SME-Retail 426,069 4,883,712 5,309,781 249,787 68,313 318,100 Non-financial comp.-Other 5,835 437,054 442,889 2,721 370 3,091 Other loans 1,094,736 1,094,736 1.698 1,698 2,726,602 45,665,113 1,624,521 Total 48,391,715 352,772 1,977,293

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 sector of activity, are presented in the following tables:

					(Th	ousands of euros)
_			31 Decem	ber 2019		
_	Gross Exposure			Ir	mpairment losses	
Sector of activity	Individual	Collective	Total	Individual	Collective	Total
Loans to individuals	80,941	21,177,310	21,258,251	17,145	122,734	139,879
Non-financial comp Trade	134,920	3,499,638	3,634,558	79,983	35,524	115,507
Non-financial comp Construction	580,045	2,121,690	2,701,735	266,584	30,002	296,586
Non finan. comp Manufacturing indust.	84,095	4,068,820	4,152,915	46,576	39,914	86,490
Non-financial compOther activities	148,954	1,543,218	1,692,172	72,422	14,873	87,295
Non-financial comp Other services	1,239,449	9,446,042	10,685,491	796,941	100,899	897,840
Other Services/Other activities	458,198	3,808,395	4,266,593	344,870	8,826	353,696
Total	2,726,602	45,665,113	48,391,715	1,624,521	352,772	1,977,293

The balances Gross Exposure and Collective Impairment include the loans subject to individual analysis for which the Bank 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, are presented in the following tables:

(Thousands of euros) 31 December 2018 Impairment losses **Gross Exposure** Individual Individual Collective Collective Total Total Segment 15,768,891 3,990 Individuals-Mortgage 9,448 15,759,443 78,715 82,705 Individuals-Other 113,632 3,748,376 3,862,008 48,602 107,741 156,343 461,754 **Financial Companies** 631,404 4,164,899 4,796,303 12,187 473,941 1,102,804 6,468,043 7,570,847 646,018 41,338 687,356 Non-financial comp. - Corporate Non-financial comp.- SME-Corporate 9,563,714 547,507 157,926 705,433 1,224,691 8,339,023 Non-financial comp. -SME-Retail 607,693 4,223,034 4,830,727 282,722 87,613 370,335 Non-financial comp.-Other 31,108 404,995 436,103 17,410 3,939 21,349 Other loans 1,049,859 1,049,859 1.442 1,442 3,720,780 2,008,003 490,901 Total 44,157,672 47,878,452 2,498,904

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 sector of activity, are presented in the following tables:

					(Th	ousands of euros)
_			31 Decem	ber 2018		
_		Gross Exposure		Ir	npairment losses	
Sector of activity	Individual	Collective	Total	Individual	Collective	Total
Loans to individuals	123,080	19,507,821	19,630,901	52,591	186,455	239,046
Non-financial comp Trade	219,612	3,352,146	3,571,758	120,705	52,333	173,038
Non-financial comp Construction	888,381	1,857,212	2,745,593	423,706	58,263	481,969
Non finan. comp Manufacturing indust.	137,176	3,884,787	4,021,963	80,746	50,313	131,059
Non-financial compOther activities	196,050	1,517,609	1,713,659	87,637	17,906	105,543
Non-financial comp Other services	1,525,077	8,823,339	10,348,416	780,863	112,002	892,865
Other Services/Other activities	631,404	5,214,758	5,846,162	461,755	13,629	475,384
Total	3,720,780	44,157,672	47,878,452	2,008,003	490,901	2,498,904

The balances Gross Exposure and Collective Impairment include the loans subject to individual analysis for which the Bank 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):

