The changes occurred in impairment for debt securities are analysed as follows:

|  | (Thousands of euros) |  |
| :---: | :---: | :---: |
|  | 2019 | 2018 |
| Debt securities held associated with credit operations |  |  |
| Balance on 1 January | 39,921 | 42,886 |
| Adjustments due to the implementation of IFRS 9 (note 58) | - | 2,946 |
| Charge for the year in net income interest (note 2) | 120 | 211 |
| Charge for the year (note 10) | 1,717 | - |
| Reversals for the year (note 10) | (907) | $(6,121)$ |
| Loans charged-off | $(28,420)$ | - |
| Exchange rate differences | - | (1) |
| Balance at the end of the year | 12,431 | 39,921 |
| Debt securities held not associated with credit operations |  |  |
| Balance on 1 January | 1,788 | n.a. |
| Adjustments due to the implementation of IFRS 9 | - | 2,217 |
| Charge for the year (note 10) | 1,161 | 1,184 |
| Reversals for the year (note 10) | (246) | $(1,616)$ |
| Loans charged-off | (620) | - |
| Exchange rate differences | 17 | 3 |
| Balance at the end of the year | 2,100 | 1,788 |

## 23. Financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income

The balances Financial assets at fair value through profit or loss and Financial assets at fair value through other comprehensive income are analysed as follows:

|  | (Thousands of euros) |  |
| :---: | :---: | :---: |
|  | 2019 | 2018 |
| Financial assets at fair value through profit or loss |  |  |
| Financial assets held for trading |  |  |
| Debt instruments | 255,313 | 220,047 |
| Equity instruments | 3,109 | 5,410 |
| Trading derivatives | 619,912 | 644,997 |
|  | 878,334 | 870,454 |
| Financial assets not held for trading mandatorily at fair value through profit or loss |  |  |
| Loans and advances to customers at fair value | 352,367 | 291,050 |
| Debt instruments | 1,037,480 | 1,108,605 |
| Equity instruments | 15,666 | 5,029 |
|  | 1,405,513 | 1,404,684 |
| Financial assets designated at fair value through profit or loss |  |  |
| Debt instruments | 31,496 | 33,034 |
| Financial assets at fair value through other comprehensive income |  |  |
| Debt instruments | 13,179,281 | 13,797,971 |
| Equity instruments | 37,420 | 47,654 |
|  | 13,216,701 | 13,845,625 |
|  | 15,532,044 | 16,153,797 |

2019 REPORT \& ACCOUNTS

The portfolio of Financial assets at fair value through profit or loss (excluding Loans and advances to customers at fair value) and Financial assets at fair value through other comprehensive income, net of impairment, by type of asset, as at 31 December 2019, is analysed as follows:

|  | (Thousands of euros) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2019 |  |  |  |  |
|  | At fair value through profit or loss |  |  | At fair value through other comprehensive income | Total |
|  | Held for trading | ```Not held for trading mandatorily at fair value through profit or loss``` | Designated at fair value through profit or loss |  |  |
| Debt instruments |  |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |  |
| Portuguese issuers | 3,180 | - | 31,496 | 4,425,302 | 4,459,978 |
| Foreign issuers | 205,805 | - | - | 5,398,404 | 5,604,209 |
| Bonds issued by other entities |  |  |  |  |  |
| Portuguese issuers | 3,043 | 16,778 | - | 802,268 | 822,089 |
| Foreign issuers | 43,285 | - | - | 314,991 | 358,276 |
| Treasury bills (Public Issuers and Central Banks) |  |  |  |  |  |
| Portuguese issuers | - | - | - | 1,922,991 | 1,922,991 |
| Foreign issuers | - | - | - | 315,325 | 315,325 |
| Shares of foreign companies (a) | - | 37,375 | - | - | 37,375 |
| Investment fund units (b) | - | 983,327 | - | - | 983,327 |
|  | 255,313 | 1,037,480 | 31,496 | 13,179,281 | 14,503,570 |

