

## 19. Loans and advances to customers

The analysis of loans and advances to customers, by type of credit, is as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
Discounted bills	249,139	228,752
Current account credits	1,366,648	1,503,893
Overdrafts	388,603	536,409
Loans	9,729,298	10,065,178
Mortgage loans	15,833,481	15,506,736
Factoring operations	1,863,179	1,601,595
Finance leases	2,271,961	2,159,121
	<b>31,702,309</b>	<b>31,601,684</b>
Overdue loans - less than 90 days	48,665	43,539
Overdue loans - Over 90 days	1,530,850	2,446,446
	<b>33,281,824</b>	<b>34,091,669</b>
Impairment for credit risk	(2,293,486)	(2,742,244)
	<b>30,988,338</b>	<b>31,349,425</b>

The balance Loans and advances to customers, as at 31 December 2018, is analysed as follows:

	(Thousands of euros)				
	<b>2018</b>				
	Outstanding loans	Overdue loans	Gross amount	Impairment	Net amount
Public sector	598,007	1	598,008	(1,336)	596,672
Asset-backed loans	18,953,094	962,864	19,915,958	(1,491,170)	18,424,788
Other guaranteed loans	3,055,244	165,922	3,221,166	(250,860)	2,970,306
Unsecured loans	3,277,917	294,994	3,572,911	(257,351)	3,315,560
Foreign loans	1,682,907	113,660	1,796,567	(174,066)	1,622,501
Factoring operations	1,863,179	7,740	1,870,919	(27,771)	1,843,148
Finance leases	2,271,961	34,334	2,306,295	(90,932)	2,215,363
	<b>31,702,309</b>	<b>1,579,515</b>	<b>33,281,824</b>	<b>(2,293,486)</b>	<b>30,988,338</b>

The balance Loans and advances to customers, as at 31 December 2017, is analysed as follows:

	(Thousands of euros)				
	<b>2017</b>				
	Outstanding loans	Overdue loans	Gross amount	Impairment	Net amount
Public sector	713,433	47	713,480	(850)	712,630
Asset-backed loans	18,928,322	1,329,814	20,258,136	(1,823,087)	18,435,049
Other guaranteed loans	3,146,466	295,034	3,441,500	(336,327)	3,105,173
Unsecured loans	3,576,995	649,247	4,226,242	(342,019)	3,884,223
Foreign loans	1,475,752	148,849	1,624,601	(114,752)	1,509,849
Factoring operations	1,601,595	13,112	1,614,707	(20,981)	1,593,726
Finance leases	2,159,121	53,882	2,213,003	(104,228)	2,108,775
	<b>31,601,684</b>	<b>2,489,985</b>	<b>34,091,669</b>	<b>(2,742,244)</b>	<b>31,349,425</b>

As at 31 December 2018, the balance Loans and advances to customers includes the amount of Euros 11,415,253,000 (31 December 2017: Euros 11,163,389,000) regarding credits related to mortgage loans issued by the Bank.

The Bank, as part of the liquidity risk management, holds a pool of eligible assets that can serve as collateral in funding operations with the European Central Bank, which include loans and advances to customers.

As referred in note 47, the Group provides loans and/or guarantees to qualifying shareholders holding individually or together with their affiliates, 2% or more of the share capital identified in the Board of Directors report and in note 38.

As at 31 December 2018, the Bank granted credit to qualifying shareholders and entities controlled by them, in the amount of Euros 101,350,000 (31 December 2017: Euros 62,822,000), as referred in note 47 A). The amount of impairment recognised for these contracts amounts to Euros 744,000 (31 December 2017: Euros 77,000).

The business conducted between the company and qualifying shareholders or natural or legal persons related to them, pursuant to article 20 of the Securities Code, regardless of the amount, is always subject to appraisal and deliberation by the Board of Directors, through a proposal by the Credit Committee and the Executive Committee, supported by an analysis and technical opinion issued by the Internal Audit Division, and after a prior opinion has been obtained from the Audit Committee.

The balance Loans and advances to customers includes the following amounts related to finance leases contracts:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
Amount of future minimum payments	2,637,129	2,486,723
Interest not yet due	(365,168)	(327,602)
Present value	2,271,961	2,159,121

The amount of future minimum payments of lease contracts, by maturity terms, is analysed as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
Up to 1 year	363,406	350,302
1 to 5 years	1,010,400	960,669
Over 5 years	1,263,323	1,175,752
	2,637,129	2,486,723

The analysis of financial lease contracts, by type of client, is presented as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
<b>Individuals</b>		
Home	49,774	55,018
Consumer	30,937	28,122
Others	105,922	112,976
	186,633	196,116
<b>Companies</b>		
Equipment	420,825	352,503
Real estate	1,664,503	1,610,502
	2,085,328	1,963,005
	2,271,961	2,159,121

Regarding operational leasing, the Bank does not present relevant contracts as lessor.

