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Bank Polski

Consolidated financial statements of the PKO Bank Polski S.A. Group for the year ended 31 December 2022

SELECTED FINANCIAL DATA DERIVED FROM THE CONSOLIDATED FINANCIAL STATEMENTS

SELECTED FINANCIAL DATA	PLN million			EUR million		
	2022	2021	Change % (A-B)/B	2022	2021	Change % (D-E)/E
	A	B	C	D	E	F
Net interest income	11 813	9 882	19.54%	2 520	2 159	16.72%
Net fee and commission income	4 951	4 377	13.11%	1 056	956	10.46%
Net expected credit losses and net impairment allowances on non-financial assets	(1 564)	(1 355)	15.42%	(334)	(296)	12.84%
Administrative expenses	(7 850)	(6 117)	28.33%	(1 674)	(1 336)	25.30%
Profit before tax	4 749	6 513	(27.08%)	1 013	1 423	(28.81%)
Net profit (including non-controlling shareholders)	3 333	4 873	(31.60%)	711	1 065	(33.24%)
Net profit attributable to the parent company	3 333	4 874	(31.62%)	711	1 065	(33.24%)
Earnings per share for the period - basic (in PLN/EUR)	2.67	3.90	(31.54%)	0.57	0.85	(32.94%)
Earnings per share for the period - diluted (in PLN/EUR)	2.67	3.90	(31.54%)	0.57	0.85	(32.94%)
Net comprehensive income	30	(2 218)	(101.35%)	6	(485)	(101.24%)
Total net cash flows	11 220	11 074	(1.33%)	2 393	2 419	(1.07%)

SELECTED FINANCIAL DATA	PLN million			EUR million		
	31.12.2022	31.12.2021	Change % (A-B)/B	31.12.2022	31.12.2021	Change % (D-E)/E
	A	B	C	D	E	F
Total assets	430 683	418 086	3.01%	91 832	90 900	1.03%
Total equity	35 435	37 693	(5.99%)	7 556	8 195	(7.80%)
Share capital	1 250	1 250		267	272	(1.84%)
Number of shares (in million)	1 250	1 250		1 250	1 250	
Book value per share (in PLN/EUR)	28.35	30.15	(5.97%)	6.04	6.56	(7.93%)
Diluted number of shares (in million)	1 250	1 250		1 250	1 250	
Diluted book value per share (in PLN/EUR)	28.35	30.15	(5.97%)	6.04	6.56	(7.93%)
Total Capital Ratio (%)	17.78	18.73	(5.07%)	17.78	18.73	(5.07%)
Tier 1	38 139	39 412	(3.23%)	8 132	8 569	(5.10%)
Tier 2	2 584	2 700	(4.30%)	551	587	(6.13%)

SELECTED FINANCIAL STATEMENT ITEMS HAVE BEEN TRANSLATED INTO EUR AT THE FOLLOWING RATES	2022	2021
arithmetic mean of the NBP exchange rates at the end of a month (income statement, statement of comprehensive income and cash flow statement items)	4.6883	4.5775
	31.12.2022	31.12.2021
NBP mid exchange rates at the date indicated (statement of financial position items)	4.6899	4.5994

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CONSOLIDATED INCOME STATEMENT

INCOME STATEMENT	Note	2022	2021
Net interest income	17	**11 813**	**9 882**
Interest and similar income		20 140	10 568
of which calculated under the effective interest rate method		19 580	9 785
Interest expense		(8 327)	(686)
Net fee and commission income	18	**4 951**	**4 377**
Fee and commission income		6 515	5 596
Fee and commission expense		(1 564)	(1 219)
Other net income		**508**	**774**
Dividend income	19	51	12
Gains/(losses) on financial transactions	20	358	64
Foreign exchange gains/ (losses)	21	(73)	436
Gains/(losses) on derecognition of financial instruments	22	(26)	206
of which measured at amortized cost		15	5
Net other operating income and expense	23	198	56
Result on business activities		**17 272**	**15 033**
Net allowances for expected credit losses	24	(1 501)	(1 309)
Net impairment losses on non-financial assets	25	(63)	(46)
Cost of legal risk of mortgage loans in convertible currencies	26	(1 914)	-
Administrative expenses	27	(7 850)	(6 117)
of which net regulatory charges		(1 889)	(642)
Tax on certain financial institutions	28	(1 266)	(1 079)
Share in profits and losses of associates and joint ventures	44	71	31
Profit before tax		**4 749**	**6 513**
Income tax expense	29	(1 416)	(1 640)
Net profit/(loss) (including non-controlling interest)		**3 333**	**4 873**
Profit (loss) attributable to non-controlling shareholders		-	(1)
Net profit attributable to equity holders of the parent company		**3 333**	**4 874**
Earnings per share	30		
– basic earnings per share for the period (PLN)		2.67	3.90
– diluted earnings per share for the period (PLN)		2.67	3.90
Weighted average number of ordinary shares during the period (in million)*		1 250	1 250

* In 2022 and 2021, there were no dilutive instruments. Therefore, the amount of diluted earnings per share is the same as the amount of basic earnings per share.

(IN PLN MILLION)

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

STATEMENT OF COMPREHENSIVE INCOME	Note	2022	2021
Net profit (including non-controlling shareholders)		**3 333**	**4 873**
Other comprehensive income		**(3 303)**	**(7 091)**
Items which may be reclassified to profit or loss		**(3 296)**	**(7 098)**
Cash flow hedges (net)	33	(1 519)	(4 054)
Cash flow hedges (gross)		(1 901)	(5 003)
Deferred tax	29	382	949
Hedges of net investments in foreign operations	33	4	(4)
Fair value of financial assets measured at fair value through other comprehensive income (net)	33	(1 676)	(3 078)
Remeasurement of fair value, gross		(2 112)	(3 601)
Gains /losses transferred to the profit or loss (on disposal)		41	(201)
Deferred tax	29	395	724
Currency translation differences on foreign operations		(87)	51
Share in other comprehensive income of associates and joint ventures		(18)	(13)
Items which cannot be reclassified to profit or loss		**(7)**	**7**
Actuarial gains and losses (net)		(7)	7
Actuarial gains and losses (gross)		(9)	9
Deferred tax	29	2	(2)
Total net comprehensive income		**30**	**(2 218)**
Total net comprehensive income, of which attributable to:		30	(2 218)
equity holders of the parent		30	(2 217)
non-controlling interest		-	(1)

(IN PLN MILLION)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note	31.12.2022	31.12.2021
ASSETS		430 683	418 086
Cash and balances with Central Bank	31	15 917	11 587
Amounts due from banks	32	16 101	9 010
Hedging derivatives	33	1 042	933
Other derivative instruments	33	13 162	10 903
Securities	34	135 632	135 440
Reverse repo transactions	35	7	-
Loans and advances to customers	36	231 721	234 300
Assets in respect of insurance activities	40	555	911
Property, plant and equipment under operating leases	75	1 764	1 371
Property, plant and equipment	42	2 917	3 108
Non-current assets held for sale	43	10	18
Intangible assets	41	3 527	3 463
Investments in associates and joint ventures	44	285	285
Current income tax receivable		52	36
Deferred tax assets	29	5 187	4 116
Other assets	45	2 804	2 605

	Note	31.12.2022	31.12.2021
LIABILITIES AND EQUITY		430 683	418 086
Liabilities		395 248	380 393
Amounts due to Central bank		9	8
Amounts due to banks	37	3 011	3 821
Hedging derivatives	33	7 469	4 806
Other derivative instruments	33	12 978	11 008
Amounts due to customers	38	339 582	322 296
Liabilities in respect of insurance activities	40	1 732	2 008
Loans and advances received	39	2 294	2 461
Securities in issue	39	15 510	23 872
Subordinated liabilities	39	2 781	2 716
Other liabilities	46	7 014	5 366
Current income tax liabilities		765	18
Deferred tax liabilities	29	13	356
Provisions	47	2 090	1 657
EQUITY	69	35 435	37 693
Share capital		1 250	1 250
Reserves and accumulated other comprehensive income		22 215	25 313
Retained earnings		8 651	6 270
Net profit or loss for the year		3 333	4 874
Capital and reserves attributable to equity holders of the parent company		**35 449**	**37 707**
Non-controlling interests		(14)	(14)

(IN PLN MILLION)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE PERIOD ENDED 31 DECEMBER 2022	Share capital	Reserves and accumulated other comprehensive income					Retained earnings	Net profit or loss for the period	Total capital and reserves attributable to equity holders of the parent company	Total non-controlling interests	Total equity
		Reserves									
		Supplementary capital	General banking risk fund	Other reserves	Accumulated other comprehensive income	Reserves and accumulated other comprehensive income					
As at the beginning of the period	1 250	23 003	1 070	6 968	(5 728)	25 313	6 270	4 874	37 707	(14)	37 693
Transfer from retained earnings	-	-	-	-	-	-	4 874	(4 874)	-	-	-
Dividend	-	-	-	-	-	-	(2 288)	-	(2 288)	-	(2 288)
Comprehensive income	-	-	-	-	(3 303)	(3 303)	-	3 333	30	-	30
Transfer from retained earnings to equity	-	82	-	123	-	205	(205)	-	-	-	-
As at the end of the period	1 250	23 085	1 070	7 091	(9 031)	22 215	8 651	3 333	35 449	(14)	35 435

FOR THE PERIOD ENDED 31 DECEMBER 2021	Share capital	Reserves and accumulated other comprehensive income					Retained earnings	Net profit or loss for the period	Total capital and reserves attributable to equity holders of the parent company	Total non-controlling interests	Total equity
		Reserves									
		Supplementary capital	General banking risk fund	Other reserves	Accumulated other comprehensive income	Reserves and accumulated other comprehensive income					
As at the beginning of the period	1 250	29 519	1 070	3 137	1 363	35 089	6 142	(2 557)	39 924	(13)	39 911
Transfer from retained earnings	-	-	-	-	-	-	(2 557)	2 557	-	-	-
Comprehensive income	-	-	-	-	(7 091)	(7 091)	-	4 874	(2 217)	(1)	(2 218)
Offset of accumulated losses	-	-	-	(2 944)	-	(2 944)	2 944	-	-	-	-
Transfer from retained earnings to equity	-	184	-	75	-	259	(259)	-	-	-	-
Special fund set up for the purpose of covering individual balance sheet losses	-	(6 700)	-	6 700	-	-	-	-	-	-	-
As at the end of the period	1 250	23 003	1 070	6 968	(5 728)	25 313	6 270	4 874	37 707	(14)	37 693

(IN PLN MILLION)

FOR THE PERIOD ENDED 31 DECEMBER 2022	Accumulated other comprehensive income						
	Share in other comprehensive income of associates and joint ventures	Fair value of financial assets measured at fair value through other comprehensive income	Cash flow hedges	Hedge of net investment in foreign operation	Actuarial gains and losses	Currency translation differences on foreign operations	Total
As at the beginning of the period	(17)	(1 785)	(3 699)	(4)	(14)	(209)	(5 728)
Comprehensive income	(18)	(1 676)	(1 519)	4	(7)	(87)	(3 303)
As at the end of the period	(35)	(3 461)	(5 218)	-	(21)	(296)	(9 031)

FOR THE PERIOD ENDED 31 December 2021	Accumulated other comprehensive income						
	Share in other comprehensive income of associates and joint ventures	Fair value of financial assets measured at fair value through other comprehensive income	Cash flow hedges	Hedge of net investment in foreign operation	Actuarial gains and losses	Currency translation differences on foreign operations	Total
As at the beginning of the period	(4)	1 293	355	-	(21)	(260)	1 363
Comprehensive income	(13)	(3 078)	(4 054)	(4)	7	51	(7 091)
As at the end of the period	(17)	(1 785)	(3 699)	(4)	(14)	(209)	(5 728)

(IN PLN MILLION)

Bank Polski

CONSOLIDATED STATEMENT OF CASH FLOWS

	Note	31.12.2022	31.12.2021
Cash flows from operating activities			
Profit before tax		**4 749**	**6 513**
Income tax paid		**(1 429)**	**(1 744)**
Total adjustments:		**15 223**	**28 026**
Depreciation and amortization	27, 18	1 278	1 211
(Gains)/losses on investing activities	72	(97)	(67)
Interest and dividends received	72	(3 758)	(2 280)
Interest paid		581	417
Change in:			
amounts due from banks	72	(213)	512
hedging derivatives		2 554	4 453
other derivative instruments		(289)	(499)
securities	72	(4 288)	(888)
loans and advances to customers	72	1 529	(11 565)
reverse repo transactions		(7)	-
assets in respect of insurance activities		356	(113)
property, plant and equipment under operating lease		(640)	(416)
non-current assets held for sale		8	110
other assets		(216)	137
accumulated allowances for expected credit losses	72	1 191	(36)
accumulated allowances on non-financial assets and other provisions	72	270	139
amounts due to the Central Bank		1	8
amounts due to banks		(810)	1 195
amounts due to customers		17 286	39 941
liabilities in respect of insurance activities		(276)	268
loan and advances received	72	(35)	(34)
liabilities in respect of debt securities in issue	72	742	(226)
subordinated liabilities	72	65	-
other liabilities	72	1 903	896
Other adjustments	72	(1 912)	(5 137)
Net cash from/used in operating activities		18 543	32 795

(IN PLN MILLION)

	Note	31.12.2022	31.12.2021
Cash flows from investing activities			
Inflows from investing activities		**102 154**	**63 263**
Redemption of securities measured at fair value through other comprehensive income		89 661	58 533
Redemption of securities measured at amortized cost		7 765	2 116
Interest received on securities measured at fair value through other comprehensive income		1 987	1 305
Interest received on securities measured at amortized cost		1 720	964
Proceeds from disposal of intangible assets, property, plant and equipment and assets held for sale		255	195
Other inflows from investing activities including dividends	72	766	150
Outflows on investing activities		**(97 116)**	**(76 562)**
Increase in equity of joint ventures		-	(18)
Purchase of securities measured at fair value through other comprehensive income		(92 919)	(49 564)
Purchase of securities measured at amortized cost		(2 452)	(25 950)
Purchase of intangible assets and property, plant and equipment		(1 038)	(1 030)
Other outflows on investing activities	72	(707)	-
Net cash from/used in investing activities		5 038	(13 299)

	Note	31.12.2022	31.12.2021
Cash flows from financing activities			
Payment of dividends	71	(2 288)	-
Proceeds from debt securities in issue	72	8 421	10 403
Redemption of debt securities	72	(17 525)	(18 403)
Taking up loans and advances	72	620	1 331
Repayment of loans and advances	72	(753)	(1 103)
Payment of lease liabilities	72	(255)	(233)
Repayment of interest on long-term liabilities	72	(581)	(417)
Net cash from financing activities		(12 361)	(8 422)
Total net cash flows		**11 220**	**11 074**
of which foreign exchange differences on cash and cash equivalents		100	38
Cash and cash equivalents at the beginning of the period		20 775	9 701
Cash and cash equivalents at the end of the period	72	**31 995**	**20 775**

(IN PLN MILLION)

GENERAL INFORMATION ABOUT THE GROUP

1. ACTIVITIES OF THE GROUP

Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna (**PKO BANK POLSKI S.A.** or **THE BANK**) was established by virtue of a decree signed on 7 February 1919 by the Head of State Józef Piłsudski, Prime Minister Ignacy Paderewski and Hubert Linde, post and telegraph minister and simultaneously the first president, as Pocztowa Kasa Oszczędnościowa. In 1950, the Bank began operating as Powszechna Kasa Oszczędności Bank Państwowy (state-owned bank). Pursuant to the Decree of the Council of Ministers dated 18 January 2000, Powszechna Kasa Oszczędności (a state-owned bank) was transformed into a state owned joint-stock company, Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna.

On 12 April 2000, Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna was registered and entered into the Commercial Register maintained by the District Court for the City of Warsaw, Commercial Court, 16th Registration Department. At present, the court with jurisdiction over the Bank's affairs is the District Court in Warsaw, 13th Commercial Division of the National Court Register. The Bank was registered under the number KRS 0000026438 and was assigned the statistical number REGON 016298263.

Country of registration	Poland
Registered office	Warsaw
Address of the registered office of the entity	Puławska street 15, 02-515 Warsaw

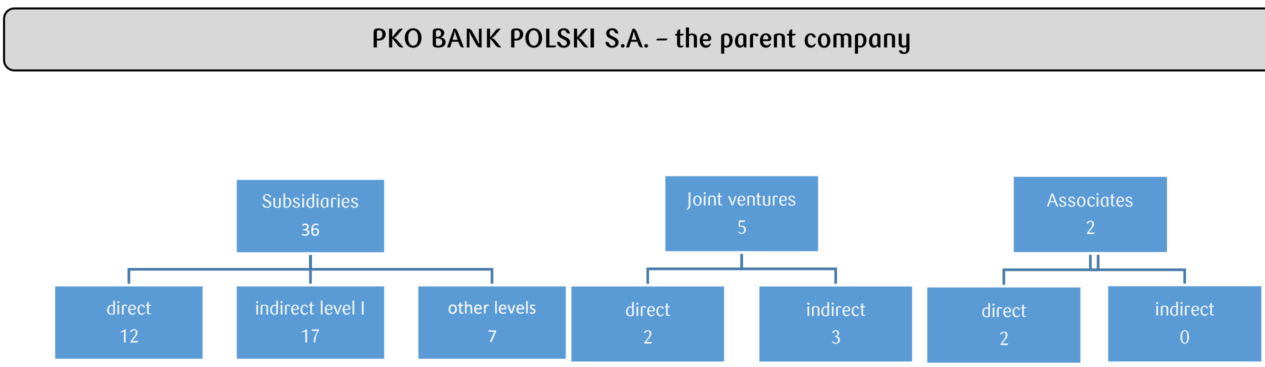
According to the Bulletin of the Warsaw Stock Exchange (Ceduła Giełdowa), the Bank is classified under the macro-sector "Finance", in the "Banks" sector.

The Powszechna Kasa Oszczędnościowa Bank Polski Spółka Akcyjna Group (**"THE PKO BANK POLSKI S.A. GROUP", "THE BANK'S GROUP", "THE GROUP"**) conducts its operations within the territory of the Republic of Poland and through subsidiaries in Ukraine, Sweden and Ireland; it also has branches in the Federal Republic of Germany ("the German Branch"), the Czech Republic ("the Czech Branch") and in the Slovak Republic ("the Slovak Branch").

PKO Bank Polski S.A., as the parent company, is a universal deposit and credit bank which services both Polish and foreign individuals, legal and other entities. The Bank may hold and trade in cash in foreign currencies, as well as conduct foreign exchange and foreign currency transactions, open and maintain bank accounts in banks abroad, and deposit foreign currency in those accounts.

Through its subsidiaries, the Group offers mortgage loans, provides specialized financial services related to leases, factoring, debt collection, investment funds, pension funds and insurance, as well as provides services related to car fleet management, transfer agent, technological solutions, IT outsourcing and business support, real estate management and also conducts banking operations and provides debt collection and financing services in Ukraine.

In 2022 and 2021, the Bank did not change the name of the reporting unit or other identification data.



(IN PLN MILLION)

The PKO Bank Polski S.A. Group consists of the following subsidiaries:

No.	ENTITY NAME	REGISTERED OFFICE	ACTIVITY	OWNERSHIP INTEREST (%)	
	DIRECT SUBSIDIARIES			31.12.2022	31.12.2021
1	PKO Bank Hipoteczny S.A.	Warsaw	banking activities	100	100
2	PKO Towarzystwo Funduszy Inwestycyjnych S.A.	Warsaw	investment fund management	100	100
3	PKO Leasing S.A.	Łódź	leases and loans	100	100
4	PKO BP BANKOWY PTE S.A.	Warsaw	pension fund management	100	100
5	PKO BP Finat sp. z o.o.	Warsaw	services, including transfer agent services and outsourcing of IT specialists	100	100
6	PKO Życie Towarzystwo Ubezpieczeń S.A.	Warsaw	life insurance	100	100
7	PKO Towarzystwo Ubezpieczeń S.A.	Warsaw	other personal insurance and property insurance	100	100
8	PKO Finance AB	Sollentuna, Sweden	financial services	100	100
9	KREDOBANK S.A.	Lviv, Ukraine	banking activities	100	100
10	Merkury - fiz an[1]	Warsaw	investing funds collected from fund participants	100	100
11	NEPTUN - fizan[1]	Warsaw		100	100
12	PKO VC - fizan[1]	Warsaw		100	100

[1] PKO Bank Polski S.A. holds investment certificates of the Fund; the percentage of the Fund's investment certificates held is presented in the item "Share in capital".

