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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 31 December 2022 and 2021, the fair value of financial instruments is presented as follows:

(Thousands of AOA)

31-12-2022	Net book value	Fair value of financial instruments			Total book value
		Measured at fair value	Measured at amortised 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 amortised cost					
Debt securities	306,297,438	-	306,297,438	306,297,438	306,297,438
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
	790,446,046	**-**	**790,446,046**	**790,446,046**	**790,446,046**
TOTAL ASSETS	**1,105,068,271**	**314,622,225**	**790,446,046**	**1,105,068,271**	**1,105,068,271**
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 amortised 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**

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(Thousands of AOA)

31-12-2021	Net book value	Fair value of financial instruments			Total book value
		Measured at fair value	Measured at amortised cost	Total	
Assets					
Financial assets at fair value through profit or loss					
Shares	267,782,882	267,782,882	-	267,782,882	267,782,882
Loans and advances to customers	148,956	148,956	-	148,956	148,956
Derivatives	298,758	298,758	-	298,758	298,758
	268,230,596	**268,230,596**	**-**	**268,230,596**	**268,230,596**
Financial assets at fair value through other comprehensive income					
Bonds and other fixed-income securities	2,584,778	2,584,778	-	2,584,778	2,584,778
Shares	429,389	429,389	-	429,389	429,389
	3,014,167	**3,014,167**	**-**	**3,014,167**	**3,014,167**
Financial assets at amortised cost					
Debt securities	369,305,248	-	369,305,248	369,305,248	369,305,248
Loans and advances to customers	440,985,217	-	440,985,217	440,985,217	440,985,217
Other loans and advances to central banks and credit institutions	33,814,994	-	33,814,994	33,814,994	33,814,994
	844,105,459	**-**	**844,105,459**	**844,105,459**	**844,105,459**
TOTAL ASSETS	**1,115,350,222**	**271,244,763**	**844,105,459**	**1,115,350,222**	**1,115,350,222**
Liabilities					
Financial liabilities at fair value through profit or loss					
Derivatives	1,412	1,412	-	1,412	1,412
	1,412	**1,412**	**-**	**1,412**	**1,412**
Financial liabilities at amortised cost					
Deposits from central banks and other credit institutions					
Deposits from credit institutions	80,660,368	-	80,660,368	80,660,368	80,660,368
Deposits from customers and other loans					
Term deposit	807,436,759	-	807,436,759	807,436,759	807,436,759
Other loans	20,146,137	-	20,146,137	20,146,137	20,146,137
	908,243,264	**-**	**908,243,264**	**908,243,264**	**908,243,264**
TOTAL LIABILITIES	**908,244,676**	**1,412**	**908,243,264**	**908,244,676**	**908,244,676**

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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 judgement, 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, except for 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 31 December 2022 and 2021, 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 amortised 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.

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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.

Financial assets at amortised 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 amortised 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.

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As at 31 December 2022 and 2021, the credit quality of financial assets, is presented as follows:

(Thousands of AOA)

31-12-2022	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	287,888,426	(44,376,095)	243,512,331
	No rating	Not available	212,014,527	(97,600,432)	114,414,095
Other assets	External rating	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)	16,851,039
		B+ to B-	573,525,791	(4,421,121)	569,104,670
	No rating	Not available	585,889,025	(70,590,498)	515,298,527
			1,815,549,672	**(231,271,319)**	**1,584,278,354**

(Thousands of AOA)

31-12-2021	Rating origin	Rating level	Total exposure	Impairment losses	Net exposure
Loans and advances to customers	Internal rating	Low	74,633,829	(24,298,231)	50,335,598
		Medium	75,965,586	(7,926,815)	68,038,771
		High	225,338,747	(26,278,254)	199,060,493
	No rating	Not available	212,380,361	(88,830,006)	123,550,355
Other assets	External rating	A+ to A-	20,217,422	(2,093)	20,215,329
		BBB+ to BBB-	39,039,706	(18,750)	39,020,956
		BB+ to BB-	1,444,189	(607)	1,443,582
		B+ to B-	719,571,772	(5,718,452)	713,853,320
	No rating	Not available	521,647,485	(23,148,341)	498,499,144
			1,890,239,097	**(176,221,549)**	**1,714,017,548**

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