4. CREDIT RISK

4.1. DEFINITIONS AND POLICIES FOR ASSESSMENT OF LOSSES AND PROVISIONING

Credit risk is associated with the potential losses and with the uncertainty concerning the expected returns due to the failure of the borrower – and of its guarantor, if there is one – or of the issuer of a security or of the counterparty of a contract in complying with their duties.

Past due loans, for accounting purposes, correspond to the global value of the credits and instalments due and not collected associated to credit agreements recognised in the balance sheet in any form whatsoever. Thus, all the credits (capital) that have not been settled 30 days after their maturity date are accounted in past due loans.

This framework also includes the capital instalments contractually foreseen for future periods but that, due to the non-payment of one of the instalments (of capital or of interests) may, in accordance with the law, be considered due and there are doubts on whether they will be paid.

A loan, including its components of principal, interest and expenses, is considered to be "non performing" whenever a previously established limit has been exceeded, whenever a contractual covenant has been breached or when an overdraft situation has occurred (with no previous approval and after its liquidation has been requested to the debtor). Materiality thresholds per client segment are defined for the monitoring of credit risk.

In 2017, the credit impairment assessment process included the general principles defined by IAS 39 and the orientations stemming from Banco de Portugal's regulatory letter no. 2/2014/DSP.

Within the impairment assessment, three components must be distinguished, depending on the risk, the clients' exposures and on the existence/non-existence of objective evidence of impairment:

• Individual analysis for Clients with large exposure and high risk;

• Collective analysis for high risk Clients that are not covered by the individual analysis;

• Collective analysis for clients that are not considered to be of high risk, for which no impairment signs were verified (the IBNR component - Incurred But Not Reported).

The individual analysis clients' are subject to a regular process for the allocation of a recovery expectation concerning all of their exposures, as well as of a term expected for the recovery. The impairment amount for each client is based, essentially, in the prospects of repayment and repayment term, concerning monetary, financial or physical assets. This periodic process is based on the elements that are relevant for the impairment assessment, namely:

• Financial and economic data, based on the Client's most recent accounting statements;

• Qualitative data that characterise the Client's situation in what concerns the economic viability of the business;

• Projected cash-flows for clients that are analysed in a 'going concern' perspective;

• Credit worthiness track-record of the Client within the Bank and the financial system.

Collateral and guarantees data is of particular importance, especially in real estate companies and in cases for which economic viability is reduced.

The Bank has a conservative approach towards the treatment of collateral, materialised in the use of haircuts, aiming at incorporating the assets' devaluation risk, the costs inherent to their selling and the maintenance costs and term that occur until the sale.

For each client, impairment is calculated as the difference between the respective exposure and the total of expected cash-flows for the various operations, discounted at the effective interest rate of each operation.

Collective impairment losses' assessment is based on the Probability of Default (PD), on a loss recognition horizon of 1 year and on the Loss Given Default (LGD), taking into account the time in default. Both PD and LGD are estimated from the Bank's historical data and are subject to periodical updates.

The results of the impairment assessment process are duly registered in accounting terms. In accordance with Banco de Portugal's regulatory letter no. 15/2009, the accounting cancellation of credits should be effected when there are no realistic recovery prospects from an economic perspective and, for collateralised credits, when the funds coming from the use of the collaterals have already been received, by the use of impairment losses when these correspond to 100% of the value of the credits deemed as impossible to recover. Hence, when a credit reaches an impairment of 100%, its classification as unrecoverable should be envisaged. However, even if a credit impairment has not reached 100%, it still may be classified as unrecoverable if there are no recovery expectations. It is important to point out that all procedures and methodologies described are defined through internal regulations approved by top management and dedicated to the impairment process, as well as to credit granting, monitoring and recovery and to the treatment of non-performing credit.

On each balance date, an evaluation of the objective evidence of impairment is made. A financial asset or group of financial assets is impaired whenever there is objective evidence of impairment, resulting of one or more events that occurred after its initial recognition, such as: (i) for listed securities, a continued or significant price devaluation, and (ii) for unlisted securities, when that event (or events) has an impact in the financial asset, or group of financial assets, estimated future cash flow value that can be reasonably estimated. According to the Group's policies, 30% of devaluation of the fair value of an equity instrument is considered a significant devaluation and the one year period is assumed as a continued devaluation of the fair value below acquisition cost.

If impairment is detected in a financial asset available for sale, the accumulated loss (measured as the difference between the acquisition cost and the fair value, excluding impairment losses previously recognised against results) is allocated to fair value reserves and recognised in the results. If, in a subsequent period, the fair value of the debt instruments classified as financial assets available for sale increases and that increase may be objectively related with an event that occurred after the recognition of the impairment loss in the results, the impairment loss is reverted against results. The recovery from impairment losses recognised in equity instruments classified as financial assets available for sale is registered against fair value reserves when it occurs (not being reversed against results).

Finally, provisions are recognised when (i) the Group has a current liability (legal or deriving from practices or policies that imply the recognition of certain liabilities), (ii) it is likely that its payment is demanded and (iii) when a reliable estimation of the value of that liability can be made.

In cases where the discount effect is material, provisions are recorded, corresponding to the present value of expected future payments, discounted at a rate that reflects the risk associated with the liability.

The provisions are reviewed in the end of each reporting date and adjusted to show the better estimation, being reverted to results in the same proportion as unlikely payments. The provisions are derecognised by using them to pay the liabilities for which they have initially been made for or when the same are no longer required.

The conciliation of the general and specific credit risk adjustments, concerning exposures subject to impairment, is presented in Table 15.

TABLE 15 – TEMPLATE EU CR2-A – CHANGES IN THE STOCK OF GENERAL AND SPECIFIC CREDIT RISK ADJUSTMENTS

(Thousand euros)

	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
OPENING BALANCE IN 1 JANUARY	**3,765,523**	**107,499**
Increases due to amounts set aside for estimated loan losses during the period	622,995	17,699
Decreases due to amounts reversed for estimated lon losses during the period		
Decreases due to amounts taken against accumulated credit risk adjustments	-1,080,765	-3,320
Transfers between credit risk adjustments	-15,645	15,645
Impact of exchange rate differences		-18,903
Business combinations, including acquisitions and disposals of subsidiaries		
Other adjustments		
CLOSING BALANCE IN 31 DECEMBER	**3,292,108**	**118,620**
Recoveries on credit risk adjustments recorded directly to the statement of profit and loss	-16,966	
Specific credit risk adjustments directly recorded to the statement of profit and loss		

The changes in the stock of defaulted and impaired loans and debt securities is shown in table 16.

TABLE 16 – TEMPLATE EU CR2-B - CHANGES IN THE STOCK OF DEFAULTED AND IMPAIRED LOANS AND DEBT SECURITIES

(Thousand euros)

	Gross carrying value of defaulted exposures
OPENING BALANCE IN 1 JANUARY	9,965,166
Loans and debt securities that have defaulted or impaired since the last reporting period	901,047
Returned to non-defaulted status	- 691,106
Amounts written off	- 540,965
Other changes	- 1,824,540
CLOSING BALANCE IN 31 DECEMBER	7,809,602

4.2. CREDIT QUALITY

The following table presents the breakdown of both on-balance and off-balance sheet items' credit quality.