Equity instruments
Shares

| Portuguese companies | 2,515 | - | - | 19,163 | 21,678 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Foreign companies | 49 | 15,666 | - | 18,254 | 33,969 |
| Investment fund units | - | - | - | 3 | 3 |
| Other securities | 545 | - | - | - | 545 |
|  | 3,109 | 15,666 | - | 37,420 | 56,195 |
| Trading derivatives | 619,912 | - | - | - | 619,912 |
|  | 878,334 | 1,053,146 | 31,496 | 13,216,701 | 15,179,677 |
| Level 1 | 252,683 | - | 31,496 | 12,643,402 | 12,927,581 |
| Level 2 | 317,689 | - | - | 464,728 | 782,417 |
| Level 3 | 307,962 | 1,053,146 | - | 108,571 | 1,469,679 |

(a) Under IFRS 9, and as detailed in note 58, these shares were considered as debt instruments because they not fall within the definition of SPPI
(b) Under IFRS 9, and as detailed in note 58, these participation units were considered as debt instruments because they not fall within the definition of equity instruments.

As at 31 December 2019, the balance Trading derivatives includes the valuation of the embedded derivatives separated in accordance with the accounting policy 1C.5. in the amount of Euros 1,257,000 (31 December 2018: Euros 920,000).

As at 31 December 2019, portfolios are recorded at fair value in accordance with the accounting policy described in note 1 C). As referred in IFRS 13, financial instruments are measured according to the levels of valuation described in note 49.

As at 31 December 2019, the balances Financial assets at fair value through other comprehensive income and Financial assets held for trading include bonds issued with different levels of subordination associated with the traditional securitization transactions Magellan Mortgages No. 1 and No. 4, referred in note 1 D. in the amount of Euros 184,000 and Euros 105,000, respectively.

The Group, as part of the management process of the liquidity risk (note 54), holds a pool of eligible assets that can serve as collateral in funding operations in the European Central Bank and other Central Banks in countries were the Group operates, which includes debt instruments. As at 31 December 2019, the balances Financial assets at fair value through other comprehensive income and Financial designated at fair value through profit or loss, includes the amounts of Euros 8,776,000 and Euros 29,603,000, respectively (31 December 2018: Euros $8,898,000$ and Euros $30,714,000$ ) of securities included in the ECB's monetary policy pool.

As at 31 December 2019, the balance Financial assets at fair value through other comprehensive income - Bonds issued by other entities includes the amount of Euros 297,243,000 related to public sector companies.

The portfolio of Financial assets at fair value through profit or loss (excluding Loans and advances to customers at fair value) and Financial assets at fair value through other comprehensive income, net of impairment, by type of asset, as at 31 December 2018, is analysed as follows:

(a) Under IFRS 9, and as detailed in note 58 , these shares were considered as debt instruments because they not fall within the definition of SPPI.
(b) Under IFRS 9, and as detailed in note 58, these participation units were considered as debt instruments because they not fall within the definition of equity instruments.

The changes occurred during 2019 and 2018 in impairment for financial assets at fair value through other comprehensive, in balance sheet are analysed as follows:

|  | (Thousands of euros) |  |
| :---: | :---: | :---: |
|  | 2019 | 2018 |
| Balance on 31 December 2017 |  | 570,379 |
| Transition adjustments IFRS 9 (note 58) | - | $(565,229)$ |
| Balance on 1 January | 4,887 | 5,150 |
| Transfers | $(1,536)$ | 867 |
| Impairment through profit and loss (note 11) | 538 | 2,993 |
| Reversals through profit and loss (note 11) | $(2,718)$ | $(4,085)$ |
| Amounts charged-off | (6) | - |
| Exchange rate differences | 12 | (38) |
| Balance at the end of the year | 1,177 | 4,887 |

2019 REPORT \& ACCOUNTS

As at 31 December 2019, the accumulated impairment associated with the financial assets at fair value through other comprehensive income amounts to Euros 3,157,000 and is recorded against Fair value reserves (2018: Euros 6,820,000).