(IN PLN MILLION)

No.	ENTITY NAME INDIRECT SUBSIDIARIES	REGISTERED OFFICE	ACTIVITY	OWNERSHIP INTEREST (%)* 31.12.2022	 31.12.2021
	PKO Leasing S.A. GROUP				
1	PKO Agencja Ubezpieczeniowa sp. z o.o.	Warsaw	intermediation in concluding insurance agreements	100	100
1.1	PKO Leasing Finanse sp. z o.o.	Warsaw	sale of post-lease assets	100	100
2	PKO Leasing Sverige AB	Stockholm, Sweden	leasing	100	100
3	Prime Car Management S.A.	Gdańsk	leasing, fleet management	100	100
3.1	Futura Leasing S.A.	Gdańsk	leasing and sales of post-lease assets	100	100
3.2	Masterlease sp. z o.o.	Gdańsk	leasing	100	100
3.3	MasterRent24 sp. z o.o.	Gdańsk	short-term lease of cars	100	100
4	PKO Faktoring S.A.	Warsaw	factoring	100	100
	ROOF Poland Leasing 2014 DAC[1]	Dublin, Ireland	SPV established for securitization of lease receivables	-	-
5	Polish Lease Prime 1 DAC[2]	Dublin, Ireland		-	-
	PKO Życie Towarzystwo Ubezpieczeń S.A. GROUP				
6	Ubezpieczeniowe Usługi Finansowe sp. z o.o.	Warsaw	services	100	100
	KREDOBANK S.A. GROUP				
7	"KREDOLEASING" sp. z o.o.	Lviv, Ukraine	in organization	100	100
	Merkury - fiz an				
8	"Zarząd Majątkiem Górczewska" sp. z o.o.	Warsaw	property management	100	100
9	Molina sp. z o.o.	Warsaw	general partner in partnerships limited by shares of a fund	100	100
10	Molina spółka z ograniczoną odpowiedzialnością 1 S.K.A.	Warsaw	buying and selling real estate on own account, real estate management	100	100
11	Molina spółka z ograniczoną odpowiedzialnością 2 S.K.A.[3]	Warsaw		100	100
12	Molina spółka z ograniczoną odpowiedzialnością 4 S.K.A.[3]	Warsaw		100	100
	Molina spółka z ograniczoną odpowiedzialnością 5 S.K.A. w likwidacji (in liquidation)[4]	Warsaw		-	100
13	Molina spółka z ograniczoną odpowiedzialnością 6 S.K.A. w likwidacji (in liquidation)	Warsaw		100	100
	NEPTUN - fizan				
14	Qualia sp. z o.o.	Warsaw	after-sale services in respect of developer products	100	100
15	Sarnia Dolina sp. z o.o.	Warsaw	development activities	100	100
16	Bankowe Towarzystwo Kapitałowe S.A.	Warsaw	services	100	100
16.1	"Inter-Risk Ukraina" spółka z dodatkową odpowiedzialnością[5]	Kiev, Ukraine	debt collection	99.90	99.90
16.2	Finansowa Kompania "Prywatne Inwestycje" sp. z o.o.[6]	Kiev, Ukraine	financial services	95.4676	95.4676
16.2.1	Finansowa Kompania "Idea Kapitał" sp. z o.o.	Lviv, Ukraine	services	100	100
17	"Sopot Zdrój" sp. z o.o.	Sopot	property management	72.9769	72.9769

* share of direct parent in the entity's equity

1) In June 2022, the Company was deleted from the Irish register of companies and thus ceased to be part of the PKO Bank Polski S.A. Group. As at 31 December 2021, in accordance with IFRS 10, PKO Leasing S.A. exercised control over the Company, although it did not have an equity share in it

2) In accordance with IFRS 10, PKO Leasing S.A. exercises control over the company, although it does not have a capital share In it.

3) The company's Extraordinary General Shareholders' Meeting resolved to put the company into liquidation as of 1 December 2022 – the change had not been entered in the National Court Register by 31 December 2022.

4) The company's liquidation was completed in July 2022 and the company was deleted from the National Court Register.

5) Finansowa Kompania "Prywatne Inwestycje" sp. z o.o. is the second shareholder of the company.

6) "Inter-Risk Ukraina" – a company with additional liability – is the second shareholder of the company.

(IN PLN MILLION)

The Group has the following associates and joint ventures:

No.	ENTITY NAME	REGISTERED OFFICE	ACTIVITY	OWNERSHIP INTEREST (%)* 31.12.2022	31.12.2021
	Joint ventures of PKO Bank Polski S.A.				
1	Operator Chmury Krajowej sp. z o.o.	Warsaw	cloud computing services	50	50
2	Centrum Elektronicznych Usług Płatniczych eService sp. z o.o.	Warsaw	financial services support activities, including handling transactions concluded using payment instruments	34	34
	1 EVO Payments International s.r.o.	Prague, the Czech Republic	financial services support activities	100	100
	Joint venture NEPTUN - fizan				
	2 "Centrum Obsługi Biznesu" sp. z o.o.	Poznań	property management	41.45	41.45
	Joint venture PKO VC - fizan				
	3 BSafer sp. z o.o.	Stalowa Wola	managing marketing consents	35.06	35.06
	Associates of PKO Bank Polski S.A.				
1	Bank Pocztowy S.A.	Bydgoszcz	banking activities	25.0001	25.0001
2	"Poznański Fundusz Poręczeń Kredytowych" sp. z o.o.	Poznań	guarantees	33.33	33.33
3	System Ochrony Banków Komercyjnych S.A.	Warsaw	manager of the security system referred to in Article 130e of the Banking Law	21.11	-

* share in equity of the entity exercising joint control / having a significant impact / the direct parent.

2. CHANGES IN THE GROUP COMPANIES

In 2022, the following events occurred in the structure of the Group.

- liquidation of ROOF Poland Leasing 2014 (an entity from the PKO Leasing S.A. portfolio) was completed,
- liquidation of Molina spółka z ograniczoną odpowiedzialnością 5 S.K.A. w likwidacji (in liquidation) (an entity from the Merkury fiz an portfolio) was completed.

The aforementioned companies ceased to be members of the PKO Bank Polski S.A. Group.

On 1 August 2022, System Ochrony Banków Komercyjnych S.A. was entered into the National Court Register. The company manages the protection system referred to in Article 4(1)(9a) of the Banking Law, which was established by 8 commercial banks, including PKO Bank Polski S.A. The Bank acquired 21,113 shares of the company with a total nominal value of PLN 211,130, representing 21.1% of the share capital and carrying 21.1% of the votes at the company's General Meeting. The company was classified as an associate of the Bank.

With effect from 1 December 2022, the Extraordinary General Shareholders' Meeting of the companies: Molina spółka z ograniczoną odpowiedzialnością 2 S.K.A and Molina spółka z ograniczoną odpowiedzialnością 4 S.K.A resolved to put the companies into liquidation. These companies are members of the Bank Group and form the portfolio of MERKURY fiz an – a fund with a direct subsidiary of PKO Bank Polski SA. In January 2023, the above changes were entered in the National Court Register.

3. INFORMATION ON MEMBERS OF THE SUPERVISORY BOARD AND MANAGEMENT BOARD

Composition of the Bank's Supervisory Board as at 31 December 2022:

- Maciej Łopiński – Chair of the Supervisory Board
- Wojciech Jasiński – Deputy Chair of the Supervisory Board
- Dominik Kaczmarski – Secretary of the Supervisory Board
- Mariusz Andrzejewski – Member of the Supervisory Board
- Andrzej Kisielewicz – Member of the Supervisory Board
- Rafał Kos – Member of the Supervisory Board
- Tomasz Kuczur – Member of the Supervisory Board

- Krzysztof Michalski – Member of the Supervisory Board
- Robert Pietryszyn – Member of the Supervisory Board
- Bogdan Szafrański – Member of the Supervisory Board
- Agnieszka Winnik-Kalemba – Member of the Supervisory Board

The Bank's Annual General Meeting, in accordance with the Policy on the Assessment of Suitability of Candidates for Members and Members of the Supervisory Board of Powszechna Kasa Oszczędności Bank Polski S.A., conducted a periodic assessment of the suitability of the Supervisory Board, confirming the individual suitability of the Bank's Supervisory Board members and the collective suitability of the entire body.

On 17 October 2022, Mr Grzegorz Chłopek resigned as a member of the Bank's Supervisory Board with effect as of 17 October 2022.

On 18 October, the Extraordinary General Shareholders' Meeting of the Bank appointed Mr Robert Pietryszyn to the Bank's Supervisory Board.

Composition of the Bank's Management Board as at 31 December 2022:

- Paweł Gruza – Vice-President of the Management Board managing the work of the Management Board
- Maciej Brzozowski – Vice-President of the Management Board
- Marcin Eckert – Vice-President of the Management Board
- Wojciech Iwanicki – Vice-President of the Management Board
- Maks Kraczkowski – Vice-President of the Management Board
- Mieczysław Król – Vice-President of the Management Board
- Artur Kurcweil – Vice-President of the Management Board
- Piotr Mazur – Vice-President of the Management Board

On 26 January 2022, the Polish Financial Supervision Authority unanimously approved the appointment of Ms Iwona Duda as President of the Bank's Management Board and therefore on 26 January 2022, Ms Iwona Duda started performing the function of President of the Bank's Management Board.

On 24 March 2022, the Bank's Supervisory Board appointed Mr Maciej Brzozowski a Member of the Bank's Management Board for a joint term of office which started on 3 July 2020, and entrusted him with the position of Vice-President of the Bank's Management Board as of 25 March 2022.

On 9 August 2022, Ms Iwona Duda resigned as Chairman of the Bank's Management Board as well as from the Bank's Management Board itself as of the end of 9 August 2022. At the same time, the Bank's Supervisory Board appointed Mr Paweł Gruza as Vice-President of the Bank's Management Board as of 10 August 2022 for the current joint term of office of the Bank's Management Board, which commenced on 3 July 2020, and subject to the approval of the Polish Financial Supervision Authority and as of the date of such approval, appointed Mr Paweł Gruza as President of the Bank's Management Board. Until the approval by the Polish Financial Supervision Authority, the Supervisory Board has entrusted Mr Paweł Gruza with directing the work of the Management Board.

On 15 December 2022, the Bank's Supervisory Board removed Mr Bartosz Drabikowski from the Bank's Management Board. At the same time, the Supervisory Board resolved to appoint Mr Andrzej Kopyrski to the Bank's Management Board as Vice-President of the Bank's Management Board, effective 1 January 2023, for the current joint term of office of the Bank's Management Board, which commenced on 3 July 2020.

4. Approval of the consolidated financial statements

These consolidated financial statements of the Group (THE FINANCIAL STATEMENTS), subject to review by the Audit Committee and adoption by the Supervisory Board of the Bank on 9 March 2023, were approved for publication by the Management Board on 9 March 2023.

5. Representation by the Management Board

The Management Board hereby represents that, to its best knowledge, the financial statements of the Group and the comparative data have been prepared in accordance with the applicable accounting policies and give a true, fair and clear view of the Group's financial position and its results of operations.

6. STATEMENT OF COMPLIANCE

The financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU) as at 31 December 2022, and in the areas not regulated by these standards, in accordance with the requirements of the Accounting Act of 29 September 1994 and the respective secondary legislation issued on its basis, as well as the requirements relating to issuers of securities registered or applying for registration on the stock exchange official listing market.

7. GOING CONCERN

The financial statements have been prepared on the basis of the assumption that the Bank's Group will continue as a going concern for a period of at least 12 months from the date of approval for publication by the Management Board, i.e from 9 March 2023. As at the date of signing of these financial statements, the Management Board of the Bank did not identify any facts or circumstances which would indicate any threats to the Group's ability to continue in operation as a going concern for at least 12 months after the publication as a result of intended or forced discontinuing or significantly curtailing the existing operations of the Bank's Group.

The Management Board of the Bank considered the impact of: current situation in Ukraine, legal risk of mortgage loans in convertible currencies and credit holidays introduced by the Act on social financing for business ventures and assistance to borrowers, and assessed that these factors do not give rise to material uncertainty as to the ability of the Group to continue as a going concern.

The external business conditions covering the macroeconomic environment (e.g. a gradual slowdown of the economy in relation to external shocks, inflation, interest rate increases), the situation on the financial markets, the state of the Polish banking and non-banking sector, the regulatory and legal environment, as well as the factors that will affect future financial results are described in detail in the Management Board Report on the operations of the PKO Bank Polski S.A. Capital Group (note 2 "External conditions of operations").

Disclosures concerning: the situation in Ukraine are presented in the note "The impact of the geopolitical situation in Ukraine on the Capital Group of PKO Bank Polski S. A.", the legal risk of mortgage loans in convertible currencies in the notes "Cost of legal risk of mortgage loans in convertible currencies" and "Subsequent events" and loan holidays in the note "Loans and advances to customers".

8. THE BASIS FOR PREPARATION OF THE FINANCIAL STATEMENTS

Consolidated financial statements of the PKO Bank Polski S.A. Group cover the year ended 31 December 2022 and include comparative data for the year ended 31 December 2021. The financial data is presented in millions of Polish zlotys (PLN), unless otherwise indicated.

These financial statements have been prepared on a fair value basis in respect of financial assets and liabilities measured at fair value through profit or loss, including derivatives and financial assets measured at fair value through other comprehensive income. The remaining financial assets are recognized by the Group at amortized cost less allowances for expected credit losses. Other financial liabilities are recognized by the Group at amortized cost. Non-current assets are measured at acquisition cost less accumulated depreciation and impairment losses. Fixed assets or groups of assets classified as held for sale are recognized by the Group at the lower of their carrying amount and fair value less costs of disposal.

When preparing the financial statements, the Group makes estimates and adopts assumptions which directly affect both the financial statements and the supplementary information included therein. The estimates and assumptions applied by the Capital Group to report the value of assets and liabilities, as well as income and expenses are made using historical data and other factors that are available and considered appropriate in particular circumstances. Assumptions regarding the future and the available data are used for assessing the carrying amounts of assets and liabilities which cannot be clearly determined using other sources. In making estimates, the Group takes into consideration the reasons and sources of the uncertainties that are anticipated at the end of the reporting period. Actual results may differ from estimates.

Estimates and assumptions made by the Group are subject to periodic reviews. Changes in estimates are recognized in the period to which they relate.

(IN PLN MILLION)

DESCRIPTION OF MAJOR ACCOUNTING POLICIES

Major accounting policies and estimates and judgments applied in the preparation of these financial statements are presented in this Chapter and in individual notes further in the financial statements.

In all years presented, these accounting policies are applied consistently, with the exception of issues described in the note "Changes in the accounting policies applicable from 1 January 2022 and explanation of the differences between previously published financial statements and these financial statements".

9. FUNCTIONAL CURRENCY, PRESENTATION CURRENCY AND FOREIGN CURRENCIES

The functional currency of the parent and other entities included in these financial statements, except for the German Branch, the Czech Branch, the Slovak Branch and entities conducting their activities outside of the Republic of Poland, is the Polish zloty. The functional currency of the entities operating in Ukraine is the Ukrainian hryvnia, the functional currency of the German Branch, the Slovak Branch and the entities operating in Sweden and Ireland is the euro, and the functional currency of the Czech Branch is the Czech koruna.

- ### TRANSACTIONS AND BALANCES IN FOREIGN CURRENCIES

Transactions denominated in foreign currencies are translated into the functional currency at the exchange rate applicable on the transaction date. At the end of each reporting period, the Group translates:

- monetary items in foreign currencies – at the closing exchange rate, i.e. the mid-exchange rate quoted by the National Bank of Poland at the end of the reporting period;
- non-monetary items carried at historical cost in foreign currencies – at the exchange rate as at the date of the transaction;
- non-monetary items measured at fair value in a foreign currency are translated using the exchange rates prevailing as at the date of determination of the fair value.

Foreign exchange gains and losses arising from the settlement of such transactions and from the valuation of monetary and non-monetary assets and liabilities denominated in foreign currencies are recognized in the income statement.

UAH/PLN	2022	2021
Foreign exchange rates as at the end of the period	0.1258	0.1487
Arithmetic mean of exchange rates as at the last day of each month in the period	0.1354	0.1422
The highest exchange rate during the period	0.1467	0.1517
The lowest exchange rate during the period	0.1258	0.1332

Until 9 September 2022, i.e. until the date on which the Bank terminated the purchase of UAHs at bank outlets[1], the Group adopted the exchange rate quoted by the National Bank of Ukraine at which the Group exchanged UAH into PLN as the closing rate as of 31 March 2022. As at 31 December 2022, the Group has again adopted the mid-exchange rate of UAH as the closing rate quoted for this currency by the National Bank of Poland.

EUR/PLN	2022	2021
Foreign exchange rates as at the end of the period	4.6899	4.5994
Arithmetic mean of exchange rates as at the last day of each month in the period	4.6883	4.5775
The highest exchange rate during the period	4.8698	4.6834
The lowest exchange rate during the period	4.5756	4.4805

[1] In March 2022, PKO Bank Polski S.A signed an agreement with the National Bank of Poland (NBP) to carry out the purchase of the hryvnia at the Bank's outlets and its resale to the NBP at the exchange rate set by the National Bank of Ukraine. Implementation of the agreement was commenced by PKO Bank Polski S.A. on 25 March 2022 and the agreement with NBP was in effect until 9 September 2022.

(IN PLN MILLION)

CZK/PLN	2022	2021
Foreign exchange rates as at the end of the period	0.1942	0.1850
Arithmetic mean of exchange rates as at the last day of each month in the period	0.1909	0.1785
The highest exchange rate during the period	0.1980	0.1850
The lowest exchange rate during the period	0.1851	0.1727

10. Basis of consolidation

10.1. Subsidiaries

Subsidiaries are entities (including entities which are not incorporated, such as general partnerships) controlled by the parent company, which means that the parent company has a direct or indirect impact on the financial and operating policy of the given entity in order to gain economic benefits from its operations. The definition of control provides that:

1. an investor controls an investee when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee,
2. therefore, an investor controls an investee if and only if the investor has all of the following elements:
    - power over the investee,
    - exposure, or rights, to variable returns from its involvement with the investee, and
    - the ability to use its power over the investee to affect the amount of the investor's returns;
3. to have power over an investee, an investor must have existing rights that give it the current ability to direct the relevant activities; for the purpose of assessing power, only substantive rights and rights that are not protective shall be considered,
4. determining whether an investor has power depends on a significant activity, the way decisions are made on significant activities and rights held by the investor and other entities in relation to the entity in which the investment was made.

The PKO Bank Polski SA Group does not meet the definition of "an investment entity".

10.2. Consolidation

All subsidiaries of the PKO Bank Polski S.A. Group are consolidated using the acquisition method. The process of consolidation of financial statements of subsidiaries under the acquisition method involves adding up the individual items of the income statements and statements of financial position of the parent company and the subsidiaries in the full amounts, and making appropriate consolidation adjustments and eliminations. The following items are eliminated in full on consolidation:

- the carrying amount of the Bank's investments in subsidiaries and the equity of these entities at the date of their acquisition;
- inter-company receivables and payables and other settlements between consolidated entities of a similar nature;
- revenues and costs resulting from inter-company transactions between consolidated entities;
- profits or losses resulting from inter-company transactions between consolidated entities contained in the value of the consolidated entities' assets, except for impairment losses;
- dividends accrued or paid by subsidiaries to the parent company and other consolidated entities;
- inter-company cash flows in the statement of cash flows.

The consolidated statement of cash flows is prepared on the basis of the consolidated statement of financial position, consolidated income statement and additional notes and explanations.

Financial statements of subsidiaries are prepared for the same reporting periods as the financial statements of the parent company. Consolidation adjustments are made in order to eliminate any differences in the accounting policies applied by the Bank and its subsidiaries.

10.3. ACQUISITION OF SUBSIDIARIES (BUSINESS COMBINATIONS)

The acquisition of subsidiaries by the Group is accounted for under the acquisition method. As at the acquisition date, the acquirer recognises, separately from goodwill, the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree. The acquirer measures the identifiable assets acquired and the liabilities assumed at their acquisition-date fair values. In each and every business combination, all non-controlling interests in the acquiree are designated at fair value or on a pro rata basis in respect of the share of the non-controlling interest in the identifiable net assets of the acquiree.

Goodwill is recognized as at the acquisition date and measured as the excess of the total of:

1) the consideration provided, designated at fair value as at the date of the acquisition,
2) value of all non-controlling interests in the acquiree, measured in accordance with the above rules and
3) in the event of a business combination performed in stages, at fair value as at the date of acquiring interest in the capital of the acquiree, which had been previously owned by the Bank,

over the net amount of the value of identifiable assets and liabilities acquired, designated at fair value as at the acquisition date, determined as at the acquisition date.

If the net value, determined as at the acquisition date, of identifiable assets and liabilities acquired, designated at fair value as at the acquisition date is higher than the total of:

1) the consideration provided, designated at fair value as at the date of the acquisition,
2) value of all non-controlling interests in the acquiree, measured in accordance with the above rules and
3) in the event of a business combination performed in stages, at fair value as at the date of acquiring interest in the capital of the acquiree, which had been previously owned by the Bank,

the difference is recognised directly in the income statement.

In respect of mergers of the Group companies, i.e. the so-called transactions under joint control, the predecessor accounting method is applied, i.e. the acquired subsidiary is recognized at the carrying amount of its assets and liabilities recognized in the Group's consolidated financial statements in respect of the given subsidiary, including the goodwill arising from the acquisition of that subsidiary.

10.4. ASSOCIATES AND JOINT VENTURES

Associates are entities (including entities which are not incorporated, such as general partnerships) on which the Group exerts significant influence but whose financial and operating policies it does not control, which usually accompanies having from 20% to 50% of the total number of votes in the decision-making bodies of the entities.

Joint ventures are commercial companies or other entities, which are partly controlled by parent company or a significant investor and other shareholders or partners on the basis of the Memorandum of Association, company's agreement or an agreement concluded for a period longer than one year.

Investments in associates and joint ventures are accounted in accordance with the equity method and are initially stated at cost. The Group's investment in associates and joint ventures includes goodwill determined as at the acquisition date, net of any potential accumulated impairment allowances.

The Group's share in the results of associates and joint ventures from the acquisition date is recorded in the income statement and its share in changes in the balance of other comprehensive income from the acquisition date is recorded in other comprehensive income. The carrying amount of investments is adjusted by the total movements in the individual equity items from the acquisition date. When the Group's share in the losses of these entities becomes equal or higher than the Group's interest in such entities, including unsecured receivables (if any), the Group discontinues recognizing further losses, unless it has assumed the obligation or made payments on behalf of the particular entity.

At each balance sheet date, the Group makes an assessment of whether there is any evidence of impairment of investments in associates and joint ventures. If any such evidence exists, the Group estimates the recoverable amount, i.e. the value in use of the investment or the fair value of the investment less costs to sell, whichever of these values is higher. If the carrying amount of an asset exceeds its recoverable amount, the Group recognizes an impairment allowance in the income statement.

11. GENERAL ACCOUNTING POLICIES FOR FINANCIAL INSTRUMENTS

11.1. ACCOUNTING FOR TRANSACTIONS

Financial assets and financial liabilities, including forward transactions and regular-way transactions, which carry an obligation or a right to purchase or sell in the future an agreed number of specified financial instruments at a fixed price, are entered into the books of account under the date of the contract, irrespective of the settlement date provided in the contract.

