

# Note 38 - Fair value of financial assets and liabilities

Fair value is based on quoted market prices, whenever available. Otherwise, fair value is determined based on cash-flow discounting techniques. Cash flows for the different instruments are calculated according with its financial characteristics and discount rates used include both the market interest rate curve and the current risk levels of the respective issuer.

Therefore, the fair value obtained is influenced by parameters used in the evaluation model, that necessarily have some degree of subjectivity and exclusively reflect the value attributed to different financial instruments.

As at December 31, 2023 and 2022, the fair value of financial instruments is presented as follows:

| AOA thousand  |                |                                     |                            |               |                  |
|---|----------------|-------------------------------------|----------------------------|---------------|------------------|
| 12-31-2023  |                |                                     |                            |               |                  |
|   | Net book value | Fair value of financial instruments |                            |               | Total book value |
|   |                | Measured at fair value              | Measured at amortized cost | Total         |                  |
| Assets  |                |                                     |                            |               |                  |
| Financial assets at fair value through profit or loss             |                |                                     |                            |               |                  |
| Shares  | 298,890,931    | 298,890,931                         | -                          | 298,890,931   | 298,890,931      |
| Loans and advances to customers                                   | 124,571        | 124,571                             | -                          | 124,571       | 124,571          |
|   | 299,015,502    | 299,015,502                         |                            | 299,015,502   | 299,015,502      |
| Financial assets at fair value through other comprehensive income |                |                                     |                            |               |                  |
| Bonds and other fixed-income securities                           | 51,331,595     | 51,331,595                          | -                          | 51,331,595    | 51,331,595       |
| Shares  | 1,775,421      | 1,775,421                           | -                          | 1,775,421     | 1,775,421        |
|   | 53,107,016     | 53,107,016                          | -                          | 53,107,016    | 53,107,016       |
| Financial assets at amortized cost                                |                |                                     |                            |               |                  |
| Debt securities   | 467,315,333    | -                                   | 467,315,333                | 467,315,333   | 467,315,333      |
| Loans and advances to customers                                   | 479,108,472    | -                                   | 479,108,472                | 479,108,472   | 479,108,472      |
| Other loans and advances to central banks and credit institutions | 81,193,455     | -                                   | 81,193,455                 | 81,193,455    | 81,193,455       |
|   | 1,027,617,260  | -                                   | 1,027,617,260              | 1,027,617,260 | 1,027,617,260    |
| Total Assets  | 1,379,739,778  | 352,122,518                         | 1,027,617,260              | 1,379,739,778 | 1,379,739,778    |
| Liabilities   |                |                                     |                            |               |                  |
| Financial liabilities at fair value through profit or loss        |                |                                     |                            |               |                  |
| Deposits from customers and other loans                           |                |                                     |                            |               |                  |
| Term deposit  | 1,053,435,872  | -                                   | 1,053,435,872              | 1,053,435,872 | 1,053,435,872    |
| Other loans   | 7,007,521      | -                                   | 7,007,521                  | 7,007,521     | 7,007,521        |
|   | 1,060,443,393  |                                     | 1,060,443,393              | 1,060,443,393 | 1,060,443,393    |
| Total Liabilities   | 1,060,443,393  | -                                   | 1,060,443,393              | 1,060,443,393 | 1,060,443,393    |

| AOA thousand  |                |                                     |                            |               |                  |
|---|----------------|-------------------------------------|----------------------------|---------------|------------------|
| 12-31-2022  |                |                                     |                            |               |                  |
|   | Net book value | Fair value of financial instruments |                            |               | Total book value |
|   |                | Measured at fair value              | Measured at amortized cost | Total         |                  |
| Assets  |                |                                     |                            |               |                  |
| Financial assets at fair value through profit or loss             |                |                                     |                            |               |                  |
| Shares  | 260,203,725    | 260,203,725                         | -                          | 260,203,725   | 260,203,725      |
| Loans and advances to customers                                   | 182,149        | 182,149                             | -                          | 182,149       | 182,149          |
|   | 260,385,874    | 260,385,874                         |                            | 260,385,874   | 260,385,874      |
| Financial assets at fair value through other comprehensive income |                |                                     |                            |               |                  |
| Bonds and other fixed-income securities                           | 53,806,962     | 53,806,962                          | -                          | 53,806,962    | 53,806,962       |
| Shares  | 429,389        | 429,389                             | -                          | 429,389       | 429,389          |
|   | 54,236,351     | 54,236,351                          | -                          | 54,236,351    | 54,236,351       |
| Financial assets at amortized cost                                |                |                                     |                            |               |                  |
| Debt securities   | 467,315,333    | -                                   | 467,315,333                | 467,315,333   | 467,315,333      |
| Loans and advances to customers                                   | 453,601,310    | -                                   | 453,601,310                | 453,601,310   | 453,601,310      |
| Other loans and advances to central banks and credit institutions | 30,547,298     | -                                   | 30,547,298                 | 30,547,298    | 30,547,298       |
|   | 951,463,941    | -                                   | 951,463,941                | 951,463,941   | 951,463,941      |
| Total Assets  | 1,266,086,166  | 314,622,225                         | 951,463,941                | 1,266,086,166 | 1,266,086,166    |
| Liabilities   |                |                                     |                            |               |                  |
| Financial liabilities at fair value through profit or loss        |                |                                     |                            |               |                  |
| Derivatives   | 2,030,008      | 2,030,008                           | -                          | 2,030,008     | 2,030,008        |
|   | 2,030,008      | 2,030,008                           |                            | 2,030,008     | 2,030,008        |
| Financial liabilities at amortized cost                           |                |                                     |                            |               |                  |
| Deposits from customers and other loans                           |                |                                     |                            |               |                  |
| Term deposit  | 835,248,710    | -                                   | 835,248,710                | 835,248,710   | 835,248,710      |
| Other loans   | 20,146,137     | -                                   | 20,146,137                 | 20,146,137    | 20,146,137       |
|   | 855,394,847    |                                     | 855,394,847                | 855,394,847   | 855,394,847      |
| Total Liabilities   | 857,424,855    | 2,030,008                           | 855,394,847                | 857,424,855   | 857,424,855      |



