

41. Fair values

Fair value, which is best reflected by a market price, if available is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in a direct transaction, other than forced sale or liquidation.

41.1. Fair value of financial assets and liabilities

Based on the employed methods of determining the fair value, financial assets/liabilities are classified to the following categories:

- Level I: financial assets/liabilities measured directly on the basis of prices quoted in the active market.
- Level II: financial assets/liabilities measured on the basis of measurement techniques based on assumptions using data from an active market or market observations.
- Level III: financial assets/liabilities measured on the basis of measurement techniques commonly used by the market players, the assumptions of which are not based on data from an active market.

The table below presents the balance-sheet figures for financial assets and liabilities per individual measurement levels.

end of 2014

	Level 1	Level 2	Level 3	Total
Financial assets, of which:	23,734.1	6,343.1	5.0	30,082.2
- Financial assets held for trading, of which:	1,409.8	447.0	0.0	1,856.8
- <i>repo transactions</i>	0.0	447.0	0.0	447.0
- <i>treasury bonds</i>	1,409.8	0.0	0.0	1,409.8
- Valuation of derivatives	0.0	2,412.3	0.0	2,412.3
- Financial assets available-for sale, of which:	22,324.3	500.0	5.0	22,829.3
- <i>treasury bonds</i>	20,618.4	0.0	0.0	20,618.4
- <i>NBP bills</i>	0.0	500.0	0.0	500.0
- <i>BGK bonds</i>	1,696.9	0.0	0.0	1,696.9
- <i>equity instruments</i>	9.0	0.0	5.0	14.0
- Derivative hedge instruments	0.0	2,983.8	0.0	2,983.8
Financial liabilities, of which:	860.5	4,611.3	0.0	5,471.8
- Financial liabilities held for trading, of which:	0.0	56.9	0.0	56.9
- <i>repo transactions</i>	0.0	56.9	0.0	56.9
- Book short position in trading securities	860.5	0.0	0.0	860.5
- Valuation of derivatives	0.0	2,521.6	0.0	2,521.6
- Derivative hedge instruments	0.0	2,032.8	0.0	2,032.8

end of 2013

	Level 1	Level 2	Level 3	Total
Financial assets, of which:	18,867.6	5,098.0	2.7	23,968.3
- Financial assets held for trading, of which:	476.5	1,474.9	0.0	1,951.4
- <i>repo transactions</i>	0.0	675.1	0.0	675.1
- <i>treasury bonds</i>	476.5	0.0	0.0	476.5
- <i>NBP bills</i>	0.0	799.8	0.0	799.8
- Valuation of derivatives	0.0	1,471.4	0.0	1,471.4
- Financial assets available-for sale, of which:	18,391.1	1,099.8	2.7	19,493.6
- <i>treasury bonds</i>	16,463.9	0.0	0.0	16,463.9
- <i>NBP bills</i>	0.0	1,099.8	0.0	1,099.8
- <i>BGK bonds</i>	1,902.6	0.0	0.0	1,902.6
- <i>equity instruments</i>	24.6	0.0	2.7	27.3

- Derivative hedge instruments	0.0	1,051.9	0.0	1,051.9
Financial liabilities, of which:	621.1	3,220.5	0.0	3,841.6
- Financial liabilities held for trading, of which:	0.0	613.1	0.0	613.1
- repo transactions	0.0	613.1	0.0	613.1
- Book short position in trading securities	621.1	0.0	0.0	621.1
- Valuation of derivatives	0.0	1,493.0	0.0	1,493.0
- Derivative hedge instruments	0.0	1,114.4	0.0	1,114.4

Movements between valuation levels

In 2014 there were no movements between valuation levels.

Valuation of financial instruments classified to the 2nd level

The Group classifies derivatives, cash bills of the National Bank of Poland and repo transactions into the 2nd level of valuation.