11.2. OFFSETTING FINANCIAL INSTRUMENTS

The Group offsets financial assets and liabilities and reports in the consolidated financial statements from the net financial position, if there is a legally enforceable right to offset the recognised amounts and an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

11.3. DERECOGNITION OF FINANCIAL INSTRUMENTS FROM THE STATEMENT OF FINANCIAL POSITION

Financial assets are derecognized from the statement of financial position when contractual rights to the cash flows from the financial asset expire or when the Group does not have justified prospects for recovering the given financial asset in full or in part, or when the financial asset is transferred by the Group to another entity. The financial asset is transferred when the Group:

- transfers contractual rights to cash flows from the financial asset, or
- retains contractual rights to cash flows from the financial asset, but assumes a contractual obligation to transfer these cash flows to a third party.

When transferring a financial asset, the Group makes an assessment of the extent to which it retains the risks and rewards of the ownership of the financial asset.

- If substantially all risks and benefits associated with holding a given financial asset are transferred, the financial asset is eliminated from the statement of financial position;
- If the Group retains substantially all risks and rewards of ownership of a financial asset, the Group continues to present the financial asset in the statement of financial position;
- If the Group neither transfers nor retains substantially all risks and rewards of ownership of a financial asset, the Group determines whether or not it has retained control over the financial asset. If the Group has retained control, it continues to recognize the financial asset in the statement of financial position to the extent of its continuing involvement in the financial asset; if control has not been retained, the financial asset is derecognized from the statement of financial position.

The Group derecognizes a financial liability (or a part thereof) from its statement of financial position when the contractual liability has been settled, cancelled, or has expired.

The Group excludes financial assets from the statement of financial position when, among other things, they are subject to invalidation by a final court judgement, cancellation by prescription or they are uncollectible. When the said assets are derecognized, they are charged to the respective credit loss allowances or losses in respect of legal risk (in case of invalidation of CHF loans).

In the event that no allowances have been recognised, or if the amount of the allowance is less than the amount of the financial asset, the amount of the credit loss allowance is increased by the difference between the value of the asset and the amount of the allowance that has been recognized to date.

11.4. THE PRINCIPLES FOR CLASSIFICATION OF FINANCIAL INSTRUMENTS

The Group classifies financial assets into the following categories:

- measured at amortized cost;
- measured at fair value through other comprehensive income;
- measured at fair value through profit or loss.

The Group classifies financial liabilities into the following categories:

- measured at amortized cost;

- measured at fair value through profit or loss.

Classification of financial assets as at the date of their acquisition or origin depends on the business model adopted by the Group to manage a given group of assets and the characteristics of the contractual cash flows from a single asset or group of assets. The Group identifies the following business models:

- the "HELD TO COLLECT" cash flows model, in which financial assets originated or acquired are held in order to collect benefits from contractual cash flows – this model is typical for lending activities;
- "HELD TO COLLECT AND SELL" model - a model in which financial assets originated or acquired are held to collect benefits from contractual cash flows, but they may also be sold (frequently and in transactions of a high volume) – this model is typical for liquidity management activities;
- THE RESIDUAL MODEL – other than the "held to collect" or the "held to collect and sell" cash flows model.

- **BUSINESS MODEL**

The business model is determined by the Group upon initial recognition of financial assets. The Group determines the business model at the level of individual groups of assets, in the context of the business area in connection with which the financial assets originated or were acquired, and is based, among other things, on the following factors:

- the method for assessing and reporting the results of the financial assets portfolio;
- the method for managing the risk associated with such assets and the principles of remunerating the persons managing such portfolios.

In the "held to collect" business model, assets are sold occasionally, in the event of an increase in credit risk or a change in the laws or regulations. The purpose of selling the assets is to maintain the assumed level of regulatory capital. Assets are sold in accordance with the principles described in the portfolio management strategy or close to maturity, in the event of a decrease in the credit rating below the level assumed for a given portfolio, significant internal restructuring or acquisition of another business, the performance of a contingency or recovery plan or another unforeseeable factor over which the Group has no influence.

- **ASSESSMENT OF CONTRACTUAL CASH FLOW CHARACTERISTICS**

The assessment of the contractual cash flow characteristics establishes, based on a TEST OF CONTRACTUAL CASH FLOWS, whether contractual cash flows are solely payments of principal and interest on the principal amount outstanding (hereinafter "SPPI"). Interest comprises the payment for the time value of money and the credit risk associated with the outstanding principal over a specified period, and for other basic risks and costs relating to granting the financing, as well as a profit margin.

Contractual cash flow characteristics do not affect the classification of the financial asset if:

- their effect on the contractual cash flows from that asset could not be significant (de minimis characteristic);
- they are not genuine, i.e. they affect the contractual cash flows from the instrument only in the case of occurrence of a very rare, unusual or very unlikely event (non-genuine characteristic).

In order to make such a determination, the potential impact of the contractual cash flow characteristics in each reporting period and throughout the whole life of the financial instrument is considered.

The SPPI test is performed for each financial asset in the "held to collect" or "held to collect and sell" models upon initial recognition (and for substantial modifications after subsequent recognition of a financial asset).

In the case of financial assets having characteristics associated with sustainable development (green loans, where a customer may benefit from a reduced margin upon presentation of an energy efficiency certificate), the cash flow changes are assessed taking into account the possible impact of the characteristic associated with sustainable development in every reporting period and cumulatively throughout the lending period. It is also considered whether the impact of this characteristic on contractual cash flows is associated with credit risk. If, along with an increase or decrease in credit risk, the interest rate increases or decreases, which indicates a positive relation between the loan margin and the credit risk level, the SPPI criteria are not violated and therefore the SPPI Test criterion is met.

The Group analyses, among other things, the following features of financial assets which result in the SPPI test being failed:

- leverage in the design of interest rate, understood as a multiplier higher than 1;

- a creditor's right to participate in the profit – contractual cash flows are not only the repayment of principal and interest on the outstanding principal;
- limitation of the debtor's liabilities (resulting in a non-recourse asset);
- early repayment and extension option contingent on a future economic event which does not relate to the agreement, particularly an event not related to a change in the borrower's credit risk level;
- covenants providing for an increase or decrease in interest rate in line with an increase or decrease in credit risk, which reflects a negative relation between the loan margin and the level of credit risk;
- interest rates unilaterally determined by the Group (administered interest rates), if they do not approximate variable market rates.

If the qualitative assessment performed as part of the SPPI test is insufficient to determine whether the contractual cash flows are solely payments of principal and interest, a benchmark test (QUANTITATIVE ASSESSMENT) is performed to determine the difference between the (non-discounted) contractual cash flows and the (non-discounted) cash flows that would occur should the time value of money remain unchanged (the reference level of cash flows).

11.5. FINANCIAL ASSETS MEASURED AT AMORTIZED COST

Financial assets (debt financial assets) are measured at amortized cost, provided that both the following conditions are met:

- a financial asset is held in accordance with the "held to to collect" business model,
- the terms and conditions of an agreement concerning the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding (the SPPI test is passed).

Upon initial recognition, these financial assets are measured at fair value. The initial value of an asset measured at amortized cost is adjusted by all commissions and fees which affect its effective return and constitute an integral element of the effective interest rate of this asset (commissions and fees arising in connection with activities performed by the Group, and leading to the origination of the assets).

The carrying amount of this category of assets is determined using the effective interest rate described in the note "Interest income and expenses", which is used to determine (calculate) the interest income generated by the asset in a given period, adjusting it for expected credit loss allowances.

Assets for which the schedule of future cash flows necessary for calculating the effective interest rate cannot be determined, are not measured at amortized cost. Financial assets recognized in this item are measured at amounts due, including interest on receivables, taking into account allowances for expected credit losses. Commissions and fees connected with the arising of or decisive for the financial qualities of such assets should be settled over the period of life of the asset using the straight-line method, and are included in commission income.

If the timing of future cash flows and, consequently, the effective interest rate, cannot be determined, the receivables are measured at the amount due.

11.6. FINANCIAL ASSETS MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Financial assets (including debt instruments) are measured at fair value through other comprehensive income if both the following conditions are met:

- the financial asset is held in accordance with the business model aimed at both receiving contractual cash flows and selling the asset; and
- the terms and conditions of an agreement concerning the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding (the SPPI test is passed).

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price), whether or not this price is directly observable or estimated using another valuation technique. For methods of determining fair value, see note "FAIR VALUE HIERARCHY".

Financial assets measured at fair value through other comprehensive income are measured at fair value. The effects of changes in the fair value of such financial assets until derecognition or reclassification are recognized in other comprehensive income, except for income of a similar nature to interest income, net allowances for expected credit losses and foreign exchange gains or losses, which are recognized in profit or loss.

The gain or loss recognized in other comprehensive income constitutes the difference between the fair value of a financial asset as at the measurement date and the value of the asset at amortized cost.

The gains and losses arising from disposal of financial instruments designated as financial assets measured at fair value through profit or loss and the effect of their measurement at fair value are recognised in profit or loss under the heading "Gains/(losses) on financial transactions".

Income similar to interest income on instruments measured at fair value through profit or loss are recognised in profit or loss under the heading "Interest income and expenses".

If a financial asset has been derecognized, accumulated gains and losses previously reported in other comprehensive income are reclassified from other comprehensive income to financial profit or loss in the form of a reclassification adjustment.

11.7. FINANCIAL ASSETS MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS

If financial assets do not meet the aforementioned qualification criteria to be measured at amortized cost or at fair value through other comprehensive income, the Group classifies them as financial assets measured at fair value through profit or loss

In addition, upon initial recognition, a financial asset may be irrevocably designated as measured at fair value through profit or loss (the option of measurement at fair value through profit or loss), provided that this will eliminate or significantly reduce inconsistency in the measurement or recognition which would arise as a result of measuring assets or liabilities, or recognizing the related gains or losses according to different accounting principles (accounting mismatch). This option is available for debt instruments both under the "hold to collect", and "hold to collect and sell" models.

In the Group's financial statements, financial assets measured at fair value through profit or loss are presented as follows:

- held for trading - financial assets which:
  - are acquired or incurred principally for the purpose of selling or repurchasing it in the near term; or
  - on initial recognition are part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
  - are a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).
- financial assets that are not held for trading and must be measured at fair value through profit or loss – financial assets that have not passed the test of contractual cash flow characteristics (irrespective of the business model); or financial assets classified to the residual model;
- financial assets designated to be measured at fair value through profit or loss at initial recognition (option to measure at fair value through profit or loss).

Gains or losses on assets measured at fair value through profit or loss are recognized in profit or loss. Gains or losses on the measurement of the financial asset at fair value comprise the difference between the fair value of the asset and its value at amortized cost determined as at the measurement date.

11.8. EQUITY INSTRUMENTS

Investments in equity instruments are measured at fair value through profit or loss.

The Group chose not to measure investments in equity instruments at fair value through other comprehensive income.

11.9. RECLASSIFICATION OF FINANCIAL ASSETS

Financial assets may be reclassified only in the event of a change in the business model relating to an asset or a group of assets resulting from the commencement or discontinuation of a material part of operations. Such changes are very infrequent. Reclassification is presented prospectively, i.e. without changing the effects of fair value measurements, allowances or accrued interest recognised to date.

The following are not treated as changes in the business model:

- a change in intention related to particular financial assets (even in circumstances of significant changes in market conditions);

- the temporary disappearance of a particular market for financial assets;
- a transfer of financial assets between areas of operation with different business models.

Financial liabilities are not reclassified.

11.10. MODIFICATIONS – CHANGES IN CONTRACTUAL CASH FLOWS

Modification – understood as a change in the contractual cash flows in respect of a financial asset based on an annex to the contract, may be substantial or non-substantial. A change in the contractual cash flows resulting from execution of the terms of the contract is not a modification.

When the contractual cash flows of a financial asset are renegotiated or otherwise modified based on an annex to the agreement or by general legislation, and the renegotiation or modification does not result in the derecognition of that financial asset ("NON-SUBSTANTIAL MODIFICATION"), the gross carrying amount of the financial asset is recalculated and gain or loss arising from such modification is recognized in profit or loss (as income or interest costs).

An adjustment of the carrying amount of a financial asset resulting from the modification is recognized in interest income/ expenses over time using the effective interest rate method. The gross carrying amount of the financial asset is calculated as the present value of renegotiated or modified cash flows resulting from the agreement, discounted at the original effective interest rate of the financial assets (or credit-adjusted effective interest rate for purchased or originated credit-impaired financial assets) or, if applicable (e.g. with respect to gain or loss on a hedged item resulting from hedging), the revised effective interest rate. Any costs or fees incurred adjust the carrying amount of the modified financial asset and are amortized over the remaining part of the life of the modified financial asset.

In certain circumstances, renegotiation or modification of contractual cash flows associated with a financial asset may lead to derecognition of the financial asset. If an existing financial asset is derecognized due to its modification, and a modified asset is subsequently recognized, the modified asset is treated as a "new" financial asset ("A SUBSTANTIAL MODIFICATION"). The new asset is recognized at the fair value and a new effective interest rate applicable to the new asset is calculated. If the characteristics of a modified new financial asset (after signing an annex) comply with the arm's length conditions, the carrying amount of that financial asset is equal to its fair value.

The assessment whether a given modification of financial assets is a substantial or a non-substantial modification depends on satisfaction of certain quantitative and qualitative criteria.

The following QUALITATIVE CRITERIA have been adopted:

- currency conversion;
- change of debtor, other than caused by the debtor's death;
- introducing or removing a contractual characteristic that adversely affects the test of cash flow characteristics (SPPI test) or removal of these features;

The occurrence of at least one of these criteria results in a substantial modification.

The QUANTITATIVE CRITERION consists of a 10% test analysing the change in the contractual terms of a financial asset resulting in a difference between the amount of future cash flows arising from the changed financial asset discounted using the original effective interest rate and the amount of the future cash flows that would arise from the original financial asset discounted using the same interest rate. The other quantitative criterion is an increase in a debtor's exposure, which includes an increase in the capital and off-balance sheet liabilities granted of more than 10% in relation to the amount of capital and off-balance sheet liabilities prior to the increase for each individual exposure. The third criterion is the extension of the original term of cash loans, business loans serviced in branch by more than 1 year and by more than double the residual term; cash loans, business loans handled by collection units by more than 1 year; home loans serviced in branch and handled by collection units by more than 4 years.

In the event of the occurrence of a quantitative criterion (a difference) of more than 10%, the modification is considered substantial, whereas a quantitative criterion of 10% or less means that the modification is considered non-substantial.

Derecognition of financial instruments measured at fair value through other comprehensive income or at amortized cost typically relates to a sale or a substantial modification of such assets.

11.11. Measurement of purchased or originated credit-impaired financial assets (POCI)

IFRS 9 distinguishes a category of purchased or originated credit-impaired assets (hereafter "POCI" - purchased or originated credit-impaired asset).

POCI assets comprise debt financial assets measured at amortized cost and measured at fair value through other comprehensive income, i.e. loans and debt securities.

Such assets are initially recognized at the net carrying amount (net of allowances), which corresponds to their fair value. Interest income on POCI assets is calculated based on the net carrying amount using the effective interest rate adjusted for credit risk recognized over the life of the asset. The credit-adjusted effective interest rate is calculated taking into account future cash flows adjusted for the effect of credit risk recognized over the life of the asset. The change in estimates of future recoveries in further reporting periods is recognized as a gain or loss on expected credit losses.

11.12. Measurement of financial liabilities

Liabilities in respect of a short position in securities and some of the liabilities in respect of insurance products are measured at fair value through profit or loss.

Other financial liabilities are measured at amortized cost using the effective interest rate method. In the case of financial liabilities for which it is not possible to estimate the schedule of future cash flows and the effective interest rate, they are measured at the amount due.

12. Environmental issues

Due to the nature of its business activities, the Bank's and the Group's direct impact on the natural environment is limited to the consumption of natural resources. Indirect environmental impact involves the Bank's provision of financing the Bank's product offering. The Group mitigates its direct impact on the environment and adjusts its lending policies addressed to the various sectors of the economy in order to also motivate its customers to mitigate their environmental impact.

Issues relating to the Group's environmental impact and the pro-environmental initiatives undertaken by it are described in the Management Board's Report on the operations of the PKO Bank Polski S.A. Group for 2022 in the following chapters:

- 13.4 "Non-financial factors in the Bank's strategy",
- 13.5 "Key non-financial performance indicators",
- 13.7 "Material topics: management and risks", including: 13.7.6 "Environment", 13.7.7 "Climate" and 13.7.8 "Sustainable development".

From 2021 onwards, ESG risks have been included in the Group's risk management strategy. For issues related to ESG risk management, see note "ESG risk management".

This note describes the impact of climate-related factors on the specific components of the Group's financial statement, including in particular the impact of climate risk on the measurement of the expected credit losses and concentration of credit risk.

- **Sources of uncertainty of estimates, significant judgments and the ability to continue as a going concern**

The Group is exposed to climate risk, including:

- physical risk (e.g. risk arising from more frequent/severe weather events); and
- economic transformation and climate change risk (e.g. risk associated with transition to less polluting, low-emission economy, extremization of the seasons).

The climate risk may potentially affect the estimates and assessments applied by the Group (including those used in the calculation of allowances for expected credit losses).

As detailed below, there were no significant climate-related estimates or judgements in the Group that would materially affect the values recognised in these financial statements.

Climate-related issues do not present a threat to the Group's ability to continue in operation as a going concern in the period of 12 months after the approval of these financial statements by the Management Board for publication.

- **CLASSIFICATION AND MEASUREMENT OF FINANCIAL INSTRUMENTS AT FAIR VALUE**

The climate risk may affect the expected cash flows from loans granted and, therefore, expose the Group to credit losses. The borrower-specific attributes, physical risk and transition risk may (individually or in combination) affect the expected cash flows, as well as the potential future economic scenarios which are taken into account in the measurement of expected credit losses.

The impact of climate-related risk factors on the expected credit losses will vary depending on the severity and duration of the anticipated climate threats, their direct and indirect impact on the borrower and the lender's loan portfolio, and the loan portfolio duration.

The impact of climate-related risk factors on the Group's expected credit losses is potentially limited, as the Capital Group, given the relatively short duration of many bank loan portfolios, expects that the most significant implications of climate change will occur in the medium to long term, and will potentially reduce today's impact on ECL. At the same time, it is important to monitor the rate and scale of such changes and their possible effect on the measurement of the allowances for expected credit losses. In the lending process for corporate corporate customers and SME customers evaluated with the use of the rating method, the Group each time assesses the impact of environmental, social and governance factors (ESG factors) on the Customer's creditworthiness, and identifies credit transactions with an increased financial leverage (levered transactions). The Group also examines the impact of credit transactions on ESG and classifies them to four categories, from transactions with a positive impact on ESG to those with a material negative impact. In assessing ESG factors, the Group takes into account, among others, the risk of climate change and the impact on the customer's business, the possible impact of the customer on climate change, factors related to human capital or health and safety, as well as factors related to aspects of governance (including organisational culture and internal supervision).

In the fair value measurement of financial instruments classified to level 3 of fair value the Group does not use unobservable data relating to climate risk:

- debt securities classified at level 3 – generally constitute financing of business entities from industries not exposed to significant climate risk (e.g. insurance companies, developers),
- granted loans classified as level 3 – they generally represent financing for households and their fair value is estimated by applying the discounted cash-flow method using an effective credit spread,
- not listed shares in other entities classified as level 3 – they do not include companies from sectors which are exposed to significant climate risk.

- **PROPERTY, PLANT AND EQUIPMENT, PROPERTY, PLANT AND EQUIPMENT LEASED OUT UNDER OPERATING LEASE AND INTANGIBLE ASSETS**

Climate-related issues do not affect depreciation and amortization recognized by the Group as at 31 December 2022 and 2021. Moreover, climate-related factors did not cause any indications of impairment of non-financial assets and did not affect their recoverable value as at 31 December 2022 and 2021.

It should be noted, though, that the potential impact of climate change risk, understood as a sudden, rapid transformation of the economy towards lower emissions (a rapid generation change of a significant class of assets in financing) may ultimately be important for the Group's lease entities.

- **INVENTORIES –** Climate-related issues do not affect the carrying amount of the inventories held by the Group as at 31 December 2022 and 2021.
- **TAXES** Climate-related issues do not affect deferred income tax assets recognized by the Group as at 31 December 2022 and 2021.
- **PROVISIONS AND LITIGATION** As at 31 December 2022 and 2021, there were no proceedings involving any climate or environmental issues at the Group. In the years 2021 to 2022, the Group was not subject to administrative proceedings related to violations of environmental regulations or climate impacts that resulted in the imposition of fines.
- **INSURANCE ACTIVITIES**

  Intensification of extreme weather phenomena, including in particular the risk of flood, is a specific instance of physical risk to insurance activities. The effect of this risk on the financial results and solvency is mitigated mainly by risk selection and a properly structured reinsurance programme. Insurance companies calculate the capital requirement for catastrophic risk and analyse the stress test scenarios for flood risk.

(IN PLN MILLION)

At present, insurance companies do not have environmental taxonomy for investment assets due to the fact that they do not offer new investment products.

In the case of insurance activities (property insurance), climate risk is taken into account in the valuation of liabilities, i.e. it is taken into account in the amount of the premium. Premium reserve is recognized in the amount of premium attributable to future periods. In particular, flood risk provisions as at 31 December 2022 can be estimated at PLN 8.2 million (as at 31 December 2021 - PLN 3 million) – the significant increase during the year is due to the dynamic growth of the home insurance portfolio. Upon the occurrence of an event constituting materialization of climate risk, insurance companies also recognize provisions for losses.

In the case of life insurance activities, the said risk is not sufficiently material to allow quantification of liabilities - they are valued based on an assessment of the cumulative probability of occurrence of insured events.

The ESG measures taken by the Group's insurance companies are described in note "ESG risk management".

13. CHANGES IN ACCOUNTING POLICIES APPLICABLE FROM 1 JANUARY 2022 AND EXPLANATION OF THE DIFFERENCES BETWEEN PREVIOUSLY PUBLISHED FINANCIAL STATEMENTS AND THESE FINANCIAL STATEMENTS

In order to better reflect its operations and ensure comparability with the banking sector, the Group made the following changes in its accounting policies with respect to:

1. INCOME STATEMENT

- **RECLASSIFICATION OF CARD-RELATED COSTS (1)**

Starting from the first quarter of 2022, the Group has presented card-related costs in net fee and commission income under card-related costs. Previously, they have been presented in administrative expenses as material costs.