The analysis of loans and advances to customers, as at 31 December 2018, by sector of activity, is as follows:

(Thousands of euros)

	2018					
	Outstanding loans	Overdue loans	Gross amount	Impairment	Net amount	% Gross amount
Agriculture and forestry	263,971	7,348	271,319	(6,190)	265,129	0.82%
Fisheries	19,765	40	19,805	(644)	19,161	0.06%
Mining	36,101	2,463	38,564	(9,036)	29,528	0.12%
Food, beverage and tobacco	447,825	12,716	460,541	(10,900)	449,641	1.38%
Textiles	335,913	13,603	349,516	(21,390)	328,126	1.05%
Wood and cork	118,183	4,800	122,983	(4,513)	118,470	0.37%
Paper, printing and publishing	154,853	4,778	159,631	(17,608)	142,023	0.48%
Chemicals	410,247	37,358	447,605	(39,825)	407,780	1.34%
Machinery, equipment and basic metallurgical	612,441	37,621	650,062	(30,192)	619,870	1.95%
Electricity and gas	262,276	336	262,612	(755)	261,857	0.79%
Water	150,204	603	150,807	(10,371)	140,436	0.45%
Construction	1,319,627	313,319	1,632,946	(380,825)	1,252,121	4.91%
Retail business	862,113	71,138	933,251	(76,110)	857,141	2.80%
Wholesale business	1,104,710	58,427	1,163,137	(68,233)	1,094,904	3.49%
Restaurants and hotels	1,097,001	31,680	1,128,681	(77,426)	1,051,255	3.39%
Transports	706,814	11,049	717,863	(17,191)	700,672	2.16%
Post offices	2,290	135	2,425	(351)	2,074	0.01%
Telecommunications	177,598	5,590	183,188	(14,168)	169,020	0.55%
Services						
Financial intermediation	1,491,652	106,707	1,598,359	(373,751)	1,224,608	4.80%
Real estate activities	1,148,673	203,228	1,351,901	(146,857)	1,205,044	4.06%
Consulting, scientific and technical activities	1,218,963	22,696	1,241,659	(350,959)	890,700	3.73%
Administrative and support services activities	387,244	29,102	416,346	(71,293)	345,053	1.25%
Public sector	829,986	1	829,987	(1,336)	828,651	2.49%
Education	109,784	1,267	111,051	(7,007)	104,044	0.33%
Health and collective service activities	243,729	1,722	245,451	(3,220)	242,231	0.74%
Artistic, sports and recreational activities	282,078	5,915	287,993	(75,887)	212,106	0.87%
Other services	96,972	245,811	342,783	(175,649)	167,134	1.03%
Consumer loans	1,735,949	162,566	1,898,515	(137,229)	1,761,286	5.70%
Mortgage credit	15,602,096	97,900	15,699,996	(82,731)	15,617,265	47.19%
Other domestic activities	984	378	1,362	(302)	1,060	0.00%
Other international activities	472,267	89,218	561,485	(81,537)	479,948	1.69%
	31,702,309	1,579,515	33,281,824	(2,293,486)	30,988,338	100.00%

The analysis of loans and advances to customers, as at 31 December 2017, by sector of activity, is as follows:

(Thousands of euros)