Derivatives

The following models are applied for non-linear transactions (FX options), depending on the product type:

- the European vanilla option – the Garman-Kohlhagen model,
- the European digital option - the Garman-Kohlhagen model adjusted by the call spread,
- the touch option – the Murex Skew Model,
- the (American) barrier option – the Murex Skew Model,
- the (European) barrier option – the Garman-Kohlhagen model
- Cap/Floor (back-to-back transactions) – the Black model.

The following are the input data for the models:

- the foreign exchange rate – obtained by the parties from the National Bank of Poland website,
- implied volatilities – obtained from Bloomberg BGN or Bloomberg Synthetic for the currency pair with lower liquidity
- profitability curves similar to those for linear derivatives.

Fair value for linear instruments (other derivatives) is determined based on discounted future cash flows at the transaction levels. The fair value determined in that manner is the PV of those cash flows.

All input data used for the creation of the revaluation curves are observed on the market, and include: deposit market rates, forward points, FRA rates, IRS rates, OIS rates, FX basis points, basis points among the index for variable rate, and FX-rates. The data come from the Reuters system and come mainly from brokers. The quality of those data as well as the data from other sources used in the revaluation process is verified on an annual basis or adjusted ad hoc.

All derivatives except for interest rate derivatives in PLN are valued according to the OIS curve concept on the assumption that there is a hedge of the transaction valuation in the form of a deposit at EONIA rate.

Due to the specific nature of the Polish market, single-currency derivatives in PLN are valued according to one curve for identification of future interest flows and for discount purposes. Similar to linear derivatives in other currencies, the curves taken account of the type of the underlying index.

Cash bills of the National Bank of Poland

Flat profitability curve set at the level of the NBP reference rate is applied for the valuation of NBP cash bills.

Repo transactions

Fair value for repo transactions is determined based on future payment flows discounted according to the profitability curve for the so called cash instruments.

Measurement adjustment

The Group adopted prudent valuation for financial assets and liabilities measured at fair value and based the said measurement on the guidelines provided for in the Technical Standards of the European Banking Authority (i.e.: EBA – Article 105(14) of the Regulation EU 575/2013 published in March 2014). This approach aims at determining the fair value with a high, 90%, confidence level, considering uncertain market pricing and closing cost. As at the end of 2014, the prudent valuation adjustment totalled PLN 29.4 million, out of which PLN 25.1 million reduced the revaluation reserve of instruments hedging cash flows, whereas PLN 4.3 million encumbered the financial result (including: PLN -3.4 million was recognised *under net income on hedge accounting while PLN -0.9 million under net income on financial instruments measured through profit and loss and FX result*).

Valuation of financial instruments classified to the 3rd level

Shares and participations of several companies for which it is difficult or impossible to determine the fair value due to absence of active market for those instruments are classified into the 3rd valuation level. The Group is of the opinion that the purchase price less the impairment charge (if any) is the best indicator of their value.

Movements in financial assets / liabilities classified to the Level 3 of the measurement

	2014	2013
Opening balance	2.7	16.1
Increases, of which:	2.3	0.0
- purchase	2.3	0.0
Decreases, of which:	0.0	-13.4
- movement to Level 1	0.0	-13.4
Closing balance	5.0	2.7

The fair value measurement changes referring to the income statement are recognised in the item of the income statement *Net income on financial instruments measured at fair value through profit and loss and FX result*.

Potential changes to the estimates of the measured financial instruments classified to the Level 3 of the measurement do not have significant impact on the consolidated financial statements of the Group.

41.2. Fair value of non-financial assets

end of 2014

	Level 1	Level 2	Level 3	Total
Investment property	-	-	60.0	60.0
Own real property	-	-	339.4	339.4
Property, plant and equipment held for sale	-	-	35.5	35.5

end of 2013

	Level 1	Level 2	Level 3	Total
Investment property	-	-	121.4	121.4
Own real property	-	-	343.9	343.9
Property, plant and equipment held for sale	-	-	35.3	35.3

Fair value measurement

Investment real estates

The Group is the owner of one real property (partly of investment nature) located in Katowice. On that account, the Group receives income on rental instalments from the investment part. In line with the accounting principles adopted by the Group, the real property's value is carried at fair value. The fair value is determined on the basis of the independent appraiser's valuation. To this end, the method of discounted cash flow over 10 years is applied, with the use of generally adopted market parameters for similar investment projects, taking account of the utilised space of the building.