- **RECLASSIFICATION OF THE COSTS OF TRANSPORT OF CASH TO THE GROUP'S CUSTOMERS (2)**

Starting from the first quarter of 2022, the Group has presented the costs of transport of cash in net fee and commission income under the costs of bank accounts relating to clearing services. Previously, they have been presented in administrative expenses as material costs of IT services.

- **RECLASSIFICATION OF THE COSTS OF VOLUNTARY MEMBERSHIP FEES (3)**

Starting from the first quarter of 2022, the Group has presented the costs of voluntary membership fees as a component of other operating expenses. Previously, these costs were presented as administrative expenses.

INCOME STATEMENT – SELECTED ITEMS	01.01-31.12.2021 before restatement	(1)	(2)	(3)	01.01-31.12.2021 restated
Net fee and commission income	**4 431**	**(50)**	**(4)**	-	**4 377**
Fee and commission expense	(1 165)	(50)	(4)	-	**(1 219)**
Other net income	**777**	-	-	**(3)**	**774**
Net other operating income and expense	59	-	-	(3)	**56**
Result on business activities	**15 090**	**(50)**	**(4)**	**(3)**	**15 033**
Administrative expenses	(6 174)	50	4	3	**(6 117)**
of which net regulatory charges	(645)	-	-	3	**(642)**
Net profit attributable to equity holders of the parent company	4 874	-	-	-	4 874

2. STATEMENT OF FINANCIAL POSITION

In the consolidated statement of financial position, the line entitled "Receivables in respect of insurance activities" was changed to "Assets in respect of insurance activities".

(IN PLN MILLION)

3. Cash flow statements

From the financial statements for 2022 onwards:

- the item “interest and dividends” in the section on cash flows from operating activities has been split into “interest and dividends received” and “interest paid” (1).
- cash flows from property assets leased under operating leases were reclassified from investing activities to operating activities (2).

CASH FLOWS – SELECTED DATA	01.01-31.12.2021 before restatement	(1)	(2)	01.01-31.12.2021 restated
Interest and dividends (old item)	(1 863)	-	-	-
Interest and dividends received (new item)	-	(2 280)	-	(2 280)
Interest paid (new item)	-	417	-	417
property, plant and equipment under operating lease (new item)	-	-	(416)	(416)
Net cash from/used in operating activities	**33 211**	**-**	**(416)**	**32 795**
Inflows from investing activities	**63 534**	-	**(271)**	**63 263**
Sale of intangible assets and property, plant and equipment	**466**	-	**(271)**	**195**
Outflows on investing activities	**(77 249)**	-	**687**	**(76 562)**
Purchase of intangible assets and property, plant and equipment	(1 717)	-	687	(1 030)
Net cash from/used in investing activities	**(13 715)**	**-**	**416**	**(13 299)**

14. IFRS 17 “Insurance contracts”

International Financial Reporting Standard 17 Insurance Contracts ('IFRS 17') was published by the International Accounting Standards Board in May 2017 and amended by it in June 2020 and on 9 December 2021[2]. IFRS 17 was endorsed for use in European Union countries on 19 November 2021 by Regulation 2021/2036 of the European Union.

The aim of the new standard is to introduce new uniform rules for the measurement of insurance and reinsurance contracts, ensuring greater comparability of reporting between providers of insurance products, and to provide a number of new disclosures for the use of financial statement users.

This standard is mandatorily applicable from 1 January 2023. IFRS 17 will replace IFRS 4 “Insurance Contracts”, which enabled entities to recognize insurance contracts according to the accounting principles based on the national standards.

IFRS 17 will change the recognition, measurement, presentation and disclosure of insurance contracts distributed by Group companies, both as products linked to, among others, mortgage loans, cash loans and leasing products, and as stand-alone products.

The Group has implemented the standard in the retrospective full and modified approach for the part of the portfolio.

The implementation of IFRS 17 as at 1 January 2022 resulted in an increase in assets by PLN 557 million, liabilities by PLN 273 million and equity by PLN 284 million. For a detailed description of the impact of adjustments due to the implementation of IFRS 17, see Section 14.3. Impact assessment - classification and measurement.

The presented effect of the adjustments arising from the implementation of IFRS17 on the Group's assets, liabilities and equity, to the best of our knowledge, is the best estimate at the time of publication of these consolidated financial statements.

[2]The amendment to the transition requirements in IFRS 17 allows companies to overcome one-time classification differences of comparative information of the previous reporting period upon initial application of IFRS 17 and IFRS 9 Financial Instruments.

14.1. IMPLEMENTATION SCHEDULE

Starting in 2020, the Group's insurance companies are implementing the IFRS 17 implementation project, with support from the External Advisor from 2021. The scope of the project primarily includes the development of a methodology and the implementation of a dedicated tool to perform actuarial calculations in line with the requirements of IFRS 17.

In the second quarter of 2022, a project coordinated by the Bank and supported by the External Advisor commenced, where the scope of work related to the implementation of IFRS 17 was extended to the Group, including the Bank and the Group's leasing companies. The project coordinated by the Accounting and Reporting Department also involves employees of the Tax Department, Planning Department and Control Department, Credit Risk Management Department, as well as employees from business, settlement and IT. In addition, representatives of subsidiaries are involved in the project: PKO Leasing S.A., PKO Życie Towarzystwo Ubezpieczeń S.A and PKO Towarzystwo Ubezpieczeń S.A.

As part of the work carried out as part of the projects:

- a gap analysis of existing legislation (IFRS 15, IFRS 9, IFRS 4, Recommendation U) versus the requirements of IFRS 17 was prepared;
- a concept was developed on how to implement IFRS 17 and its impact on the method of consolidation, the structure of the balance sheet and the income statement, taking into account tax and capital adequacy issues;
- a detailed valuation methodology has been developed for each type of contract;
- adjustments were calculated for the opening balance sheet as at 1 January 2022 and for the comparable periods of 2022, resulting from the implementation of IFRS 17;
- Group accounting policies regarding IFRS 17 have been developed;
- templates for disclosures in the financial statements from 1 January 2023 onwards have been prepared;
- the concept of IT solutions was developed (identification of data sources, construction of input and output data repositories to facilitate the automation of recalculations, construction of an actuarial recalculation tool, operationalization of their generation);

14.2. MEASUREMENT AND PRESENTATION OF INSURANCE PRODUCTS

The key differences in the measurement and presentation of insurance products that apply to the Group and that will come into effect upon implementation of IFRS 17 are presented below.

14.2.1. IFRS 17 KEY ASSUMPTIONS

IFRS 17, as a new accounting standard, will change the recognition, measurement, presentation and disclosure of insurance contracts. The standard applies to insurance contracts, reinsurance contracts and investment contracts with discretionary profit-sharing.

The new standard defines an insurance contract as a contract in which one party accepts a significant insurance risk from the policyholder and undertakes to compensate the insured for an adverse effect arising from, an uncertain future event. This definition is in principle consistent with the definition in IFRS 4

The standard will not apply to, among others, investment contracts, product guarantees issued by the manufacturer, loan guarantees, catastrophe bonds and so-called weather derivatives (contracts that require a payment based on a climatic, geological or other physical variable that is not specific to a party to the contract).

The biggest impact on the occurrence of differences compared to the current IFRS 4 will have:

- the valuation of liabilities and assets under insurance contracts, which will be:
  - based on the value of the best estimate of future cash flows;
  - reflect the time value of money;
  - include the risk adjustment for non-financial risk;
  - include the expected value of future profits;
- recognition of expected profits for the group of insurance contracts over time, in proportion to the so-called coverage units, corresponding to the level of service provided by the insurance company in each reporting period;
- recognition of entire expected loss on insurance contracts at the point at which the entity assesses that the contract is onerous, which may be at the date of initial recognition of that contract or at subsequent measurement;

- separate (from direct business contracts) measurement of liabilities and assets for outward reinsurance.

For measurement purposes, insurance contracts are aggregated into groups of contracts. Groups of contracts are defined by first identifying portfolios comprising contracts subject to similar insurance risks and managed together. Each portfolio is then divided into quarterly cohorts (i.e. by policy recognition date) and each quarterly cohort into the following three groups:

- a group of contracts that are onerous at initial recognition;
- a group of contracts that at initial recognition have no significant possibility of becoming onerous subsequently; and
- a group of the remaining contracts in the portfolio.

Cash flows within the boundary of an insurance contract are those that relate directly to the fulfilment of the contract, including cash flows for which the entity has discretion over the amount or timing.

The cash flows within the boundary include:

- premiums (including premium adjustments and instalment premiums) from a policyholder and any additional cash flows that result from those premiums;
- payments to (or on behalf of) a policyholder, including claims that have already been reported but have not yet been paid (i.e. reported claims), incurred claims for events that have occurred but for which claims have not been reported and all future claims for which the entity has a substantive obligation;
- an allocation of insurance acquisition cash flows attributable to the portfolio to which the contract belongs;
- claim handling costs;
- costs the entity will incur in providing contractual benefits paid in kind;
- policy administration and maintenance costs;
- taxes on transactions.

Separate presentation of outward reinsurance contracts and insurance and reinsurance contracts is required under the new standard.

Within each of these two groups, separate presentation is required for assets and liabilities of portfolios depending on whether the sum of the balance sheet items making up the insurance portfolio measurement is a net asset or liability.

In addition, only the aggregate asset and liability position of insurance contracts will be presented on the balance sheet without distinguishing items such as premium receivables and payables, the balance of acquisition costs or insurance technical reserves.

The standard also requires quantitative and qualitative disclosures, with a focus on the expert judgements applied and the entity's risk profile.

14.2.2. THE CURRENT MODEL FOR THE MEASUREMENT AND RECOGNITION OF INSURANCE PRODUCTS, INCLUDING THOSE LINKED TO LOANS AND ADVANCES

The Group recognises net income on insurance activities under commission income – in the line “offering insurance products” which comprises premium income, costs of insurance activities, claims and change in technical reserves, and the impact of the reinsurer’s share in the aforementioned items.

Due to the fact that the Group offers insurance products along with loans and advances and lease products and it is impossible to purchase from the Group an insurance product that is identical as to the legal form, conditions and economic content without purchasing a loan, an advance or a lease product, the payments received by the Group for the insurance products sold are treated as an integral part of the remuneration for the financial instruments offered. All premium received by the Group split in accordance with Recommendation U on the basis of the relative fair value model into a portion relating to:

- the insurance product - measured using an actuarial model in accordance with the requirements of IFRS 4 (recognised in commission income, line "offering insurance products")
- and the portion relating to the credit product – settled using the effective interest rate method and recognised in interest income and, in the part corresponding to the performance of the agency service, if the insurer is a Group

company, accounted for using the straight line method during the term of the insurance product and is recognized as commission income (line: offering insurance products).

Costs directly attributable to selling insurance products are accounted for in the same manner as the revenue, i.e. as a component of the amortized cost of a financial instrument or on a one-off basis. The provision for future refunds is allocated to the financial instrument and insurance service in accordance with the relative fair value model.

At present, the Group presents its insurance activities under the following headings in the statement of financial position (see the note "Assets and liabilities from insurance activities" for details):

- **Assets from insurance activities** are receivables on account of reinsurance and share of reinsurers in technical reserves.
- **Liabilities in respect of insurance activities** comprise insurance technical reserves to cover current and future claims and costs which may arise from the insurance contracts concluded, i.e. unearned premium and unexpired risk reserves, outstanding claims and benefits reserve, reserve for bonuses and discounts for the insured, life insurance reserve, and other, as well as deferred reinsurance commission and reinsurance related liabilities.
- **Amounts due to customers – "Liabilities in respect of insurance products":** liabilities from unit-linked products, safe capital product, structured products and insurance deposits.

14.2.3. Measurement and recognition of insurance products offered by the Group, including those linked to loans and advances in accordance with IFRS 17

In accordance with IFRS 17, all insurance products offered by the Group are recognised and measured in accordance with this standard as insurance products. At the consolidated Group level, the premium received by the Group is no longer split in accordance with Recommendation U on the basis of the relative fair value model (this model will be maintained for the Bank's separate financial statements).

The components of the net insurance income, including the portion that forms part of the Bank's interest income, commission income or administrative expenses and relates directly to insurance contracts, is measured using an actuarial model and presented in the "Net income from insurance business".

The implementation of IFRS 17 at the consolidated level also affects the carrying amount of loans and advances to customers. The premium element recognised under the relative fair value model, adjusting the gross carrying amount of loans at the Bank level, at the consolidated level is an element of the assets and liabilities arising from insurance activities, measured in accordance with the principles set out in IFRS 17.

Starting from 1 January 2023, products i.e. liabilities from unit-linked products, "safe capital", previously recognised under IFRS 9, are measured under IFRS 17 as part of liabilities from insurance activities (this applies to the item "Amounts due to customers" – "Liabilities in respect of insurance products"). And as investment products, structured products and policies, they continue to be recognized in accordance with IFRS 9 under the line "Amounts due to customers".

14.2.4. Measurement principles for insurance contracts

Under IFRS 17, contracts may be measured according to the following methods:

1) **GMM – general measurement model** – the basic measurement model, wherein the total value of the insurance liability is calculated as the sum of:
   a) discounted value of the best estimate of future cash flows - expected (probability-weighted) cash flows from premiums, claims, benefits and acquisition expenses and costs;
   b) risk adjustment for non-financial risk, RA – an individual estimate of the financial value of the offset for uncertainty related to the amount and timing of future cash flows, and
   c) contractual service margin, CSM – representing an estimate of future profits recognized during the policy term. The CSM value is sensitive to changes in estimates of cash flows, resulting e.g. from changed non-economic assumptions. CSM cannot be a negative value – any losses on the contracts shall be recognized immediately in the income statement (an exception is made for outward reinsurance contracts, for which the CSM may be negative);

2) **PAA – premium allocation approach**

The premium allocation approach (PAA), is a simplified approach where the measurement of liability for remaining coverage (LRC) is analogous to the provision for unearned premiums mechanism in IFRS 4 (without separate presentation of RA and CSM). The PAA method is applied for short-term contracts of up to 1 year and longer, as long as the relevant qualifying criteria for applying the simplification are satisfied, as specified in paragraphs 53 or 69 of IFRS 17. The measurement of liability for incurred claims (LIC) is carried out using the GMM model (without CSM calculations). At the time of implementation of IFRS 17, the PAA method is not used to measure insurance liabilities/assets;

3) **VFA – variable fee approach**

The liability measurement method used for IFRS 17 reporting of insurance contracts with direct profit sharing, where the measurement of liabilities is performed similarly to the GMM approach with the difference that changes in the contract margin component of the CSM in subsequent periods also include the impact of changes in economic factors, not just insurance factors.

Due to the specific nature of the insurance and reinsurance contracts in non-life insurance offered within the Group (insurance of several years), the criteria for applying the simplified valuation method based on premium allocation - PAA - are not met at the date of transition. Accordingly, both life insurance contracts and non-life insurance and reinsurance contracts will be measured using the general model - GMM. The exception to this is direct profit-sharing insurance contracts, for which the Group will use the VFA model.

14.2.5. IDENTIFICATION AND AGGREGATION OF INSURANCE CONTRACTS

In order to identify insurance contracts and inward reinsurance contracts that are within the scope of IFRS 17, the Group verifies whether, under a given contract, the entity accepts a significant insurance risk from the policyholder and undertakes to compensate the policyholder for an adverse effect defined as an uncertain future insurable event.

For measurement purposes, insurance contracts should be aggregated into the so-called groups of insurance contracts described in Section 14.2.1 IFRS 17 MAIN ASSUMPTIONS. Grouping of contracts should be done taking into account the following three dimensions:

- portfolio dimension - contracts with similar risk characteristics and managed jointly;
- profitability dimension - contracts belonging to the same profitability group (one of the three defined by the standard);
- cohort dimension - contracts issued no more than one year apart.

The purpose of this aggregation is to ensure that profits are recognized over time in proportion to the insurance services provided, and losses are recognized immediately when the entity assesses that the concluded contract gives rise to a burden.

At the same time, the above aggregation makes it impossible to offset gains and losses between identified groups of insurance contracts, even within a single portfolio.

Grouping of insurance contracts will occur upon initial recognition, and the Group will not reassess the groups in subsequent periods unless there is a rationale for discontinuing recognition as specified in IFRS 17.

In the Group, the division of the portfolio into groups of insurance contracts will be determined taking into account the above dimensions:

- portfolio dimension - based on the risk characteristics of individual insurance contracts and based on existing insurance portfolio management processes;
- profitability dimension:
  - for life insurance - at the level of a single contract by measuring the given insurance contract;
  - for non-life insurance - all contracts will be treated as profitable, unless there are facts or circumstances that indicate that they are not profitable. Profitability will be assessed at the level of the IFRS 17 portfolio, while it is permissible to move the assessment to the level of the quarter or year cohorts;
- cohort dimension - the Group decided to use quarterly cohorts for both life and non-life insurance and reinsurance. The Group does not expect to apply the exemption from reporting under the requirement for annual cohorts.

14.2.6. MAIN ELEMENTS OF MEASUREMENT ACCORDING TO IFRS 17

The most significant elements of the IFRS 17 measurement and the main methodological decisions made by the Group are presented below.

14.2.6.1. CONTRACT BOUNDARIES

For the purpose of measurement of liabilities, the value of financial flows within the contract boundaries is estimated. Contract boundaries cover the period during which the Group is obliged to provide the services covered by the insurance contract. This period may arise from premiums already paid or premiums in respect of which the insured may be liable to pay. Cash flows are treated as flows within the contract boundaries if they result from the insurance cover provided during the above period, even if the physical payment goes beyond the contract boundaries.

The service obligation defining the contract boundaries expires when there is a realistic possibility of a risk reassessment and tariff change. If there is no such practical possibility, the measurement of liabilities includes all future expected premiums.

In the Group the contract boundary approach is largely consistent with the Solvency II measurement approach used to date. The exceptions are contract boundaries applied in unit-linked products, where the guidelines for future cash flows derived from the "KNF Office's Position on the Contract Boundary for the Purpose of Determining Insurance or Reinsurance Liabilities" are used for measurement for the needs of Solvency II. In contrast, for the needs of IFRS 17, in unit-linked products with regular premiums, the future premium is modelled in accordance with the policyholder's liabilities described in the general terms and conditions of insurance and in the policy.

14.2.6.2. DISCOUNTING AND ADJUSTMENT FOR NON-FINANCIAL RISK

The Group uses discount rate curves determined under the bottom-up approach (IFRS 17 paragraph B80), which assumes that discount curves will be determined as liquid risk-free rate curves.

Base discount curves are set at risk-free discount rates published by EIOPA. As part of the simplification adopted, no illiquidity premium was applied.

The Group includes a risk adjustment for non-financial risks in the measurement of insurance contracts. Due to the different risk characteristics for the portfolio of life and non-life insurance and for the future flows arising from the liabilities of payable claims and those arising from the remaining insurance period, the adjustment for non-financial risk for these liabilities is estimated independently.

For non-life insurance, the adjustment for future coverage is determined using the Value at Risk (VaR) method, using a modified SCR calculation according to the Solvency II standard formula. Two approaches are used to determine the adjustment for the loss reserve: the VaR method analogous to the approach for future coverage and the bootstrap method.

For life insurance, for liabilities arising from the remaining insurance period, the adjustment is determined using the cost of capital (CoC) method, and for liabilities for payable claims using the bootstrap method. The risk adjustment for non-financial risks at the entity level is determined as a simple sum of adjustments determined at the level of individual groups of contracts or business lines, and diversification is taken into account when determining the level of materiality at the entity level (bottom-up approach). At the Group level, the adjustment for non-financial risk is determined as a simple sum of adjustments for individual entities, and diversification between entities is not taken into account.

14.2.6.3. CONTRACT MARGIN

The contract margin is part of the liabilities (or assets) under insurance and reinsurance contracts. The contract margin reflects the outstanding profit for a group of insurance contracts and is therefore released as income in the income statement. The amount of margin release in a reporting period is determined as the value of unrecognised expected future profit attributable to the period in accordance with a pattern of so-called coverage units, which determine the volume of insurance service provided in each period.

The pattern of coverage units provided was estimated on the basis of sums insured (life insurance) or premiums earned assuming a pro rata approach (property insurance)

(IN PLN MILLION)

14.2.6.4. FINANCIAL COSTS OF INSURANCE OPERATIONS

Under IFRS 17, the Group has the option to split the financial expenses of its insurance operations into the portions recognized in profit or loss and other comprehensive income. The Group plans to take advantage of this opportunity for all IFRS 17 portfolios. In accordance with IFRS 4 technical provisions were not calculated on the basis of current economic assumptions. Hence this is a new element introduced by IFRS 17.

14.2.6.5. TRANSITION DATE

The Group will apply IFRS 17 for the first time in the period beginning 1 January 2023. Due to the need to prepare comparative data, 1 January 2022 is assumed as the date of transition to the new standard.

The standard allows the use of 3 methods for the purpose of measuring financial items at the transition date:

- full retrospective approach (FRA) - a method in which an entity measures groups of insurance contracts as if the standard had been applied from the beginning for those contracts;
- modified retrospective approach (MRA) - a method that allows to apply simplifications to the FRA method if its full application is not feasible in practice;
- fair value approach - a method that is permitted, if the MRA method is not feasible in practice or if the entity has decided not to use the MRA method.

In accordance with the provisions of IFRS17 paragraph C3, unless it is impracticable to do so, the Group applies the full retrospective approach to the measurement of insurance contracts. In cases where the application of the full retrospective approach has been assessed as impracticable, the Group uses the modified retrospective approach or the fair value approach, and the choice of approach is made individually for each group of contracts. Factors such as group characteristics, the availability of historical data, materiality and whether the group of contracts belongs to the portfolio offered for sale by the Group as of the transition date are taken into account in the selection.

The Group plans to use the full retrospective approach for most groups of contracts and, in a few cases, the MRA method. However, the fair value approach will not be used for the valuation.

14.2.7. DISCLOSURES

In the quarterly reports and financial statements for the respective periods of 2023, the Group will identify and present separately the net insurance income, which will include all income and expenses related to the Group's insurance business.