The Bank uses the following hierarchy for fair value, with 3 levels in the valuation of financial instruments (assets and liabilities), which reflects the level of judgment, the observability of the data used, and the importance of the parameters used in determining the fair value of the instrument, in accordance with the provisions of IFRS 13:

- Level 1: Fair value is determined based on unadjusted quoted prices, captured in transactions in active markets involving identical instruments to the ones being valued. If there is more than one active market for the same financial instrument, the relevant price is the one prevailing in the main market of the instrument, or the most advantageous market for which there is access;
- Level 2: Fair value is determined using valuation techniques based on observable inputs in active markets, whether direct data (prices, rates, spreads, etc.) or indirect data (derivatives), and valuation assumptions similar to those that an unrelated party would use in estimating the fair value of the same financial instrument. It also includes instruments whose valuation is obtained through quotations disclosed by independent entities but whose markets have the lowest liquidity; and
- Level 3: Fair value is determined based on unobservable inputs in active markets using techniques and assumptions that market participants would use to value the same instruments, including assumptions about inherent risks, the valuation technique used, and the inputs used and review processes to test the accuracy of the values obtained.

The Bank considers an active market for a given financial instrument at the measurement date, depending on the turnover and liquidity of the transactions carried out, the relative volatility of quoted prices and the readiness and availability of the information, and the following conditions should apply:

- Existence of frequent daily prices trading in the last year;
- The above quotations change regularly; and
- There are executable quotes from more than one entity. A parameter used in a valuation technique is considered observable in the market, if the following conditions are met:

- If its value is determined in an active market;
- If there is an OTC market and it is reasonable to assume that the conditions of an active market are met, with the exception of the condition of trading volumes; and
- The parameter value can be obtained by the inverse calculation of prices of financial instruments or derivatives where the remaining parameters required for initial assessment are observable in a liquid market or an OTC market that comply with the preceding paragraphs.

As at December 31, 2023 and 2022, all financial assets recorded at fair value were classified in levels 2 and 3, despite the fact that, in some situations, these were prices verified on the Angolan capital market (BODIVA). Because this market started its activity at the end of 2016, given the low liquidity and depth of the capital market and the early stage it is now, they were not considered to have the necessary conditions to be classified at level 1.

The main methodologies and assumptions used in estimating the fair value of financial assets and liabilities recorded in the balance sheet at amortized cost are analysed as follows:

**Cash and deposits at central banks, Loans and advances to credit institutions repayable on demand and Other loans and advances to central banks and credit institutions**

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

**Financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income**

These financial instruments are accounted at fair value for Angolan public debt securities. The fair value is based on market quotations available at BODIVA, whenever these are available. Otherwise, fair value is estimated through numerical models based on discounted cash-flow techniques, using the interest rate curve adjusted for factors associated, predominantly the credit risk and liquidity risk, determined in accordance with the market conditions and respective maturities.

Interest rates are determined based on information disseminated by financial content providers and BNA. Interest rates for specific periods of the cash flows are determined by appropriate interpolation methods. The same interest rate curves are also used in the projection of the non-deterministic cash flows, such as indexes.

For investment funds, the best fair value estimate considered is the financial statements of these bodies at the Bank’s balance sheet date and, where possible, with the Auditor’s Report.

