

43. FAIR VALUE

Fair value is based on market prices, whenever these are available. If market prices are not available, as occurs regarding many products sold to clients, fair value is estimated through internal models based on cash-flow discounting techniques. Cash-flows for the different instruments sold are calculated according to its financial characteristics and the discount rates used include both the market interest rate curve and the current conditions of the Bank's pricing policy.

Thus, the fair value obtained is influenced by the parameters used in the evaluation model that have some degree of judgment and reflects exclusively the value attributed to different financial instruments. However it does not consider prospective factors, as the future business evolution. Therefore the values presented cannot be understood as an estimate of the economic value of the Group.

The main methods and assumptions used in estimating the fair value for the financial assets and financial liabilities are presented as follows:

CASH AND DEPOSITS AT CENTRAL BANKS, LOANS AND ADVANCES TO CREDIT INSTITUTIONS REPAYABLE ON DEMAND

Considering the short term of these financial instruments, the amount in the balance sheet is a reasonable estimate of its fair value.

LOANS AND ADVANCES TO CREDIT INSTITUTIONS, RESOURCES FROM CREDIT INSTITUTIONS AND ASSETS WITH REPURCHASE AGREEMENTS

The fair value of these financial instruments is calculated discounting the expected principal and interest future cash flows for these instruments, considering that the payments of the instalments occur in the contractually defined dates. This update is made based on the prevailing market rate for the term of each cash flow plus the average spread of the production of the most recent 3 months of the same. For the elements with signs of impairment, the net impairment of these operations is considered as a reasonable estimate of their fair value, considering the economic valuation that is realized in the determination of this impairment.

For resources from Central Banks it was considered that the book value is a reasonable estimate of its fair value, given the nature of operations and the associated short-term. The rate of return of funding with the European Central Bank is 0.0% as at 31 December 2017 (31 December 2016: 0.00%).

For the remaining loans and advances and deposits, the discount rate used reflects the current conditions applied by the Bank on identical instruments for each of the different residual maturities (rates from the monetary market or from the interest rate swap market). As at 31 December 2017, the average discount rate was 0.77% for loans and advances and 0.67% for resources, for operations in Euros these rates are -0.09% and 0.60% (these values include the spread associated with each type of operation).

LOANS AND ADVANCES TO CUSTOMERS AND DEPOSITS REPAYABLE ON DEMAND WITHOUT DEFINED MATURITY DATE

Considering the short maturity of these financial instruments, the conditions of the portfolio are similar to conditions used at the date of the report. Therefore the amount in the balance sheet is a reasonable estimate of its fair value.

LOANS AND ADVANCES TO CUSTOMERS WITH DEFINED MATURITY DATE

The fair value of these instruments is calculated by discounting the expected principal and interest future cash flows for these instruments, considering that the payments of the instalments occur in the contractually defined dates. For loans with signs of impairment, the net impairment of these operations is considered as a reasonable estimate of their fair value, considering the economic valuation that is realized in the determination of this impairment.

The discount rate used is the one that reflects the current rates of the Bank for each of the homogeneous classes of this type of instruments and with similar residual maturity. The discount rate includes the market rates for the residual maturity date (rates from the monetary market or from the interest rate swap market, at the end of the period) and the spread used at the date of the report, which was calculated from the average production of the three most recent months compared to the reporting date. As at 31 December 2017, the average discount rate was 3.69%, for operations in Euros this rates is 3.70% (these values include the spread associated with each type of operation). The calculations made incorporate the credit risk spread.

RESOURCES FROM CUSTOMERS AND OTHER LOANS

The fair value of these financial instruments is calculated by discounting the expected principal and interest future cash flows for the referred instruments, considering that payments occur in the contractually defined dates. The discount rate used reflects the current conditions applied by the Bank in similar instruments with a similar maturity. The discount rate includes the market rates of the residual maturity date (rates of monetary market or the interest rate swap market, at the end of the period) and the actual spread of the Bank. This was calculated from the average production of the three most recent months compared to the reporting date. As at 31 December 2017, the average discount rate was 0.20% (for operations in Euros this rates is 0.08%).