TABLE 17 - TEMPLATE EU CR1-A – CREDIT QUALITY OF EXPOSURES BY EXPOSURE CLASS AND INSTRUMENT

(Thousand euros)

	a	b	c	d	e	f	g
	Gross carrying values		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
Corporates	4,764,905	13,268,238	0	2,447,368	0	0	15,585,776
Of which: Specialised lending	5,556	1,508,534	0	3,452	0	0	1,510,638
Retail	2,237,327	27,379,800	0	660,183	0	0	28,956,944
Equity	0	593,948	0	141,292	0	0	452,656
TOTAL IRB APPROACH	**7,002,233**	**41,241,986**	**0**	**3,248,843**	**0**	**0**	**44,995,376**
Central Governments or Central Banks	0	11,349,628	0	1,823	0	0	11,347,805
Regional Governments or Local Authorities	0	744,693	0	708	0	0	743,984
Public Setor Entities	0	349,156	0	2,090	0	0	347,066
Multilateral Development Banks	0	19,432	0	0	0	0	19,432
International Organisations	0	0	0	0	0	0	0
Institutions	0	2,914,386	0	132	0	0	2,914,255
Corporates	0	8,150,275	0	39,389	0	0	8,110,886
Retail	0	2,524,644	0	25,010	0	0	2,499,634
Secured by mortgages on immovable property	0	985,519	0	22,942	0	0	962,577
Exposures in default	943,785	0	0	343,114	0	0	600,671
Items associated with particularly high risk	0	0	0	0	0	0	0
Covered bonds	0	0	0	0	0	0	0
Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0
Collective Investments Undertakings	0	22,329	0	1,190	0	0	21,139
Equity exposures	0	22,453	0	10,972	0	0	11,480
Other exposures	0	0	0	0	0	0	0
TOTAL STANDARDISED APPROACH	**943,785**	**27,082,514**	**0**	**447,370**	**0**	**0**	**27,578,929**
TOTAL	**7,946,017**	**68,324,500**	**0**	**3,696,212**	**0**	**0**	**72,574,305**

TABLE 18 - TEMPLATE EU CR1-B – CREDIT QUALITY OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPES

(Thousand euros)

	a	b	c	d	e	f	g
	Gross carrying values		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
Mortgage credit	1,483,492	21,852,632		235,411			23,100,712
Services	2,536,207	9,047,916		1,434,263			10,149,860
Consumer credit	725,580	6,037,353		431,346			6,331,587
Construction	1,442,704	1,691,345		587,563			2,546,486
Other activ. national	921,667	18,967,310		416,325			19,472,652
Other activ. international		242		0			242
Wholesale business	145,192	1,502,340		84,392			1,563,141
Other	691,176	8,586,632		353,458			8,924,350
TOTAL	**7,946,017**	**67,685,770**		**3,542,758**			**72,089,029**

TABLE 19 - TEMPLATE EU CR1-C – CREDIT QUALITY OF EXPOSURES BY GEOGRAPHY

(Thousand euros)

	a	b	c	d	e	f	g
	Gross carrying values		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
Portugal	6,983,609	46,885,649		3,084,729			50,784,529
Poland	751,147	18,342,171		356,112			18,737,206
Other	211,262	2,457,950		101,918			2,567,294
TOTAL	**7,946,017**	**67,685,770**		**3,542,758**			**72,089,029**

TABLE 20 - TEMPLATE EU CR1-D – AGEING OF PAST-DUE EXPOSURES

(Thousand euros)

	Gross carrying values					
	=< 30 days	> 30 days =< 60 days	> 60 days =< 90 days	> 90 days =< 180 days	> 90 days =< 1 year	> 1 year
Loans	691,914	78,946	14,487	1,313	1,281	13,252
Debt securities						
Total exposures	**691,914**	**78,946**	**14,487**	**1,313**	**1,281**	**13,252**

TABLE 21 - TEMPLATE EU CR1-E – NON-PERFORMING AND FORBONE EXPOSURES

(Thousand euros)

	Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collateral and financial guarantees received	
		Of which performing but past due > 30 days and =< 90 days	Of which performing forbone	of which non-peroforming				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forbone exposures
					of which defaulted	of which impaired	of which forbone		of which forbone		of which forbone		
Debt securities	13,021,126			204,964	75,121	204,964		-5,202		-126,480		3,730	
Loans and advances	51,910,117	81,178	1,061,296	7,658,392	7,126,669	7,541,711	3,130,330	-108,801	-17,921	-3,170,245	-1,407,824	3,698,454	2,369,125
Off-balance-sheet exposures	12,741,260			746,554	693,318			7,188	6	123,687	5	316,985	

4.3. CONCENTRATION RISK MANAGEMENT

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) Corporate single-name exposures (Large exposures);
- 2) Exposures to sovereign risks;
- 3) Exposures to Institutions (banks/financial institutions);
- 4) Exposure to sectors of activity;
- 5) Geographic concentration (country risk).

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 case 4), 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.

(*) Net exposure = EAD x LGD, assuming that PD=1 and considering LGD=45% whenever own estimates for LGD do not exist.

The limits for single-name concentration are presented in the following table, which indicates the single-name limit established (for any given Customer/Group of Customers), as the Net Exposure weight on the consolidated Own Funds.

TABLE 22 – LIMITS FOR SINGLE NAME CONCENTRATION

Risk quality	Risk grade	Max Net exposure as a % of COF
High quality	1 – 5	8.0%
Average/good quality	6 – 7	6.0%
Average low/quality	8 - 9	4.0%
Low quality	10 – 11	1.0%
Restricted credit	12 or worse	0.5%

As at 31 of December 2017 there were 4 Economic Groups with net exposure above the limits approved for the respective risk grade, which compares with 8 Customers by the end of 2016. For each Client with 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 measurement of this concentration type is also done within the Group RAS (Risk Appetite Statement) scope.

The following tables present the concentration limits to Sovereigns, Institutions, activity sectors and geographies, as well as the measurements of these concentrations as at 31st of December 2017:

TABLE 23 – OTHER CONCENTRATION LIMITS

Counterparties	Limit (% of COF)	Net exposure % weight
Sovereigns	Very low risk 25%; low risk 10%; average (or lower quality) risk 7.5%	Sovereign 1: 3.8% (very low risk); Sovereign 2: 0.4% (low risk); Sovereign 3: 0.01% (low risk); Sovereign 4: 0.01% (very low risk)
Institutions	Very low risk 10%; low risk 5%; average (or lower quality) risk 2.5%	Institution 1 (very low risk): 2.7%; Institution 2 (average or lower quality risk): 2.0%; Institution 3 (low risk): 0.7%; Institution 4: 0.7%; Institution 5: 0.6%; Institution 6: 0.6%; Institution 7: 0.6%; Institution 8: 0.5%; Institution 9: 0.5%; Institution 10: 0.5%; Institution 11: 0.4%; Institution 12: 0.3%; Institution 13: 0.3%; Institution 14: 0.3%; Institution 15: 0.3%; Institution 16: 0.2%; Institution 17: 0.2%; Institution 18: 0.2%; Institution 19: 0.2%; Institution 20: 0.2%

Counterparties	Limit (% of COF)	Net exposure % weight
Countries	Very low risk 40%; low risk 20%; average (or lower quality) risk 10%	Country 1 (very low risk): 4.9% ; Country 2 (very low risk): 2.7% ; Country 3 (very low risk): 2.6% ; Country 4 (average or lower quality risk): 2.5% ; Country 5 (very low risk): 2.3% ; Country 6 (very low risk): 1.8% ; Country 7 (very low risk): 1.5% ; Country 8: 1.3% ; Country 9: 0.8% ; Country 10: 0.6% ; Country 11: 0.5% ; Country 12: 0.3% ; Country 13: 0.2% ; Country 14: 0.2% ; Country 15: 0.2%
Sectors of activity	40% of the Group entity's Own Funds	Portugal: Other corporate services 28.4% Other activities 19.2% Construction 17.9% Financial and insurance activities 16.2% Wholesale and retail trade; repair of motor vehicles and motorcycles 16.2% Poland: Wholesale and retail trade; repair of motor vehicles and motorcycles 25.2% Transporting and storage 12.1% Financial and insurance activities 10.5%

Risk Grades		
1 - 3	4 - 6	7 - 12
Very low risk	Low risk	Average (or lower quality) risk

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.