			20	19		
	Construction	Companies -	Mortgage	Individuals -	Other	
Year of production	and CRE	Oth. Activities	loans	Other	loans	Total
2009 and previous						
Number of operations	15,965	22,875	237,261	338,670	73	614,844
Value (Euros '000)	1,000,320	3,054,608	9,155,121	711,714	1,948	13,923,711
Impairment constituted (Euros '000)	102,077	115,483	32,867	9,578	-	260,005
2010						
Number of operations	1,417	2,008	13,102	49,884	16	66,427
Value (Euros '000)	146,692	300,328	724,651	105,693	43	1,277,407
Impairment constituted (Euros '000)	9,862	10,882	1,812	797	-	23,353
2011						
Number of operations	1,352	2,153	5,040	48,301	2	56,848
Value (Euros '000)	57,793	293,017	270,225	94,644	35	715,714
Impairment constituted (Euros '000)	5,817	10,572	392	746	-	17,527
2012						
Number of operations	1,174	2,006	3,015	52,606	185	58,986
Value (Euros '000)	83,859	182,871	129,888	71,437	8,783	476,838
Impairment constituted (Euros '000)	3,742	12,473	414	509	3	17,141
2013	-,	, -				,
Number of operations	1,794	3,029	6,014	77,558	13	88,408
Value (Euros '000)	74,456	563,433	267,049	108,564	1,512	1,015,014
Impairment constituted (Euros '000)	5,280	38,573	622	759		45,234
2014	3,200	30,373	022	737		13,231
Number of operations	1,746	4,762	4,102	74,785	69	85,464
Value (Euros '000)	96,824	661,606	227,704	118,573	181,956	1,286,663
Impairment constituted (Euros '000)	6,982	34,277	132	860	41	42,292
2015	0,702	34,277	132	000	71	72,272
Number of operations	2,721	7,656	6,193	90,669	97	107,336
Value (Euros '000)	163,496	918,573	401,536	201,207	10,036	1,694,848
Impairment constituted (Euros '000)	20,926	53,101	239	2,041	4	76,311
2016	20,920	33,101	239	2,041	4	70,311
Number of operations	3,201	10,465	8,364	101,011	43	123,084
Value (Euros '000)					31,627	
	235,284	1,716,183	587,504	254,860		2,825,458
Impairment constituted (Euros '000)	14,077	87,145	201	3,256	6	104,685
2017	2.025	12.500	12.101	106 245	104	125.025
Number of operations	3,825	12,560	13,191	106,245	104	135,925
Value (Euros '000)	476,222	1,800,594	1,098,957	325,899	94,790	3,796,462
Impairment constituted (Euros '000)	40,385	69,068	337	4,082	27	113,899
2018	4.05-	00.046	10 = 1=	404.400	10=	227.65
Number of operations	6,975	20,842	18,540	191,120	187	237,664
Value (Euros '000)	1,208,373	3,059,734	1,793,911	617,921	402,646	7,082,585
Impairment constituted (Euros '000)	7,309	43,284	229	5,158	29	56,009
2019						
Number of operations	14,329	45,792	19,786	536,971	91	616,969
Value (Euros '000)	1,482,718	5,453,698	1,996,586	1,295,203	164,133	10,392,338
Impairment constituted (Euros '000)	10,482	100,326	1,389	4,461	23	116,681
Total						
Number of operations	54,499	134,148	334,608	1,667,820	880	2,191,955
Value (Euros '000)	5,026,037	18,004,645	16,653,132	3,905,715	897,509	44,487,038
Impairment constituted (Euros '000)	226,939	575,184	38,634	32,247	133	873,137

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):