As at 31 December 2017, the average discount rates for Loans and advances to credit institutions, Loans and advances to customers, Resources from credit institutions and Resources from customers are analysed as follows:

| | Loans and advances to credit institutions | Loans and advances to customers | Resources from credit institutions | Resources from customers |
|------------------------------|--|---------------------------------------|--|-----------------------------|
| EUR | -0.09% | 3.70% | 0.60% | 0.08% |
| AUD | n.a. | n.a. | n.a. | 2.08% |
| CAD | n.a. | 1.66% | n.a. | 1.90% |
| CHF | n.a. | n.a. | n.a. | -0.37% |
| CNY | n.a. | n.a. | n.a. | 3.95% |
| DKK | n.a. | n.a. | n.a. | -0.02% |
| GBP | 0.80% | 3.39% | n.a. | 0.80% |
| HKD | n.a. | 1.51% | n.a. | 1.16% |
| MOP | n.a. | 1.25% | n.a. | 1.51% |
| NOK | 0.80% | 4.36% | n.a. | 1.25% |
| PLN | n.a. | n.a. | 1.88% | 1.95% |
| SEK | n.a. | n.a. | n.a. | 0.02% |
| USD | 1.98% | 2.80% | 2.02% | 2.10% |
| ZAR | 7.22% | n.a. | n.a. | 7.58% |
| Average discount rate | 0.77% | 3.69% | 0.67% | 0.20% |

FINANCIAL ASSETS AND LIABILITIES HELD FOR TRADING (EXCEPT DERIVATIVES) AND FINANCIAL ASSETS AVAILABLE FOR SALE

These financial instruments are accounted for at fair value. Fair value is based on market prices ("Bid-price"), whenever these are available. If market prices are not available, fair value is estimated through numerical models based on cash-flow discounting techniques, using the market interest rate curve adjusted for factors associated, predominantly credit risk and liquidity risk, determined in accordance with the market conditions and time frame.

Market interest rates are determined based on information released by the suppliers of financial content - Reuters and Bloomberg - more specifically as a result of prices of interest rate swaps. The values for the very short-term rates are obtained from similar sources but regarding interbank money market. The interest rate curve obtained is calibrated with the values of interest rate short-term futures. Interest rates for specific periods of the cash flows are determined by appropriate interpolation methods. The same interest rate curves are used in the projection of the non-deterministic cash flows such as indexes.

When optionality is involved, the standard templates (Black-Scholes, Black, Ho and others) are used considering the volatility areas applicable. Whenever there are no references in the market of sufficient quality or that the available models do not fully apply to meet the characteristics of the financial instrument, specific quotations supplied by an external entity are applied, typically a counterparty of the business.

FINANCIAL ASSETS HELD TO MATURITY

These financial instruments are accounted at amortised cost net of impairment. Fair value is based on market prices, whenever these are available. If market prices are not available, fair value is estimated through numerical models based on cash-flow discounting techniques, using the market interest rate curve adjusted for factors associated, predominantly credit risk and liquidity risk, determined in accordance with the market conditions and time frame.

HEDGING AND TRADING DERIVATIVES

All derivatives are recorded at fair value.

In case of derivative contracts that are quoted in organised markets their market prices are used. As for derivatives traded "Over-the-counter", it is applied methods based on numerical cash-flow discounting techniques and models for assessment of options considering variables of the market, particularly the interest rates on the instruments in question, and where necessary, their volatilities.

Interest rates are determined based on information disseminated by the suppliers of financial content - Reuters and Bloomberg - more specifically those resulting from prices of interest rate swaps. The values for the very short-term rates are obtained from a similar source but regarding interbank money market. The interest rate curve obtained is calibrated with the values of interest rate short-term futures. Interest rates for specific periods of the cash flows are determined by appropriate interpolation methods. The interest rate curves are used in the projection of the non-deterministic cash flows such as indexes.

DEBT SECURITIES ISSUED AND SUBORDINATED DEBT

For these financial instruments the fair value was calculated for components for which fair value is not yet reflected in the balance sheet. Fixed rate instruments for which the Group adopts "hedge-accounting", the fair value related to the interest rate risk is already recognised.

For the fair value calculation, other components of risk were considered, in addition to the interest rate risk already recorded. The fair value is based on market prices, whenever these are available. If market prices are not available, fair value is estimated through numerical models based on cash-flow discounting techniques, using the market interest rate curve adjusted by associated factors, predominantly credit risk and trading margin, the latter only in the case of issues placed on non-institutional customers of the Bank.