4.4. CHARACTERISATION OF THE EXPOSURES

The exposures taken into consideration for the calculation of the own funds requirements for credit risk comprise the banking book exposures registered in the consolidated balance sheet and in off-balance sheet accounts related, namely, with loans and advances to customers, other loans and advances to credit institutions, investments in financial instruments, the ownership of other assets, the guarantees and commitments assumed and hedging derivatives. These exposures do not include those handled within the scope of the trading portfolio, but the ones related to securitisation are considered.

The total exposures net of impairments and amortisations attained a value of 72,574 million euros, as at 31 December 2017, and 72,491million euros as at 31 December 2016. Table 24 presents the breakdown of this amount in accordance with the risk types defined in the Basel Accord.

TABLE 24 – TEMPLATE EU CRB-B – TOTAL AND AVERAGE NET AMOUNT OF EXPOSURES

(Thousand euros)

	Net value of exposures at the end of the period	**Average net exposures over the period**
Corporates	15,585,776	15,066,107
Of which: Specialised lending	1,510,638	1,541,953
Retail	28,956,944	29,104,710
Equity	452,656	450,793
TOTAL IRB APPROACH	**44,995,376**	**44,621,610**
Central Governments or Central Banks	11,347,805	11,632,548
Regional Governments or Local Authorities	743,984	770,801
Public Setor Entities	347,066	520,582
Multilateral Development Banks	19,432	18,952
International Organisations		
Institutions	2,914,255	3,119,068
Corporates	8,110,886	7,504,328
Retail	2,499,634	2,347,194
Secured by mortgages on immovable property	962,577	871,700
Of which: SMEs		
Exposures in default	600,671	587,720
Items associated with particularly high risk		273,490
Covered bonds		
Claims on institutions and corporates with a short-term credit assessment		
Collective Investments Undertakings	21,139	202,095
Equity exposures	11,480	21,356
Other exposures		
TOTAL STANDARDISED APPROACH	**27,578,929**	**27,869,832**
TOTAL	**72,574,305**	**72,491,442**

The geographical distribution of the Group's original risk positions at the end of 2017 and 2016 is provided in Table 25.

TABLE 25 – TEMPLATE EU CRB-C - GEOGRAPHICAL BREAKDOWN OF EXPOSURES

(Thousand euros)

	Portugal	Poland	Other	Total
Central Governments or Central Banks				
Institutions				
Corporates	14,568,895	3,474	1,013,406	15,585,776
Retail	20,911,484	6,585,238	1,460,223	28,956,944
Equity	421,625	7,927	23,104	452,656
TOTAL IRB APPROACH	**35,902,004**	**6,596,639**	**2,496,733**	**44,995,376**
Central Governments or Central Banks	4,963,896	4,865,568	1,518,342	11,347,805
Regional Governments or Local Authorities	654,971	88,872	141	743,984
Public Setor Entities	192,167	18,330	136,569	347,066
Multilateral Development Banks		19,432		19,432
International Organisations				
Institutions	1,104,001	398,724	1,411,529	2,914,255
Corporates	3,567,281	3,671,493	872,112	8,110,886
Retail	233,891	2,056,185	209,559	2,499,634
Secured by mortgages on immovable property	55,609	652,382	254,586	962,577
Exposures in default	130,461	317,893	152,316	600,671
Items associated with particularly high risk				
Covered bonds				
Claims on institutions and corporates with a short-term credit assessment				
Collective Investment Undertakings	21,139			21,139
Equity exposures	11,162		319	11,480
Other exposures				
TOTAL STANDARDISED APPROACH	**10,934,578**	**12,088,879**	**4,555,473**	**27,578,929**
TOTAL	**46,836,582**	**18,685,517**	**7,052,205**	**72,574,305**

The sectorial distribution of the Group's original risk positions at the end of 2017 and 2016 is provided in Table 26.

TABLE 26 – TEMPLATE EU CRB-D - CONCENTRATION OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPES

(Thousand euros)

	Mortgage credit	Services	Consumer credit	Construction	Other activ. national	Other activ. international	Wholesale business	Other	Total
Central Governments or Central Banks									
Institutions									
Corporates		5,906,473		2,097,926	1,054,058		954,627	5,572,692	15,585,776
Retail	23,066,347	274,631	4,377,310	166,764	178,546	13	195,654	697,680	28,956,944
Equity								452,656	452,656
TOTAL IRB APPROACH	**23,066,347**	**6,181,104**	**4,377,310**	**2,264,690**	**1,232,603**	**13**	**1,150,281**	**6,723,027**	**44,995,376**
Central Governments or Central Banks		1,137,400		6,296	9,494,992	204		708,913	11,347,805
Regional Governments or Local Authorities		4,120			731,440			8,425	743,984
Public Setor Entities		192,157			154,908				347,066
Multilateral Development Banks					19,432				19,432
International Organisations									
Institutions		2,181,186			733,069				2,914,255
Corporates		388,711		220,434	5,378,757	15	342,434	1,780,535	8,110,886
Retail		19,354	1,779,415	17,804	511,873	10	60,663	110,515	2,499,634
Secured by mortgages on immovable property	25,254	29,607	49,404	1,573	835,843		3,833	17,063	962,577
Exposures in default	9,111	16,221	125,458	35,689	379,735		5,930	28,527	600,671
Items associated with particularly high risk									
Covered bonds									
Claims on institutions and corporates with a short-term credit assessment									
Collective Investments Undertakings								21,139	21,139
Equity exposures								11,480	11,480
Other exposures									
TOTAL STANDARDISED APPROACH	**34,365**	**3,968,756**	**1,954,276**	**281,796**	**18,240,048**	**229**	**412,860**	**2,686,598**	**27,578,929**
TOTAL	**23,100,712**	**10,149,860**	**6,331,587**	**2,546,486**	**19,472,652**	**242**	**1,563,141**	**9,409,625**	**72,574,305**

The distribution of the Group's original risk positions by residual maturity term at the end of 2017 and 2016 is provided in Table 27.

TABLE 27 – TEMPLATE EU CRB-E - MATURITY OF EXPOSURES

(Thousand euros)

	RM < 1 year	1 year < RM < 5 years	5 years < RM < 10 years	RM > 10 years	Total
Central Governments or Central Banks					
Institutions					
Corporates	7,209,939	3,530,115	2,930,818	1,914,903	15,585,776
Retail	1,876,121	3,072,284	2,230,794	21,777,746	28,956,944
Equity				452,656	452,656
TOTAL IRB APPROACH	**9,086,060**	**6,602,399**	**5,161,611**	**24,145,305**	**44,995,376**
Central Governments or Central Banks	5,067,486	3,882,606	2,150,538	247,175	11,347,805
Regional Governments or Local Authorities	135,460	126,668	199,271	282,585	743,984
Public Setor Entities	42,093	66,068	67,897	171,008	347,066
Multilateral Development Banks		19,432			19,432
International Organisations					
Institutions	1,617,165	456,925	807,888	32,277	2,914,255
Corporates	4,406,234	3,201,921	392,125	110,605	8,110,886
Retail	381,060	1,121,863	633,728	362,984	2,499,634
Secured by mortgages on immovable property	331,221	334,702	191,901	104,753	962,577
Exposures in default	276,927	219,221	70,342	34,181	600,671
Items associated with particularly high risk					
Covered bonds					
Claims on institutions and corporates with a short-term credit assessment					
Collective Investments Undertakings				21,139	21,139
Equity exposures				11,480	11,480
Other exposures					
TOTAL STANDARDISED APPROACH	12,257,645	9,429,407	4,513,690	1,378,186	27,578,929
TOTAL	**21,343,706**	**16,031,806**	**9,675,301**	**25,523,492**	**72,574,305**

4.5. OWN FUNDS REQUIREMENTS FOR CREDIT RISK

4.5.1. FRAMEWORK OF THE APPROACHES USED

As at 31 December 2016 and 2017, the Group determined the own funds requirements for credit risk in accordance with the authorisations granted by the Supervisor for the approach to calculate risk weighted assets (RWA).

