

20. Derivative financial instruments

The Group has the following types of derivative instruments:

Forward currency transactions represent commitments to purchase foreign and local currencies, including outstanding spot transactions. **Futures for currencies and interest rates** are contractual commitments to receive or pay a specific net value, depending on currency rate of exchange or interest rate variations, or to buy or sell a foreign currency or a financial instrument on a specified future date for a fixed price established on the organised financial market. Because futures contracts are collateralised with fair-valued cash or securities and the changes of the face value of such contracts are accounted for daily in reference to stock exchange quotations, the credit risk is marginal. **FRA contracts** are similar to futures except that each FRA is negotiated individually and each requires payment on a specific future date of the difference between the interest rate set in the agreement and the current market rate on the basis of theoretical amount of capital.

Currency and interest rate swap contracts are commitments to exchange one cash flow for another cash flow. Such a transaction results in swap of currencies or interest rates (e.g., fixed to variable interest rate) or combination of all these factors (e.g., cross-currency CIRS). With the exception of specific currency swap contracts, such transactions do not result in swaps of capital. The credit risk of the Group consists of the potential cost of replacing swap contracts if the parties fail to discharge their liabilities. This risk is monitored daily by reference to the current fair value, proportion of the face value of the contracts and market liquidity. The Group evaluates the parties to such contracts using the same methods as for its credit business, to control the level of its credit exposure.

The Group applies fair value hedge accounting for fixed interest rate Eurobonds issued by mFinance France S.A, subsidiary of mBank, fixed interest rate mortgage bonds issued by mBank Hipoteczny a subsidiary of mBank, fixed interest rate loans received by mBank from European Investment Bank as well as cash flow hedge accounting of variable rate loans indexed to market rates, granted by the Bank. Hedging instrument in both types of hedge accounting are fix to float Interest Rate Swap.

Detailed information on hedge accounting are presented in Note 21 below.

Currency and interest rate options are agreements, pursuant to which the selling party grants the buying party the right, but not an obligation, to purchase (call option) or sell (put option) a specific quantity of a foreign currency or a financial instrument at a predefined price on or by a specific date or within an agreed period. In return for accepting currency or interest rate risk, the buyer offers the seller a premium. An option can be either a public instrument traded at a stock exchange or a private instrument negotiated between the Group and a customer (private transaction). The Group is exposed to credit risk related to purchased options only up to the balance sheet value of such options, i.e. the fair value of the options.

Market risk transactions include futures contracts as well as commodity options, stock options and index options.

Face values of certain types of financial instruments provide a basis for comparing them to instruments disclosed in the statement of financial position but they may not be indicative of the value of the future cash flows or of the present fair value of such instruments. For this reason, the face values do not indicate the level of the Group's exposure to credit risk or price change risk. Derivative instruments can have positive value (assets) or negative value (liabilities), depending on market interest or currency exchange rate fluctuations. The aggregate fair value of derivative financial instruments may be subject to strong variations.

The following tables present the fair values of the derivatives:

	Contract amount		Fair value	
	Purchase	Disposal	Assets	Liabilities
As at 31 December 2017				
Derivatives held for trading				
Foreign exchange derivatives				
- Currency forwards	18 628 052	18 846 094	103 092	266 381
- Currency swaps	13 448 601	13 342 269	133 340	50 823
- Cross-currency interest rate swaps	11 936 364	11 850 069	124 380	23 570
- OTC currency options bought and sold	1 809 601	1 802 752	32 911	36 080
Total OTC derivatives	45 822 618	45 841 184	393 723	376 854
- Currency futures	86 599	86 897	-	-
Total foreign exchange derivatives	45 909 217	45 928 081	393 723	376 854
Interest rate derivatives				
- Interest rate swap, OIS	149 054 812	149 054 813	782 159	791 641
- Forward rate agreements	1 125 000	3 350 000	711	81
- OTC interest rate options	376 149	493 415	2 470	2 544
Total OTC interest rate derivatives	150 555 961	152 898 228	785 340	794 266
- Interest rate futures	10 767	491	-	-
Total interest rate derivatives	150 566 728	152 898 719	785 340	794 266
Market risk transactions	1 304 405	1 862 741	44 651	34 093
Total derivative assets / liabilities held for trading	197 780 350	200 689 541	1 223 714	1 205 213
Derivatives held for hedging				
Derivatives designated as fair value hedges	9 456 452	9 456 452	93 752	4 284
- Interest rate swaps	9 456 452	9 456 452	93 752	4 284
Derivatives designated as cash flow hedges	5 965 000	5 965 000	30 312	2 103
- Interest rate swaps	5 965 000	5 965 000	30 312	2 103
Total derivatives held for hedging	15 421 452	15 421 452	124 064	6 387
Offsetting effect	-	-	(111 475)	(116 235)
Total recognised derivative assets/ liabilities	213 201 802	216 110 993	1 236 303	1 095 365
Short-term (up to 1 year)	76 997 463	80 094 156	407 334	387 154
Long-term (over 1 year)	136 204 339	136 016 837	828 969	708 211