			20	18		
	Construction	Companies -	Mortgage	Individuals -	Other	
Year of production	and CRE	Oth. Activities	loans	Other	loans	Total
2008 and previous						
Number of operations	16,261	23,065	205,011	376,119	64	620,520
Value (Euros '000)	910,473	2,983,089	8,375,302	743,696	3,309	13,015,869
Impairment constituted (Euros '000)	137,122	130,579	51,610	16,131	8	335,450
2009						
Number of operations	1,871	2,278	15,806	40,883	22	60,860
Value (Euros '000)	227,396	402,067	824,669	65,916	358	1,520,406
Impairment constituted (Euros '000)	21,269	10,474	5,990	2,280	-	40,013
2010						
Number of operations	1,676	2,202	13,914	57,368	17	75,177
Value (Euros '000)	174,679	391,149	797,419	122,451	45	1,485,743
Impairment constituted (Euros '000)	18,688	11,804	2,926	1,264	-	34,682
2011						
Number of operations	1,526	2,256	5,289	55,764	2	64,837
Value (Euros '000)	77,433	287,209	294,521	107,004	20	766,187
Impairment constituted (Euros '000)	7,866	9,267	538	1,442	-	19,113
2012						
Number of operations	1,356	2,033	3,082	65,901	195	72,567
Value (Euros '000)	95,714	366,904	140,978	93,178	6,212	702,986
Impairment constituted (Euros '000)	8,349	84,072	550	756	3	93,730
2013						
Number of operations	2,196	3,652	6,296	99,922	24	112,090
Value (Euros '000)	88,567	643,343	296,108	149,934	2,068	1,180,020
Impairment constituted (Euros '000)	13,797	39,175	706	1,480	1	55,159
2014						
Number of operations	2,324	6,409	4,316	108,079	69	121,197
Value (Euros '000)	123,218	709,248	254,074	183,594	185,964	1,456,098
Impairment constituted (Euros '000)	7,328	27,811	195	1,833	50	37,217
2015						
Number of operations	3,726	10,966	6,572	142,542	98	163,904
Value (Euros '000)	218,918	1,235,253	447,412	265,900	33,083	2,200,566
Impairment constituted (Euros '000)	29,679	131,099	332	3,960	12	165,082
2016						
Number of operations	3,921	12,744	8,920	138,183	42	163,810
Value (Euros '000)	319,901	1,892,727	656,189	376,904	85,417	3,331,138
Impairment constituted (Euros '000)	27,263	103,342	236	6,533	15	137,389
2017						
Number of operations	4,451	15,703	13,966	138,674	103	172,897
Value (Euros '000)	580,798	2,190,466	1,215,453	468,864	99,619	4,555,200
Impairment constituted (Euros '000)	42,531	79,119	656	5,615	20	127,941
2018	·	·		·		
Number of operations	11,154	41,914	19,300	260,955	226	333,549
Value (Euros '000)	1,650,758	6,410,985	1,929,193	1,014,050	441,912	11,446,898
Impairment constituted (Euros '000)	15,758	122,471	796	9,424	92	148,541
Total		•		•		· · · · · · · · · · · · · · · · · · ·
Number of operations	50,462	123,222	302,472	1,484,390	862	1,961,408
Value (Euros '000)	4,467,855	17,512,440	15,231,318	3,591,491	858,007	41,661,111
Impairment constituted (Euros '000)	329,650	749,213	64,535	50,718	201	1,194,317

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:

			20	119		
	Constructi	on and CRE	Companies - C	ther Activities	Mortgag	je loans
Fair Value	Real Estate	Other real Collateral (*)	Real Estate	Other real Collateral (*)	Real Estate	Other real Collateral (*)
< 0.5 M€						
Number	6,185	1,891	9,004	7,100	260,207	402
Value (Euros '000)	798,829	91,703	1,255,316	290,238	35,043,380	22,170
>= 0.5 M€ and < 1 M€						
Number	647	35	1,037	87	3,869	6
Value (Euros '000)	450,180	21,839	721,631	56,740	2,517,184	3,487
>= 1 M€ and < 5 M€						
Number	446	43	770	81	539	2
Value (Euros '000)	932,308	69,063	1,518,322	151,602	798,827	3,105
>= 5 M€ and < 10 M€						
Number	67	3	97	17	6	-
Value (Euros '000)	465,997	23,184	661,996	114,119	39,768	-
>= 10 M€ and < 20 M€						
Number	35	1	55	14	-	-
Value (Euros '000)	485,611	13,009	740,103	207,088	-	-
>= 20 M€ and < 50 M€						
Number	25	-	24	2	-	-
Value (Euros '000)	718,625	-	709,533	57,393	-	-
>= 50 M€						
Number	3	-	9	4	-	-
Value (Euros '000)	171,131	-	745,204	863,177	-	-
Total						
Number	7,408	1,973	10,996	7,305	264,621	410
Value (Euros '000)	4,022,681	218,798	6,352,105	1,740,357	38,399,159	28,762