For the portfolio that, on those dates, fitted the standardised approach, the original exposures were classified in line with regulatory risk classes according to the nature of the counterparty, to which specific regulatory weights are applied after carrying out some adjustments - such as the ones related with provisions and value corrections, the ones due to the application of CCF, namely, in the case of off-balance sheet exposures, and those resulting from risk mitigation - thus finding the value of the risk weighed assets.

In the capital requirements calculation based on the standardised approach, the exposures are weighted according to the provisions of the CRR. In the risk class "Central Government and Central Banks", credit ratings of issuers or issues are used, provided they have been attributed by recognised credit rating agencies (ECAI – External Credit Assessment Institutions), for the purpose of determining the respective risk quality levels, as per which the corresponding risk weights are applied as defined by the CRR (no. 2 of article 114, Section 2, Chapter 2, Title II, Part III). Whenever the same issuer or issue has two or more risk evaluations, the second best rating attributed is used. The credit rating of the issuer is applicable to all of its operations, whereas the rating for a specific issue is only considered for that same issue. The ECAI used by the Group were Standard & Poor's, Moody's and Fitch Ratings. Exposures of unrated clients are treated in accordance with no. 1 of article 114, Section 2, Chapter 2, Title II, Part III of the CRR.

Regarding the "Institutions" risk class, the risk weight of the exposures results from the existence of specific ratings and the exposures' terms-to-maturity or from the existence of the sovereign rating at stake and the exposures original term, as defined by articles 119 to 121 of the CRR.

Concerning the risk classes "Central Government and Central Banks" and "Institutions", in Portugal, the Group uses the standardised approach, pursuant to the conditions for permanent partial use of such approach, defined by article 150, Section 1, Chapter 3, Title II, Part III of the CRR.

On 31 December 2016 and 2017, according to the supervisory authorisations granted for the Group's activities in Portugal, the Bank used the internal ratings based approach for the exposure classes " Corporates" and "Retail Exposures" (in both cases, with own LGD estimates), "Equity exposures" and "Items representing securitisation positions". Regarding the Corporates exposure class, the exposures treated under the simplified rating system were weighted using the standardised approach. From 31 December 2012, also, according to the supervisory authorisations granted for the Group's activities in Poland, the Bank used the internal ratings based approach for "Retail Exposures" (with own LGD estimates), regarding the positions of individual clients guaranteed by residential real estate collateral and the retail renewable positions (QRRE – Qualified Retail Renewable Exposures).

For all the other geographies where the Group operates, the consolidated own funds requirements as at 31 December 2016 and 2017 were estimated following the standardised approach.

Also, in Portugal:

• Risk weighted assets as at 31 December 2016 and 2017 for exposures to Customers that exceptionally did not receive an internal risk level were computed according to the standardised approach, considering a PD corresponding to risk grade 12 of the Group Master Scale;

• Within the Corporates risk class, the Bank used the standardised approach for a set of exposures to churches, sports clubs and other non-profit organisations, in accordance with the supervisory authorisation for a permanent partial use of this approach, for these cases.

4.5.2. IRB APPROACH – PARAMETERS AND GENERAL INFORMATION

In the IRB Approach, the weight of exposures to determine the value of risk weighted assets is based on the PD corresponding to the various internal risk ratings of the Customers, using internal rating systems and models, adequate for each Customers segment/sub-segment.

In addition, in this approach, the computation of the risk weighted assets also uses the internally estimated LGD as well as CCF factors on off-balance sheet exposures. On the IRB approach, the effect of the credit risk decrease by means of collaterals for credit exposures is incorporated into the estimate of the risk weighted assets through the LGD parameters.

The internal ratings are given based on the Rating Master Scale, common to all the rating systems and models used, presented in Table 28.

TABLE 28 - RATING MASTER SCALE

Risk grades	Minimum PD	Maximum PD	Description
1	0.01%	0.05%	Maximum security (only for sovereign risks)
2	0.05%	0.07%	Superior quality
3	0.07%	0.14%	Very high quality
4	0.14%	0.28%	High quality
5	0.28%	0.53%	Very good quality
6	0.53%	0.95%	Good quality
7	0.95%	1.73%	Medium/high quality
8	1.73%	2.92%	Medium quality
9	2.92%	4.67%	Medium/low quality
10	4.67%	7.00%	Low quality
11	7.00%	9.77%	Very low quality
12	9.77%	13.61%	Conditioned acess to credit
13 (*)	13.61%	27.21%	Weak signs of impairment
14 (*)	27.21%	100.00%	Strong signs of impairment
15 (*)	100.00%	100.00%	*Default*

(*) Processual risk grade; the presented values of Max. and Min. PD for RG 13 and 14 are indicative, being applied the observed PD.

The risk ratings attributed by the rating systems and models are valid for one year, and are periodically revised/updated or whenever there are grounds to do so (e.g. requests for new loans or evidence of a decrease in the debtor's credit quality).

The Rating Division is solely responsible for risk ratings - a unit that is independent from the credit decision-making bodies and areas – even though most risk scores are granted by automatic decision making models used for Customers that have exposures in the Retail Portfolio.

All customers are rated, but the corresponding PD are only used to compute own funds requirements through the IRB Approach for exposures that fit the risk classes for which the Supervisor authorised the use of this approach.

The rating models included in the various rating systems are regularly subject to validation, carried out in 2016 by the validation unit of the Models Monitoring and Validation Office (GAVM), which is independent from the units that are responsible for the development and maintenance of rating models. In addition, GAVM's validation unit is also responsible for ensuring that the Group's Rating Master Scale is up-to-date and correct.

The conclusions of GAVM's validation, as well as its amendment/improvement recommendations and proposals, are analysed and ratified by a specific Validation Committee, whose composition varies according to the type of model analysed. The proposals to amend the models originated in the Validation Committees are submitted to the approval of the Risk Commission.

Besides its responsibilities regarding the PD models and the Rating Master Scale, GAVM is also responsible for validating the models used to estimate LGD and CCF parameters. Regarding these models, the Bank estimates them all based on the methods validated by the Supervisor within the scope of the process to approve the use of the IRB approach.

In terms of LGD parameters, the computation model used is based on the gathering and analysis of past data on credit risk losses, and all losses verified are computed and the various cash flows underlying credit recovery processes are discounted, including financial losses.

CCF are estimated based on the analysis of data on the use of credit lines and limits within the time frame of one year prior to the defaults.

It should be underlined that there is a model owner for each credit risk model - PD, LGD and CCF – responsible for:

• Ensuring compliance with the regulatory requirements for storing input and output data;

• Ensuring the adequacy of the model's documentation, including the development documentation, development samples and all the documents regarding changes to the model;

• Being the senior responsible in charge of all requests pertaining to the decision process based on the model;

• Changing the model whenever necessary;

• Ensuring the existence of monitoring processes;

• Ensuring the necessary support to the GAVM pursuant to the model validation work.