IFRS 17 also requires the development of extensive disclosures regarding the amounts recognised in the annual financial statements, including detailed arrangements for insurance contracts entered into, the impact of newly recognised insurance contracts and information on the expected pattern of contract margins, as well as disclosures regarding significant estimates made in applying IFRS 17. Disclosures on the nature and extent of risks arising from insurance and reinsurance contracts will also be expanded. Disclosures will be presented at a more detailed level and will be adapted to the materiality of individual disclosures.

14.3. IMPACT ASSESSMENT - CLASSIFICATION AND MEASUREMENT

The total effect of adjustments resulting from the implementation of IFRS 17 on the Group's assets, liabilities and equity including the tax impact is presented in the table below:

	31.12.2021 (pursuant to IFRS 4)	Adjustment due to implementation of MSSF 17	01.01.2022 (pursuant to IFRS 17)
ASSETS, of which:	418 086	557	418 643
Loans and advances to customers	234 300	1 397	235 697
Assets in respect of insurance activities	911	(783)	128
Intangible assets	3 463	(20)	3 443
Deferred tax assets	4 116	(23)	4 093
Other assets	2 605	(14)	2 591

(IN PLN MILLION)

	31.12.2021 (pursuant to IFRS 4)	Adjustment due to implementation of MSSF 17	01.01.2022 (pursuant to IFRS 17)
LIABILITIES AND EQUITY	418 086	557	418 643
Liabilities, of which:	380 393	273	380 666
Amounts due to customers	322 296	(1 030)	321 266
Liabilities in respect of insurance activities	2 008	1 309	3 317
Other liabilities	5 366	(6)	5 360
EQUITY, of which:	37 693	284	37 977
Reserves and accumulated other comprehensive income	25 313	9	25 313
Unappropriated profit (taking into account profit or loss for 2021)	11 144	275	11 419
Capital and reserves attributable to equity holders of the parent company	**37 707**	**284**	**37 991**

The presented effect of the adjustments arising from the implementation of IFRS17 on the Group's assets, liabilities and equity, to the best of our knowledge, is the best estimate at the time of publication of these consolidated financial statements.

- The increase in equity by PLN 284 million results from a retrospective change in the recognition of historically collected insurance premiums and a change in the measurement methodology for insurance liabilities. Until the implementation of IFRS 17, as described in Section 14.2.2 THE CURRENT MODEL FOR THE MEASUREMENT AND RECOGNITION OF INSURANCE PRODUCTS, INCLUDING THOSE LINKED TO LOANS AND ADVANCES the entire premium received by the Group was split in accordance with Recommendation U on the basis of the relative fair value model into an insurance product portion - measured using an actuarial model in accordance with the requirements of IFRS 4 - and a credit product portion - accounted for using the effective interest rate method. With the implementation of IFRS 17, insurance premiums were recognised in full as insurance component measured using the GMM model. As a consequence, the rate of revenue recognition and therefore the historically recognised profit included in retained earnings has changed.
- Loans and advances to customers increased by PLN 1 397 million, due to the discontinuation of the premium element accounted for using the effective interest rate method and adjusting the gross carrying amount of loans. The value of this premium previously recognised as a component of the gross carrying amount of loans and advances to customers is now part of the insurance business measured using the new methodology under IFRS 17, thereby translating into an increase in the balance of liabilities in respect of insurance activities.
- In accordance with IFRS 17, the liability from insurance operations as at 1 January 2022 increased by PLN 1 309 million to PLN 3 317 million, of which liability for remaining coverage (LRC) is PLN 3 143 million and liability for incurred claims (LIC) is PLN 174 million.
- There was also a decrease of PLN 783 million in the line of assets in respect of insurance activities, which is primarily due to the adoption of a different method of determining insurance assets and liabilities with the reinsurer's share. In accordance with IFRS 17, the value of assets in respect of insurance activities as at 1 January 2022 amounts to 128 million, of which liability for remaining coverage (LRC) amounts to PLN -107 million and liability for incurred claims (LIC) amounts to PLN -21 million.
- In intangible assets, the Group recognised future gains on insurance contracts (hereinafter Value in force, VIF) resulting from the settlement of the acquisition on 1 April 2014 of "Nordea Polska Towarzystwo Ubezpieczeń na Życie" SA (currently PKO Życie Towarzystwo Ubezpieczeń S.A.). Following the implementation of IFRS 17, VIF amounts to PLN 2 million as at 1 January 2022 (negative adjustment of PLN 20 million). The remeasurement is due to the fact that a significant part of the products for which VIF has been recognised are subject to the requirements of IFRS 17, so that VIF for this part of the portfolio is replaced by the contractual service margin (CSM). The amount of contractual service margin from the acquired portfolio subject to measurement in accordance with IFRS 17 is higher than the value of the recognised VIF, due to the prudential valuation that was applied for liability measurement purposes at the time of the transaction. The new VIF value has been limited to policies subject to measurement in accordance with IFRS 9 and has been calculated in line with the original recognition of the VIF (i.e. measurement of the VIF at the time of the transaction and adoption of an amortisation pattern based on the distribution of projected future profits).

(IN PLN MILLION)

- From 1 January 2023 onwards, a significant part of the products, i.e. the liabilities from the majority of unit-linked products and the "safe capital" product, will be measured in accordance with IFRS 17 as part of liabilities from insurance activities (this applies to the item “Amounts due to customers” – “Liabilities in respect of insurance products”). The remainder will be measured in accordance with IFRS 9. The value of the adjustment to the item "Amounts due to customers" amounted to a negative PLN 1,030 million. The carrying amount of the liabilities in respect of insurance products presented under "Amounts due to customers" amounts to PLN 175 million after adjustments.

14.4. IMPACT OF IFRS 17 ON OWN FUNDS AND CAPITAL ADEQUACY MEASURES

According to CRR Regulation, prudential consolidation is used for capital adequacy purposes, which unlike consolidation in accordance with IFRS, covers only subsidiaries that meet the definition of an institution, financial institution or any ancillary services enterprise. Therefore, the following insurance companies of the Group are excluded from prudential consolidation: PKO Towarzystwo Ubezpieczeń S.A. and PKO Życie Towarzystwo Ubezpieczeń S.A. The insurance companies are measured using the equity method. In accordance with the above, the Group's investment in insurance companies was initially recognised at cost after the date of acquisition and its value is subsequently adjusted by the change in the Group's share of the net assets of the insurance companies, as appropriate. The Group's profit or loss includes its share of the profit or loss of the Group's insurance companies (item “Share in profit or loss of associates and joint ventures”) and other comprehensive income includes its share of other comprehensive income of the Group's insurance companies (item “Share in other comprehensive income of associates and joint ventures”). The impact of intercompany transactions between Group entities is eliminated.

Thus, the implementation of IFRS 17 at the date of the opening balance sheet will affect the value of equity investments recognised (own funds requirements for credit risk), as well as retained earnings and accumulated other comprehensive income from the remeasurement of insurance companies measured using the equity method.

The total impact of the adjustments on the total capital ratio is +0.03 b.p. The presented impact of the adjustments arising from the implementation of IFRS17 on capital adequacy, to the best of our knowledge, is the best estimate at the time of publication of these consolidated financial statements.

15. NEW STANDARDS AND INTERPRETATIONS AND THEIR AMENDMENTS

- STANDARDS AND INTERPRETATIONS AND THEIR AMENDMENTS EFFECTIVE FROM 1 JANUARY 2022

STANDARDS AND INTERPRETATIONS *	DESCRIPTION OF CHANGES AND IMPACT
AMENDMENTS TO IFRS 3 “BUSINESS COMBINATIONS” (1.01.2022/28.06.2021)	Amendments to IFRS 3 update the references to the Conceptual Framework issued in 2018. They also added a requirement that, for transactions and other events within the scope of IAS 37 or IFRIC 21, an acquirer applies IAS 37 or IFRIC 21 (instead of conceptual framework) to identify the liabilities it has assumed in business combination. Moreover, the standard added an explicit statement that an acquirer does not recognize contingent asset acquired in a business combination. The amendments were not applicable to the Group in 2022.
AMENDMENTS TO IAS 16 “PROPERTY, PLANT AND EQUIPMENT” (1.01.2022/28.06.2021)	The amendments indicated, among other things, that proceeds from the use of a fixed asset not yet placed in service should be recognised in the income statement and not deducted from the cost of the fixed asset. No material impact on the consolidated financial statements.
AMENDMENT TO IAS 37 “PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS” (1.01.2022/28.06.2021)	The amendments clarified that, when assessing whether a contract is onerous, the costs of performing the contract include both direct incremental costs and the allocation of other direct costs. No material impact on the consolidated financial statements.
ANNUAL IMPROVEMENTS TO IFRS 2018-2020 (1.01.2022/28.06.2021)	• The amendment to IFRS 1 relates to situations when a subsidiary adopts IFRS for the first time at a later date than its parent; in such a case, the subsidiary may decide to measure cumulative translation differences for all foreign operations using the amounts reported by its parent in its consolidated financial statements, based on the parent’s date of transition to IFRS.

(IN PLN MILLION)

	• The amendment to IAS 41 aligns fair value measurement requirements set out in IAS 41 with the assumptions of IFRS 13. The above amendments do not apply to the Group. • The amendment to IFRS 9 clarifies which fees should be included for purposes of the '10 per cent' test in the case of derecognition of financial liabilities. • Amendments to illustrative examples in IFRS 16 relating to identification of lease incentives. No material impact on the consolidated financial statements.

* the effective date in EU / date of endorsement by EU is provided in parentheses

- **NEW STANDARDS AND INTERPRETATIONS AND AMENDMENTS THERETO THAT HAVE BEEN PUBLISHED AND ENDORSED BY THE EUROPEAN UNION, BUT HAVE NOT COME INTO FORCE YET AND ARE NOT APPLIED BY THE BANK**

STANDARDS AND INTERPRETATIONS *	DESCRIPTION OF CHANGES AND IMPACT
IFRS 17 "INSURANCE CONTRACTS" (1.01.2023/ 19.11. 2021) AND AMENDMENTS TO IFRS 17 (1.01.2023/ 19.11. 2021)	For details, see Chapter IFRS 17 "Insurance contracts"
AMENDMENTS TO IAS 1 "PRESENTATION OF FINANCIAL STATEMENTS" AND IAS 8 "ACCOUNTING POLICIES, CHANGES IN ACCOUNTING ESTIMATES AND ERRORS" (1.01.2023/2.03.2022))	Amendments to IAS 1 contain guidelines on the application of the term "material" in disclosures of the accounting policies. Instead of significant accounting policies, the amendments require disclosure of material information about accounting policies, with explanations and examples of how an entity can identify material information about accounting policies. The amendments to IAS 8 introduce a new definition of accounting estimates. Under the new definition, accounting estimates are monetary amounts in the financial statements that are subject to measurement uncertainty. The introduction of the definition of accounting estimates and other amendments to IAS 8 are intended to help entities distinguish between changes in accounting policies and changes in accounting estimates. The Group is of the opinion that these changes will have an impact on the scope of information presented in its financial statements.
AMENDMENTS TO IAS 12 "INCOME TAXES" (1.01.2023/11.08.2022)	Amendments to IAS 12 require that the entities recognise in the financial statements deferred tax assets and liabilities resulting from transactions, other than business combinations, in which equal amounts of deductible and taxable temporary differences arise on initial recognition. The Group does not expect these amendments to have a material effect on the consolidated financial statements.

* the expected effective date in EU / date of endorsement by EU is provided in parentheses

- **NEW STANDARDS AND INTERPRETATIONS, AND AMENDMENTS THERETO, WHICH HAVE BEEN PUBLISHED BUT HAVE NOT BEEN ENDORSED BY THE EUROPEAN UNION**

STANDARDS AND INTERPRETATIONS *	DESCRIPTION OF CHANGES AND IMPACT
AMENDMENTS TO IAS 1 - CLASSIFICATION OF LIABILITIES (1.01.2023/ NO DATA)	The changes relate to the classification of liabilities in the statement of financial position as short-term or long-term. They clarify that the classification of liabilities as short-term or long-term should take into account, as at the classification date, the existence of a debt extension, regardless of the entity's intention to use it for a period longer than 12 months, and should take into account the fulfillment of the conditions of such extension as at the date of assessment, if it is conditional. The Group is currently evaluating the impact on the consolidated financial statements.

AMENDMENT TO IFRS 16 "LEASES" (1.01.2024/ NO DATA)	The amendments clarify how a seller-lessee should measure sale and leaseback transactions that meet the requirements of IFRS 15 to recognise an asset as a sale. In particular, the measurement of the lease liability should not take into account gains and losses associated with the retained right of use. The seller-lessee may still recognise in profit or loss the gains and losses associated with the partial or total termination of a lease. A retrospective approach will apply to these amendments. The Group is currently evaluating the impact on the consolidated financial statements.

* the expected effective date in EU / date of endorsement by EU is provided in parentheses

SUPPLEMENTARY NOTES TO THE INCOME STATEMENT

16. INFORMATION ON OPERATING SEGMENTS

ACCOUNTING POLICIES:

The segmentation note was prepared on the basis of the internal reporting system, i.e. information provided to the Management Board of PKO Bank Polski S.A., which is used to assess the achieved results and allocate resources.

The principles of identifying revenues and costs as well as assets and liabilities applied in the segmentation report are consistent with the accounting principles described in these financial statements. The presented assets and liabilities of the segment are operating assets and liabilities used by the segment in its operating activities. The values of assets and liabilities as well as revenues and costs for individual segments are based on internal management information. The segment results, assets and liabilities also include items that can be assigned based on rational assumptions. On this basis, the segments recognize the impact of significant one-off events, such as negative goodwill arising from the acquisition of the company, goodwill impairment losses, impairment losses on associates, and the cost of legal risk of the portfolio of mortgage loans in convertible currencies.

Share of the profit and loss of associates and joint ventures, profit and loss of noncontrolling shareholders, income tax expense as regards the presentation of profit or loss and assets in respect of deferred income tax, current income tax receivables, current income tax and deferred tax liabilities in terms of presentation of the statement of financial position have been recognised at Group level (unallocated assets and liabilities).

The Group settles transactions between segments as if they were related to unrelated entities, using internal settlement rates based on market rates for a given currency and maturity date, taking into account liquidity margins. Transactions between the segments are carried out on normal commercial terms.

Due to the changes in the accounting policies introduced as of 1 January 2022 , which are described in detail in note CHANGES IN ACCOUNTING POLICIES APPLICABLE FROM 1 JANUARY 2022 AND EXPLANATION OF THE DIFFERENCES BETWEEN PREVIOUSLY PUBLISHED FINANCIAL STATEMENTS AND THESE FINANCIAL STATEMENTS the comparative data for 2021 was changed accordingly with respect to reclassification of card-related costs, costs of transport of cash to the Group's customers, costs of voluntary membership fees.

The PKO Bank Polski S.A. Group conducts business activities within segments offering specific products and services addressed to specific groups of customers. The manner in which the business segments are divided ensures consistency with the sales management model and offers customers a comprehensive product mix comprising both traditional banking products and more complex investment products, as well as services provided by the Group entities.

The segmentation note presented below is included in the internal reporting system, i.e. information presented to the Management Board of PKO Bank Polski S.A., which is used to assess the achieved results and allocate resources.

The segment report presented below reflects the internal organizational structure of the PKO Bank Polski S.A. Group.

The Group operates in three main segments:

RETAIL SEGMENT	The retail segment offers a full range of services to individuals as part of retail, private and mortgage banking. It also comprises transactions concluded with legal persons, i.e. firms and enterprises. The products and services offered to customers in this segment include, among other things: current accounts, savings accounts, term deposits, private banking services, investment and insurance products, investment funds, credit and debit cards, electronic and mobile banking services. With regard to financing, this segment offers consumer loans, mortgage loans, including those offered by PKO Bank Hipoteczny S.A., as well as Corporate loans for firms and enterprises, developers, cooperatives and property managers, and leases and factoring offered by the PKO Leasing S.A. Group. In addition, the results of the retail segment comprise the results of the following companies: PKO TFI SA, PKO BP BANKOWY PTE SA, PKO Życie Towarzystwo Ubezpieczeń SA, PKO Towarzystwo Ubezpieczeń SA, PKO BP Finat sp. z o.o..
CORPORATE AND INVESTMENT SEGMENT	The corporate and investment segment comprises transactions concluded with large corporate customers and financial institutions. This segment offers the following products and services: maintaining current accounts and term deposits, cash management and trade finance services, safekeeping of securities, currency products and derivatives, corporate loans, leasing and factoring offered by the PKO Leasing S.A. Group. As part of this segment's activities, PKO Bank Polski S.A. also concludes, on its own or in consortiums with other banks, agreements for financing large projects in the form of loans and issues of non-Treasury securities. The segment also comprises own activities, i.e. investing activities, brokerage activities, interbank transactions, as well as transactions in derivative instruments and debt securities. The results of the corporate and investment segments also comprise the results of the companies operating in Ukraine and companies conducting technological services, real estate development and real estate management activities as well as funds investing money collected from investment fund participants.
TRANSFER CENTER AND OTHER	The transfer & other activities centre comprises the result on internal settlements related to funds transfer pricing, the result on the Bank's investment portfolio of debt securities, the result on long-term sources of financing and the result on positions classified for hedge accounting, as well as the results not allocated to any other segment. Internal funds transfer is based on arm's length transfer pricing. Long-term external financing includes issuing securities, including mortgage covered bonds, subordinated liabilities and loans received from financial institutions. The results of PKO Finance AB are presented as part of this segment.

(IN PLN MILLION)

FINANCIAL INFORMATION

The tables below present data on revenues, costs, profits / losses as well as assets and liabilities of the individual reporting segments of the Group for the periods ended 31 December 2022 and 31 December 2021.

Income statement by segment	Continuing operations			
2022	Retail segment	Corporate and investment segment	Transfer center and other	Total operations of the Group
Net interest income	8 096	3 896	(179)	11 813
Net fee and commission income	3 688	1 270	(7)	4 951
Other net income	413	476	(381)	508
Dividend income	-	51	-	51
Gains/(losses) on financial transactions	172	200	(14)	358
Foreign exchange gains/ (losses)	87	196	(356)	(73)
Gains/(losses) on derecognition of financial instruments	(1)	(23)	(2)	(26)
Net other operating income and expense	129	78	(9)	198
Income/(expenses) relating to internal customers	26	(26)	-	-
Result on business activities	12 197	5 642	(567)	17 272
Net allowances for expected credit losses	(959)	(542)	-	(1 501)
Net impairment losses on non-financial assets	(41)	(1)	(21)	(63)
Cost of legal risk of mortgage loans in convertible currencies	(1 914)	-	-	(1 914)
Administrative expenses, of which:	(6 484)	(1 334)	(32)	(7 850)
depreciation and amortization	(892)	(138)	-	(1 030)
net regulatory charges	(1 478)	(379)	(32)	(1 889)
Tax on certain financial institutions	(737)	(382)	(147)	(1 266)
Share in profits and losses of associates and joint ventures	-	-	-	71
Segment profit/(loss)	**2 062**	**3 383**	**(767)**	**4 749**
Income tax expense (tax burden)				(1 416)
Net profit (including non-controlling shareholders)				3 333
Net profit attributable to equity holders of the parent company				3 333

(IN PLN MILLION)

Income statement by segment	Continuing operations			
2021	Retail segment	Corporate and investment segment	Transfer center and other	Total operations of the Group
Net interest income	6 994	1 679	1 209	9 882
Net fee and commission income	3 310	1 080	(13)	4 377
Other net income	(1)	349	426	774
Dividend income	-	12	-	12
Gains/(losses) on financial transactions	(77)	148	(7)	64
Foreign exchange gains/ (losses)	4	110	322	436
Gains/(losses) on derecognition of financial instruments	2	104	100	206
Net other operating income and expense	44	1	11	56
Income/(expenses) relating to internal customers	26	(26)	-	-
Result on business activities	10 303	3 108	1 622	15 033
Net allowances for expected credit losses	(994)	(315)	-	(1 309)
Net impairment losses on non-financial assets	(26)	7	(27)	(46)
Administrative expenses, of which:	(5 048)	(1 040)	(29)	(6 117)
depreciation and amortization	(852)	(146)	-	(998)
net regulatory charges	(488)	(126)	(28)	(642)
Tax on certain financial institutions	(783)	(335)	39	(1 079)
Share in profits and losses of associates and joint ventures	-	-	-	31
Segment profit/(loss)	**3 452**	**1 425**	**1 605**	**6 513**
Income tax expense (tax burden)				(1 640)
Net profit (including non-controlling shareholders)				4 873
Profit (loss) attributable to non-controlling shareholders				(1)
Net profit attributable to equity holders of the parent company				4 874

INTEREST INCOME BY SEGMENT	2022			
	Retail segment	Corporate and investment segment	Transfer center and other	Total
Loans and other amounts due from banks	11	586	560	1 157
Debt securities	56	2 046	1 734	3 836
Loans and advances to customers (excluding finance lease receivables)	10 299	3 506	-	13 805
Finance lease receivables	978	335	-	1 313
Amounts due to customers (excluding loans and advances received)	-	29	-	29
Total	11 344	6 502	2 294	20 140

(IN PLN MILLION)

INTEREST INCOME BY SEGMENT	2021 Retail segment	Corporate and investment segment	Transfer center and other	Total
Loans and other amounts due from banks	-	19	11	30
Hedging derivatives	-	-	384	384
Debt securities	8	509	1 325	1 842
Loans and advances to customers (excluding finance lease receivables)	6 316	1 331	-	7 647
Finance lease receivables	474	172	-	646
Amounts due to customers (excluding loans and advances received)	-	19	-	19
Total	6 798	2 050	1 720	10 568

FEE AND COMMISSION INCOME BY SEGMENT	2022		
	Retail segment	Corporate and investment segment	Total
Loans, insurance, operating leases and fleet management	**1 195**	**389**	**1 584**
lending	517	323	840
offering insurance products	555	19	574
operating leases and fleet management	123	47	170
Investment funds, pension funds and brokerage activities	**490**	**305**	**795**
servicing investment funds and OFE (including management fees)	380	8	388
servicing and selling investment and insurance products	26	-	26
brokerage activities	84	297	381
Cards	**1 906**	**83**	**1 989**
Margins on foreign exchange transactions	**521**	**290**	**811**
Bank accounts and other	**1 016**	**320**	**1 336**
servicing bank accounts	808	149	957
cash operations	32	52	84
servicing foreign mass transactions	59	43	102
customer orders	27	36	63
fiduciary services	-	9	9
Other	90	31	121
Total	5 128	1 387	6 515

(IN PLN MILLION)

FEE AND COMMISSION INCOME BY SEGMENT	2021		
	Retail segment	Corporate and investment segment	Total
Loans, insurance, operating leases and fleet management	**1 023**	**331**	**1 354**
lending	498	298	796
offering insurance products	444	12	456
operating leases and fleet management	81	21	102
Investment funds, pension funds and brokerage activities	**555**	**258**	**813**
servicing investment funds and OFE (including management fees)	433	37	470
servicing and selling investment and insurance products	36	-	36
brokerage activities	86	221	307
Cards	**1 469**	**53**	**1 522**
Margins on foreign exchange transactions	**389**	**193**	**582**
Bank accounts and other	**975**	**350**	**1 325**
servicing bank accounts	793	198	991
cash operations	31	40	71
servicing foreign mass transactions	48	40	88
customer orders	27	30	57
fiduciary services	-	10	10
other	76	32	108
Total	4 411	1 185	5 596

Assets and liabilities by segment 31.12.2022	Retail segment	Corporate and investment segment	Transfer center and other	Total operations of the Group
Assets	175 906	157 834	91 419	425 159
Investments in associates and joint ventures	-	285	-	285
Unallocated assets	-	-	-	5 239
Total assets	175 906	158 119	91 419	430 683
Liabilities	288 290	79 423	26 757	394 470
Unallocated liabilities	-	-	-	778
Total liabilities	288 290	79 423	26 756	395 248

Assets and liabilities by segment 31.12.2021	Retail segment	Corporate and investment segment	Transfer center and other	Total operations of the Group
Assets	186 401	130 908	96 341	413 650
Investments in associates and joint ventures	-	285	-	285
Unallocated assets	-	-	-	4 151
Total assets	186 401	131 193	96 341	418 086
Liabilities	267 713	79 132	33 175	380 020
Unallocated liabilities	-	-	-	373
Total liabilities	267 713	79 132	33 175	380 393

(IN PLN MILLION)

INFORMATION ON GEOGRAPHICAL AREAS

The PKO Bank Polski S.A. Group also divides its operations into geographical segments.