<sup>(\*)</sup> 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:

			20	18		
	Constructi	on and CRE	Companies - C	ther Activities	Mortgag	je loans
Fair Value	Real Estate	Other real Collateral (*)	Real Estate	Other real Collateral (*)	Real Estate	Other real Collateral (*)
< 0.5 M€						
Number	6,822	2,057	8,728	8,474	226,978	447
Value (Euros '000)	854,914	93,528	1,264,438	313,327	28,536,472	23,771
>= 0.5 M€ and < 1 M€						
Number	582	45	990	90	2,147	5
Value (Euros '000)	393,818	28,238	687,766	61,321	1,393,748	2,876
>= 1 M€ and < 5 M€						
Number	370	35	764	78	348	2
Value (Euros '000)	748,083	55,639	1,504,817	151,753	527,942	2,916
>= 5 M€ and < 10 M€						
Number	61	3	93	16	4	-
Value (Euros '000)	424,210	19,280	646,698	113,519	24,124	-
>= 10 M€ and < 20 M€						
Number	28	1	51	11	-	-
Value (Euros '000)	379,121	12,834	690,498	158,151	-	-
>= 20 M€ and < 50 M€						
Number	22	-	27	3	-	-
Value (Euros '000)	630,522	-	802,373	86,423	-	-
>= 50 M€						
Number	3	-	8	2	-	-
Value (Euros '000)	176,677	-	669,380	688,193	-	-
Total						
Number	7,888	2,141	10,661	8,674	229,477	454
Value (Euros '000)	3,607,345	209,519	6,265,970	1,572,687	30,482,286	29,563

<sup>(\*)</sup> 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) 31 December 2019 Number of properties Segment/Ratio Stage 1 Stage 2 Stage 3 Impairment **Construction and CRE** Without associated collateral 1,736,673 741,390 430,199 187,864 <60% 224,914 8,374 12,453 408,312 41,225 >=60% and <80% 560,850 1,636 92,652 21,159 6,354 >=80% and <100% 707 92,821 80,467 101,810 21,191 >=100% 7,926 365,801 176,194 365,017 192,944 Companies - Other Activities Without associated collateral n.a. 12,596,627 2,190,765 1,211,272 909,888 <60% 13,875 628,986 388,577 153,469 80,291 >=60% and <80% 2,601 440,499 199,038 58,009 15,274 >=80% and <100% 1,885 356,633 138,580 95,536 49,365 >=100% 5,545 561,738 315,401 531,144 356,633 Mortgage loans Without associated collateral n.a. 279,390 25,499 4,751 4,639 <60% 212,091 6,837,908 1,005,158 123,681 3,782 >=60% and <80% 96,711 4,955,299 842,531 133,323 3,615 >=80% and <100% 36,709 1,775,415 439,968 119,234 4,104 >=100% 9,925 118,577 135,264 32,989 343,167

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:

				(7	housands of euros)
		31	1 December 2018		
	Number				
Segment/Ratio	of properties	Stage 1	Stage 2	Stage 3	Impairment
Construction and CRE					
Without associated collateral	n.a.	1,646,104	683,188	467,158	200,729
<60%	5,168	227,896	199,585	63,305	14,270
>=60% and <80%	2,655	414,992	72,633	97,792	15,591
>=80% and <100%	1,138	89,103	48,765	90,372	25,733
>=100%	14,986	172,060	144,066	794,268	412,533
Companies - Other Activities					
Without associated collateral	n.a.	11,788,615	1,973,445	1,543,516	991,146
<60%	14,352	582,543	354,653	188,168	53,500
>=60% and <80%	3,277	394,605	185,614	127,616	32,203
>=80% and <100%	1,705	199,698	163,570	115,983	50,982
>=100%	8,064	677,799	336,092	684,357	458,118
Mortgage loans					
Without associated collateral	n.a.	193,786	4,697	2,105	1,870
<60%	165,269	5,174,838	763,161	142,291	3,742
>=60% and <80%	101,766	5,093,550	874,775	180,221	5,471
>=80% and <100%	43,015	1,827,831	524,200	193,505	6,244
>=100%	14,555	393,231	165,185	264,818	65,406