Own real properties

The Group measures its real properties at fair value. The measurement is carried out by an independent appraiser in line with the applicable principles of real property appraisal depending on the type of the building (for administrative buildings – replacement cost method was applied, and for operational buildings – the DCF method was applied).

In 2014, the following real properties were appraised:

- ING Bank Śląski S.A. Head Office in Katowice – as at 31 December 2014, the building's value totalled PLN 105.6 million, the change in the value of this real property for the year 2014 decreased the revaluation reserve by PLN 7.4 million (PLN 6.0 million upon including deferred tax) and decreased the financial result by PLN 6.1 million (PLN 4.9 million upon including deferred tax) and
- 20 other real properties located across Poland; change in the value of the real properties for the year 2014 increased the revaluation surplus by PLN 0.3 million (PLN 0.2 million upon including deferred tax) and decreased the 2014 financial result by PLN 27.9 million (PLN 22.6 million upon including deferred tax).

In addition, the change ownership in subsidiary Solver sp. z o.o. from 82.30% to 88.93% resulted in an increase in the revaluation reserve of PLN 0.3 million (PLN 0.2 million upon including deferred tax).

In 2013, the following real properties were appraised:

- ING Bank Śląski S.A. Head Office in Katowice – as at 31 December 2013, the building's value totalled PLN 121.5 million, the change in the value of this real property for the year 2013 increased the revaluation reserve by PLN 1.7 million (PLN 1.4 million upon including deferred tax) and
- 11 other real properties located across Poland; change in the value of the real properties for the year 2013 increased the revaluation surplus by PLN 0.6 million (PLN 0.5 million upon including deferred tax) and decreased the 2013 financial result by PLN 0.4 million (PLN 0.3 million upon including deferred tax).

upon including deferred tax) and decreased the 2013 financial result by PLN 6.4 million (PLN 5.2 million upon including deferred tax).

As at 31 Dec 2014 PLN 31.4 million, which amount (including deferred tax) refers to the real properties assessed at fair value, is recognised in the revaluation reserve. As at 31 Dec 2013 the same item amounted to PLN 43.2 million. The value of the appraised real properties estimated at the historical cost upon including impairment loss and depreciation charges would amount to PLN 300.6 million as at 31 Dec 2014 against PLN 290.6 million as at 31 Dec 2013.

Movements in non-financial assets classified to the Level 3 of the measurement

Investment real estates

	2014	2013
Opening balance	121.4	120.9
Increases, of which:	0.2	0.5
- purchase	0.2	0.5
Disposals, due to:	-64.4	0.0
- reclassification to own real property	-64.4	0.0
Change in fair value, of which:	2.8	0.0
- including in income statement [†]	2.8	0.0
Value at the end of period	60.0	121.4

[†] in line Net income on the other basic activities, in detailed item net income on the investment properties

Own real property

	2014	2013
Value at the beginning of period	343.9	348.6
Additions, due to:	121.0	37.3
- purchases	0.1	0.8
- investment take-overs	30.3	25.3
- reclassification from assets held for sale	3.4	11.2
- reclassification from investment real property	62.0	0.0
- other	25.2	0.0
Disposals, due to:	-93.0	-42.9
- amortisation charges	-39.2	-24.8
- reclassification to assets held for sale	-19.9	-17.9
- other	-33.9	-0.2
Change in fair value, of which:	-32.5	0.9
- including in other comprehensive income [†]	0.3	2.2
- including in income statement ^{**}	-32.8	-1.3
Value at the end of period	339.4	343.9

[†] in detailed item Revaluation reserve from measurement of property, plant and equipment

^{**} in line general and administrative expenses, in detailed item maintenance and rental of buildings