The PKO Bank Polski S.A. Group conducts its operations in the Republic of Poland, as well as in Ukraine (through the KREDOBANK S.A. Group, "Inter-Risk Ukraina" company with additional liability, Finansowa Kompania "Prywatne Inwestycje" sp. z o.o. and Finansowa Kompania "Idea Kapitał" sp. z o.o.), in Sweden (through PKO Finance AB and PKO Leasing Sverige AB) and in Ireland (through Polish Lease Prime 1 DAC1). PKO Bank Polski S.A. also has foreign corporate branches in the Federal Republic of Germany, the Czech Republic and the Slovak Republic.

For presentation purposes, the results of the companies operating in Sweden and Ireland and of the Bank's branches operating in Germany, the Czech Republic and Slovakia were recognized in the segment "Poland" due to their impact on the scale of the operations of the PKO Bank Polski S.A. Group.

The results of the companies recognized in the segment "Ukraine" include intercompany transactions with other companies of the PKO Bank Polski S.A. Group operating in Ukraine. Intercompany transactions with other companies of the PKO Bank Polski S.A. Group and consolidation adjustments are presented in the results of the segment "Poland".

2022	Poland	Ukraine	Total
Net interest income	**11 538**	**275**	**11 813**
Net fee and commission income	**4 803**	**148**	**4 951**
Other net income	**501**	**7**	**508**
Dividend income	51	-	51
Gains/(losses) on financial transactions	358	-	358
Foreign exchange gains/ (losses)	(75)	2	(73)
Gains/(losses) on derecognition of financial instruments	(27)	1	(26)
Net other operating income and expense	194	4	198
Result on business activities	**16 842**	**430**	**17 272**
Net allowances for expected credit losses	(1 276)	(225)	(1 501)
Net impairment losses on non-financial assets	(63)	-	(63)
Cost of legal risk of mortgage loans in convertible currencies	(1 914)	-	(1 914)
Administrative expenses, of which:	(7 664)	(186)	(7 850)
depreciation and amortization	(989)	(41)	(1 030)
net regulatory charges	(1 876)	(13)	(1 889)
Tax on certain financial institutions	(1 266)	-	(1 266)
Share in profits and losses of associates and joint ventures	71	-	71
Segment profit/(loss)	**4 730**	**19**	**4 749**
Income tax expense (tax burden)			(1 416)
Net profit (including non-controlling shareholders)			3 333
Net profit attributable to equity holders of the parent company			3 333

31.12.2022	Poland	Ukraine	Total
Assets, of which:	425 519	4 879	430 398
Loans and advances to customers	230 144	1 577	231 721
Investments in associates and joint ventures	285	-	285
Total assets	425 804	4 879	430 683
Liabilities, of which:	390 883	4 365	395 248
Amounts due to customers	335 443	4 139	339 582
Total liabilities	390 883	4 365	395 248

(IN PLN MILLION)

2021	Poland	Ukraine	Total
Net interest income	**9 599**	**283**	**9 882**
Net fee and commission income	**4 304**	**73**	**4 377**
Other net income	**750**	**24**	**774**
Dividend income	12	-	12
Gains/(losses) on financial transactions	64	-	64
Foreign exchange gains/ (losses)	424	12	436
Gains/(losses) on derecognition of financial instruments	202	4	206
Net other operating income and expense	48	8	56
Result on business activities	**14 653**	**380**	**15 033**
Net allowances for expected credit losses	(1 278)	(31)	(1 309)
Net impairment losses on non-financial assets	(46)	-	(46)
Administrative expenses, of which:	(5 904)	(213)	(6 117)
depreciation and amortization	(952)	(46)	(998)
net regulatory charges	(630)	(12)	(642)
Tax on certain financial institutions	(1 079)	-	(1 079)
Share in profits and losses of associates and joint ventures	31	-	31
Segment profit/(loss)	**6 377**	**136**	**6 513**
Income tax expense (tax burden)			(1 640)
Net profit (including non-controlling shareholders)			4 873
Profit (loss) attributable to non-controlling shareholders			(1)
Net profit attributable to equity holders of the parent company			4 874

31.12.2021	Poland	Ukraine	Total
Assets, of which:	412 872	4 929	417 801
Loans and advances to customers	231 795	2 505	234 300
Investments in associates and joint ventures	285	-	285
Total assets	413 157	4 929	418 086
Liabilities, of which:	376 063	4 330	380 393
Amounts due to customers	318 670	3 626	322 296
Total liabilities	376 063	4 330	380 393

17. INTEREST INCOME AND EXPENSE

ACCOUNTING POLICIES

Interest income and expenses comprise interest, including premiums and discounts in respect of financial instruments measured at amortized cost and instruments measured at fair value through other comprehensive income, as well as income similar to interest income on instruments measured at fair value through profit or loss. Interest income and expenses also include fees and commissions received and paid, which are deferred using the effective interest rate and which are taken into account in the measurement of the financial instrument, including costs of remuneration of agents and intermediaries for the sale of the financial instrument, costs of employee bonuses to the extent that relate directly to selling credit products.

Interest income and expenses are recognized on an accrual basis using the effective interest rate method, which discounts the estimated future cash flows throughout the expected useful life of a financial asset or financial liability to the gross carrying amount of the financial asset or amortized cost of the financial liability, with the exception of:

- purchased or originated credit-impaired financial assets (POCI assets). Interest income on these assets is calculated on the net carrying amount using the effective interest rate, adjusted for the credit risk recognised for the entire life of the asset, with the calculation of interest income for the respective month being made for financial assets classified as POCI at the end of the previous month based on the net carrying amount calculated using the previous month's net-to-gross ratio;
- financial assets which were not originally POCI assets, but subsequently became credit-impaired financial assets. Interest income on these assets is calculated on the net carrying amount using the original effective interest rate from the moment of recognizing premises for impairment of the asset, with the calculation of interest income for the respective month being made for financial assets classified as stage 3 at the end of the previous month based on the net carrying amount calculated using the previous month's net-to-gross ratio;

The calculation of the effective interest rate covers all commissions, transaction costs paid and received by the parties to the contract, and all other premiums and discounts constituting an integral part of the effective interest rate.

Interest income also includes:

- the effect of the fair value measurement of financial assets acquired as part of business combinations between subsidiaries
- the impact of the European Union Court of Justice's ruling on consumer rights to reduce the cost of loans repaid before contractual maturity by reducing interest income, as the estimated difference between the value of the commission deferred using the effective interest rate as at the anticipated date of early repayment of the loan and on a straight-line basis, according to which the Bank is returning commission. The estimates are based on historical early repayment periods and their probability.
- effect of statutory credit holidays introduced by the Act on the crowdfunding of business ventures and on assistance for borrowers, recognised in the second half of 2022 in correspondence with the gross carrying amount of mortgage loans granted in PLN (note: "Loans and advances to customers").
- the impact of the amendment of the Act of 23 March 2017 on mortgage credit and supervision of mortgage credit intermediaries and agents (Journal of Laws of 2020, items 1027 and 2320 and of 2022, items 872 and 1488), concerning the reimbursement of the additional mortgage cost associated with waiting for the mortgage to be registered in the mortgage register, borne by the customer until the mortgage is registered in the mortgage register by deducting interest income, as the value of the estimated return of the margin for customers calculated until the date of registration of the mortgage in the mortgage register.

- **INCOME AND EXPENSES RESULTING FROM SALES OF INSURANCE PRODUCTS LINKED TO LOANS AND ADVANCES**

Due to the fact that the Group offers insurance products along with loans and advances and lease products and it is impossible to purchase from the Group an insurance product that is identical as to the legal form, conditions and economic content without purchasing a loan, an advance or a lease product, the payments received by the Group for the insurance products sold are treated as an integral part of the remuneration for the financial instruments offered.

Remuneration received and receivable by the Group for offering insurance products for the products directly associated with the financial instruments is settled using the effective interest rate method and recognized in interest income and, in the part corresponding to the performance of the agency service, if the insurer is a Group company, it is accounted for using the straight line method during the term of the insurance product and is recognized as commission income when the insurance product is sold or renewed.

Remuneration is divided into the commission portion and the interest portion based on the proportion of the fair value of the financial instrument and the fair value of the intermediation service to the sum of these two values, in accordance with the relative fair value model comprising a range of different parameters, including the average effective interest rate on the financial instrument, the average contractual and economic (actual) lending or lease period, the average insurance premium amount, the term of the insurance policy, the independent insurance agent's commission.

The fair value of a financial instrument is measured according to the income-based approach, involving the conversion of future cash flows to their present value using a discount rate consisting of a risk-free rate determined in relation to the average yield on 5-year and 10-year bonds in the past year, the risk premium determined in relation to the annual costs of credit risk and exceeding the credit risk premium, which reflects all other factors that the market participants would take into account in the fair value measurement under the current circumstances.

(IN PLN MILLION)

On the other hand, measurement of the fair value of the insurance intermediation service is based on the market approach, which consists in referring to prices and other information on identical or similar comparable market transactions.

Costs directly attributable to selling insurance products are accounted for in the same manner as the revenue, i.e. as a component of the amortized cost of a financial instrument or on a one-off basis.

The Group makes periodical estimations of the remuneration amount that will be recoverable in the future due to the early termination of the insurance contract based on historical data on premiums collected and refunds made. The provision for future returns, according to the relative fair value model, is allocated to the financial instrument and recognised as a deduction from its gross carrying amount and to the insurance service – recognised under provisions.

The Group reviews the correctness of the adopted parameters used in the relative fair value model and the ratio of provisions for refunds whenever the Bank becomes aware of significant changes in this respect, at least once a year.

FINANCIAL INFORMATION:

INTEREST AND SIMILAR INCOME	2022	2021
Loans and other amounts due from banks[1]	**1 157**	**30**
Hedging derivatives	**-**	**384**
Debt securities:	**3 836**	**1 842**
measured at amortized cost	1 486	884
measured at fair value through other comprehensive income	2 315	947
measured at fair value through profit or loss	35	11
Loans and advances to customers (excluding finance lease receivables)[2]	**13 805**	**7 647**
measured at amortized cost	13 282	7 259
measured at fair value through profit or loss	523	388
Finance lease receivables	**1 313**	**646**
Amounts due to customers (excluding loans and advances received)	**29**	**19**
Total	**20 140**	**10 568**
of which: interest income on impaired financial instruments	438	246
Interest income calculated using the effective interest rate method on financial instruments measured:	19 580	9 785
at amortized cost	17 265	8 838
at fair value through other comprehensive income	2 315	947
Income similar to interest income on instruments measured at fair value through profit or loss	560	783
Total	**20 140**	**10 568**

[1] Under loans and other receivables from banks, the Group recognised interest income on funds in call accounts (central clearing through a clearing broker) of PLN 297 million as at 31 December 2022 (PLN 4 million as at 31 December 2021) and interest income on funds in the current account with the NBP of PLN 560 million (PLN 11 million as at 31 December 2021).

[2] The item loans and advances to customers includes the impact of the effect of statutory credit holidays, recognized in the second half of 2022 for an amount of PLN 3 111 million (note "Loans and advances to customers").

(IN PLN MILLION)

INTEREST EXPENSE	2022	2021
Hedging derivatives	(3 580)	-
Amounts due to banks	(134)	(23)
Interbank deposits	(6)	(7)
Loans and advances received	(83)	(43)
Leases	(19)	(12)
Amounts due to customers	(3 720)	(204)
Issues of securities	(621)	(349)
Subordinated liabilities	(164)	(48)
Total	**(8 327)**	**(686)**

	31.12.2022	31.12.2021
Interest on funds in the mandatory reserve account	6.75%	1.75%

During the course of a working day, the Group may use funds from the mandatory reserve accounts for ongoing payments, on the basis of an instruction submitted to the National Bank of Poland (NBP). However, the Bank must ensure that the average monthly balance on this account complies with the requirements set in the mandatory reserve declaration.

18. Fee and commission income and expenses

ACCOUNTING POLICIES:

The Group recognizes fee and commission income that is not accounted for using the effective interest rate in such a manner so as to reflect the transfer of the goods or services promised to a customer in an amount reflecting the consideration to which – in accordance with the Group's expectations – it will be entitled in return for the goods or services in accordance with the five stage model for recognizing revenue.

Fee and commission income includes one-off amounts charged by the Group for services not related directly to the creation of financial assets, as well as amounts charged by the Group's services performed, which are recognized on a straight-line basis. Fee and commission income also includes fees and commissions recognized on a straight-line basis, received on loans and advances granted with an unspecified schedule of future cash flows for which the effective interest rate cannot be determined.

Upon concluding a contract, the Group assesses whether it will be capable of fulfilling the commitment to perform over time or at a point in time.

The following items are also included in commission income:

- net income on insurance activities in the line "offering insurance products", see "Assets and liabilities in respect of insurance activities";
- net income on operating leases, short-term rental and net income on the provision of fleet management services – in the line "operating leases and fleet management" – see note "Leases";
- foreign exchange margin included in the exchange rates offered to the Bank's customers when providing foreign currency purchase/sale services is presented in the line "margin on foreign exchange transactions".

(IN PLN MILLION)

FINANCIAL INFORMATION

FEE AND COMMISSION INCOME	2022	2021
Loans, insurance, operating leases and fleet management	**1 584**	**1 354**
lending	840	796
offering insurance products	574	456
operating leases and fleet management	170	102
Investment funds, pension funds and brokerage activities	**795**	**813**
servicing investment funds and OFE (including management fees)	388	470
servicing and selling investment and insurance products	26	36
brokerage activities	381	307
Cards	**1 989**	**1 522**
Margins on foreign exchange transactions	**811**	**582**
Bank accounts and other	**1 336**	**1 325**
servicing bank accounts	957	991
cash operations	84	71
servicing foreign mass transactions	102	88
customer orders	63	57
fiduciary services	9	10
Other	121	108
Total, of which:	6 515	5 596
income from financial instruments not measured at fair value through profit or loss	5 607	4 776

FIDUCIARY ACTIVITIES

The Parent Company is a direct participant in the Central Securities Depository of Poland (Krajowy Depozyt Papierów Wartościowych) and the Securities Register (at the National Bank of Poland). The Parent Company maintains securities accounts and handles transactions on the domestic and foreign markets, provides fiduciary services and performs a depository role for pension and investment funds. Assets held by the Parent Company as part of providing fiduciary services have not been disclosed in these financial statements since they do not meet the definition of the Parent Company's assets.

FEE AND COMMISSION EXPENSE	2022	2021
Loans and insurance	**(100)**	**(116)**
commission paid to external entities for product sales	(20)	(22)
cost of construction project supervision and property appraisal	(28)	(42)
fees to Biuro Informacji Kredytowej	(23)	(18)
loan handling	(29)	(34)
Investment funds, pension funds and brokerage activities	**(47)**	**(56)**
Cards	**(1 257)**	**(905)**
Bank accounts and other	**(160)**	**(142)**
clearing services	(56)	(42)
commissions for operating services provided by banks	(16)	(16)
sending short text messages (SMS)	(50)	(54)
selling banking products	(1)	(2)
servicing foreign mass transactions	(22)	(15)
other	(15)	(13)
Total	(1 564)	(1 219)

(IN PLN MILLION)

NET INCOME ON OPERATING LEASES AND FLEET MANAGEMENT	2022	2021
Income on operating leases and fleet management	513	393
Costs of operating leases and fleet management	(95)	(78)
Depreciation of property, plant and equipment under operating leases	(248)	(213)
Net income on operating leases and fleet management	170	102

19. Dividend income

ACCOUNTING POLICIES:

Dividend income is recognized on the date when the shareholders' rights to its receipt is determined, if the Group is entitled to dividend, if it is likely that it will obtain economic benefits related to dividend and the amount of the dividend may be reliably determined.

FINANCIAL INFORMATION

DIVIDEND INCOME	2022	2021
from financial assets held for trading	1	1
from financial instruments not held for trading, measured at fair value through profit or loss	50	11
Total	51	12

20. Gains/(losses) on financial transactions

ACCOUNTING POLICIES:

The net gain/(loss) on financial transactions includes gains and losses arising from disposal of financial instruments designated as financial assets / liabilities measured at fair value through profit or loss and the effect of their measurement at fair value. This item also includes the ineffective portion of cash flow hedges in the case of hedging strategies in which IRS contracts are the hedging instrument, as well as gains and losses on the hedging instrument and hedged item relating to the hedged risk (fair value hedges).

RELATED NOTES: "Hedge accounting and other financial instruments", "Securities", "Loans and advances to customers"

FINANCIAL INFORMATION

GAINS/(LOSSES) ON FINANCIAL TRANSACTIONS	2022	2021
Financial instruments held for trading, of which:	**400**	**221**
Derivatives[1]	400	219
Equity instruments	(2)	4
Debt securities	2	(2)
Financial instruments not held for trading, measured at fair value through profit or loss, of which:	**(26)**	**(126)**
Equity instruments	11	-
Debt securities	8	(15)
Loans and advances to customers	(45)	(111)
Hedge accounting	**(16)**	**(31)**
Total	358	64

[1] of which due to stock options and stock exchange indices PLN 212 million (PLN 25 million in 2021).

(IN PLN MILLION)

21. FOREIGN EXCHANGE GAINS/ (LOSSES)

ACCOUNTING POLICIES:

Foreign exchange gains (losses) comprise foreign exchange gains and losses, both realized and unrealized, resulting from valuation of assets and liabilities denominated in foreign currencies and from the fair value measurement of foreign currency derivatives (FX forward, FX swap, CIRS and currency options). In the case of the hedging strategies in which CIRS contracts are the hedging instrument, this item also includes the ineffective portion of cash flow hedges (for details, please see the note "Hedge accounting and other financial instruments").

Allowances for expected credit losses in respect of loans, advances and other foreign currency-denominated receivables, which are recorded in PLN, are revalued when the measurement of the underlying foreign currency-denominated assets changes. The effect of such remeasurement due to foreign exchange differences is recognized in foreign exchange gains/losses.

	2022	2021
Foreign exchange gains/ (losses)	(73)	436

Lower net foreign exchange gains (losses) mainly as a result of the recognition in 2021 of a foreign exchange gain of approximately PLN 328 million following the decision of the Extraordinary Shareholders' Meeting of the Bank of 23 April 2021 to offer settlements to customers and a deterioration in the gain or loss on foreign exchange transactions due to an increase in PLN interest rates and an increase in the cost of currency conversion in 2022, with an improvement in the net income on customer operations.

22. GAINS/(LOSSES) ON DERECOGNITION OF FINANCIAL INSTRUMENTS

ACCOUNTING POLICIES: note: "Modifications – Changes in contractual cash flows"

RELATED NOTES: "Consolidated statement of comprehensive income",

FINANCIAL INFORMATION

GAINS/(LOSSES) ON DERECOGNITION OF FINANCIAL INSTRUMENTS	2022	2021
Measured at fair value through other comprehensive income	(41)	201
Measured at amortized cost	15	5
Total	**(26)**	**206**

23. OTHER OPERATING INCOME AND EXPENSES

ACCOUNTING POLICIES:

Other operating income comprises income not directly related to banking activities. Other operating income mainly includes gains on the sale of investments in residential real estate, sale/scrapping of property, plant and equipment, intangible assets and assets held for sale, damages, fines and penalties received, and income from lease/rental of properties.

In the Group companies, other operating income also include, respectively, revenue from the sale of finished goods, goods for resale and materials. Other operating income also includes reversed provisions for legal claims, excluding legal claims relating to mortgage loans in foreign currencies and income in respect of the valuation and sale of CO_2 emission allowances.

Other operating expenses include mainly provisions for refunds to customers on early repayment of consumer and mortgage loans before the CJEU ruling (see note "Provisions"), losses on sale /scrapping of property, plant and equipment, intangible assets and assets repossessed for debt, and donations made. In the Group companies, other operating expenses also include the cost of finished goods, goods for resale and materials. Other operating expenses also include provisions recognized for legal claims, excluding legal claims relating to mortgage loans in foreign currencies and income and costs in respect of the valuation and sale of CO_2 emission allowances.