For shares, the best estimate of fair value is the book value of the entities in which the Bank holds shares, given by their equity and the percentage held by the Bank and, where possible, with the Auditor’s Report.

**Financial assets at amortized cost – Debt securities**

The fair value of these instruments is based on market prices, whenever these are available. Otherwise, fair value is estimated through the update of expected cash-flows of future capital and interest for these instruments.

For disclosure purposes, it is presumed that Treasury Bills (where applicable) have short-term residual maturities and that Treasury Bonds in foreign currency bear interest rates in line with the comparable market rates in force, therefore their book value substantially represents the fair value of these assets.

**Loans and advances to customers**

The fair value of loans and advances to customers is calculated based on the update of expected principal and interest future cash flows, considering that the payments of the instalments occur in the contractually defined dates. The expected future cash flows of homogeneous credit portfolios, such as mortgage loans, are estimated on a portfolio basis. The discount rates used are the current rates charged for loans with similar characteristics.

**Other assets**

Other assets classified at fair value through profit or loss were valued in accordance with the assumptions defined in the internal model for the valuation of assets at fair value in the level 3 hierarchy. The model estimates the fair value of these assets by the sum of the discounted cash flows at a valuation benchmark rate defined based on the assumptions made in the internal model. The fair value of other assets at amortized cost is presumed to be their carrying amount.

**Deposits from central banks and other credit institutions**

The fair value of loans and advances to customers is calculated based on the update of expected principal and interest future cash flows, considering that the payments of the instalments occur in the contractually defined dates.

**Deposits from customers and other loans**

The fair value of these financial instruments is calculated based on the expected principal and interest future cash flows. The discount rate used reflects the rates charged for deposits with similar characteristics at the balance sheet date. Considering that the applicable interest rates are renewed for periods of less than one year, there are no material differences in their fair value.

Concerning the exchange rates, the Bank uses in its valuation models the spot rate observed in the market at the time of the valuation.



As at December 31, 2023 and 2022, the credit quality of financial assets is presented as follows:

| AOA thousand                    |                 |               |                |                   |               |
|---------------------------------|-----------------|---------------|----------------|-------------------|---------------|
|                                 | 12-31-2023      |               |                |                   |               |
|                                 | Rating origin   | Rating level  | Total exposure | Impairment losses | Net exposure  |
| Loans and advances to customers | Internal rating | Low           | 18,492,243     | (1,186,300)       | 17,305,943    |
|                                 |                 | Medium        | 95,069,572     | (13,909,922)      | 81,159,649    |
|                                 |                 | High          | 345,749,306    | (62,222,073)      | 283,527,232   |
|                                 | No rating       | Not available | 209,326,435    | (112,210,789)     | 97,115,646    |
| Other assets                    | External rating | AAA to AA-    | 5,706,184      | (86)              | 5,706,099     |
|                                 |                 | A+ to A-      | 21,609,759     | (445)             | 21,609,314    |
|                                 |                 | BBB+ to BBB-  | 97,383,137     | (6,932)           | 97,376,206    |
|                                 |                 | BB+ to BB-    | 3,382,649      | (3,155)           | 3,379,494     |
|                                 |                 | B+ to B-      | 906,710,590    | (5,269,346)       | 901,441,245   |
|                                 | No rating       | Not available | 657,088,320    | (78,009,589)      | 579,078,731   |
|                                 |                 |               | 2,360,518,196  | (272,818,637)     | 2,087,699,559 |

| AOA thousand                    |                 |               |                |                   |               |
|---------------------------------|-----------------|---------------|----------------|-------------------|---------------|
| 12-31-2022                      |                 |               |                |                   |               |
|                                 | Rating origin   | Rating level  | Total exposure | Impairment losses | Net exposure  |
| Loans and advances to customers | Internal rating | Low           | 16,646,871     | (1,605,262)       | 15,041,609    |
|                                 |                 | Medium        | 93,297,391     | (12,664,117)      | 80,633,275    |
|                                 |                 | High          | 287,888,425    | (44,376,095)      | 243,512,330   |
|                                 | No rating       | Not available | 212,014,528    | (97,600,432)      | 114,414,096   |
| Other assets                    | External rating | AAA to AA-    | -              | -                 | -             |
|                                 |                 | A+ to A-      | 12,931,395     | (875)             | 12,930,519    |
|                                 |                 | BBB+ to BBB-  | 16,493,447     | (1,159)           | 16,492,288    |
|                                 |                 | BB+ to BB-    | 16,862,799     | (11,760)          | 16,851,040    |
|                                 |                 | B+ to B-      | 573,525,791    | (4,421,121)       | 569,104,669   |
|                                 | No rating       | Not available | 585,889,025    | (70,590,498)      | 515,298,527   |
|                                 |                 |               | 1,815,549,672  | (231,271,319)     | 1,584,278,354 |