Property, plant and equipment held for sale

	2014	2013
Value at the beginning of period	35.3	33.0
Additions, due to:	20.1	8.6
- reclassification from property, plant and equipment	20.0	8.5
- other	0.1	0.1
Disposals, due to:	-18.8	-1.3
- sale	-18.5	-1.3
- other	-0.3	0.0
Change in fair value, of which:	-1.1	-5.0
- including in income statement [†]	-1.1	-5.0
Value at the end of period	35.5	35.3

[†] in line general and administrative expenses, in detailed item maintenance and rental of buildings

41.3. Financial assets and liabilities which are not carried at fair value in the statement of financial position

end of 2014

	Carrying value	Fair value			TOTAL
		Level I	Level II	Level III	
Assets					
Cash in hand and balances with the Central Bank	5,330.7	-	5,330.7	-	5,330.7
Loans and receivables to other banks	1,838.3	-	1,838.3	-	1,838.3
Loans and receivables to customers	61,054.8	-	4,199.1	56,263.7	60,462.8
Receivables from customers due to repo transactions	106.6	-	106.6	-	106.6
Other assets	129.7	-	-	129.7	129.7
Liabilities					
Liabilities due to other banks	6,123.4	-	6,123.4	-	6,123.4
Liabilities due to customers	75,658.9	-	-	75,659.3	75,659.3
Liabilities due to customers under repo transactions	29.7	-	29.7	-	29.7
Liabilities under issue of debt securities	866.5	-	871.4	-	871.4

end of 2013

	Carrying value	Fair value			TOTAL
		Level I	Level II	Level III	
Assets					
Cash in hand and balances with the Central Bank	6,970.1	-	6,970.1	-	6,970.1
Loans and receivables to other banks	1,399.8	-	1,399.8	-	1,399.8
Loans and receivables to customers	52,237.9	-	3,912.5	46,826.1	50,738.6
Receivables from customers due to repo transactions	638.8	-	638.8	-	638.8
Other assets	86.9	-	-	86.9	86.9
Liabilities					
Liabilities due to other banks	4,609.8	-	4,609.8	-	4,609.8
Liabilities due to customers	67,547.9	-	-	67,547.4	67,547.4
Liabilities due to customers under repo transactions	433.5	-	433.5	-	433.5
Liabilities under issue of debt securities	566.4	-	566.4	-	566.4

The Group discloses the data on the fair value of loans and deposits and debt securities recognised respectively in the groups of financial assets and financial liabilities carried at amortised cost considering the effective interest rate.

In calculations, the yield curve is used; it takes account of the transfer prices calculated based on:

- PLN: BID rates up to 9M (inclusive) being WIBID and over 1Y adequate IRS rates; OFFER rates up to 9M (inclusive) being WIBOR and over 1Y adequate IRS rates.
- EUR: BID rates up to 9M (inclusive) being EURIBOR and over 1Y adequate IRS rates; OFFER rates up to 9M (inclusive) being EURIBOR and over 1Y adequate IRS rates.
- USD and CHF: BID rates up to 9M (inclusive) being LIBOR and over 1Y adequate IRS rates; OFFER rates up to 9M (inclusive) being LIBOR and over 1Y adequate IRS rates.

BID rates are used to compute fair value of financial liabilities measured at amortized cost; in the case of financial assets measured at amortized cost OFFER rates are applied. All intermediate points on the curves are interpolated linearly.

Credit loss estimations reflect the loan loss provisioning model in place at the Group.

In certain aspects, the model adopted by the Group is based on the assumptions that do not confirm the prices of verifiable current market transactions referring to the same instrument – the model takes account of neither prepayments nor restructuring-based changes.

Loans and receivables

The credit portfolio including debt securities classified to financial assets measured at amortised cost is divided into sub-portfolios according to the type of product, the client's segment and the currency.