The portfolio of financial assets at fair value through other comprehensive income, as at 31 December 2019, is analysed as follows:

|  | (Thousands of euros) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2019 |  |  |  |
|  | Amortised cost (a) |  | Fair value adjustments (note 43) | Total |
| Debt instruments |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |
| Portuguese issuers | 4,292,931 | 93,586 | 38,785 | 4,425,302 |
| Foreign issuers | 5,384,433 | (744) | 14,715 | 5,398,404 |
| Bonds issued by other entities |  |  |  |  |
| Portuguese issuers | 764,470 | 17,875 | 19,923 | 802,268 |
| Foreign issuers | 303,954 | 6,026 | 5,011 | 314,991 |
| Treasury bills (Public Issuers and Central Banks) |  |  |  |  |
| Portuguese issuers | 1,922,666 | - | 325 | 1,922,991 |
| Foreign issuers | 315,235 | - | 90 | 315,325 |
|  | 12,983,689 | 116,743 | 78,849 | 13,179,281 |
| Equity instruments |  |  |  |  |
| Shares |  |  |  |  |
| Portuguese companies | 50,476 | - | $(31,313)$ | 19,163 |
| Foreign companies | 20,855 | - | $(2,601)$ | 18,254 |
| Investment fund units | 2 | - | 1 | 3 |
|  | 71,333 | - | $(33,913)$ | 37,420 |
|  | 13,055,022 | 116,743 | 44,936 | 13,216,701 |

(a) Include interest accrued and accumulated impairment for debt securities classified as financial assets at fair value through other comprehensive income, as provided by IFRS 9, and according to the requirements defined in the accounting policy 1 C1.5.1.2.

The portfolio of financial assets at fair value through other comprehensive income, as at 31 December 2018, is analysed as follows:

|  | (Thousands of euros) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  |  |
|  | Amortised cost (a) | Fair value hedge adjustments (note 43) | Fair value adjustments (note 43) | Total |
| Debt instruments |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |
| Portuguese issuers | 5,547,657 | 165,986 | $(42,551)$ | 5,671,092 |
| Foreign issuers | 4,889,654 | 981 | 13,722 | 4,904,357 |
| Bonds issued by other entities |  |  |  |  |
| Portuguese issuers (*) | 1,188,586 | 6,750 | 18,424 | 1,213,760 |
| Foreign issuers | 107,379 | (1) | (371) | 107,007 |
| Treasury bills (Public Issuers and Central Banks) |  |  |  |  |
| Portuguese issuers | 853,339 | - | 153 | 853,492 |
| Foreign issuers | 1,047,983 | - | 280 | 1,048,263 |
|  | 13,634,598 | 173,716 | $(10,343)$ | 13,797,971 |
| Equity instruments |  |  |  |  |
| Shares |  |  |  |  |
| Portuguese companies | 57,033 | - | $(33,763)$ | 23,270 |
| Foreign companies | 20,816 | - | 3,566 | 24,382 |
| Investment fund units | 2 | - | - | 2 |
|  | 77,851 | - | $(30,197)$ | 47,654 |
|  | 13,712,449 | 173,716 | $(40,540)$ | 13,845,625 |

(*) Includes impairment for overdue securities
(a) Include interest accrued and accumulated impairment for debt securities classified as financial assets at fair value through other comprehensive income, as provided by IFRS 9, and according to the requirements defined in the accounting policy 1 C1.5.1.2.

The portfolio of Financial assets at fair value through profit or loss (excluding Loans and advances to customers at fair value) and Financial assets at fair value through other comprehensive, net of impairment, as at 31 December 2019, by valuation levels, is analysed as follows:

|  | (Thousands of euros) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2019 |  |  |  |
|  | Level 1 | Level 2 | Level 3 | Total |
| Debt instruments |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |
| Portuguese issuers | 4,392,381 | 67,597 | - | 4,459,978 |
| Foreign issuers | 5,604,209 | - | - | 5,604,209 |
| Bonds issued by other entities |  |  |  |  |
| Portuguese issuers | 644,464 | 69,044 | 108,581 | 822,089 |
| Foreign issuers | 358,274 | - | 2 | 358,276 |
| Treasury bills and other Government bonds |  |  |  |  |
| Portuguese issuers | 1,922,991 | - | - | 1,922,991 |
| Foreign issuers | - | 315,325 | - | 315,325 |
| Shares of foreign companies | - | - | 37,375 | 37,375 |
| Investment fund units | - | - | 983,327 | 983,327 |
|  | 12,922,319 | 451,966 | 1,129,285 | 14,503,570 |
| Equity instruments |  |  |  |  |
| Shares |  |  |  |  |
| Portuguese companies | 4,786 | 3,423 | 13,469 | 21,678 |
| Foreign companies | 114 | 9,339 | 24,516 | 33,969 |
| Investment fund units | - | - | 3 | 3 |
| Other securities | - | - | 545 | 545 |
|  | 4,900 | 12,762 | 38,533 | 56,195 |
| Trading derivatives | 362 | 317,689 | 301,861 | 619,912 |
|  | 12,927,581 | 782,417 | 1,469,679 | 15,179,677 |