(IN PLN MILLION)

RELATED NOTES: Provisions

FINANCIAL INFORMATION

OTHER OPERATING INCOME	2022	2021
Net revenues from the sale of products and services	118	97
Gains on sale or scrapping of tangible fixed assets, tangible fixed assets leased out under operating lease, intangible assets and assets held for sale	108	101
Damages, compensation and penalties received	47	46
Ancillary income	11	15
Recovery of receivables expired, forgiven or written off	2	4
Reversal of provision for future payments	2	4
Reversal of provision recognized for legal claims excluding legal claims relating to repaid mortgage loans in convertible currencies	7	3
Income from sale of CO_2 emission allowances	43	54
Inne[1]	90	64
Total	**428**	**388**

[1] including, with regard to leasing activities, revenue from early termination of contracts of PLN 15 million (PLN 10 million in 2021), revenue from the sale of coins for collectors' purposes of PLN 10 million (PLN 8 million in 2021).

OTHER OPERATING EXPENSES	2022	2021
Cost of products and services sold	(1)	(3)
Losses on sale or scrapping of tangible fixed assets, tangible fixed assets leased out for operating activity, intangible assets and assets held for sale	(11)	(33)
Damages, compensation and penalties paid	(1)	(1)
Donations made	(54)	(44)
Sundry expenses	(15)	(17)
Recognition of provision for potential refunds of fees and commission to customers	(13)	(27)
Recognition of provision for future payments	(2)	(3)
Recognition of provision for legal claims excluding legal claims relating to repaid mortgage loans in convertible currencies	(12)	(10)
Costs from sale of CO_2 emission allowances	(25)	(114)
Inne[1]	(96)	(80)
Total	**(230)**	**(332)**

[1] including the costs of external services for the recovery of PLN 20 million (PLN 20 million in 2021 - 15 million), remarketing costs of PLN 24 million (PLN 15 million in 2021).

24. NET ALLOWANCES FOR EXPECTED CREDIT LOSSES

ACCOUNTING POLICIES:

The allowance for expected credit losses is recognized in the financial statements in the following manner:

- Financial assets measured at amortized cost: the allowance reduces the gross carrying amount of the financial asset; changes in the allowances amount are recognized in the income statement;
- Off-balance sheet liabilities of a financial nature and financial guarantees: the allowance is presented as a provision under liabilities; changes in the provisions amount are recognized in the income statement;
- Financial instruments measured at fair value through other comprehensive income: the carrying amount of assets recognized at fair value is not additionally decreased by the allowances; however, each change in the measurement is divided into the impairment component, which is recognized in the income statement, and the component relating to other changes in the fair value measurement, which is recognized in other comprehensive income;

- Financial assets measured at fair value through profit and loss: no allowances for expected credit losses are recognized.

ESTIMATES AND JUDGMENTS:

The Group reviews its loan portfolio for impairment at least quarterly. To determine whether an impairment should be recognised in the income statement, the Group assesses whether there is any data indicating a measurable reduction in the estimated future cash flows relating to the loan portfolio. The methodology and assumptions used to determine the estimated cash flow amounts and the periods over which they will occur are reviewed on a regular basis.

- MEASUREMENT AND ASSESSMENT OF CREDIT RISK: EXPECTED CREDIT LOSSES

With regard to impairment, the Group applies the concept of expected losses.

The impairment model is applicable to financial assets that are not measured at fair value through profit or loss, comprising:

- debt financial instruments comprising credit exposures and securities;
- lease receivables;
- other financial assets;
- off-balance sheet financial and guarantee liabilities.

Expected credit losses are not recognized for equity instruments.

Impairment allowances for exposure reflect 12-month or lifetime expected credit losses on such exposures for a given financial asset.

The time horizon of an expected loss depends on whether a significant increase in credit risk occurred since the moment of initial recognition. Based on this criterion, financial assets are allocated to 3 stages:

- STAGE 1 – exposures in which the credit risk is not significantly higher than upon initial recognition and no evidence of impairment is found;
- STAGE 2 – exposures in which the credit risk is significantly higher than upon initial recognition, but no evidence of impairment is found;
- STAGE 3 –assets in respect of which evidence of impairment is recognized, including assets granted or purchased with evidence of impairment recognized (upon being granted or purchased).

- SIGNIFICANT INCREASE IN CREDIT RISK

A significant increase in credit risk is verified according to the likeliness of default and its changes with respect to the date of originating the loan.

  - MORTGAGE AND OTHER RETAIL EXPOSURES

The Group uses a model based on a marginal PD calculation, i.e. the probability of default in a given month, to assess a significant increase in credit risk for mortgage exposures and other retail exposures. This probability depends on the time that has passed from originating the exposure. This enables reflecting the differences in credit quality that are typical of exposures to individuals over the lifetime of the exposure.The marginal PD curves were determined on the basis of historic data at the level of homogeneous portfolios, which are separated according to the type of product, the year of their origination, the loan currency and the credit quality at the time of origination.The marginal PD is attributed to individual exposures by scaling the curve at the level of the portfolio to the individual assessment of the exposure / customer using application models (using data from loan applications) and behavioural models. The Group identifies the premise of a significant increase in credit risk for a given exposure by comparing individual PD curves over the exposure horizon as at the date of initial recognition and as at the reporting date. Only the parts of the original and current PD curves which correspond to the period from the reporting date to the date of maturity of the exposure are compared as at each reporting date. The comparison is based on the average probability of default over the life of the loan in the period under review adjusted for current and forecast macroeconomic indicators.

The result of this comparison, referred to as α statistics, is referred to the threshold value above which an increase in credit risk is considered significant. The threshold value is determined on the basis of the historical relationship between the values of the α statistics and the default arising. In this process the following probabilities are minimized:

(IN PLN MILLION)

- classification into a set of credit exposures with a significant increase in the level of credit risk (based on the α statistic), for which no event of default took place during the audited period (type I error)
- non-classification into the set of credit exposures with a significant increase in the level of credit risk (based on the statistics) for which an event of default occurred during the audited period (type II error).

According to data as at the end of 2022, an increase in the PD parameter of at least 2.6 compared to the value at the time of its recognition in the Group's accounting records in respect of mortgage exposures and an increase of at least 2.5 in respect of other retail exposures constitutes a premise of a significant deterioration in credit quality.

With respect to credit exposures for which the current risk of default does not exceed the level provided for in the price of the loan, the results of the comparison of the probability of default curves as at the date of initial recognition and as at the reporting date do not signify a significant increase in credit risk.

- **Exposures to institutional customers**

In order to assess the significant increase in credit risk for institutional customers the Group applies the model based on the Markov chains. Historical data is used to build matrices of probabilities of customers migrating between individual classes of risk that are determined on the basis of the Group's rating and scoring models. These migrations are determined within homogeneous portfolios, classified using, among other things, customer and customer segment assessment methodologies.

An individual highest acceptable value of the probability of default is set for each category of risk and portfolio on the date of the initial recognition of the credit exposure, which, if exceeded, is identified as a significant increase in credit risk. This value is set on the basis of the average probability of default for categories of risk worse than that at initial recognition of the exposure, weighted by the probability of transition to those categories of risk in the given time horizon.

In accordance with the data as at the end of 2022 and 2021, the minimum deterioration in the category of risk which constitutes a premise of a significant increase in credit risk compared to the current category of risk were as follows:

Risk category	PD range	Minimum range of the risk category deterioration indicating a significant increase in credit risk[1]
A-B	0.0 – 0.90%	3 categories
C	0.90 – 1.78%	3 categories
D	1.78 – 3.55%	2 categories
E	3.55-7.07%	1 category
F	7.07-14.07%	1 category
G	14.07-99.99%	not applicable[2]

[1] average values (the ranges are determined separately for homogeneous groups of customers)
[2] deterioration of the risk category is a direct indication of impairment

The Group uses all available qualitative and quantitative information to identify the remaining premises of a significant increase in credit risk, including:

- marking a credit exposure as POCI without any indication of impairment,
- restructuring measures introducing forbearance for a debtor in financial difficulties;
- delays in repayment of a material amount of principal or interest (understood as an amount in excess of PLN 400 or 1% of the debtor's total cumulative loan exposure to the Bank and the other entities of the Bank's Group) exceeding 30 days;
- identified early warning signals as part of the monitoring process, suggesting a material increase in credit risk (including changes in collateral, modifications of the terms of agreement with the customer, in particular relating to the schedule of loan utilization or repayment, reduction of the Bank's exposure to the customer);
- a significant increase in the LTV ratio;
- quarantine for Stage 2 exposures, which have not shown premises for impairment in the previous 3 months.
- filing for consumer bankruptcy by any of the joint borrowers;
- transfer of the credit exposure for management by the Bank's restructuring and debt collection units;

- use by the borrower of a mortgage loan from statutory support in loan repayment.
- **IMPAIRED LOANS AND DEFINITION OF DEFAULT**

The premise for the impairment of a credit exposure is, in particular:

- delays in repayment of a material amount of the principal or interest or fees (understood as an amount in excess of PLN 400 and 1% of the debtor's total cumulative loan exposure to the Bank and the other entities of the Group) exceeding 90 days;
- a deterioration in the debtor's economic and financial position during the lending period or a risk to the completion of the investment project financed, expressed by the classification into a rating class or risk category suggesting a material risk of default (rating H);
- the conclusion of a restructuring agreement or the application of relief in debt repayment, which is forced by economic or legal reasons arising from the customer's financial difficulties (until the claim is recognized as remedied);
- filing a motion for the debtor's bankruptcy, placing the debtor into liquidation or the opening of enforcement proceedings with respect to the debtor;
- declaration of consumer bankruptcy by any of the joint borrowers;
- information on death of all borrowers who are natural persons or entrepreneurs running individual business activity or a civil partnership (unless such business activity is continued by a successor);
- the occurrence of other events indicating the debtor's inability to repay his total liability under the agreement.

In accordance with Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms ("CRR"), the Group defines a **STATE OF DEFAULT** if it assesses that the debtor is unable to repay the loan liability without resorting to exercising the collateral or if the exposure is overdue more than 90 days. The premises of default are identical to the premises for impairment of the exposure.

Both the process of assessing a significant increase in credit risk and the process of calculating the expected loss are conducted monthly at the level of individual exposures. They use a dedicated computing environment that allows for the distribution of the results to the Group's internal units.

The Group has **SEPARATED THE PORTFOLIO OF FINANCIAL ASSETS WITH LOW CREDIT RISK** by classifying financial instruments for which the average long-term default rate does not exceed the probability of default specified by the rating agency for the worst class investment rating. This portfolio includes, in particular, exposures to banks, governments, local government entities and housing cooperatives and communities.

- **CALCULATION OF THE EXPECTED CREDIT LOSS**

The model for the calculation of the expected credit loss is based on applying detailed segmentation to the credit portfolio, taking into account the following characteristics at product and customer level:

- type of credit product;
- currency of the product;
- year of granting;
- assessment of risk of the customer's default;
- the customer's business segment;
- method of assessing the customer risk.

The Group calculates expected credit losses on an individual and on a portfolio basis.

THE INDIVIDUAL BASIS is used in respect of individually significant exposures. The expected credit loss on the exposure is determined as the difference between its gross carrying amount (in the case of an off-balance sheet credit exposure – the value of its balance sheet equivalent) and the present value of the expected future cash flows, determined taking into account the possible scenarios regarding the performance of the contract and the management of credit exposure, weighted by the probability of their realization.

THE PORTFOLIO METHOD is applied to exposures that are not individually significant and in the event of a failure to identify premises of impairment.

In the portfolio method, the expected loss is calculated as the product of credit risk parameters: probability of default (PD), loss given default (LGD) and exposure at default (EAD); each of these parameters is a vector representing the number of months covering the expected credit loss horizon.

The Group sets this horizon for retail exposures without a repayment schedule on the basis of behavioural data from historical observations. The loss expected both in the entire duration of the exposure and in a period of 12 months is the sum of expected losses in the individual periods discounted using the effective interest rate. The Group adjusts the parameter specifying the level of exposure at the time of default by the future repayments arising from the schedule and potential overpayments and underpayments to specify the value of the asset at the time of default in a given period.

In the calculations of expected credit losses the estimates concerning future MACROECONOMIC CONDITIONS are taken into account. In terms of portfolio analysis, the impact of MACROECONOMIC SCENARIOS is taken into account in the amount of the individual risk parameters. The methodology for calculating the risk parameters includes the study of the dependencies of these parameters on the macroeconomic conditions based on historical data. Three macroeconomic scenarios based on the Bank's own projections are used for calculating the expected loss:

- a baseline scenario with a probability of 75%
- and two alternative scenarios, with a probability of 20% and 5%, respectively.

The scope of the projected indicators includes:

- GDP growth rate,
- unemployment rate,
- WIBOR 3M rate,
- LIBOR CHF 3M rate (from 1 January 2022: SARON 3M),
- CHF/PLN exchange rate,
- property price index
- NBP reference rate.

The final expected loss is the weighted average probability of scenarios from expected losses corresponding to individual scenarios.

The Group ensures compliance of the macroeconomic scenarios used for the calculation of the risk parameters with macroeconomic scenarios used for the credit risk budgeting processes.

The BASELINE SCENARIO uses the base macroeconomic projections. The projections are prepared on the basis of the quantitative models, taking into account adjustments for the presence of one-off events.

The EXTREME SCENARIOS apply to cases of so-called internal shock, as a result of which the so-called external variables (foreign interest rates) do not change with respect to the baseline scenario. The extreme scenarios are developed on the basis of a statistical and econometric analysis, i.e. they do not reflect the events described, but the projected path. Two scenarios are identified, optimistic and pessimistic.

The share of the scenarios for the GDP path (GDP GROWTH RATE) that falls between the optimistic and the pessimistic scenario is referred to as the probability of the baseline scenario. Such an assumption is used to project GDP growth, using a potential rate of growth of the Polish economy that varies over time, calculated with the use of quarterly data provided by the Central Statistical Office. The values of other macroeconomic variables used in the scenarios (rate of unemployment, property price index) are estimated after the extreme paths of GDP growth are defined.

The RATE OF UNEMPLOYMENT is calculated on the basis of the quantified dependence on the difference between GDP growth and the potential rate of economic growth. The result is adjusted for significant structural changes taking place in the Polish economy, which are not encompassed by the quantitative model, in particular:

- the ageing of the Polish population (and the appearance of unsatisfied demand for labour, which will limit the scale of increase in the rate of unemployment in a situation in an economic downturn);

- the Polish labour market is nearing full employment (restrictions of supply mean that there is increasingly less space for a further decline in the rate of unemployment);
- the inflow of immigrants (only partly included in the official statistics).

The level of the **PROPERTY PRICE INDEX** is set on the basis of changes in GDP, taking into account the conditions of supply and demand on the market based on the data and trends presented by the NBP in the publication "Information on housing prices and the situation on the residential and commercial property market in Poland" and the Bank's own analyses.

The projections for deposit **RATES** are mainly prepared on the basis of assumptions regarding central bank interest rates.

The **CHF/PLN EXCHANGE RATE** is a cross rate of the EUR/PLN and EUR/CHF exchange rates. Its projections are a combination of projections for these two rates. The EUR/PLN and EUR/CHF projections are prepared on the basis of a macroeconomic analysis (current and historical) based on econometric methods, as well as on a technical analysis of the financial markets.

In 2022, in the macroeconomic model, the Bank dropped the solutions resulting directly from the approach adopted during the pandemic, i.e. the inclusion of the 2-year average GDP and unemployment projection from the pandemic period as the basis for estimating macroeconomic indicators and the inclusion of the impact of credit holidays on the reduced materialization of credit risk. At the same time, factors are included in the model to reflect current domestic and global events: the impact of the current macroeconomic situation (high inflation) on customers' ability to settle their obligations, as well as the impact of Russia's invasion of Ukraine on fuel prices and, consequently, on the health of companies. Additional factors in the model include:

- taking into account an increase in the interest rate on the quality of the credit portfolio and increases in energy prices on the situation of enterprises, using the historically observed portfolio quality dependency on the level of interest rates and energy prices,
- taking into account the rise in energy prices on the situation of enterprises using historically observed dependence,
- consideration of the effect of exchange rate volatility on the quality of the foreign currency housing loan portfolio, as a result of the escalation of hostilities in Ukraine.

In addition, due to the significant influx of refugees and the uncertainty of its impact on the labour market, the model in all portfolios does not take into account a decrease in unemployment as a factor improving the quality of the loan portfolio.

The applied approach to the impact of macroeconomic forecasts on risk parameters describes the situation simultaneously in all branches of the economy and may not take into account the problems of individual industries caused by the pandemic, which is why the Capital Group conducted additional analyzes of the loan portfolio, including the leasing portfolio. These analyzes performed by risk experts included, above all, an assessment of the impact of specific macroeconomic conditions not included in the portfolio approach and allowed the identification of clients and industries particularly affected by the current economic situation.

In the case of the loan portfolio, this applies in particular to the construction, hotel, automotive, rental of office and retail space, as well as high energy intensity. Exposures with highest PD values (D rating or worse) belonging to identified industries were marked with the indication of "significant increase in credit risk" and covered by increased write-downs. In the fourth quarter of 2022, the forecasts of macroeconomic indicators were taken into account in the estimates, and thus the allowance for these customers was determined based on PD for the worst rating class. As a result of these analyses, the Group increased the write-downs for expected credit losses by approx. PLN 399 million, which represents approx. 25% of the value of write-downs on the entire portfolio of economic loans classified as Stage 2.

In the case of the portfolio of finance lease receivables, this relates to the following sectors: transport, construction, hotel, finishing, furniture, automotive, paper. For these sectors, the Group divided the portfolio into the portfolio of customers with a higher level of risk and the portfolio of standard customers, and for both these groups introduced adjustments to the model PD to increase the coverage of the write-down on this portfolio, with standard clients being lower than for customers with increased risk levels. The most numerous of the identified groups include the transport sector, which accounts for 22% of the healthy portfolio (of which 2% of the healthy portfolio is at a higher risk level), the remaining industries constitute 16% of a healthy portfolio (of which 1% has a higher risk level). The changes resulted in an increase in write-offs by PLN 11 million for the transport sector and PLN 27 million for other industries.

The tables below present projections of the key macroeconomic parameters and their assumed probabilities of materialization.

scenario as at 31.12.2022	Baseline			optimistic			pessimistic		
probability	75%			5%			20%		
	2023	2024	2025	2023	2024	2025	2023	2024	2025
GDP growth y/y	(0.3)	2.8	2.9	5.2	8.2	6.2	(5.8)	(2.5)	(0.4)
Unemployment rate	3.9	4.7	3.9	2.9	3.4	3.1	4.3	5.3	4.3
Property price index	97.0	96.1	98.2	103.9	110.8	114.9	90.6	83.1	83.6
WIBOR 3M (%)	6.8	5.8	4.6	7.3	6.1	4.7	6.2	4.6	3.8
CHF/PLN	4.6	4.2	4.1	4.4	4.1	4.0	5.1	5.3	4.9

scenario as at 31.12.2021	Baseline			optimistic			pessimistic		
probability	75%			5%			20%		
	2022	2023	2024	2022	2023	2024	2022	2023	2024
GDP growth y/y	5.2	3.7	3.0	10.9	6.6	3.0	(0.5)	0.9	3.0
Unemployment rate	3.0	2.6	2.5	2.0	1.7	2.5	4.0	3.5	2.5
Property price index	109.4	106.6	102.5	116.3	112.8	102.5	102.4	100.8	102.5
CHF/PLN	4.0	3.9	3.9	3.8	3.7	3.7	4.5	4.3	4.0

The table below presents the estimated sensitivity of the level of allowances for expected credit losses to macroeconomic conditions, calculated as the change in the level of allowances for expected credit losses in respect of not impaired exposures resulting from the materialization of particular macroeconomic scenarios as at 31 December 2022 and 31 December 2021.

	31.12.2022		31.12.2021	
	optimistic	pessimistic	optimistic	pessimistic
estimated change in the level of allowances for expected credit losses for not impaired exposures due to the materialization of particular macroeconomic scenarios (in PLN million)	(290)	527	(317)	233

(IN PLN MILLION)

The table below presents the estimated sensitivity of the level of allowances for expected losses as a result of scenarios of deterioration or improvement in risk parameters as at 31 December 2022 and 31 December 2021.

ESTIMATED CHANGE IN EXPECTED CREDIT LOSSES RESULTING FROM MATERIALIZATION OF A SCENARIO OF THE RISK PARAMETERS, THE DETERIORATION OR IMPROVEMENT, OF WHICH:[1]	+10% scenario	(10%) scenario	+10% scenario	(10%) scenario
	31.12.2022		31.12.2021	
changes in the present value of estimated cash flows for the Bank's portfolio of individually impaired loans and advances assessed on an individual basis				
SECURITIES	(37)	49	(33)	46
Stage 1	-	12	-	12
Stage 3	(37)	37	(33)	34
LOANS AND ADVANCES TO CUSTOMERS	(92)	138	(120)	153
Stage 3	(92)	138	(120)	153
Changes in the probability of default				
SECURITIES	8	(8)	6	(6)
Stage 1	8	(8)	5	(5)
Stage 2	1	(1)	1	(1)
LOANS AND ADVANCES TO CUSTOMERS	201	(237)	170	(195)
Stage 1	101	(107)	75	(82)
Stage 2	100	(130)	95	(113)
Changes in recovery rates				
SECURITIES	(9)	9	(8)	8
Stage 1	(8)	8	(6)	6
Stage 2	(1)	1	(2)	2
LOANS AND ADVANCES TO CUSTOMERS	(545)	547	(484)	487
Stage 1	(163)	163	(132)	132
Stage 2	(215)	216	(206)	207
Stage 3	(167)	167	(145)	149

[1] "()" decrease in write-downs", "+" increase in write-downs

RELATED NOTES: "Amounts due from banks", "Securities", "Loans and advances to customers", "Credit risk management", "Credit risk – financial information", "Other assets", "Provisions"

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NET ALLOWANCES FOR EXPECTED CREDIT LOSSES	2022	2021
Amounts due from banks	**(2)**	**-**
Debt securities	**19**	**(63)**
measured at fair value through other comprehensive income	34	(46)
measured at amortized cost	(15)	(17)
Loans and advances to customers[1]	**(1 347)**	**(1 202)**
measured at amortized cost	(1 347)	(1 202)
Other financial assets	**(14)**	**1**
Provisions for financial liabilities and guarantees granted	**(157)**	**(45)**
Total	**(1 501)**	**(1 309)**

[1] of which for consumer loans in the amount of PLN 684 million (PLN 496 million in 2021) and business loans in the amount of PLN 391 million (PLN 401 million in 2021).