As original reference, the Bank applies the curves resulting from the market interest rate swaps for each specific currency. The credit risk (credit spread) is represented by an excess from the curve of interest rate swaps established specifically for each term and class of instruments based on the market prices on equivalent instruments.

For own issued debts placed among non institutional costumers of the Bank, one more differential was added (commercial spread), which represents the margin between the financing cost in the institutional market and the cost obtained by distributing the respective instrument in the owned commercial network.

The average reference yield curve obtained from market prices in Euros and used in the calculation of the fair value of own securities was 6.76% (31 December, 2016: 8.82%, not considering CoCos). Regarding the subordinated issues placed on the retail market it was determined a discount rate of 2.01% (31 December, 2016: 3.00%). As at 31 December 2016, the average discount rate calculated for senior issues in Euros (including the Government guaranteed and asset-backed) was 0.71%. For senior and collateralised securities placed on the retail market, the average discount rate was 1.06% (31 December 2016: 1.02%).

For debt securities, the fair value calculation focused on all the components of these instruments, as a result the difference determined as at 31 December 2017 is a positive amount of Euros 8,613,000 (31 December 2016: a positive amount of Euros 24,427,000), and includes a payable amount of Euros 158,000 (31 December 2016: a receivable amount of Euros 142,000) which reflects the fair value of embedded derivatives and are recorded in financial assets and liabilities held for trading.

As at 31 December 2017, the following table presents the interest rates used in the definition of the interest rate curves of main currencies, namely EUR, USD, GBP and PLN used to determine the fair value of the assets and liabilities of the Bank:

| | Currencies | | | |
|----------|------------|-------|-------|-------|
| | EUR | USD | GBP | PLN |
| 1 day | -0.43% | 1.42% | 0.47% | 1.47% |
| 7 days | -0.43% | 1.50% | 0.51% | 1.47% |
| 1 month | -0.42% | 1.63% | 0.50% | 1.55% |
| 2 months | -0.39% | 1.65% | 0.56% | 1.58% |
| 3 months | -0.38% | 1.70% | 0.61% | 1.62% |
| 6 months | -0.32% | 1.83% | 0.72% | 1.71% |
| 9 months | -0.27% | 1.90% | 0.81% | 1.72% |
| 1 year | -0.26% | 1.88% | 0.88% | 1.80% |
| 2 years | -0.15% | 2.06% | 0.78% | 2.03% |
| 3 years | 0.01% | 2.15% | 0.89% | 2.22% |
| 5 years | 0.31% | 2.23% | 1.03% | 2.50% |
| 7 years | 0.57% | 2.30% | 1.14% | 2.70% |
| 10 years | 0.89% | 2.38% | 1.27% | 2.94% |
| 15 years | 1.25% | 2.47% | 1.41% | 3.25% |
| 20 years | 1.42% | 2.51% | 1.46% | 3.37% |
| 30 years | 1.50% | 2.52% | 1.43% | 3.37% |

The following table shows the fair value of financial assets and liabilities of the Bank, as at 31 December 2017:

(Thousands of euros)

| | 2017 | | | | |
|---|---|-----------------------------------|-------------------|---------------|---------------|
| | Fair value through profit or loss | Fair value through reserves | Amortised cost | Book value | Fair value |
| Assets | | | | | |
| Cash and deposits at Central Banks | - | - | 1,291,663 | 1,291,663 | 1,291,663 |
| Loans and advances to credit institutions | | | | | |
| Repayable on demand | - | - | 156,460 | 156,460 | 156,460 |
| Other loans and advances | - | - | 1,254,472 | 1,254,472 | 1,257,994 |
| Loans and advances to customers (i) | - | - | 33,356,945 | 33,356,945 | 31,639,558 |
| Financial assets held for trading | 770,639 | - | - | 770,639 | 770,639 |
| Other financial assets held for trading | | | | | |
| at fair value through profit or loss | 142,336 | - | - | 142,336 | 142,336 |
| Financial assets available for sale | - | 6,692,982 | - | 6,692,982 | 6,692,982 |
| Hedging derivatives (ii) | 18,804 | - | - | 18,804 | 18,804 |
| Held to maturity financial assets | - | - | 342,785 | 342,785 | 339,903 |
| | 931,779 | 6,692,982 | 36,402,325 | 44,027,086 | 42,310,339 |
| Liabilities | | | | | |
| Resources from credit institutions | - | - | 7,825,051 | 7,825,051 | 7,753,210 |
| Resources from customers (i) | 2,902,392 | - | 32,135,035 | 35,037,427 | 35,049,359 |
| Debt securities (i) | 941,253 | - | 1,440,628 | 2,381,881 | 2,390,494 |
| Financial liabilities held for trading | 381,380 | - | - | 381,380 | 381,380 |
| Hedging derivatives (ii) | 112,352 | - | - | 112,352 | 112,352 |
| Subordinated debt (i) | - | - | 1,021,541 | 1,021,541 | 1,127,749 |
| | 4,337,377 | - | 42,422,255 | 46,759,632 | 46,814,544 |