In addition, regarding the rating systems in which rating models are integrated, there is also a rating system owner, who is responsible for:

• Ensuring the necessary support to the GAVM within the scope of the analysis of the rating systems decision flow;

• Promoting the execution of changes to the rating system whenever necessary.

The next table shows the off-balance credit facilities' amounts and their use, weighted by using own estimates for CCF (in accordance with article 452 (iii) e) of the CRR):

TABLE 29 – CREDIT FACILITIES OUTSIDE OF THE BALANCE SHEET

(Thousand euros)

IRB *Portfolio*	Original exposure		Exposure at risk		Risk weighted assets		% RWA	
	Non-used	Used	Non-used	Used	Non-used	Used	Non-used	Used
Corporate	8,737,382	18,873,038	3,255,496	18,373,226	2,139,646	12,783,571	66%	70%
Large Corporate	5,366,833	10,448,529	2,295,584	10,021,967	1,484,980	6,525,274	65%	65%
Small and medium Corporate	2,968,810	7,295,880	653,994	7,222,680	382,849	5,154,872	59%	71%
Specialised lending	401,739	1,128,629	305,918	1,128,579	271,818	1,103,426	89%	98%
Equity	105,341	2,807,176	105,341	2,245,496	191,223	4,055,746	182%	181%

In accordance with items h) and i) from article 452 of the CRR, it is also referred that:

- During 2017, the relevant parameters associated with the IRB portfolio parameters were stable. The effective LGD of the IRB portfolio is still, approximately, of 30% and the average CCF below 50%;
- The improvement in the credit worthiness of clients in 2017, as a consequence of the favourable evolution of the economic climate, translated into a reduction of 20% in the average PD.

4.5.3. IRB APPROACH – "CORPORATES" RISK CLASS

In this risk class, the computation of own funds requirements using the IRB Approach is based on the weights resulting from the risk assessment made by the Project Finance rating system and on the PD that correspond to the risk ratings given by the Real Estate Promotion and the Corporates rating system.

In the first case, the Bank uses several rating models to grant risk scores (and the respective PD used to compute the applicable weights): Large, Mid and Small Corporate models, models for Holdings of Economic Groups and for Investment Holdings, models for Real Estate Promotion projects and companies (in both cases, with specific approaches to investment or development cases), Real Estate Investment Funds model and Small Real Estate Companies/Small Real Estate Projects models.

In the second case, the Bank uses the Project Finance rating model, which consists on the mapping between the scoring of a specific questionnaire and one of four possible classifications (besides the possibility of default) for the risks in question, which then define the weights to be used in the computation of risk weighted assets in accordance with no. 5 of article 153, Sub-Section 2, Section 2, Chapter 3, Title II, Part III of the CRR.

The risk grades attributed by these models result from two evaluation components: a quantitative component (economic-financial grade, based on the Customer's accounting data) and a qualitative component, based on an evaluation template. The risk grade resulting from these two components may be adjusted (upwards or downwards) by checking several situations that are typified and pre-defined in specific internal regulations.

Finally, if the rating analyst proposes an override to the Client's Integrated Rating, this must be approved by the Rating Committee, resulting in the Final Rating. However, the overrides are not frequent.

Table 30 summarises these rating models and systems:

TABLE 30 - CORPORATES RATING MODELS AND SYSTEMS

Rating system for Corporates	Large Corporate Model: quantitative component (quantitative score, based on accounting data and taking into consideration the Client's activity sector) + qualitative component (based on expert judgment and following sectorial rating matrixes that incorporate the sectors' risk) + adjustments stemming from pre-defined situations (including those arising from the identification of "imminent risk" evidence) + Group adjustments.
	Small and Mid Corporate Models: quantitative component (economic/financial grade based on accounting data and taking into consideration the Client's activity sector) + qualitative component (based on information gathered by the commercial area on specific templates for that purpose) + adjustments stemming from pre-defined situations (including those arising from the identification of imminent risk evidence) + Group adjustments.
	Business Model for Real Estate Development/Model for Investment Companies/Real Estate income: quantitative component (specific ratios, financial score, financial flexibility) + qualitative component (sector, management quality, assets/projects quality, market and competitiveness) + adjustments stemming from pre-defined situations (including those arising from the identification of imminent risk evidence) + Group adjustments.
	Model for Small Real Estate agents: quantitative component + qualitative component + adjustments stemming from pre-defined situations or from the identification of imminent risk evidence + adjustments stemming from economic group relations (e.g. parents vs. affiliates).
Rating system for Projects	Rating model for Project Finance: scoring of specific questionnaire on the financial strength, the politic and regulatory frameworks, other features of the operation, the ability of sponsors/shareholders and the package of collaterals.
	Model for Real Estate Promotion Projects for sale / Model for Real Estate Promotion Projects for income/Model for Real Estate Investment Funds: quantitative component (specific ratios, financial score, financial flexibility) + qualitative component (sector, management quality, assets/projects quality, market and competitiveness) + adjustments stemming from pre-defined situations (including those arising from the identification of imminent risk evidence) + Group adjustments.
	Model for small Real Estate Projects: quantitative component + qualitative component + adjustments stemming from pre-defined situations (including those arising from the identification of imminent risk evidence) + Group adjustments.

4.5.4. IRB APPROACH – "RETAIL PORTFOLIO" RISK CLASS

In this risk class, the risk weighted assets calculation by the IRB Approach is based on the PD that correspond to the risk scores given by the rating systems for Small Businesses and for Individuals.

In these rating systems, the attribution of risk scores is made using two types of automated decision models: (i) a behavioural model (TRIAD), based on the past financial data of the Customers at the Bank (executed by computer on a monthly basis), which is complemented by (ii) acceptance scoring models, used whenever the behavioural model does not apply (new Customers for instance) and defined based on the credit product the Customer wants or on the products the Customer already has.

In the Small Businesses Rating System, the TRIAD model is composed by two assessment grids that allow the model to fit the evaluated Customer's profile. In this rating system, as mentioned before, risk scores may also be granted by an acceptance scoring model designed for the segment in question.

In the Individuals Rating System, the TRIAD model is composed by four assessment grids defined based on the products already owned by the Customer, and the complementary acceptance scoring models are defined based on the credit product the Customer wants or on the products the Customer already has.

The rating systems and models used by the Bank for the Retail Portfolio are broken down in Table 31:

TABLE 31 - RETAIL PORTFOLIO RATING MODELS AND SYSTEMS

Rating system for Small Business	TRIAD model - automatic decision based on Client financial behaviour and two scorecards (according to the Client profile).
	Application Scoring model for the Small Businesses (whenever TRIAD cannot be applied - e.g. new Clients).
Rating system for Individuals	TRIAD model - Automatic decision based on Client financial behaviour and four scorecards (according to the products already owned by the Client).
	Application Scoring model for Individuals (whenever TRIAD cannot be applied - e.g. new customers), for each intended product or for products already owned by the Client.