	2017					
	Outstanding loans	Overdue loans	Gross amount	Impairment	Net amount	% Gross amount
Agriculture and forestry	247,430	9,199	256,629	(13,226)	243,403	0.75%
Fisheries	17,734	236	17,970	(748)	17,222	0.05%
Mining	34,358	7,184	41,542	(10,300)	31,242	0.12%
Food, beverage and tobacco	399,562	14,617	414,179	(11,264)	402,915	1.21%
Textiles	338,808	24,266	363,074	(23,654)	339,420	1.06%
Wood and cork	125,260	10,245	135,505	(19,202)	116,303	0.40%
Paper, printing and publishing	123,842	5,710	129,552	(11,392)	118,160	0.38%
Chemicals	355,018	43,135	398,153	(35,916)	362,237	1.17%
Machinery, equipment and basic metallurgical	580,295	51,171	631,466	(37,071)	594,395	1.85%
Electricity and gas	289,169	-	289,169	(667)	288,502	0.85%
Water	161,430	3,784	165,214	(10,881)	154,333	0.48%
Construction	1,372,455	531,030	1,903,485	(469,631)	1,433,854	5.58%
Retail business	890,111	76,143	966,254	(61,686)	904,568	2.83%
Wholesale business	1,159,315	105,383	1,264,698	(88,453)	1,176,245	3.71%
Restaurants and hotels	945,985	52,631	998,616	(96,247)	902,369	2.93%
Transports	708,030	14,839	722,869	(16,583)	706,286	2.12%
Post offices	1,759	150	1,909	(277)	1,632	0.01%
Telecommunications	167,294	5,760	173,054	(14,861)	158,193	0.51%
Services						
Financial intermediation	1,667,527	237,808	1,905,335	(451,877)	1,453,458	5.59%
Real estate activities	1,075,272	344,070	1,419,342	(216,173)	1,203,169	4.16%
Consulting, scientific and technical activities	1,488,873	210,195	1,699,068	(483,601)	1,215,467	4.98%
Administrative and support services activities	371,329	26,099	397,428	(58,597)	338,831	1.17%
Public sector	851,239	47	851,286	(849)	850,437	2.50%
Education	113,486	2,340	115,826	(5,848)	109,978	0.34%
Health and collective service activities	258,407	2,149	260,556	(3,356)	257,200	0.76%
Artistic, sports and recreational activities	311,524	5,658	317,182	(78,179)	239,003	0.93%
Other services	102,528	248,641	351,169	(147,967)	203,202	1.03%
Consumer loans	1,668,394	251,266	1,919,660	(201,478)	1,718,182	5.63%
Mortgage credit	15,321,914	141,271	15,463,185	(138,487)	15,324,698	45.38%
Other domestic activities	15	5,050	5,065	(76)	4,989	0.01%
Other international activities	453,321	59,908	513,229	(33,697)	479,532	1.51%
	31,601,684	2,489,985	34,091,669	(2,742,244)	31,349,425	100.00%

The analysis of loans and advances to customers, by maturity and by sector of activity as at 31 December, 2018 is as follows:

(Thousands of euros)

	2018						
	Outstanding loans			Total Outstanding	Overdue loans	Total	%
	Due within 1 year	1 year to 5 years	Over 5 years				
Agriculture and forestry	90,219	75,213	98,539	263,971	7,348	271,319	0.82%
Fisheries	7,097	4,077	8,591	19,765	40	19,805	0.06%
Mining	21,981	7,823	6,297	36,101	2,463	38,564	0.12%
Food, beverage and tobacco	288,071	94,332	65,422	447,825	12,716	460,541	1.38%
Textiles	160,712	88,220	86,981	335,913	13,603	349,516	1.05%
Wood and cork	62,438	34,430	21,315	118,183	4,800	122,983	0.37%
Paper, printing and publishing	86,169	20,306	48,378	154,853	4,778	159,631	0.48%
Chemicals	197,311	109,696	103,239	410,246	37,359	447,605	1.34%
Machinery, equipment and basic metallurgical	280,242	188,506	143,693	612,441	37,621	650,062	1.95%
Electricity and gas	24,026	48,959	189,291	262,276	336	262,612	0.79%
Water	18,300	11,538	120,366	150,204	603	150,807	0.45%
Construction	378,358	349,358	591,911	1,319,627	313,319	1,632,946	4.91%
Retail business	428,866	211,238	222,009	862,113	71,138	933,251	2.80%
Wholesale business	605,468	263,609	235,633	1,104,710	58,427	1,163,137	3.49%
Restaurants and hotels	61,391	278,602	757,008	1,097,001	31,680	1,128,681	3.39%
Transports	223,848	140,200	342,767	706,815	11,048	717,863	2.16%
Post offices	1,365	815	110	2,290	135	2,425	0.01%
Telecommunications	87,968	42,566	47,064	177,598	5,590	183,188	0.55%
Services							
Financial intermediation							
intermediation	195,140	312,179	984,332	1,491,651	106,708	1,598,359	4.80%
Real estate activities	249,140	249,874	649,659	1,148,673	203,228	1,351,901	4.06%
Consulting, scientific and technical activities	274,209	379,196	565,558	1,218,963	22,696	1,241,659	3.73%
Administrative and support services activities	167,335	112,752	107,157	387,244	29,102	416,346	1.25%
Public sector	120,850	409,470	299,666	829,986	1	829,987	2.49%
Education	34,590	18,377	56,817	109,784	1,267	111,051	0.33%
Health and collective service activities	96,659	62,042	85,028	243,729	1,722	245,451	0.74%
Artistic, sports and recreational activities	40,857	28,284	212,937	282,078	5,915	287,993	0.87%
Other services	25,582	33,286	38,104	96,972	245,811	342,783	1.03%
Consumer credit	493,443	559,301	683,206	1,735,950	162,565	1,898,515	5.70%
Mortgage credit	7,828	211,047	15,383,221	15,602,096	97,900	15,699,996	47.19%
Other domestic activities	152	409	423	984	378	1,362	0.00%
Other international activities	185,593	111,596	175,078	472,267	89,218	561,485	1.69%
	4,915,208	4,457,301	22,329,800	31,702,309	1,579,515	33,281,824	100.00%