The portfolio of Financial assets at fair value through profit or loss (excluding Loans and advances to customers at fair value) and Financial assets at fair value through other comprehensive, net of impairment, as at 31 December 2018, by valuation levels, is analysed as follows:

|  | (Thousands of euros) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  |  |
|  | Level 1 | Level 2 | Level 3 | Total |
| Debt instruments |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |
| Portuguese issuers | 5,526,914 | 180,878 | - | 5,707,792 |
| Foreign issuers | 5,065,704 | - | - | 5,065,704 |
| Bonds issued by other entities |  |  |  |  |
| Portuguese issuers (*) | 941,606 | 275,894 | 22,890 | 1,240,390 |
| Foreign issuers | 152,188 | - | 1 | 152,189 |
| Treasury bills and other Government bonds |  |  |  |  |
| Portuguese issuers | 853,492 | - | - | 853,492 |
| Foreign issuers | 675,923 | 372,340 | - | 1,048,263 |
| Shares of foreign companies | - | - | 19,085 | 19,085 |
| Investment fund units | - | - | 1,072,742 | 1,072,742 |
|  | 13,215,827 | 829,112 | 1,114,718 | 15,159,657 |
| Equity instruments Shares |  |  |  |  |
| Portuguese companies | 4,727 | - | 23,482 | 28,209 |
| Foreign companies | 24 | 15,564 | 13,847 | 29,435 |
| Investment fund units | - | - | 14 | 14 |
| Other securities | - | - | 435 | 435 |
|  | 4,751 | 15,564 | 37,778 | 58,093 |
| Trading derivatives | 880 | 347,040 | 297,077 | 644,997 |
|  | 13,221,458 | 1,191,716 | 1,449,573 | 15,862,747 |

(*) Includes impairment for overdue securities

2019 REPORT \& ACCOUNTS

As referred in IFRS 13, financial instruments are measured according to the levels of valuation described in note 49.
The item Investment fund units classified as level 3 includes units in restructuring funds (note 47) in the amount of Euros 924,487,000 (31 December 2018: Euros $1,006,988,000$ ) which book value resulted from the last disclosure of the Net Asset Value (NAV) determined by the Management Company, which, as at 31 December 2019, corresponds to the NAV with reference to that date, after considering the effects of the last audited accounts for the respective funds. These funds have a diverse set of assets and liabilities, valued in their respective accounts at fair value through internal methodologies used by the management company.

The instruments classified as level 3 have associated net losses not performed in the amount of Euros 1,555,000 (2018: Euros $7,382,000$ ) recorded in Other comprehensive income. The amount of impairment associated to these securities amounts to Euros 1,177,000 in 2019 (2018: Euros 4,887,000).

The analysis of Financial assets at fair value through profit or loss (excluding loans and advances at fair value and trading derivatives) and Financial assets at fair value through other comprehensive, by residual maturity, as at 31 December 2019 is as follows:

|  | (Thousands of euros) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2019 |  |  |  |  |  |
|  | Up to 3 months | 3 months to 1 year | 1 year to 5 years | Over 5 years | Undetermined | Total |
| Debt instruments |  |  |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |  |  |
| Portuguese issuers | - | 82,854 | 2,952,439 | 1,424,685 | - | 4,459,978 |
| Foreign issuers | 230,897 | 270,439 | 4,734,189 | 368,684 | - | 5,604,209 |
| Bonds issued by other entities |  |  |  |  |  |  |
| Portuguese issuers | 44 | - | 383,176 | 438,869 | - | 822,089 |
| Foreign issuers | 495 | - | 171,779 | 186,002 | - | 358,276 |
| Treasury bills and other |  |  |  |  |  |  |
| Government bonds |  |  |  |  |  |  |
| Portuguese issuers | 782,058 | 1,140,933 | - | - | - | 1,922,991 |
| Foreign issuers | 235,175 | 80,150 | - | - | - | 315,325 |
| Shares of foreign companies | - | - | - | - | 37,375 | 37,375 |
| Investment fund units | - | 14,017 | 94,527 | 866,587 | 8,196 | 983,327 |
|  | 1,248,669 | 1,588,393 | 8,336,110 | 3,284,827 | 45,571 | 14,503,570 |

## Equity instruments

Companies' shares

| Portuguese companies | - | - | - | - | 21,678 |
| :--- | :--- | :--- | :--- | :--- | ---: |
| Foreign companies | - | - | - | - | 33,969 |
| Investment fund units | - | - | - | - | 30,969 |
| Other securities | - | - | - | - | 3 |
|  | - | - | - | - | 545 |

The analysis of Financial assets at fair value through profit or loss (excluding loans and advances at fair value and trading derivatives) and Financial assets at fair value through other comprehensive, by residual maturity, as at 31 December 2018, is as follows:

|  | (Thousands of euros) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  |  |  |  |
|  | Up to 3 months | 3 months to 1 year | 1 year to <br> 5 years | $\begin{gathered} \hline \text { Over } \\ 5 \text { years } \\ \hline \end{gathered}$ | Undetermined | Total |
| Debt instruments |  |  |  |  |  |  |
| Bonds issued by public entities |  |  |  |  |  |  |
| Portuguese issuers | - | 860 | 3,648,552 | 2,058,380 | - | 5,707,792 |
| Foreign issuers | 1,952 | 48,884 | 4,670,294 | 344,574 | - | 5,065,704 |
| Bonds issued by other entities |  |  |  |  |  |  |
| Portuguese issuers | 264,471 | 13,010 | 368,519 | 594,390 | 3,722 | 1,244,112 |
| Foreign issuers | - | - | 65,060 | 87,129 | - | 152,189 |
| Treasury bills and other |  |  |  |  |  |  |
| Government bonds |  |  |  |  |  |  |
| Portuguese issuers | 38,726 | 814,766 | - | - | - | 853,492 |
| Foreign issuers | 546,688 | 501,575 | - | - | - | 1,048,263 |
| Shares of foreign companies | - | - | - | - | 19,085 | 19,085 |
| Investment fund units | - | - | 33,898 | 1,030,593 | 8,251 | 1,072,742 |
|  | 851,837 | 1,379,095 | 8,786,323 | 4,115,066 | 31,058 | 15,163,379 |
| Impairment for overdue securities | - | - | - | - | $(3,722)$ | $(3,722)$ |
|  | 851,837 | 1,379,095 | 8,786,323 | 4,115,066 | 27,336 | 15,159,657 |

Equity instruments

| Companies' shares |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| Portuguese companies | - | - | - | 28,209 | 28,209 |  |
| Foreign companies | - | - | - | - | 29,435 | 29,435 |
| Investment fund units | - | - | - | 12 | 2 | 14 |
| Other securities | - | - | - | - | 435 | 435 |
|  | - | - | - | 12 | 58,081 | 58,093 |
|  | 851,837 | $1,379,095$ | $8,786,323$ | $4,115,078$ | 85,417 | $15,217,750$ |

The balance Financial assets not held for trading mandatorily at fair value through profit or loss - Loans to customers at fair value is analysed as follows:

|  | (Thousands of euros) |  |
| :--- | ---: | ---: | ---: |
| Public sector | 2019 | 2018 |
| Asset-backed loans | 27 | 20 |
| Unsecured loans | 346,558 | 287,028 |
|  | 346,593 | 287,053 |
| Overdue loans - less than 90 days | 1,717 | 1,023 |
| Overdue loans - Over 90 days | 4,057 | 2,974 |