TABLE 32 – TEMPLATE EU CR9 – IRB METHOD – BACKTESTING OF PD PER EXPOSURE CLASS

(Thousand euros)

Exposure class	PD range (%)	Weighted average PD (%)	Arithmetic average PD by obligors (%)	Number of obligors		Defaulted obligors in the year	Of which, new obligors	2017 default rate
				End of previous year	End of the year			
1. CORPORATES	0 to <0.25	0.20%	0.18%	861	912			
	0.25 to <1	0.62%	0.55%	2,338	2,551			
	1 to <5	2.42%	2.35%	2,656	2,914	8		0.30%
	5 to <16	9.52%	9.93%	2,909	3,254	111		3.82%
	16 to <99	40.60%	46.90%	118	127	48	3	38.14%
	100	100.00%	100.00%	1,246	1,268	1,266	22	
1.1 Specialised lending	0 to <0.25							
	0.25 to <1	0.69%	0.66%	38	50			
	1 to <5	1.30%	1.30%	13	14			
	5 to <16	11.50%	11.50%	3	3			
	16 to <99							
	100	100.00%	100.00%	2	2	2		
1.2 SME	0 to <0.25	0.20%	0.19%	522	558			
	0.25 to <1	0.57%	0.55%	1,655	1,811			
	1 to <5	2.36%	2.31%	1,950	2,150	3		0.15%
	5 to <16	9.84%	10.06%	2,292	2,576	91		3.98%
	16 to <99	43.73%	47.27%	99	107	37	3	34.34%
	100	100.00%	100.00%	1,048	1,064	1,063	16	
2. RETAIL	0 to <0.25	0.14%	0.13%	771,525	830,793	533	14	0.07%
	0.25 to <1	0.52%	0.52%	437,761	487,700	1,649	22	0.37%
	1 to <5	2.15%	2.18%	296,645	337,345	4,182	40	1.40%
	5 to <16	9.02%	9.71%	214,765	277,093	13,364	213	6.12%
	16 to <99	34.65%	42.21%	19,627	21,993	8,016	51	40.58%
	100	100.00%	100.00%	105,593	107,298	106,238	1,705	
2.1 Secured by real estate	0 to <0.25	0.14%	0.13%	198,452	205,295	166	1	0.08%
	0.25 to <1	0.51%	0.51%	75,296	77,291	274	2	0.36%
	1 to <5	2.17%	2.17%	46,678	47,909	674	2	1.44%
	5 to <16	8.96%	9.01%	28,177	28,637	2,267	7	8.02%
	16 to <99	32.60%	31.05%	3,606	3,635	1,221	3	33.78%
	100	100.00%	100.00%	17,406	17,441	17,079	35	
2.1.1 SME	0 to <0.25	0.19%	0.19%	3,692	3,829			
	0.25 to <1	0.48%	0.49%	5,574	5,711	3		0.05%
	1 to <5	2.09%	2.12%	3,693	3,895	29	1	0.76%
	5 to <16	9.49%	9.70%	2,854	2,994	151	3	5.19%
	16 to <99	46.24%	45.09%	123	126	56		45.53%
	100	100.00%	100.00%	1,182	1,190	1,165	8	

(Continues)

(Continuation) (Thousand euros)

Exposure class	PD range	Weighted average PD (%)	Arithmetic average PD by obligors	Number of obligors: End of previous year	Number of obligors: End of the year	Defaulted obligors in the year	Of which, new obligors	2017 default rate
2.1.2 Non-SME	0 to <0.25	0.14%	0.13%	194,760	201,466	166	1	0.08%
	0.25 to <1	0.51%	0.51%	69,722	71,580	271	2	0.39%
	1 to <5	2.17%	2.18%	42,985	44,014	645	1	1.50%
	5 to <16	8.91%	8.93%	25,323	25,643	2,116	4	8.34%
	16 to <99	32.00%	30.55%	3,483	3,509	1,165	3	33.36%
	100	100.00%	100.00%	16,224	16,251	15,914	27	
2.2 Qualifying Revolving	0 to <0.25	0.13%	0.13%	546,506	595,070	335	8	0.06%
	0.25 to <1	0.53%	0.52%	272,869	312,655	1,020	16	0.37%
	1 to <5	2.13%	2.20%	192,597	226,048	2,522	26	1.30%
	5 to <16	9.80%	9.87%	145,796	201,567	7,707	170	5.17%
	16 to <99	42.59%	43.99%	13,165	15,358	5,033	42	37.91%
	100	100.00%	100.00%	60,366	61,680	61,213	1,314	
2.3 Other retail	0 to <0.25	0.17%	0.17%	26,567	30,428	32	5	0.10%
	0.25 to <1	0.52%	0.52%	89,596	97,754	355	4	0.39%
	1 to <5	2.10%	2.14%	57,370	63,388	986	12	1.70%
	5 to <16	9.15%	9.45%	40,792	46,889	3,390	36	8.22%
	16 to <99	46.52%	46.63%	2,856	3,000	1,762	6	61.48%
	100	100.00%	100.00%	27,821	28,177	27,946	356	
2.3.1 SME	0 to <0.25	0.18%	0.19%	12,772	14,740	1	1	
	0.25 to <1	0.53%	0.51%	24,385	26,824	39		0.16%
	1 to <5	2.12%	2.17%	14,802	17,249	141	2	0.94%
	5 to <16	9.92%	10.42%	16,286	20,335	744	21	4.43%
	16 to <99	48.61%	48.35%	447	492	246	3	54.36%
	100	100.00%	100.00%	5,279	5,463	5,400	184	
2.3.2 Non-SME	0 to <0.25	0.16%	0.16%	13,795	15,688	31	4	0.20%
	0.25 to <1	0.52%	0.52%	65,211	70,930	316	4	0.48%
	1 to <5	2.09%	2.12%	42,568	46,139	845	10	1.96%
	5 to <16	8.55%	8.72%	24,506	26,554	2,646	15	10.74%
	16 to <99	45.44%	46.29%	2,409	2,508	1,516	3	62.81%
	100	100.00%	100.00%	22,542	22,714	22,546	172	

TABLE 33 – TEMPLATE EU CR5 – STANDARDISED APPROACH

(Thousand euros)

Exposure classes	Risk weight																Total	RWA
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted		
Central Governments or Central Banks	10,974,786				8,281		46,470			178,196	848,661				9		12,056,403	1,476,081
Regional Governments or Local Authorities					584,815		45			119	9				124		585,113	117,138
Public Setor Entities	192,008				438		9,891			44	82,034						284,415	128,129
Multilateral Development Banks	19,432																19,432	
International Organisations																		
Institutions					1,446,222		396,359			76,562	3,534				114,809		2,037,486	571,584
Corporates					7,158		49,417			4,080,752	261,017				78,068		4,476,412	4,323,451
Retail									2,207,587								2,207,587	1,557,581
Secured by mortgages on immovable property					220		611,188		13,523	191,634	75,901				46,420		938,886	605,551
Exposures in default	1,255						0			288,338	142,677						432,269	502,353
Items associated with particularly high risk																		
Covered bonds																		
Claims on institutions and corporates with a short-term credit assessment																		
Collective Investment Undertakings											21,139						21,139	31,709
Equity exposures										11,480							11,480	11,480
Other exposures																		
TOTAL	**11,187,481**				**2,047,135**		**1,113,370**		**2,221,110**	**4,827,127**	**1,434,972**				**239,430**		**23,070,624**	**9,325,058**

The values of the exposures at risk originated by portfolios subject to the IRB approach, as at 31 December 2017, are presented in the following Tables, which reflect the different portfolos (Retail, Corporates, Specialised Lending and Equity positions).