The analysis of loans and advances to customers, by maturity and by sector of activity as at 31 December, 2017 is as follows:

(Thousands of euros)

	2017							
	Outstanding loans				Total Outstanding	Overdue loans	Total	%
	Due within 1 year	1 year to 5 years	Over 5 years					
Agriculture and forestry	71,640	69,556	106,234	247,430	9,199	256,629	0.75%	
Fisheries	7,320	2,707	7,707	17,734	236	17,970	0.05%	
Mining	13,615	15,098	5,645	34,358	7,184	41,542	0.12%	
Food, beverage and tobacco	245,622	95,493	58,447	399,562	14,617	414,179	1.21%	
Textiles	168,094	85,496	85,218	338,808	24,266	363,074	1.06%	
Wood and cork	62,262	27,547	35,451	125,260	10,245	135,505	0.40%	
Paper, printing and publishing	58,487	21,121	44,234	123,842	5,710	129,552	0.38%	
Chemicals	146,360	96,968	111,690	355,018	43,135	398,153	1.17%	
Machinery, equipment and basic metallurgical	243,993	192,910	143,392	580,295	51,171	631,466	1.85%	
Electricity and gas	27,210	39,940	222,019	289,169	-	289,169	0.85%	
Water	32,425	14,480	114,525	161,430	3,784	165,214	0.48%	
Construction	484,835	190,164	697,456	1,372,455	531,030	1,903,485	5.58%	
Retail business	467,256	202,929	219,926	890,111	76,143	966,254	2.83%	
Wholesale business	697,676	284,614	177,025	1,159,315	105,383	1,264,698	3.71%	
Restaurants and hotels	65,298	149,053	731,634	945,985	52,631	998,616	2.93%	
Transports	218,016	144,043	345,971	708,030	14,839	722,869	2.12%	
Post offices	906	778	75	1,759	150	1,909	0.01%	
Telecommunications	73,659	46,488	47,147	167,294	5,760	173,054	0.51%	
Services								
Financial intermediation								
intermediation	207,804	411,045	1,048,678	1,667,527	237,808	1,905,335	5.59%	
Real estate activities	261,950	196,362	616,960	1,075,272	344,070	1,419,342	4.16%	
Consulting, scientific and technical activities	604,795	516,885	367,193	1,488,873	210,195	1,699,068	4.98%	
Administrative and support services activities	164,260	128,532	78,537	371,329	26,099	397,428	1.17%	
Public sector	80,597	408,324	362,318	851,239	47	851,286	2.50%	
Education	35,382	14,515	63,589	113,486	2,340	115,826	0.34%	
Health and collective service activities	95,341	60,913	102,153	258,407	2,149	260,556	0.76%	
Artistic, sports and recreational activities	38,575	34,961	237,988	311,524	5,658	317,182	0.93%	
Other services	28,432	27,350	46,746	102,528	248,641	351,169	1.03%	
Consumer credit	507,793	517,048	643,553	1,668,394	251,266	1,919,660	5.63%	
Mortgage credit	12,143	194,894	15,114,877	15,321,914	141,271	15,463,185	45.38%	
Other domestic activities	3	12	-	15	5,050	5,065	0.01%	
Other international activities	155,186	219,606	78,529	453,321	59,908	513,229	1.51%	
	5,276,935	4,409,832	21,914,917	31,601,684	2,489,985	34,091,669	100.00%	

The analysis of loans and advances to customers, by type of credit and by maturity, as at 31 December 2018, is as follows:

(Thousands of euros)

	2018					
	Outstanding loans				Overdue loans	Total
	Due within 1 year	1 year to 5 years	Over 5 years	Total Outstanding		
Public sector	80,731	34,940	482,336	598,007	1	598,008
Asset-backed loans	760,794	1,305,397	16,886,903	18,953,094	962,864	19,915,958
Other guaranteed loans	1,233,524	1,045,739	775,981	3,055,244	165,922	3,221,166
Unsecured loans	1,133,553	698,832	1,445,532	3,277,917	294,994	3,572,911
Foreign loans	155,737	408,732	1,118,438	1,682,907	113,660	1,796,567
Factoring operations	1,475,160	388,019	-	1,863,179	7,740	1,870,919
Finance leases	75,709	575,642	1,620,610	2,271,961	34,334	2,306,295
	4,915,208	4,457,301	22,329,800	31,702,309	1,579,515	33,281,824

The analysis of loans and advances to customers, by type of credit and by maturity, as at 31 December 2017, is as follows:

(Thousands of euros)

	2017					
	Outstanding loans				Overdue loans	Total
	Due within 1 year	1 year to 5 years	Over 5 years	Total Outstanding		
Public sector	27,271	39,522	646,640	713,433	47	713,480
Asset-backed loans	822,942	1,340,744	16,764,636	18,928,322	1,329,814	20,258,136
Other guaranteed loans	1,346,164	999,450	800,852	3,146,466	295,034	3,441,500
Unsecured loans	1,695,012	674,562	1,207,421	3,576,995	649,247	4,226,242
Foreign loans	140,633	508,971	826,148	1,475,752	148,849	1,624,601
Factoring operations	1,182,162	381,571	37,862	1,601,595	13,112	1,614,707
Finance leases	62,751	465,012	1,631,358	2,159,121	53,882	2,213,003
	5,276,935	4,409,832	21,914,917	31,601,684	2,489,985	34,091,669

The balance Total credit portfolio, which includes further than loans and advances to customers, the guarantees granted, split by stage according with IFRS 9, is analysed as follows:

(Thousands of euros)

	31 December 2018	1 January 2018
<b>Total credit</b>	<b>37,103,767</b>	<b>37,752,721</b>
<b>Stage 1</b>		
Gross amount	24,822,341	25,109,594
Impairment	(26,669)	(32,122)
	<b>24,795,672</b>	<b>25,077,472</b>
<b>Stage 2</b>		
Gross amount	7,106,433	6,095,785
Impairment	(129,101)	(120,126)
	<b>6,977,332</b>	<b>5,975,659</b>
<b>Stage 3</b>		
Gross amount	5,174,993	6,547,342
Impairment	(2,301,079)	(2,867,971)
	<b>2,873,914</b>	<b>3,679,371</b>
	<b>34,646,918</b>	<b>34,732,502</b>

The Bank's credit portfolio, which includes further than loans and advances to customers, the guarantees granted and commitments to third parties, split between loans with or without signs of impairment is analysed as follows:

	(Thousands of euros)
	<b>2017</b>
<b>Total credit</b>	<b>37,752,720</b>
<b>Loans and advances to customers with signs of impairment</b>	
<b>Individually significant</b>	
Gross amount	4,668,344
Impairment	(2,263,860)
	<b>2,404,484</b>
<b>Collective analysis</b>	
Gross amount	2,140,655
Impairment	(539,632)
	<b>1,601,023</b>
<b>Loans and advances to customers without signs of impairment</b>	<b>30,943,721</b>
<b>Impairment (IBNR)</b>	<b>(53,733)</b>
	<b>34,895,495</b>

The total credit portfolio includes, as at 31 December 2018, loans and advances to customers in the amount of Euros 33,281,824,000 (31 December 2017: Euros: 34,091,669,000) and guarantees granted and commitments to third parties balance (note 41), in the amount of Euros 3,821,943,000 (31 December 2017: Euros 3,661,051,000).

The balances of Impairment were determined in accordance with the accounting policy described in note 1 B1.5 (2017: note 1 C1.1), including the provision for guarantees and other commitments to third parties (note 36), in the amount of Euros 163,363,000 (31 December 2017: Euros 114,981,000).