2019 REPORT \& ACCOUNTS

The balance Loans to customers at fair value correspond essentially to consumer loans. This balance is analysed, by remaining period, as follows:

|  |
| :--- | :--- | ---: | ---: |
| Up to 3 months |
| 3 to 6 months |

The analysis of Financial assets at fair value through profit or loss (excluding loans and advances to customers at fair value and trading derivatives) and Financial assets at fair value through other comprehensive income, by sector of activity, as at 31 December 2019 is as follows:

|  | (Thousands of euros) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2019 |  |  |  |  |
|  | Bonds and Treasury bills | Shares | Other Financial Assets | Overdue <br> Securities | Total |
| Fisheries | 680 | - | - |  | 680 |
| Mining | - | 7 | - |  | 7 |
| Paper, printing and publishing | 51,735 | 2 | - |  | 51,737 |
| Chemicals | - | 4 | - |  | 4 |
| Machinery, equipment and basic metallurgical | 2,363 | 2,518 | - |  | 4,881 |
| Electricity and gas | 9,410 | - | - |  | 9,410 |
| Water | 7,000 | - | - |  | 7,000 |
| Construction | 17,611 | 16 | 23,252 |  | 40,879 |
| Retail business | - | 6 | - |  | 6 |
| Wholesale business | 200,367 | 162 | - |  | 200,529 |
| Restaurants and hotels | - | 9,357 | - |  | 9,357 |
| Transports | 297,236 | - | - |  | 297,236 |
| Telecommunications | - | 4,686 | - |  | 4,686 |
| Services |  |  |  |  |  |
| Financial intermediation (*) | 753,341 | 59,314 | 933,445 |  | 1,746,100 |
| Real estate activities | - | - | 19,749 |  | 19,749 |
| Consulting, scientific and technical activities | 129,301 | 140 | - |  | 129,441 |
| Administrative and support services activities | 9,961 | 9,391 | - |  | 19,352 |
| Public sector | - | - | 544 |  | 544 |
| Artistic, sports and recreational activities | 16,683 | - | - |  | 16,683 |
| Other services | 2 | 7,412 | 6,885 |  | 14,299 |
| Other international activities | - | 7 | - |  | 7 |
|  | 1,495,690 | 93,022 | 983,875 |  | 2,572,587 |
| Government and Public securities | 11,987,178 | - | - |  | 11,987,178 |
|  | 13,482,868 | 93,022 | 983,875 |  | 14,559,765 |

(*) The balance Other financial assets includes restructuring funds in the amount of Euros $924,487,000$, which are classified in the sector of activity Services - Financial intermediation, but which have the core segment as disclosed in note 47.

The analysis of Financial assets at fair value through profit or loss (excluding loans and advances to customers at fair value and trading derivatives) and Financial assets at fair value through other comprehensive income, by sector of activity, as at 31 December 2018 is as follows:

|  | (Thousands of euros) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  |  |  |
|  | Bonds and Treasury bills | Shares | Other Financial Assets | Overdue <br> Securities | Total |
| Fisheries | 2,000 | - | - | - | 2,000 |
| Textiles | - | - | - | 203 | 203 |
| Wood and cork | - | - | - | 998 | 998 |
| Paper, printing and publishing | 47,066 | 1 | - | - | 47,067 |
| Chemicals | - | 4 | - | - | 4 |
| Machinery, equipment and basic metallurgical | 4,062 | 511 | - | - | 4,573 |
| Construction | - | 377 | 30,118 | 2,394 | 32,889 |
| Retail business | - | 4,064 | - | - | 4,064 |
| Wholesale business | 62,762 | 655 | - | 126 | 63,543 |
| Restaurants and hotels | - | 15,585 | - | - | 15,585 |
| Transports | 689,930 | - | - | - | 689,930 |
| Telecommunications | - | 7,849 | - | - | 7,849 |
| Services |  |  |  |  |  |
| Financial intermediation (*) | 615,600 | 30,868 | 1,007,761 | - | 1,654,229 |
| Real estate activities | - | - | 27,374 | - | 27,374 |
| Consulting, scientific and technical activities | 158,735 | 95 | - | - | 158,830 |
| Administrative and support services activities | 9,720 | 9,372 | - | - | 19,092 |
| Public sector | 158,360 | - | 434 | - | 158,794 |
| Artistic, sports and recreational activities | 16,683 | 16 | - | - | 16,699 |
| Other services | 1 | 7,324 | 7,504 | 1 | 14,830 |
| Other international activities | - | 8 | - | - | 8 |
|  | 1,764,919 | 76,729 | 1,073,191 | 3,722 | 2,918,561 |
| Government and Public securities | 12,302,911 | - | - | - | 12,302,911 |
| Impairment for overdue securities | - | - | - | $(3,722)$ | $(3,722)$ |
|  | 14,067,830 | 76,729 | 1,073,191 | - | 15,217,750 |