As at 31 December 2019 and 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 24), by type of asset:

			(Th	ousands of euros)	
		Assets arising f	rom recovered		
		loans results			
	2019	)	2018	3	
	Appraised	Book	Appraised	Book	
Asset	value	value	value	value	
Land					
Urban	458,679	363,704	566,569	433,406	
Rural	20,104	15,065	33,013	26,402	
Buildings in development					
Commercials	1,468	767	27,075	22,921	
Mortgage loans	4,000	3,043	45,260	35,428	
Constructed buildings					
Commercials	259,226	203,351	358,781	275,965	
Mortgage loans	307,220	246,208	420,138	349,063	
Others	1,478	1,153	173	100	
Other assets	-	-	210	179	
	1,052,175	833,291	1,451,219	1,143,464	

#### 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:

- 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 Bank 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 Bank 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, as at 31 December 2019 and 2018, and measured by the methodologies referred to above:

			T)	housands of euros)
	2019	Max of global risk in the period	Min of global risk in the period	2018
Generic Risk ( VaR )	1,543	5,350	713	3,110
Interest Rate Risk	1,507	5,532	689	3,173
FX Risk	711	1,219	212	1,802
Equity Risk	81	35	49	34
Diversification effects	(757)	(1,436)	(236)	(1,899)
Specific Risk	2	32	2	46
Non-Linear Risk		-	-	-
Commodities Risk	5	2	4	5
Global Risk	1,550	5,384	720	3,161

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 Bank's consolidated Balance Sheet and discriminated by exposure currency.

Variations of market interest rates influence the Bank'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 Bank'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 Bank holds material positions:

			(Tho	usands of euros)
		31 Decembe	r 2019	
Currency	- 200 pb (*)	- 100 pb (*)	+ 100 pb	+ 200 pb
CHF	340	340	684	1,335
EUR	53,904	53,904	(4,092)	(510)
PLN	(1,736)	(1,100)	1,086	2,159
USD	(14,592)	(8,388)	8,085	15,878
	37,916	44,755	5,763	18,863

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

			(Th	ousands of euros)					
		31 December 2018							
Currency	- 200 pb (*)	- 100 pb (*)	+ 100 pb	+ 200 pb					
CHF	215	215	503	985					
EUR	(47,804)	(52,516)	145,700	281,223					
PLN	(1,947)	(1,183)	1,164	2,311					
USD	(19,518)	(9,566)	9,190	18,010					
	(69,054)	(63,050)	156,557	302,529					

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

#### Foreign exchange and equity risk in the banking book

The exchange rate risk of the banking book is transferred internally to the Trading area (Treasury), 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. On an individual basis hedge accounting is made for hedge investments on investments os subsisiries, by applying Fair Value Hedge.

The Bank applies, to hedge the foreign exchange risk of the partial investment made in foreign currency in Bank Millennium (Poland) and Banque Privée BCP (Suisse) S.A., the fair value hedge accounting model.

The amount of the investment in Bank Millennium (Poland) subject to hedging is PLN 2,570,017,000 (31 December 2018: PLN 2,570,017,000), with the equivalent amount of Euros 604,454,000 (31 December 2018: Euros 598,151,000), with the hedging instrument in the same amount.

The amount of the investment Banque Privée BCP (Suisse) S.A subject to hedging is CHF 100,000,000 (31 December 2018: CHF 100,000,000), with the equivalent amount of Euros 91,976,000 (31 December 2018: Euros 88,756,000), with the hedging instrument in the amount of CHF 76,493,000 (31 December 2018: CHF 79,922,000) with the equivalent amount of Euros 70,355,000 (31 December 2018: Euros 70,936,000).