(i) - the book value includes the effect of the adjustments resulting from the application of hedge accounting;

(ii) - includes a portion that is recognized in reserves in the application of accounting cash flow hedge.

The following table shows the fair value of financial assets and liabilities of the Bank, as at 31 December 2016:

(Thousands of euros)

| | 2016 | | | | |
|---|---|-----------------------------------|-------------------|---------------|---------------|
| | Fair value through profit or loss | Fair value through reserves | Amortised cost | Book value | Fair value |
| Assets | | | | | |
| Cash and deposits at Central Banks | - | - | 790,733 | 790,733 | 790,733 |
| Loans and advances to credit institutions | | | | | |
| Repayable on demand | - | - | 312,595 | 312,595 | 312,595 |
| Other loans and advances | - | - | 1,497,180 | 1,497,180 | 1,520,092 |
| Loans and advances to customers (i) | - | - | 34,028,229 | 34,028,229 | 32,239,809 |
| Financial assets held for trading | 953,557 | - | - | 953,557 | 953,557 |
| Other financial assets held for trading | | | | | |
| at fair value through profit or loss | 146,664 | - | - | 146,664 | 146,664 |
| Financial assets available for sale | - | 5,959,643 | - | 5,959,643 | 5,959,643 |
| Hedging derivatives (ii) | 33,347 | - | - | 33,347 | 33,347 |
| Held to maturity financial assets | - | - | 409,791 | 409,791 | 392,414 |
| | 1,133,568 | 5,959,643 | 37,038,528 | 44,131,739 | 42,348,854 |
| Liabilities | | | | | |
| Resources from credit institutions | - | - | 9,745,520 | 9,745,520 | 9,853,570 |
| Resources from customers (i) | 2,985,741 | - | 30,972,228 | 33,957,969 | 33,859,052 |
| Debt securities (i) | 785,664 | - | 1,970,180 | 2,755,844 | 2,780,271 |
| Financial liabilities held for trading | 534,483 | - | - | 534,483 | 534,483 |
| Hedging derivatives (ii) | 108,313 | - | - | 108,313 | 108,313 |
| Subordinated debt (i) | - | - | 1,416,033 | 1,416,033 | 1,569,732 |
| | 4,414,201 | - | 44,103,961 | 48,518,162 | 48,705,421 |

(i) - the book value includes the effect of the adjustments resulting from the application of hedge accounting;

(ii) - includes a portion that is recognized in reserves in the application of accounting cash flow hedge.

The Bank classified the financial instruments recorded in the balance sheet at fair value in accordance with the hierarchy established in IFRS 13.

The fair value of financial instruments is determined using quotations recorded in active and liquid markets, considering that a market is active and liquid whenever its stakeholders conduct transactions on a regular basis giving liquidity to the instruments traded. When it is verified that there are no transactions that regularly provide liquidity to the traded instruments, valuation methods and techniques are used to determine the fair value of the financial instruments.

LEVEL 1 - WITH QUOTATION IN ACTIVE MARKET

In this category are included, in addition to financial instruments traded on a regulated market, bonds and units of investment funds valued on the basis of prices disclosed through trading systems.