${ }^{(*)}$ The balance Other financial assets includes restructuring funds, in the amount of Euros 1,006,988,000, which are classified in the sector of activity Services - Financial intermediation, but which have the core segment as disclosed in note 47.

The analysis of trading derivatives, by maturity, as at 31 December 2019, is as follows:

|  | (Thousands of euros) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2019 |  |  |  |  |  |
|  | Notional (remaining term) |  |  |  | Fair value |  |
|  | Up to 3 months | 3 months to 1 year | Over 1 year | Total | Assets | $\begin{aligned} & \text { bilities } \\ & \text { te } 36 \end{aligned}$ |
| Interest rate derivatives: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Interest rate swaps | 254,840 | 507,831 | 5,718,298 | 6,480,969 | 306,167 | 242,288 |
| Interest rate options (purchase) | - | 92,815 | 165,628 | 258,443 | 39 | - |
| Interest rate options (sale) | - | - | 162,574 | 162,574 | - | 58 |
|  | 254,840 | 600,646 | 6,046,500 | 6,901,986 | 306,206 | 242,346 |
| Stock Exchange transactions: |  |  |  |  |  |  |
| Interest rate futures | 53,192 | 17,817 | - | 71,009 | - | - |
| Currency derivatives: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Forward exchange contract | 260,402 | 174,276 | 23,013 | 457,691 | 1,244 | 5,486 |
| Currency swaps | 2,386,123 | 340,615 | 36,118 | 2,762,856 | 6,750 | 29,295 |
| Currency options (purchase) | 24,979 | 2,274 | - | 27,253 | 632 | - |
| Currency options (sale) | 24,979 | 2,274 | - | 27,253 | - | 632 |
|  | 2,696,483 | 519,439 | 59,131 | 3,275,053 | 8,626 | 35,413 |
| Currency and interest rate swaps: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Currency and interest rate swaps: | - | 50,848 | - | 50,848 | 157 | 1,013 |
|  | - | 50,848 | - | 50,848 | 157 | 1,013 |
| Shares/indexes: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Shares/indexes swaps | 304,513 | 1,179,093 | 1,027,987 | 2,511,593 | 4,271 | 1,910 |
| Shares/indexes options (sale) | 478,348 | - | 20,126 | 498,474 | - | - |
| Others shares/indexes options (purchase) | 16,864 | - | - | 16,864 | 16,442 | - |
| Others shares/indexes options (sale) | 16,864 | - | - | 16,864 | - | - |
|  | 816,589 | 1,179,093 | 1,048,113 | 3,043,795 | 20,713 | 1,910 |
| Stock exchange transactions: |  |  |  |  |  |  |
| Shares futures | 728,807 | - | - | 728,807 | - | - |
| Shares/indexes options (purchase) | 125,064 | 297,909 | 163,362 | 586,335 | 15,112 | - |
| Shares/indexes options (sale) | 27,983 | 52,721 | $(2,624)$ | 78,080 | - | 696 |
|  | 881,854 | 350,630 | 160,738 | 1,393,222 | 15,112 | 696 |

## Commodity derivatives:

Stock Exchange transactions:

| Commodities futures | 38 | - | - | 38 | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Credit derivatives: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Credit default swaps (CDS) | - | - | 283,107 | 283,107 | 267,841 | - |
| Other credit derivatives (sale) | - | - | 78,484 | 78,484 | - | - |
|  | - | - | 361,591 | 361,591 | 267,841 | - |
| Total derivatives traded in: |  |  |  |  |  |  |
| OTC Market | 3,767,912 | 2,350,026 | 7,515,335 | 13,633,273 | 603,543 | 280,682 |
| Stock Exchange | 935,084 | 368,447 | 160,738 | 1,464,269 | 15,112 | 696 |
| Embedded derivatives |  |  |  |  | 1,257 | 14,983 |
|  | 4,702,996 | 2,718,473 | 7,676,073 | 15,097,542 | 619,912 | 296,361 |