TABLE 34 – TEMPLATE EU CR6 – CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE - CORPORATES

(Thousand euros)

	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average CCF	Number of obligors	PD Média	Average LGD	RWA	RWA density	EL	Value adjustments and provisions
CORPORATES	0.01% to 0.05%												
	0.05% to 0.07%		3,316	79.74%	2,644	0.05%	14	42.26%	367	296	11.2%	1	
	0.07% to 0.14%	20,070	17,378	42.99%	27,544	0.10%	89	42.20%	391	5,248	19.1%	12	
	0.14% to 0.28%	661,005	1,161,981	82.99%	1,634,608	0.20%	339	41.80%	657	599,866	36.7%	1,367	
	0.28% to 0.53%	330,572	300,343	67.20%	534,414	0.40%	370	35.99%	501	225,740	42.2%	769	
	0.53% to 0.95%	510,005	517,282	75.85%	910,362	0.70%	315	40.49%	561	587,763	64.6%	2,580	
	0.95% to 1.73%	440,451	293,931	65.68%	622,427	1.30%	307	40.98%	531	526,737	84.6%	3,315	
	1.73% to 2.92%	705,548	207,676	48.08%	798,250	2.30%	202	36.59%	986	855,765	107.2%	6,711	
	2.92% to 4.67%	818,879	359,792	43.92%	982,417	3.70%	275	35.64%	634	1,046,231	106.5%	12,951	
	4.67% to 7.00%	302,185	253,951	33.87%	376,571	5.90%	188	33.89%	528	443,473	117.8%	7,528	
	7.00% to 9.77%	547,628	56,269	25.39%	474,694	8.30%	129	29.64%	741	575,196	121.2%	11,580	
	9.77% to 13.61%	364,175	265,893	19.43%	388,411	11.50%	307	34.94%	939	642,541	165.4%	15,604	
	13.61% to 100.00%	11,173	1,198	10.51%	11,299	41.58%	15	42.23%	1,411	26,428	233.9%	1,984	
	100.00% (default)	2,939,245	267,230	13.44%	2,975,169	100.00%	219	63.66%	1,162	441,503	14.8%	1,675,409	
	SUBTOTAL	**7,650,936**	**3,706,241**	**59.56%**	**9,738,811**	**32.39%**	**2,769**	**45.74%**	**758**	**5,976,788**	**61.4%**	**1,739,809**	**-1,715,012**
SME	0.01% to 0.05%												
	0.05% to 0.07%		785	76.55%	601	0.05%	3	31.71%	365	39	6.6%	0	
	0.07% to 0.14%	4,739	4,028	57.64%	6,863	0.10%	71	32.09%	917	1,055	15.4%	2	
	0.14% to 0.28%	48,577	130,044	55.29%	117,819	0.20%	507	39.39%	497	25,303	21.5%	93	
	0.28% to 0.53%	214,223	212,548	54.40%	317,379	0.40%	911	38.53%	825	133,226	42.0%	488	

	0.53% to 0.95%	209,396	190,978	51.84%	277,872	0.70%	903	38.55%	605	128,673	46.3%	746	
	0.95% to 1.73%	229,497	162,798	49.90%	399,671	1.30%	825	35.25%	568	229,396	57.4%	1,809	
	1.73% to 2.92%	321,504	116,343	43.62%	321,391	2.30%	687	35.08%	801	224,007	69.7%	2,554	
	2.92% to 4.67%	193,480	100,531	35.50%	204,186	3.70%	591	37.04%	689	168,293	82.4%	2,778	
	4.67% to 7.00%	149,533	73,894	39.65%	166,058	5.90%	482	35.18%	884	155,462	93.6%	3,412	
	7.00% to 9.77%	75,716	66,804	20.94%	85,800	8.30%	249	34.30%	630	86,050	100.3%	2,427	
	9.77% to 13.61%	599,514	210,119	23.95%	637,066	11.50%	1,858	30.86%	858	718,092	112.7%	22,461	
	13.61% to 100.00%	136,710	22,900	25.84%	142,174	46.53%	120	33.80%	1,510	230,340	162.0%	22,319	
	100.00% (default)	1,335,096	176,522	13.35%	1,358,663	100.00%	1,099	57.02%	1,174	256,255	18.9%	689,358	
	SUBTOTAL	**3,517,986**	**1,468,295**	**39.52%**	**4,035,543**	**36.75%**	**8,306**	**42.24%**	**904**	**2,356,190**	**58.4%**	**748,447**	**-728,903**
TOTAL		**11,168,921**	**5,174,536**	-	**13,774,353**	-	-	-	-	**8,332,979**	**60.5%**	**2,488,256**	**-2,443,915**

NOTE: These data do not include the exposures on Derivatives and Specialised Lending.

TABLE 35 – TEMPLATE EU CR6 – CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE - RETAIL

(Thousand euros)

	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	LGD Média	Average Maturity	RWA	RWA density	EL	Value adjustments and provisions
SECURED BY	0.01% to 0.05%												
REAL ESTATE	0.05% to 0.07%	76,286	46	46.24%	76,307	0.05%	1,135	18.13%		2,020	2.65%	7	
	0.07% to 0.14%	9,017,954	20,963	2.56%	9,112,696	0.09%	166,013	23.03%		483,549	5.31%	1,890	
	0.14% to 0.28%	3,893,102	2,497	26.39%	3,955,339	0.20%	60,531	21.54%		347,348	8.78%	1,643	
	0.28% to 0.53%	2,328,521	1,556	26.15%	2,374,148	0.40%	37,842	20.88%		344,545	14.51%	1,969	
	0.53% to 0.95%	1,652,400	1,446	21.52%	1,655,245	0.70%	26,764	21.95%		375,303	22.67%	2,556	
	0.95% to 1.73%	1,114,276	697	26.66%	1,115,651	1.30%	18,254	21.93%		378,399	33.92%	3,164	
	1.73% to 2.92%	769,031	773	10.27%	758,799	2.29%	12,724	21.75%		364,911	48.09%	3,769	
	2.92% to 4.67%	770,886	256	55.68%	782,669	3.71%	13,405	20.80%		474,442	60.62%	6,059	
	4.67% to 7.00%	573,188	45	23.76%	512,259	5.93%	8,691	21.03%		402,737	78.62%	6,410	
	7.00% to 9.77%	389,746	1,636	0.02%	345,440	8.45%	5,788	20.55%		311,738	90.24%	6,068	
	9.77% to 13.61%	932,153	385	24.08%	830,564	11.50%	14,114	18.86%		765,272	92.14%	18,015	
	13.61% to 100.00%	278,459	50		278,459	28.68%	4,210	26.92%		419,111	150.51%	19,506	
	100.00% (default)	1,471,023	63		1,471,023	100.00%	16,505	27.16%		307,313	20.89%	399,502	
	SUBTOTAL	**23,267,026**	**30,410**	**8.04%**	**23,268,600**	**7.75%**	**385,976**	**22.37%**		**4,976,689**	**21.39%**	**470,557**	**-231,090**
QUALIFYING	0.01% to 0.05%												
REVOLVING	0.05% to 0.07%	2,097	138,675	12.72%	19,735	0.05%	72,273	56.90%		398	2.02%	6	
	0.07% to 0.14%	72,801	532,358	45.94%	317,390	0.08%	271,066	62.61%		10,866	3.42%	165	
	0.14% to 0.28%	98,840	505,489	22.62%	213,161	0.20%	250,534	59.01%		13,978	6.56%	247	
	0.28% to 0.53%	101,624	216,278	29.34%	165,088	0.40%	178,006	59.49%		19,218	11.64%	388	