These hedging relationships were considered effective during the entire period of 2019, as described in the accounting policy in note 1 B.4.

Regarding equity risk, the Bank maintains a series 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.

## Liquidity risk

The assessment of the Bank's liquidity risk is carried out on a regular basis using indicators defined by the supervisory authorities 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.

Considering the prudential criteria adopted by the Group for liquidity management, the control of market financing needs and the strenghtening of the liquidity buffer provided by the portfolio available for discount at the ECB continued to receive particular attention. In this line, the portfolio of ECB assets available for discount reached Euros 17,060,132,000 as at 31 December 2019, (31 December 2018: Euros 16,912,532,000), of which Euros 7,328,153,000 mobilized in the ECB's monetary policy pool.

The eligible pool of assets for funding operations in the European Central Bank, net of haircuts, is detailed as follows:

	(In	ousands or euros)
	2019	2018
European Central Bank	7,328,153	6,817,511

As at 31 December 2019, the amount discounted in the European Central Bank amounts to Euros 4,000,000,000 (31 December 2018: Euros 4,000,000,000).

### Liquidity coverage ratio

The Bank 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 88% and as at 31 December 2018 this ratio was set at 92% (according to the current version of the Instruction as at 31 December 2018).

#### **Hedging 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:

			(7	Thousands of euros)				
	Hedging instruments							
		Book	Change in fair					
Type of hedging	Nocional	Assets	Liabilities	value (A)				
Fair value hedge								
Interest rate risk								
- Interest rate swaps	3,430,030	17,859	46,122	(105,957)				
	3,430,030	17,859	46,122	(105,957)				
Cash flows hedging								
Interest rate risk								
- Interest rate swaps	11,450,000	17,131	75,352	(123,734)				
	11,450,000	17,131	75,352	(123,734)				
Total	14,880,030	34,990	121,474	(229,691)				

(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:

	(Thou				
		Hedging i	nstruments		
Type of hedging	_	Book value		Change in fair	
	Nocional	Assets	Liabilities	value (A)	
Fair value hedge					
Interest rate risk					
- Interest rate swaps	2,763,274	12,372	60,882	(13,608)	
	2,763,274	12,372	60,882	(13,608)	
Cash flows hedging					
Interest rate risk					
- Interest rate swaps	11,880,000	80,519	7,604	107,294	
	11,880,000	80,519	7,604	107,294	
Total	14,643,274	92,891	68,486	93,686	

(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:

							(7	Thousands of euros)
				He	dged items			
							Cash flow he Currency trans	dge reserve / slation reserve
	Balance	Book	value		value of the ments	- Change in	Hedging relationships in	Hedging relationships
Type of hedging	sheet item	Assets	Liabilities	Assets	Liabilities	fair value (A)	effect	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)	2,075,608	-	(26,689)	-	104,716	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.
		2,614,698	884,593	(20,731)	8,179	108,189	n.a.	n.a.
Cash flows hedging								
Interest rate risk								
- Interest rate swaps	(B)	11,450,000	-	-	-	123,734	(60,682)	217,311
		11,450,000	-	-	-	123,734	(60,682)	217,311
Total		14,064,698	884,593	(20,731)	8,179	231,923	(60,682)	217,311

- (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  $% \left( \mathbf{E}\right) =\left( \mathbf{E}\right)$
- (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:

							( )	housands of euros)
				Hed	dged items			
							Cash flow he Currency trans	•
	Balance	Book	value		value of the ments	- Change in	Hedging relationships in	Hedging relationships
Type of hedging	sheet item	Assets	Liabilities	Assets	Liabilities	fair value (A)	effect	discontinued
Fair value hedge								
Interest rate risk								
- Interest rate swaps	(B)	462,400	-	5,306	-	444	n.a.	n.a.
	(C)	2,183,957	-	(47,870)	-	17,935	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.
		2,646,357	450,852	(42,564)	10,362	16,478	n.a.	n.a.
Cash flows hedging								
Interest rate risk								
- Interest rate swaps	(B)	11,880,000	-	-	-	(107,294)	63,052	50,648
		11,880,000	-	_	-	(107,294)	63,052	50,648
Total		14,526,357	450,852	(42,564)	10,362	(90,816)	63,052	50,648