The analysis of trading derivatives, by maturity, as at 31 December 2018, is as follows:

|  | (Thousands of euros) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  |  |  |  |
|  | Notional (remaining term) |  |  |  | Fair value |  |
|  | Up to 3 months | 3 months to 1 year | Over 1 year | Total | Assets | Liabilities (note 36) |
| Interest rate Derivatives: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Interest rate swaps | 462,745 | 1,389,124 | 6,857,859 | 8,709,728 | 335,697 | 258,391 |
| Interest rate options (purchase) | - | 108,630 | 151,683 | 260,313 | 9 | - |
| Interest rate options (sale) | - | 12,692 | 144,472 | 157,164 | - | 21 |
| Other interest rate contracts | - | 19,174 | 121,588 | 140,762 | 2,031 | 1,147 |
|  | 462,745 | 1,529,620 | 7,275,602 | 9,267,967 | 337,737 | 259,559 |
| Stock Exchange transactions: |  |  |  |  |  |  |
| Interest rate futures | 107,277 | - | - | 107,277 | - | - |
| Currency derivatives: |  |  |  |  |  |  |
| OTC Market: |  |  |  |  |  |  |
| Forward exchange contract | 212,020 | 223,111 | 17,529 | 452,660 | 1,592 | 3,024 |
| Currency swaps | 2,623,052 | 621,812 | 41,564 | 3,286,428 | 8,639 | 12,403 |
| Currency options (purchase) | 34,075 | 25,126 | 27,253 | 86,454 | 3,357 | - |
| Currency options (sale) | 34,075 | 25,126 | 27,253 | 86,454 | - | 3,349 |
|  | 2,903,222 | 895,175 | 113,599 | 3,911,996 | 13,588 | 18,776 |

## Currency and interest rate swaps:

OTC Market:

| Currency and interest rate swaps: | - | - | 59,264 | 59,264 | 480 | 1,826 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Shares/indexes:

OTC Market:

| Shares/indexes swaps | 411,029 | 950,649 | 1,604,819 | 2,966,497 | 666 | 8,816 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shares/indexes options (sale) | 459,994 | - | 19,730 | 479,724 | - | - |
| Other shares/indexes options (purchase) | - | - | 16,864 | 16,864 | 15,622 | - |
| Other shares/indexes options (sale) | - | - | 16,864 | 16,864 | - | - |
|  | 871,023 | 950,649 | 1,658,277 | 3,479,949 | 16,288 | 8,816 |
| Stock Exchange transactions: |  |  |  |  |  |  |
| Shares futures | 686,519 | - | - | 686,519 | - | - |
| Shares/indexes options (purchase) | 119,023 | 234,521 | 164,466 | 518,010 | 8,843 | - |
| Shares/indexes options (sale) | 57,212 | 10,402 | 1,724 | 69,338 | - | 597 |
|  | 862,754 | 244,923 | 166,190 | 1,273,867 | 8,843 | 597 |

## Commodity derivatives:

Stock exchange transactions:

| Commodities futures | 35 | - | - | - |
| :--- | :--- | :--- | :--- | :--- |

## Credit derivatives:

| OTC Market: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Credit default swaps (CDS) | 123,531 | - | 294,137 | 417,668 | 267,141 | 287 |
| Other credit derivatives (sale) | - | - | 81,016 | 81,016 | - | - |
|  | 123,531 | - | 375,153 | 498,684 | 267,141 | 287 |
| Total derivatives traded in: |  |  |  |  |  | 289,264 |
| Stock Exchange | 970,066 | 244,923 | 166,190 | 1,381,179 | 8,843 | 597 |
| Embedded derivatives |  |  |  |  | 920 | 8,344 |
|  | 5,330,587 | 3,620,367 | 9,648,085 | 18,599,039 | 644,997 | 298,205 |