The classification of the fair value of level 1 is used when:

- i) - There is a firm daily enforceable quotation for the financial instruments concerned, or;
- ii) - There is a quotation available in market information systems that aggregate multiple prices of various stakeholders, or;
- iii) - Financial instruments have been classified in level 1, at least 90% of trading days in the year (at the valuation date).

LEVEL 2 - VALUATION METHODS AND TECHNIQUES BASED ON MARKET DATA

Financial instruments, when there are no regular transactions in the active and liquid markets (level 1), are classified in level 2, according to the following rules:

- i) - Failure to comply with the rules defined for level 1, or;
- ii) - They are valued based on valuation methods and techniques that use mostly observable market data (interest rate or exchange rate curves, credit curves, etc.).

Level 2 includes over-the-counter derivative financial instruments contracted with counterparties with which the Bank maintains collateral agreements (ISDAs with Credit Support Annex (CSA)), in particular with MTA (Minimum Transfer Amount) which contributes to the mitigation of the counterparty credit risk, so that the CVA (Credit Value Adjustment) component is not significant. In addition, derivative financial instruments traded in the over-the-counter market, which, despite not having CSA agreements, the non-observable market data component (eg internal ratings, default probabilities determined by internal models, etc.) incorporated in valuation of CVA is not significant in the value of the derivative as a whole. In order to assess the significance of this component, the Bank defined a quantitative relevance criterion and performed a qualitative sensitivity analysis on the valuation component that includes unobservable market data.

LEVEL 3 - VALUATION METHODS AND TECHNIQUES BASED ON DATA NOT OBSERVABLE IN THE MARKET

If the level 1 or level 2 criteria are not met, financial instruments should be classified in level 3, as well as in situations where the fair value of financial instruments results from the use of information not observable in the market, such as:

- financial instruments which are not classified as level 1 and which are valued using evaluation methods and techniques without being known or where there is consensus on the criteria to be used, namely:

- i) - They are valued using comparative price analysis of financial instruments with risk and return profile, typology, seniority or other similar factors, observable in the active and liquid markets;
- ii) - They are valued based on performance of impairment tests, using performance indicators of the underlying transactions (e.g. default probability rates of the underlying assets, delinquency rates, evolution of the ratings, etc.);
- iii) - They are valued based on NAV (Net Asset Value) disclosed by the management entities of securities/real estate/other investment funds not listed on a regulated market.

Level 3 includes over-the-counter derivative financial instruments that have been contracted with counterparties with which the Bank does not maintain collateral exchange agreements (CSAs), and whose unobservable market data component incorporated in the valuation of CVA is significant in the value of the derivative as a whole. In order to assess the significance of this component, the Bank defined a quantitative relevance criterion and performed a qualitative sensitivity analysis on the valuation component that includes unobservable market data.

The following table shows, by valuation levels, the fair value of financial assets and liabilities of the Bank, as at 31 December 2017:

| | (Thousands of euros) | | | |
|---|----------------------|---------|------------|------------|
| | 2017 | | | |
| | Level 1 | Level 2 | Level 3 | Total |
| Assets | | | | |
| Cash and deposits at Central Banks | 1,291,663 | - | - | 1,291,663 |
| Loans and advances to credit institutions | | | | |
| Repayable on demand | 156,460 | - | - | 156,460 |
| Other loans and advances | - | - | 1,257,994 | 1,257,994 |
| Loans and advances to customers | - | - | 31,639,558 | 31,639,558 |
| Financial assets held for trading | 73,575 | 409,153 | 287,911 | 770,639 |
| Other financial assets held for trading | | | | |
| at fair value through profit or loss | 142,336 | - | - | 142,336 |
| Financial assets available for sale | 4,610,516 | 219,114 | 1,863,352 | 6,692,982 |
| Hedging derivatives | - | 18,804 | - | 18,804 |
| Held to maturity financial assets | 52,383 | 287,520 | - | 339,903 |
| | 6,326,933 | 934,591 | 35,048,815 | 42,310,339 |
| Liabilities | | | | |
| Resources from credit institutions | - | - | 7,753,210 | 7,753,210 |
| Resources from customers | - | - | 35,049,359 | 35,049,359 |
| Debt securities | 763,919 | - | 1,626,575 | 2,390,494 |
| Financial liabilities held for trading | - | 381,044 | 336 | 381,380 |
| Hedging derivatives | - | 112,352 | - | 112,352 |
| Subordinated debt | - | - | 1,127,749 | 1,127,749 |
| | 763,919 | 493,396 | 45,557,229 | 46,814,544 |