<sup>(</sup>A) Changes in fair value used to calculate the ineffectiveness of the hedge

As at 31 December 2019, the table below includes information on the effectiveness of hedging relationships, as well as impacts on results and other comprehensive income:

					(Thousands of euros)  Amounts reclassified from reserves to results for the following reasons:		
Type of hedging	Income statement item (A)	Gains / (losses) recognised in Other comprehensi ve 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.	2,232		n.a.	n.a.	
		n.a.	2,232		n.a.	n.a.	
Cash flows hedging							
Interest rate risk							
- Interest rate swaps		-	_	(E)	44,882	-	
		-	-		44,882	-	
Total		-	2,232		44,882	-	

<sup>(</sup>A) Income Statement item in which the ineffectiveness of the hedge was recognised

<sup>(</sup>B) Financial assets at amortised cost - Loans and advances to customers

<sup>(</sup>C) Financial assets at fair value through other comprehensive income

<sup>(</sup>D) Financial liabilities at amortised cost - Resources from credit institutions

<sup>(</sup>E) Financial liabilities at amortised cost - Resources from customers

<sup>(</sup>F) Financial liabilities at amortised cost - Non subordinated debt securities issued

<sup>(</sup>G) Financial liabilities at amortised cost - Subordinated debt

<sup>(</sup>B) Income Statement item in which the reclassified amount was recognised

<sup>(</sup>C) but which are no longer expected to occur

<sup>(</sup>D) Net gains / (losses) from hedge accounting operations

<sup>(</sup>E) Interest and similar income

As at 31 December 2018, the table below includes information on the effectiveness of hedging relationships, as well as impacts on results and other comprehensive income:

(Thousands of euros) Amounts reclassified from reserves to results for the following reasons: Gains / (losses) Hedging recognised ineffectiveness Cash flows that were being Hedged item Income in Other recognised in Income comprehensi statement Income statement hedged with an impact Type of hedging item (A) ve income statement (A) item (B) (C) on results Fair value hedge Interest rate risk - Interest rate swaps (D) 2,870 n.a. n.a. 2,870 n.a. Cash flows hedging Interest rate risk - Interest rate swaps (E) 23,004 23,004 2,870 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  $% \left( \mathbf{B}\right) =\left( \mathbf{B}\right) \left( \mathbf{B}\right) =\left( \mathbf{B}\right) \left( \mathbf{B$ 

(C) but which are no longer expected to occur

(D) Net gains / (losses) from hedge accounting operations

(E) Interest and similar income

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

Remaining period Fair value Up to 3 3 months to Over Type of hedging Liabilities months 1 year 1 year Total Assets Fair value hedging derivatives related to interest rate risk changes: OTC Market: Interest rate swaps 17,859 Notional 1,367,350 2,062,680 3,430,030 46,122 Fixed interest rate (average) -0.13% 0.74% 0.39% Cash flow hedging derivatives related to interest rate risk changes: OTC Market: Interest rate swaps 11,450,000 11,450,000 17,131 75,352 Total derivatives traded by: OTC Market 1,367,350 14,880,030 34,990 13,512,680 121,474

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

					(Thousands of euros)		
		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	2,738,774	2,763,274	12,372	60,882	
Fixed interest rate (average)		3.44%	1.31%	1.34%			
Cash flow hedging derivatives related to							
interest rate risk changes:							
OTC Market:							
Interest rate swaps		-	11,880,000	11,880,000	80,519	7,604	
Total derivatives traded by:							
OTC Market	-	24,500	14,618,774	14,643,274	92,891	68,486	

### **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, this 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 Bank 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 Defense 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 Ofice) 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