The analysis of the exposure covered by collateral associated with loans and advances to customers' portfolio, by stage according with IFRS 9, considering the fair value of collaterals, is as follows:

	(Thousands of euros)	
	<b>31 December 2018</b>	<b>1 January 2018</b>
<b>Stage 1</b>		
Securities and other financial assets	1,457,913	1,422,982
Residential real estate	12,534,313	11,838,310
Other real estate	1,943,930	1,594,317
Other guarantees	3,458,849	3,254,960
	<b>19,395,005</b>	<b>18,110,569</b>
<b>Stage 2</b>		
Securities and other financial assets	286,281	297,151
Residential real estate	2,485,674	2,439,108
Other real estate	1,080,481	1,144,569
Other guarantees	657,722	540,070
	<b>4,510,158</b>	<b>4,420,898</b>
<b>Stage 3</b>		
Securities and other financial assets	377,235	521,993
Residential real estate	962,400	1,329,018
Other real estate	985,848	1,380,034
Other guarantees	458,333	705,726
	<b>2,783,816</b>	<b>3,936,771</b>
	<b>26,688,979</b>	<b>26,468,238</b>



As at 31 December 2017, the analysis of the exposure covered by collateral associated with loans and advances to customers' portfolio, split between loans with or without signs of impairment according with IAS 39, considering the fair value of collaterals, is as follows:

	(Thousands of euros)
	<b>2017</b>
<b>Loans and advances to customers with impairment</b>	
<b>Individually significant</b>	
Securities and other financial assets	489,336
Residential real estate	292,914
Other real estate	1,149,862
Other guarantees	631,526
	<u>2,563,638</u>
<b>Collective analysis</b>	
Securities and other financial assets	19,729
Residential real estate	1,092,011
Other real estate	194,229
Other guarantees	75,797
	<u>1,381,766</u>
<b>Loans and advances to customers without impairment</b>	
Securities and other financial assets	1,500,306
Residential real estate	14,200,331
Other real estate	2,548,958
Other guarantees	3,577,348
	<u>21,826,943</u>
	<u>25,772,347</u>

The captions Other guarantees include debtors, assets subject to leasing transactions and personal guarantees, among others. Considering the policy of risk management of the Bank (note 49), the amounts presented do not include the fair value of the personal guarantees provided by clients with lower risk rating. When considered, the fair value of the personal guarantees corresponds to the guaranteed amount.

The Bank is applying physical collaterals and financial guarantees as instruments to mitigate the credit risk. The physical collaterals are mainly mortgages on residential buildings for the mortgage portfolio and other mortgages on other types of buildings related to other types of loans. In order to reflect the market value, these collaterals are regularly reviewed based on independent and certified valuation entities or through the application of revaluation coefficients that reflect the market trends for each specific type of building and geographical area. The financial guarantees are reviewed based on the market value of the respective assets, when available, with the subsequent application of haircuts that reflect the volatility of their prices. Considering the current real estate and financial markets conditions, the Bank continued to negotiate additional physical and financial collaterals with its customers.

The loan to customers' portfolio includes contracts that resulted in a formal restructuring with the customers and the consequent establishment of a new funding to replace the previous. The restructuring may result in a reinforce of guarantees and / or liquidation of part of the credit and involve an extension of maturities or a different interest rate. The analysis of the non-performing restructured loans, by sector of activity, is as follows:

	(Thousands of euros)	
	2018	2017
Agriculture and forestry	1,166	1,112
Fisheries	5	9
Food, beverage and tobacco	46	50
Textiles	1,081	189
Wood and cork	9	71
Paper, printing and publishing	-	4
Chemicals	26	48
Machinery, equipment and basic metallurgical	658	515
Construction	2,609	1,213
Retail business	1,285	1,388
Wholesale business	898	448
Restaurants and hotels	1,460	2,102
Transports	120	45
Telecommunications	28	40
Services		
Financial intermediation	124	211
Real estate activities	1,191	905
Consulting, scientific and technical activities	136	1,407
Administrative and support services activities	164	2,340
Education	13	-
Artistic, sports and recreational activities	107	118
Other services	129	27
Consumer credit	32,882	34,407
	<b>44,137</b>	<b>46,649</b>

The restructured loans are subject to an impairment analysis resulting from the revaluation of expectation to meet new cash flows inherent to the new contract terms, discounted at the original effective interest rate and considering new collaterals.

Regarding the restructured loans, the impairment associated to these operations amounts to Euros 23,498,000 (31 December 2017: Euros 21,244,000).

The Bank has implemented a process for marking operations restructured due to clients' financial difficulties. This marking is part of the credit analysis process, being in charge of the respective decision-making bodies, according to the corresponding competencies, established in the regulations in force.