For mortgage portfolio, the prepayment model is applied. Data on the maturity of PLN and CHF mortgage portfolios are used to determine the estimated prepayments according to the model maturity structure. On the basis thereof the average interest rate weighted with unamortised principal is calculated separately for PLN and CHF portfolios. A model

the model maturity structure. On the basis thereof, the average interest rate weighted with unamortised principal is calculated separately for PLN and CHF portfolios. A model schedule of principal and interest payments is aggregated on the basis of the model maturity structure and future interest flows measured at average interest rate separately for PLN and CHF.

In case of those sub-portfolios the discounting factor is used for each cashflow.

For loans/debt securities the discounting factor is assumed as a sum of:

- the market rate based on the yield curve as of the balance sheet date, and
- the average margin based on the portfolio of loans granted in the last two month period.

For that purpose the following assumptions are adopted:

- use of the loans granted in the last two months for calculation,
- division into the above mentioned product groups,
- the spot at the yield curve on the basis of which the relevant market rate is set is reflected by the revaluation date for each loan.

To estimate the fair value of CHF mortgage loans portfolio, an average margin used when extending EUR mortgage loans adjusted with swap instruments quotations for CHF/ EUR currencies was applied on account of active market disappearance.

As a result, the fair value is the total of the net present value of cash flows of a single loan/ security (in the case of the mortgage portfolio the fair value is the total of the net present value of cash flows of the aggregated mortgage portfolio calculated separately for PLN and CHF).

In case of loans without any repayment schedules and loans from the impaired group, it is assumed that the fair value for those loans equals their book value.

Liabilities due to other banks and to customers

The deposit portfolio is divided according to the type of product, the client's segment and the currency. For deposits paid on demand, it is assumed the fair value equals their book value.

Another phase involves the calculation of future cashflows as the sum of principal- and interest cashflows. After that, by applying the discounting factor for each cashflow one receives the fair value of individual deposits. The sum of fair values of individual deposits represents the fair value of the portfolio of deposits reviewed.

For deposits the discounting factor represents the sum of:

- the market rate based on the yield curve as at the balance sheet date, and
- the average margin based on the portfolio of deposits accepted in the last two months.

For that purpose the following assumptions are adopted:

- use of the deposits accepted in the last two months for calculation,
- division into the above mentioned product groups,
- the spot at the yield curve on the basis of which the relevant market rate is set is reflected by the revaluation date for each deposit.

Liabilities under issue of securities

Fair value is calculated with the use of the discounting factor for each cash flow. Accordingly, the discounting factor is the total of:

- the market rate based on the yield curve from the balance sheet date, and
- the estimated margin applied should the securities be issued.

For that purpose, it is assumed that the spot at the yield curve on the basis of which the relevant market rate is set reflects the bond repricing date.

Cash in hand and balances with the Central Bank, Other assets

As the financial assets recognised in the above item are of short-term nature, it was assumed that the carrying value is approximately the same as the fair value.

Below is presented the comparison of the carrying value with the fair value concerning loans and advances portfolio and deposits by segment:

	end of 2014		end of 2013	
	Carrying value	Fair value	Carrying value	Fair value
Loans and advances, of which:	57,030.1	56,162.9	48,427.8	46,701.8
Corporate banking segment, of which	35,627.3	35,322.2	30,409.2	29,913.6

- loans and advances	25,933.4	25,855.4	22,364.0	22,264.8
- leasing receivables	4,111.8	3,970.1	3,449.4	3,185.4
- factoring receivables	2,816.0	2,824.3	2,420.9	2,429.7
- corporate and municipal bonds	2,766.1	2,672.4	2,174.9	2,033.7
Retail banking segment, of which:	21,402.8	20,840.7	18,018.6	16,788.2
- mortgages	16,507.5	15,869.0	13,881.1	12,521.5
- other loans and advances	4,895.3	4,971.7	4,137.5	4,266.7
Deposits, of which:	74,405.7	74,406.1	66,326.6	66,326.1
- Deposits of customers from corporate banking segment	24,123.6	24,123.6	22,559.2	22,559.1
- Deposits of customers from retail banking segment	50,282.1	50,282.5	43,767.4	43,767.0