In 2017, except of valuation of derivatives, the offsetting effect includes PLN 30 572 thousand of placed collaterals and PLN 34 551 thousand of collaterals received in connection with the derivative transactions subject to compensation.

	Contract amount		Fair value	
	Purchase	Disposal	Assets	Liabilities
As at 31 December 2016				
Derivatives held for trading				
Foreign exchange derivatives				
- Currency forwards	17 619 549	17 568 019	211 526	80 443
- Currency swaps	14 071 946	14 051 750	88 148	104 858
- Cross-currency interest rate swaps	10 064 507	10 157 587	35 145	124 419
- OTC currency options bought and sold	1 985 060	2 451 218	34 562	44 064
Total OTC derivatives	43 741 062	44 228 574	369 381	353 784
- Currency futures	155 494	155 830	-	-
Total foreign exchange derivatives	43 896 556	44 384 404	369 381	353 784
Interest rate derivatives				
- Interest rate swap, OIS	142 353 190	142 353 190	1 339 170	1 376 516
- Forward rate agreements	13 225 000	15 200 000	7 383	6 204
- OTC interest rate options	221 806	400 927	1 000	1 089
Total OTC interest rate derivatives	155 799 996	157 954 117	1 347 553	1 383 809
- Interest rate futures	110 543	1 473	-	-
Total interest rate derivatives	155 910 539	157 955 590	1 347 553	1 383 809
Market risk transactions	2 161 160	4 297 119	41 342	30 961
Total derivative assets / liabilities held for trading	201 968 255	206 637 113	1 758 276	1 768 554
Derivatives held for hedging				
Derivatives designated as fair value hedges	7 647 486	7 647 486	196 634	26 026
- Interest rate swaps	7 647 486	7 647 486	196 634	26 026
Derivatives designated as cash flow hedges	2 665 000	2 665 000	30 926	1 786
- Currency swaps	2 665 000	2 665 000	30 926	1 786
Total derivatives held for hedging	10 312 486	10 312 486	227 560	27 812
Offsetting effect	-	-	(176 989)	(197 100)
Total recognised derivative assets/ liabilities	212 280 741	216 949 599	1 808 847	1 599 266
Short-term (up to 1 year)	95 706 104	97 390 032	608 038	522 887
Long-term (over 1 year)	116 574 637	119 559 567	1 200 809	1 076 379

In 2016, except of valuation of derivatives, the offsetting effect includes PLN 26 746 thousand of placed collaterals and PLN 6 634 thousand of collaterals received in connection with the derivative transactions subject to compensation.

In the both reporting periods market risk transactions comprise the fair values of: stock index options, shares and other equity securities, futures for commodities, swap contracts for commodities.

Under the financial derivative instruments the Group presented derivative instruments in the amount of PLN 127 thousand (liabilities), which have been separated from the structured investment deposits (31 December 2016: PLN 1 012 thousand).

As at 31 December 2017 and 31 December 2016, the Group did not have any financial assets and liabilities designated upon initial recognition as at fair value through the income statement.