The following table shows, by valuation levels, the fair value of financial assets and liabilities of the Bank, as at 31 December 2016:

| | (Thousands of euros) | | | |
|---|----------------------|-----------|------------|------------|
| | 2016 | | | |
| | Level 1 | Level 2 | Level 3 | Total |
| Assets | | | | |
| Cash and deposits at Central Banks | 790,733 | - | - | 790,733 |
| Loans and advances to credit institutions | | | | |
| Repayable on demand | 312,595 | - | - | 312,595 |
| Other loans and advances | - | - | 1,520,092 | 1,520,092 |
| Loans and advances to customers | - | - | 32,239,809 | 32,239,809 |
| Financial assets held for trading | 123,423 | 225,923 | 604,211 | 953,557 |
| Other financial assets held for trading | | | | |
| at fair value through profit or loss | 146,664 | - | - | 146,664 |
| Financial assets available for sale | 3,564,725 | 429,590 | 1,965,328 | 5,959,643 |
| Hedging derivatives | - | 33,347 | - | 33,347 |
| Held to maturity financial assets | 54,623 | 337,791 | - | 392,414 |
| | 4,992,763 | 1,026,651 | 36,329,440 | 42,348,854 |
| Liabilities | | | | |
| Resources from credit institutions | - | - | 9,853,570 | 9,853,570 |
| Resources from customers | - | - | 33,859,052 | 33,859,052 |
| Debt securities | 585,517 | - | 2,194,754 | 2,780,271 |
| Financial liabilities held for trading | - | 470,704 | 63,779 | 534,483 |
| Hedging derivatives | - | 108,313 | - | 108,313 |
| Subordinated debt | - | - | 1,569,732 | 1,569,732 |
| | 585,517 | 579,017 | 47,540,887 | 48,705,421 |

For financial assets classified at level 3 recorded in the balance sheet at fair value, the movement occurred during the year 2017 is presented as follows:

(Thousands of euros)

| | 2017 | | | |
|---|------------------|--------------------|-----------|--|
| | Financial assets | | | Financial liabilities held for trading |
| | held for trading | available for sale | Total | |
| Balance on January 1 | 604,211 | 1,965,328 | 2,569,539 | 63,779 |
| Gains / (losses) recognised in profit or loss | | | | |
| Results on financial operations | 42,739 | 7,788 | 50,527 | - |
| Net interest income | - | 2,045 | 2,045 | - |
| Impairment and other provisions | - | (70,059) | (70,059) | - |
| Transfers between levels | (350,191) | - | (350,191) | (55,730) |
| Purchases | 469 | 378,869 | 379,338 | 332 |
| Sales, repayments or amortizations | (9,317) | (423,644) | (432,961) | (8,045) |
| Gains / (losses) recognised in reserves | - | 3,027 | 3,027 | - |
| Accruals of interest | - | (2) | (2) | - |
| Balance as at December 31 | 287,911 | 1,863,352 | 2,151,263 | 336 |

For financial assets classified at level 3 recorded in the balance sheet at fair value, the movement occurred during the year 2016 is presented as follows:

(Thousands of euros)

| | 2016 | | |
|--|------------------|--------------------|-----------|
| | Financial assets | | |
| | held for trading | available for sale | Total |
| Balance on January 1 | 172,256 | 2,316,989 | 2,489,245 |
| Gains / (losses) recognised in profit or loss | | | |
| Results on financial operations | 73,244 | 36,228 | 109,472 |
| Impairment and other provisions | - | (281,452) | (281,452) |
| Transfers from investments in associated companies | - | 691 | 691 |
| Transfers between levels | 336,353 | (12,411) | 323,942 |
| Purchases | 82,341 | 105,011 | 187,352 |
| Sales, repayments or amortizations | (59,983) | (148,555) | (208,538) |
| Gains / (losses) recognised in reserves | - | (51,087) | (51,087) |
| Accruals of interest | - | (86) | (86) |
| Balance as at December 31 | 604,211 | 1,965,328 | 2,569,539 |