The information on operations restructured due to financial difficulties is available in the Bank's information systems, having a relevant role in the processes of credit analysis, in the marking of customers in default and in the process of determining impairment. In particular:

- there are several default triggers related to restructurings due to financial difficulties (restructuring with loss of value, recidivism of restructuring, unproductive credit, default on customers with restructured operations);
- in the process of individual impairment analysis, in addition to the existence of operations restructured due to financial difficulties, is a reason for customer selection, the loss inherent to the change in the conditions resulting from the restructuring is determined; With regard to collective analysis, and the existence of such operations leads to the integration of the client into a subpopulation with an aggravated impairment rate.

The demarcation of an operation can only take place at least 2 years after the date of marking, provided that a set of conditions exist that allow to conclude by the improvement of the financial condition of the client.

The definition of Non Performing Loans for more than 90 days (NPL > 90) incorporates total credit (past due + outstanding) associated with past due operations for more than 90 days. As at 31 December 2018, the amount calculated is Euros 2,451,122,000 (31 December 2017: Euros 3,782,038,000).

Every client or operation that meet the following conditions is marked and identified as Non Performing Exposures (NPE):

- a) total exposure of defaulted customers;
- b) total exposure of customers with signs of impairment;
- c) total exposure of customers whose overdue value for more than 90 days represents more than 20% of their total on-balance sheet exposure;
- d) total exposure of non-retail customers with at least one overdue operation for more than 90 days;
- e) retail operations overdue for more than 90 days;
- f) operations restructured due to financial difficulties overdue for more than 30 days.

As at 31 December 2018, the NPE amounts to Euros 4,608,322,000 (31 December 2017: Euros 6,480,603,000).

The changes occurred in impairment for credit risks are analysed as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
<b>Balance on 1 January</b>	<b>2,742,244</b>	3,209,840
Adjustments due to the implementation of IFRS 9 (note 52)		
Remeasurement under IFRS 9	153,917	n.a.
Charge for the year in net income interest (note 2)	31,026	n.a.
Other transfers (*)	(56,880)	(32,630)
Impairment charge for the year (note 10)	460,589	622,018
Reversals for the year (note 10)	(57,643)	(85,171)
Loans charged-off	(979,967)	(971,176)
Exchange rate differences	200	(637)
<b>Balance on 31 December</b>	<b>2,293,486</b>	2,742,244

(\*) In 2018, the balance Transfers refers to impairments that, as at 31 December 2017, were accounted in loans to customers. In the context of the financial restructuring of a group of customers occurred in 2018, the associated credits were liquidated, and the Bank received a set of assets in kind and impairment affects these assets.

The analysis of loans charged-off, by sector of activity, is as follows:

	(Thousands of euros)	
	2018	2017
Agriculture and forestry	4,797	1,595
Fisheries	152	22,020
Mining	3,295	727
Food, beverage and tobacco	1,792	3,612
Textiles	15,498	8,101
Wood and cork	16,757	2,859
Paper, printing and publishing	1,911	4,490
Chemicals	5,137	8,868
Machinery, equipment and basic metallurgical	22,558	12,464
Electricity and gas	-	14
Water	4,856	340
Construction	235,786	90,839
Retail business	28,393	36,834
Wholesale business	41,974	39,253
Restaurants and hotels	27,272	13,982
Transports	4,791	92,106
Post offices	14	74
Telecommunications	1,715	3,953
Services		
Financial intermediation	244,339	282,422
Real estate activities	77,095	53,567
Consulting, scientific and technical activities	88,173	18,154
Administrative and support services activities	10,609	9,001
Education	755	807
Health and collective service activities	452	762
Artistic, sports and recreational activities	787	5,758
Other services	2,439	2,602
Consumer credit	132,126	223,139
Mortgage credit	5,328	14,641
Other domestic activities	1,132	14,516
Other international activities	34	3,676
	<b>979,967</b>	<b>971,176</b>

In compliance with the accounting policy described in note 1 B1.3 (2017: note 1 C1.1), loans and advances to customers are charged-off when there are no feasible expectations, of recovering the loan amount and for collateralised loans, the charge-off occurs when the funds arising from the execution of the respective collaterals are effectively received. This charge-off is carried out by the utilization of impairment losses when they refer to 100% of the loans that are considered unrecoverable.

