

## 7. Credit risk mitigation techniques

### 7.1. Eligibility and type of mitigation instruments

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 rating 7 or better on the Rating Master Scale;
- Personal guarantees, when the persons are classified with rating 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.

Regarding guarantees and credit derivatives, it can be applied the substitution principle by replacing the rating of the client by the rating of the guarantor, (if the rating 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.

### 7.2. Protection levels

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.

### 7.3. Collateral valuation

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

The evaluations are performed by external expert valuers and the analyse and ratification process is centralized in the Appraisals Unit, which is independent of the business areas.

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, 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 (CRR) and Law no. 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 (meaning a devaluation above 10%), 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 300,000 euros;
- ii. Whenever it comes to residential property, an updated value is made using the property value review algorithms, resident in the internal Valuation Database, comparing the property under review with identical properties recently evaluated, in the same location.
- iii. Review of the property value by external valuers, depending on the value of the credit operation, and in accordance with the established standards from ECB and Bank of Portugal.

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

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

For the remaining real estate (land or countryside 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.

The next tables (64 and 65) show figures concerning the use of credit risk mitigation techniques, as at 31/12/2020 e 30/06/2020.

**TABLE 64 – TEMPLATE 18 / EU CR3 – CRM TECHNIQUES - OVERVIEW**

31/12/2020 (Thousand euros)					
Exposures:	Unsecured	Secured	Secured by collateral	Secured by financial guarantees	Secured by credit derivatives
Total loans	13,404,788	40,090,291	33,222,622	6,867,669	
Total debt securities	18,466,127	1,083,363	262,034	821,330	
<b>TOTAL EXPOSURES</b>	<b>31,870,914</b>	<b>41,173,655</b>	<b>33,484,656</b>	<b>7,688,999</b>	
Of which: defaulted	442,120	1,223,451	1,066,761	156,689	

  

30/06/2020 (Thousand euros)					
Exposures:	Unsecured	Secured	Secured by collateral	Secured by financial guarantees	Secured by credit derivatives
Total loans	13,811,250	38,869,761	32,716,168	6,153,593	
Total debt securities	19,270,307	1,011,045	638,379	372,666	
<b>TOTAL EXPOSURES</b>	<b>33,081,556</b>	<b>39,880,806</b>	<b>33,354,548</b>	<b>6,526,259</b>	
Of which: defaulted	446,457	1,570,059	1,363,918	206,141	

Note: Securities of the Trading Book are not included.

**TABLE 65 – TEMPLATE 19 / EU CR4 – STANDARDISED APPROACH – CREDIT RISK EXPOSURE AND CRM EFFECTS**

31/12/2020 (Thousand euros)

	Exposures before CCF and CRM		Exposures post CCF and CRM		RWA and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWA	RWA density
Central Governments or Central Banks	19,376,540	344,303	22,947,396	184,615	1,440,259	6.2%
Regional Governments or Local Authorities	1,156,817	105,471	698,708	3,470	140,436	20.0%
Public Sector Entities	249,367	51,300	204,351	15,767	212,334	96.5%
Multilateral Development Banks	40,029		40,029			
International Organisations						
Institutions	1,280,011	906,524	1,287,015	33,056	438,100	33.2%
Corporates	5,444,818	3,679,113	4,683,608	434,818	4,788,017	93.5%
Retail	5,442,098	518,374	5,290,588	3,389	3,873,323	73.2%
Secured by mortgages on immovable property	1,902,101	181,549	1,811,654	62,303	917,387	49.0%
Exposures in default	818,488	63,129	472,516	7,768	533,404	111.1%
Items associated with particularly high risk	3,308	2,430	3,202	1,248	6,674	150.0%
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective Investment Undertakings	100,317		100,317		86,201	85.9%
Equity exposures	29,967		29,967		74,917	250.0%
Other exposures	90,941		90,941		90,941	
<b>TOTAL</b>	<b>35,934,803</b>	<b>5,852,194</b>	<b>37,660,293</b>	<b>746,433</b>	<b>12,601,993</b>	<b>32.8%</b>

30/06/2020 (Thousand euros)

	Exposures before CCF and CRM		Exposures post CCF and CRM		RWA and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWA	RWA density
Central Governments or Central Banks	18,503,106	353,498	21,419,218	180,010	1,474,599	6.8%
Regional Governments or Local Authorities	988,304	141,578	694,396	7,147	140,309	20.0%
Public Sector Entities	273,077	32,816	210,924	5,781	201,832	93.1%
Multilateral Development Banks	40,856		40,856			
International Organisations						
Institutions	1,524,968	893,881	1,525,886	37,445	444,504	28.4%
Corporates	5,522,181	3,741,756	4,819,640	424,716	4,985,787	95.1%
Retail	5,237,896	488,317	5,121,675	3,685	3,738,907	72.9%
Secured by mortgages on immovable property	2,098,401	151,280	2,050,460	55,419	1,078,333	51.2%
Exposures in default	854,008	62,257	491,660	12,239	597,410	118.6%
Items associated with particularly high risk	1,532	9	1,526		2,289	150.0%
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective Investment Undertakings	108,899		108,899		88,492	81.3%
Equity exposures	32,832		32,832		80,528	245.3%
Other exposures						
<b>TOTAL</b>	<b>35,186,060</b>	<b>5,865,389</b>	<b>36,517,974</b>	<b>726,440</b>	<b>12,832,990</b>	<b>34.5%</b>