	0.53% to 0.95%	89,391	115,425	37.36%	132,517	0.71%	125,596	60.75%		24,940	18.82%	569	
	0.95% to 1.73%	83,893	71,655	44.54%	115,805	1.29%	96,573	62.06%		35,230	30.42%	924	
	1.73% to 2.92%	56,257	36,921	39.83%	70,964	2.27%	62,557	62.22%		32,877	46.33%	1,000	
	2.92% to 4.67%	42,364	24,298	36.17%	51,152	3.77%	50,808	62.32%		33,953	66.38%	1,201	
	4.67% to 7.00%	27,287	15,306	32.01%	32,186	6.03%	41,278	61.98%		29,003	90.11%	1,204	
	7.00% to 9.77%	18,124	10,097	33.09%	21,465	9.07%	30,719	62.06%		24,885	115.93%	1,214	
	9.77% to 13.61%	24,518	45,772	12.73%	30,345	11.50%	136,004	56.90%		36,582	120.56%	1,986	
	13.61% to 100.00%	31,285	4,518	71.48%	34,514	29.68%	23,839	65.56%		63,143	182.95%	6,677	
	100.00% (default)	59,385	3,306	9.36%	59,694	100.00%	73,125	77.35%		14,359	24.05%	46,174	
	SUBTOTAL	**707,865**	**1,720,100**	**32.33%**	**1,264,018**	**6.69%**	**1,412,378**	**61.84%**		**339,433**	**26.85%**	**61,755**	**-39,996**
OTHER RETAIL - SME	0.01% to 0.05%												
	0.05% to 0.07%	4,175	12,831	44.83%	9,928	0.05%	224	32.72%		387	3.89%	2	
	0.07% to 0.14%	50,527	112,062	36.92%	103,974	0.10%	13,169	33.78%		7,037	6.77%	35	
	0.14% to 0.28%	137,875	119,559	38.65%	208,460	0.20%	15,943	34.65%		23,624	11.33%	144	
	0.28% to 0.53%	127,236	91,133	40.53%	164,839	0.40%	11,732	34.94%		29,044	17.62%	228	
	0.53% to 0.95%	110,638	51,632	33.73%	117,286	0.70%	8,908	33.12%		26,758	22.81%	269	
	0.95% to 1.73%	86,423	46,631	33.62%	87,630	1.30%	6,824	32.61%		25,872	29.52%	369	
	1.73% to 2.92%	56,953	39,342	22.18%	53,351	2.30%	4,277	34.11%		19,388	36.34%	415	
	2.92% to 4.67%	42,859	12,883	60.05%	61,906	3.70%	5,753	31.77%		22,681	36.64%	725	
	4.67% to 7.00%	28,018	13,135	20.91%	22,635	5.90%	2,809	32.84%		8,982	39.68%	435	
	7.00% to 9.77%	19,029	3,718	21.87%	12,426	8.30%	1,706	32.86%		5,249	42.24%	339	
	9.77% to 13.61%	101,356	57,621	25.17%	83,472	11.50%	17,143	31.76%		37,699	45.16%	3,043	
	13.61% to 100.00%	8,990	2,840	47.65%	10,005	48.04%	566	37.83%		7,742	77.39%	1,826	
	100.00% (default)	217,999	81,445	47.33%	256,548	100.00%	5,768	38.39%				98,499	
	SUBTOTAL	**992,079**	**644,831**	**36.88%**	**1,192,460**	**22.86%**	**94,822**	**34.67%**		**214,464**	**17.98%**	**106,330**	**-151,122**
OTHER	0.01% to 0.05%												

RETAIL - NON SME	0.05% to 0.07%	13,768	5,916	23.42%	15,142	0.05%	14	27.41%		644	4.25%	2	
	0.07% to 0.14%	91,184	30,405	8.27%	98,078	0.10%	89	28.94%		7,432	7.58%	28	
	0.14% to 0.28%	294,118	38,803	15.51%	307,714	0.20%	339	29.98%		39,424	12.81%	184	
	0.28% to 0.53%	364,162	28,352	26.34%	373,566	0.40%	370	29.87%		74,384	19.91%	446	
	0.53% to 0.95%	232,992	9,113	18.10%	233,935	0.70%	315	31.67%		67,327	28.78%	519	
	0.95% to 1.73%	183,780	4,219	15.72%	183,238	1.30%	307	32.07%		69,999	38.20%	764	
	1.73% to 2.92%	150,743	9,973	39.45%	155,196	2.30%	202	26.96%		58,723	37.84%	962	
	2.92% to 4.67%	102,607	2,609	32.35%	105,591	3.70%	275	32.11%		50,992	48.29%	1,254	
	4.67% to 7.00%	70,590	2,278	33.82%	67,822	5.90%	188	31.40%		33,711	49.71%	1,256	
	7.00% to 9.77%	54,147	1,670	19.83%	50,603	8.30%	129	32.18%		27,337	54.02%	1,351	
	9.77% to 13.61%	131,780	3,067	38.29%	124,905	11.50%	307	32.41%		74,913	59.98%	4,656	
	13.61% to 100.00%	23,157	849	49.81%	23,574	45.07%	15	31.13%		19,276	81.77%	3,225	
	100.00% (default)	401,306	2,801	49.80%	402,701	100.00%	219	32.56%				131,131	
	SUBTOTAL	**2,114,336**	**140,056**	**20.40%**	**2,142,064**	**20.98%**	**2,769**	**30.88%**		**524,162**	**24.47%**	**145,780**	**-237,975**
TOTAL		**27,081,306**	**2,535,396**	-	**27,867,143**	-	-	-	-	**6,054,748**	**21.73%**	**784,421**	**-660,183**

NOTE: These data do not include the exposures on Derivatives and Specialised Lending.

TABLE 36 – TEMPLATE EU CR10 – IRB (SPECIALISED LENDING)

(Thousand euros)

Specialised lending

Regulatory categories	Remaining maturity	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Expected losses
Category 1	Less than 2.5 years			50%			
	Equal to or more than 2.5 years	23,586		70%	23,606	16,524	94
Category 2	Less than 2.5 years			70%			
	Equal to or more than 2.5 years	905,510	348,620	90%	1,202,416	1,074,929	9,619
Category 3	Less than 2.5 years			115%			
	Equal to or more than 2.5 years	147,342	42,542	115%	152,307	174,530	4,265
Category 4	Less than 2.5 years			250%			
	Equal to or more than 2.5 years	36,341	3,250	250%	38,041	95,103	3,043
Category 5	Less than 2.5 years			-			
	Equal to or more than 2.5 years	1,543	1,905	-	3,924		1,962
Total	Less than 2.5 years			-			
	Equal to or more than 2.5 years	1,114,321	396,316	-	1,420,293	1,361,086	18,984

TABLE 37 – TEMPLATE EU CR10 – IRB (EQUITY POSITIONS)

(Thousand euros)

Equities under the simple risk-weighted approach

Categories	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Own funds requirements	Expected loss
Private equity exposures			190%				
Exchange-traded equity exposures	8,215		290%	8,215	23,825	1,906	66
Other equity exposures	27,379		370%	27,379	101,302	8,104	657
Total	35,594			35,594	125,126	10,010	723

TABLE 38 – TEMPLATE EU CR8 – RWA FLOW STATEMENTS OF CCR EXPOSURES UNDER THE IRB APPROACH

(Thousand euros)

	RWA amounts	Capital requirements
RWA AS AT THE END OF THE PREVIOUS REPORTING PERIOD	18,512,032	1,480,963
Asset size	-313,944	-25,116
Asset quality		
Model updates	-322,000	-25,760
Methodology and policy	49,000	3,920
Acquisitions and disposals		
Foreign exchange movements	-164,856	-13,188
Other	-45,285	-3,623
RWA AS AT THE END OF THE REPORTING PERIOD	17,714,947	1,417,196