The analysis of loans charged-off, by type of credit, is as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
Unsecured loans	958,835	946,527
Factoring operations	5,093	1,522
Finance leases	16,039	23,127
	<b>979,967</b>	<b>971,176</b>

The analysis of recovered loans and interest occurred during 2018 and 2017 by sector of activity, is as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
Agriculture and forestry	13	39
Fisheries	24	42
Mining	1	125
Food, beverage and tobacco	128	198
Textiles	121	304
Wood and cork	112	247
Paper, printing and publishing	170	565
Chemicals	206	433
Machinery, equipment and basic metallurgical	154	246
Water	-	1
Construction	1,614	4,118
Retail business	426	1,102
Wholesale business	724	2,147
Restaurants and hotels	25	140
Transports	61	787
Telecommunications	27	1
Services		
Financial intermediation	2,236	165
Real estate activities	179	1,105
Consulting, scientific and technical activities	58	78
Administrative and support services activities	438	290
Health and collective service activities	15	10
Artistic, sports and recreational activities	3	-
Other services	41	3
Consumer credit	2,520	1,514
Mortgage credit	-	14
Other domestic activities	55	284
Other international activities	20	109
	<b>9,371</b>	<b>14,067</b>

The analysis of recovered loans and interest occurred during 2018 and 2017, by type of credit, is as follows:

	(Thousands of euros)	
	<b>2018</b>	<b>2017</b>
Unsecured loans	8,566	13,779
Foreign loans	691	119
Factoring operations	-	74
Finance leases	114	95
	<b>9,371</b>	<b>14,067</b>

The caption Loans and advances to customers includes the effect of synthetic securitization. The characterization of these operations is described in note 1 D).

## Synthetic securitizations

The Bank has two operations in progress which form structures of synthetic securitization.

### Caravela SME No. 3

Caravela SME No.3, supports an operation started on 28 June 2013, based on a medium and long term loans portfolio of current accounts and authorized overdrafts granted by BCP, mainly to small and medium companies. The legal maturity date of the operation is 25 March of 2036 and the operation amounts to Euros 1,993,999,000 as at 31 December 2018. The fair value of the relative Credit Default Swap (CDS) is recorded as a positive amount of Euros 202,017,000 and the registered cost in 2018 amounts to Euros 9,159,000.

### Caravela SME No. 4

Caravela SME No.4 is a similar operation, initiated on 5 June 2014, which portfolio contains car, real estate and equipment leasing granted between the Bank and a group of clients that belong to the same segment (small and medium companies). The legal maturity date is 21 September of 2043 and as at 31 December 2018, the operation amounts to Euros 1,179,301,000. The fair value of the relative CDS is recorded as a positive amount of Euros 64,729,000 and their registered cost in 2018 amounts to Euros 1,217,000.

In both operations, the Bank hired a CDS with a Special Purpose Vehicle (SPV), buying by this way the protection for part of the credit risk inherent to the referenced portfolio. Both cases, the synthetic securitizations, the same CDS, the risk of the respective portfolios were divided in 3 classes: senior, mezzanine and equity. The mezzanine and part of the equity (20%) were placed in the market through an SPE, and the subscription by investors, the Credit Linked Notes (CLN). The Bank retained the senior risk and part of the equity remaining (80%). The product of the CLN issue was invested by the referred SPE the constitution of a deposit that collateralizes, in full, their responsibilities towards its creditors under the operation, including the Group under the CDS context.

These operations involve the Bank's to reduce the risk-weighted assets associated with the credit portfolios supporting the operations, but it did not transfer to third parties most of the rights and obligations arising from the credits included in them, thus not meeting the derecognition criteria in the accounting policy presented in note 1B.1.3.

## 20. Debt securities

The balance Debt securities is analysed as follows:

	(Thousands of euros)	
	2018	2017
<b>Debt securities held associated with credit operations</b>		
Portuguese issuers		
Bonds	176,751	241,381
Commercial paper	2,024,762	1,681,476
Foreign issuers		
Bonds	34,671	38,731
Commercial paper	19,704	21,465
	2,255,888	1,983,053
Overdue securities - over 90 days	55,353	67,353
	2,311,241	2,050,406
Impairment	(39,921)	(42,886)
	2,271,320	2,007,520
<b>Debt securities held not associated with credit operations</b>		
Public entities		
Portuguese issuers	47,377	n.a.
Foreign issuers	4,891	n.a.
Other entities		
Portuguese issuers	254,662	n.a.
Foreign issuers	63,325	n.a.
	370,255	n.a.
Impairment	(284)	n.a.
	369,971	n.a.
	2,641,291	2,007,520