25. NET IMPAIRMENT LOSSES ON NON-FINANCIAL ASSETS

ACCOUNTING POLICIES:

Impairment losses in respect of cash generating units first and foremost reduce the goodwill attributable to those cash generating units (groups of units), and then they reduce proportionally the carrying amounts of other assets in the unit (group of units). An impairment loss in respect of goodwill is not reversed. In the case of other assets, an impairment loss may be reversed if the estimations used to determine the recoverable amount have changed. An impairment loss may be reversed only to the extent that the carrying amount of an asset does not exceed the carrying amount – less depreciation/amortization – which would be determined had the impairment loss not been recorded.

If there are indications of impairment of common assets, i.e. assets that do not generate cash flows independently from other assets or groups of assets, and the recoverable amount of a single common asset cannot be established, the Group determines the recoverable amount at the level of the cash-generating unit to which a given asset belongs.

ESTIMATES AND JUDGMENTS:

At the end of each reporting period the Group assesses whether there are any indications of impairment of any non-financial non-current assets, right-of-use assets (or cash-generating units).

Indications of impairment of non-current assets include:

1) the asset's market value has declined during the assessment period significantly more than would be expected as a result of the passage of time or normal use;
2) the occurrence of adverse changes (which has already occurred or will occur during the period) caused by technological, market, economic or legal factors in the Bank's environment or on the markets to which the asset is addressed;
3) an increase in market interest rates (which has occurred or will occur in the period), which is likely to affect a discount rate used to calculate the value in use of a given asset and reduce its recoverable value significantly;
4) evidence is available of obsolescence (an asset becoming unfit for use) or physical damage of an asset;
5) significant adverse changes have taken place during the period (or are likely to take place in the near future), in the extent to which, or manner in which, an asset is used, e.g. plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite;
6) evidence that the economic performance of a given asset is or will be in the future worse than expected;
7) the occurrence of adverse climate change which will contribute to a change in the expectations as to the further use of a given asset;
8) other indications of possible impairment.

If any such indications occur and annually in the case of intangible assets which are not amortized, as well as intangible assets not yet placed in service and goodwill, the Bank estimates the recoverable amount being the higher of the fair value less costs to sell or the value in use of a non-current asset (or a cash-generating unit), and, if the carrying amount of an asset exceeds its recoverable amount, the Group recognizes an impairment loss in the income statement. In order to estimate these amounts it is necessary to adopt assumptions concerning, among other things, the projected future cash flows that the Group may obtain from further use or sale of a given non-current asset (or a cash-generating unit). Adopting different assumptions concerning the valuation of future cash flows could affect the carrying amount of certain non-current assets.

RELATED NOTES: "Intangible assets", "Property, plant and equipment", "Assets held for sale", "Investments in associates and joint ventures", "Other assets", "Leasing"

(IN PLN MILLION)

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NET IMPAIRMENT LOSSES ON NON-FINANCIAL ASSETS	NOTE	2022	2021
Property, plant and equipment under operating leases	75	-	(1)
Property, plant and equipment	42	(3)	(1)
Assets held for sale	43	-	(2)
Intangible assets[1]	41	(21)	(11)
Investments in associates and joint ventures	44	-	12
Other non-financial assets, including inventories	45	(39)	(43)
Total		(63)	(46)

[1] the Group recognised impairment of intangible assets – customer relationships in the amount of PLN 21 million (PLN 9 million in 2021)

CHANGE IN ACCUMULATED IMPAIRMENT LOSSES ON NON-FINANCIAL ASSETS	Opening balance	Net impairment losses on non-financial assets	Other	Closing balance
2022				
Property, plant and equipment under operating leases	(3)	-	(1)	(4)
Property, plant and equipment	(100)	(3)	1	(102)
Non-current assets held for sale	(1)	-	-	(1)
Intangible assets	(396)	(21)	35	(382)
Investments in associates and joint ventures	(264)	-	-	(264)
Other non-financial assets, including inventories	(354)	(39)	56	(337)
Total	(1 118)	(63)	91	(1 090)

CHANGE IN ACCUMULATED IMPAIRMENT LOSSES ON NON-FINANCIAL ASSETS	Opening balance	Net impairment losses on non-financial assets	Other	Closing balance
2021				
Property, plant and equipment under operating leases	(1)	(1)	(1)	(3)
Property, plant and equipment	(101)	(1)	2	(100)
Non-current assets held for sale	(3)	(2)	4	(1)
Intangible assets	(415)	(11)	30	(396)
Investments in associates and joint ventures	(276)	12	-	(264)
Other non-financial assets, including inventories	(292)	(43)	(19)	(354)
Total	(1 088)	(46)	16	(1 118)

26. COST OF LEGAL RISK OF MORTGAGE LOANS IN CONVERTIBLE CURRENCIES

ACCOUNTING POLICIES AND ESTIMATES AND JUDGMENTS:

In connection with the current legal disputes regarding loans in convertible currencies, the The Group has identified a risk that the cash flows on the portfolio of mortgage loans denominated in and indexed to foreign currencies planned on the basis of schedules may not be fully recoverable and/or a liability resulting in a future outflow of funds may arise. The Group decreases the gross carrying amount of mortgage loans denominated in and indexed to foreign currencies and/or recognizes provisions for legal risk in accordance with the requirements of IFRS 9 Financial instruments and IAS 37 Provisions, Contingent Liabilities and Contingent Assets. The cost of legal risk was estimated taking into account a number of assumptions which have a significant effect on the amount of the estimates recognized in the Group's financial statements.

The Group recognizes as the decrease of the gross carrying amount of mortgage loans the effect of legal risk related to potential litigation for the portfolio of mortgage loans in convertible currencies and existing legal claims related to loan exposures recognized as at the balance sheet date in the statement of financial position. If the estimated loss due to legal risk exceeds the gross value of the loan and for settled loans, the Group recognizes provisions for legal risk as a liability of the Group, in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

The costs of legal risk related to mortgage loans in convertible currencies were estimated using a statistical method taking into account the effect of customer characteristics as the sum of the products of:

- probabilities of specific outcomes of legal disputes and the amount of loss in the event of various dispute outcome scenarios, taking into account the current and expected number of court cases throughout the period of the Group's exposure to such risk; and
- probability of acceptance of settlement by the customer and the amount of loss resulting from the settlement.

The Group also estimates the probabilities of adverse outcomes for the actual and potential claims. Such probabilities are different for mortgage loans indexed to foreign currencies and denominated in foreign currencies. In the evaluation of such probabilities, the Group uses the support of third party law firms. In the Group's opinion, the level of estimated costs of legal risk is also affected by such factors as: duration of legal proceedings (also estimated on the basis of relatively short statistics which do not meet the requirements of quantitative methods) and growing costs which must be incurred to initiate and conduct legal proceedings.

The Group has also taken into account, as an impact on the probability of settlements, the tax preferences of customers falling within the scope of the Regulation of the Minister of Finance of 11 March 2022 on suspending the collection of income tax on certain types of income (revenue) related to a mortgage loan granted for residential purposes, as amended by the Regulation of 20 December 2022, which is in force until 31 December 2024.

Given the short horizon of the historical data available and a significant uncertainty as to the direction in which the legal solutions will evolve, the adopted methodology of assessing losses in respect of the legal risk will be periodically reviewed in the subsequent reporting periods. The uncertainty in the estimates relates both to the number of future lawsuits and court decisions in this regard, including the remuneration to which the Bank is entitled for the customer's non-contractual use of capital in the event of a cancellation scenario (currently the model takes into account a probability of non-recovery of the cost of capital of 70%, thus the probability of recovery of the cost of capital is 30%) and to the expected number of settlements, which may be influenced in particular by changes in the jurisprudential line on mortgages denominated or indexed to foreign currencies, an increase in underlying interest rates or a change in the PLN/CHF exchange rate.

In 2022 and 2021, the Group regularly, on a quarterly basis, monitored the model's adequacy by comparing the actual key model parameters with the calculated values. In addition, new empirical data (more accurate or resulting from a longer observation) were gradually modifying or replacing previous assumptions. The model was also adjusted to the new processes launched by the Group in the area of mortgage loans denominated in or indexed to foreign currencies granted in the past. The following major changes were introduced to the model:

- updating the probabilities of specific outcomes of legal proceedings - on the basis of the current information received from the Group's legal advisors;
- updating the probability of signing a settlement or filing a lawsuit based on empirical data;
- determining the ratio of conversion of lawsuits to settlements over the loan's lifetime on the basis of empirical data;
- taking into account non-zero probability of a favourable outcome (for the Group), where the customer is obliged to reimburse the fee for using funds without an agreement - in the event of a verdict declaring a loan agreement invalid.

(IN PLN MILLION)

The Group has analysed the model's sensitivity to changes in key parameters:

ANALYSIS OF THE MODEL'S SENSITIVITY TO CHANGES IN KEY PARAMETERS	Increase/decrease of cost of legal risk of mortgage loans in convertible currencies	
	31.12.2022	31.12.2021
1 p.p. increase in the number of lawsuits (at the cost of inactive customers)	64	92
1 p.p. decrease in the likelihood of the Bank winning in court (instead of a 1 p.p. increase in the probability of declaring an agreement invalid)	63	42
1% increase in weighted average loss	57	35
1 p.p. decrease in the number of settlements	22	37
1 p.p. decrease in the likelihood of compensation for the principal amount[1]	40	12
1 p.p. increase in the lawsuit to settlement conversion ratio	(26)	(11)

[1] When estimating the cost of legal risk of mortgage loans in convertible currencies, the Bank takes into account the probability of recovering the cost of capital at the level of 30%. Eliminating this particular assumption, while maintaining the other parameters of the model, would increase the cost of legal risk by PLN 1 200 million

The above sensitivity analysis includes scenarios of court decisions analyzed by the Bank and loans for which the Bank estimates a non-zero probability of a lawsuit being filed by the customer.

From 2022 onwards, the Group has recognized the effects of final judgments declaring the invalidity of loan agreements in convertible currencies. As a consequence of the aforementioned judgments, the Group ceased to recognize receivables from active loan agreements in the Group's assets (under "Loans and advances to customers"). At the same time, the Bank recognized, under "Other assets", receivables from principal disbursed to customers and the Bank's claims for reimbursement for non-contractual use of principal, as well as liabilities, relating to the reimbursement of principal and interest instalments paid by customers ("Other liabilities").

RELATED NOTES: "Loans and advances to customers", "Other assets", "Provisions" "Legal claims" and "Management of currency risk associated with mortgage loans for individuals", "Subsequent events".

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Starting from 4 October 2021, following a decision of 23 April 2021 of the Extraordinary General Meeting of PKO Bank Polski S.A., the Group has been concluding settlements with consumers who concluded loan agreements or cash advance agreements with the Bank secured by mortgages and indexed to foreign currencies or denominated in foreign currencies (hereinafter: settlements with consumers).

As at 31 December 2022, nearly 37.5 thousand applications for mediation were recorded (as at 31 December 2021 – more than 19 thousand applications). The total number of settlements concluded as at 31 December 2022 was 20 396, of which 19 786 were concluded in mediation proceedings and 610 in court proceedings. As at 31 December 2021, the total number of settlements concluded was 5 887, of which 5 754 were concluded in mediation proceedings and 133 in court proceedings. Starting from 20 June 2022, the Bank enabled concluding settlement agreements with respect to MIX mortgage loans granted in CHF designated for housing purposes.

(IN PLN MILLION)

IMPACT OF LEGAL RISK OF MORTGAGE LOANS IN CONVERTIBLE CURRENCIES	Gross carrying amount of mortgage loans in convertible currencies net of the cost of legal risk of mortgage loans in convertible currencies	Accumulated cost of legal risk of mortgage loans in convertible currencies	Gross carrying amount of mortgage loans in convertible currencies including the cost of legal risk of mortgage loans in convertible currencies
as at 31.12.2022			
Loans and advances to customers – adjustment reducing the carrying amount of loans	19 015	7 378	11 637
- related to the portfolio of mortgage loans in CHF	16 731	7 378	9 353
Provisions (note 47) and adjustment to the gross carrying amount of other assets		945	
Total		**8 323**	
as at 31.12.2021			
Loans and advances to customers – adjustment reducing the carrying amount of loans	22 038	6 428	15 610
- related to the portfolio of mortgage loans in CHF	19 528	6 428	13 100
Provisions (note 47)		595	
Total		**7 023**	

Change in the accumulated cost of legal risk of mortgage loans in convertible currencies during the period	01.01-31.12.2022	01.01-31.12.2021
Carrying amount at the beginning of the period	**7 023**	**7 043**
revaluation of loss for the period	864	590
offset of settlements and judgments for the period against accumulated losses	(1 478)	(622)
Increase in adjustment to gross carrying amount of loans and advances to customers and other assets, increase in provisions for legal risk	1 914	-
other changes	-	12
Carrying amount at the end of the period	**8 323**	**7 023**

Revaluation of the loss in respect of the legal risk is associated with the effect of changes in foreign exchange rates on the part of the loss which is recognized in the convertible currency as adjustment to the gross carrying amount of loans.

27. Administrative expenses

Accounting policies:

Employee benefits

Employee benefits comprise wages and salaries and social insurance (including provisions for retirement and disability benefits, which are discussed in detail in the note "Provisions"), as well as costs of the employee pension scheme constituting a defined contribution scheme and the programme of variable remuneration components for persons occupying managerial positions, a portion of which is recorded as a liability in respect of share-based payments settled in cash, in accordance with IFRS 2 Share-based payments (the programme of variable remuneration components is discussed in detail in the note "Remuneration of the PKO Bank Polski S.A. key management").

Moreover, as part of wages and salaries the Group recognises a provision for future liabilities in respect of compensation and severance bonuses paid out to employees with whom the employment relationship is terminated for reasons not related to the employees; and accruals related to costs attributable to the current period, which will be incurred in the following period, including bonuses and holiday pay, taking account of all unused holiday.

For additional information, see also the note "Provisions"

OVERHEADS – Overheads include the costs of maintaining fixed assets, IT and telecommunications services costs, costs of administration, promotion and advertising, property protection and training.

Lease payments under short-term and low-value leases are recognized in the income statement as an expense on a straight-line basis over the lease term.

DEPRECIATION AND AMORTISATION

Costs of depreciation of property, plant and equipment, including right-of-use property, plant and equipment are recognised under the heading "Administrative expenses", item "Depreciation".

Costs of depreciation of tangible fixed assets under operating leases are recognised in fee and commission income in the line "operating leases and fleet management" as a component of the net income from operating leases and fleet management.

Depreciation of property, plant and equipment, amortization of intangible assets and depreciation of investment properties begins on the first day of the month following the month in which the asset has been placed in service, with the exception of right-of-use assets, for which depreciation begins in the same month in which they were placed in service, and ends no later than at the time when:

- the amount of depreciation or amortization charges becomes equal to the initial cost of the asset, or
- the lease period ends, or
- the asset is designated for scrapping, or
- the asset is sold; or
- the asset is found to be missing, or
- it is found – as a result of verification – that the expected residual value of the asset exceeds its (net) carrying amount, taking into account the expected residual value of the asset upon scrapping, i.e. the net amount that the Group expects to obtain at the end of the useful life of the asset, net of its expected costs to sell.

Depreciation and amortization is charged using the straight-line method, consisting in a systematic, even distribution of the initial value of a fixed asset, the right to use and an intangible asset over the specified depreciation/amortization period, regardless of any possible periods of the assets not being used.

For non-financial non-current assets it is assumed that the residual value is nil, unless there is an obligation by a third party to buy back the asset, or if there is an active market which will continue to exist at the end of the asset's period of use and it is possible to determine the value of the asset on this market.

Costs relating to the purchase or construction of buildings are allocated to significant parts of the building (components) when such components have different useful lives or when each of the components generates benefits for the Group in a different manner. Each component of a building is depreciated separately. Intangible assets with indefinite useful lives, which are subject to an annual impairment test, are not amortized.

COSTS OF REGULATORY CHARGES – In this item, the Group presents mainly the charges paid by the Group, resulting from the legal regulations governing the Group's activities, to other entities, i.e. The Polish Financial Supervision Authority (PFSA), the Bank Guarantee Fund (BGF), the Borrower Support Fund and also to the assistance fund operated by System Ochrony Banków Komercyjnych S.A. (SOBK). In this item, the Group also recognises other taxes other than income tax expense and tax on certain financial institutions, which is presented under a separate heading:

- **CONTRIBUTIONS AND PAYMENTS TO THE BGF** – According to IFRIC 21 "Levies" – fees paid by the Group to the Bank Guarantee Fund are recognized in profit or loss upon the occurrence of the obligating event. The Group makes contributions to the banks' guarantee fund (quarterly) and the banks' compulsory resolution (annually). Contributions to the guarantee fund and the mandatory restructuring fund are not tax-deductible.
- **FEES TO THE PFSA** - In accordance with IFRIC 21 "Levies", fees paid by the Group to the Polish Financial Supervision Authority are recognized in profit or loss upon the occurrence of the obligating event. Both fees (to cover the cost of banking supervision and to cover the costs of supervision over the capital market) are paid once a year. Fees paid to the Polish Financial Supervision Authority are tax deductible.
- **FLAT-RATE INCOME TAX** – The Act of 23 October 2018 on amendments to, among other things, the acts on income taxes, introduced a possibility of an alternative to taxation with WHT, namely a 3% tax on certain interest paid to

(IN PLN MILLION)

non-residents. Therefore, on 29 March 2019 the Bank filed a notification on the election of the 3% taxation option with the tax office in respect of:

- interest on loans which is paid by the Bank to PKO Finance AB with its registered office in Sweden (pursuant to the Act, the election of the taxation option relates to the years 2014 -2022) and
- interest on Eurobonds issued by the Bank before 1 January 2019.

- **OTHER TAXES AND FEES** – A tax on real estate, payments made to the State Fund for the Rehabilitation of Disabled Persons, tax on means of transport, excise duty, court fees stamps, fees related to mediation at KNF, the contribution to finance the activities of the Financial Ombudsman and its Office, as well as public and administrative fees.

ESTIMATES AND JUDGMENTS:

In estimating useful lives of particular types of property, plant and equipment, including assets leased out under operating lease, intangible assets and investment properties, the following factors are considered:

- expected physical wear and tear estimated based on the average periods of use recorded to date, reflecting the rate of wear and tear, intensity of use etc.;
- technical or market obsolescence;
- legal and other limitations of the asset's use;
- expected usage of the asset;
- climate-related issues, i.e. the climate factors potentially affecting the useful lives of assets (e.g. ageing, legal limitations or unavailability of assets);
- other factors that may affect the useful economic life of the asset type concerned.

When the period of use of a given asset results from a contract term, the useful life of such an asset corresponds to the period defined in the contract. If the estimated useful life is shorter than the period defined in the contract, the estimated useful life is applied. The amortization/depreciation method and useful life are verified at least once a year.

Depreciation /amortization periods applied by the PKO Bank Polski S.A. Group:

Fixed assets	Useful lives
Buildings, premises, cooperative rights to premises (including investment real estate)	from 25 to 60 years
Leasehold improvements (buildings, premises)	from 1 to 11 years (or the lease term, if shorter)
Machines, technical devices, tools and instruments	from 2 to 15 years
Computer units	from 2 to 10 years
Vehicles	from 3 to 5 years
Intangible assets	**Useful lives**
Software	from 1 to 24 years
Other intangible assets	from 2 to 20 years

The impact of changes in the useful lives of depreciated assets classified as land and buildings is presented in the table below:

CHANGE IN THE USEFUL LIVES OF DEPRECIATED ASSETS CLASSIFIED AS LAND AND BUILDINGS	31.12.2022		31.12.2021	
	+10 years scenario	-10 years scenario	+10 years scenario	-10 years scenario
Depreciation costs	(30)	165	(29)	178

RELATED NOTES: "Intangible assets", "Property, plant and equipment", "Provisions", "Benefits for the PKO Bank Polski SA key management.", "Leasing"

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FINANCIAL INFORMATION

ADMINISTRATIVE EXPENSES	2022	2021
Employee benefits	**(3 451)**	**(3 199)**
Overheads, of which:	**(1 480)**	**(1 278)**
Rent	(99)	(97)
IT	(389)	(396)
Depreciation and amortization	**(1 030)**	**(998)**
property, plant and equipment, of which:	(530)	(534)
right-of-use assets	(232)	(234)
IT	(120)	(102)
investment properties	(1)	(1)
intangible assets, of which:	(500)	(464)
IT	(483)	(440)
Costs of regulatory charges	**(1 889)**	**(642)**
Total	**(7 850)**	**(6 117)**

EMPLOYEE BENEFITS	2022	2021
Wages and salaries, including:	**(2 883)**	**(2 697)**
costs of contributions to the employee pension plan	(76)	(71)
restructuring costs	-	(19)
Social security, of which:	**(478)**	**(431)**
contributions for disability and retirement benefits	(414)	(365)
Other employee benefits	**(90)**	**(71)**
Total	**(3 451)**	**(3 199)**

COSTS OF REGULATORY CHARGES	2022	2021
Contribution and payments to the Bank Guarantee Fund, of which:	(409)	(481)
to the Resolution Fund	(291)	(253)
to the Bank Guarantee Fund	(118)	(228)
Fees to PFSA	(50)	(48)
Borrower Support Fund	(314)	-
Fee for the assistance fund operated by SOBK	(956)	-
Flat rate income tax	(5)	(7)
Other taxes and fees	(155)	(106)
Total	**(1 889)**	**(642)**

- **FEE FOR THE ASSISTANCE FUND OPERATED BY SYSTEM OCHRONY BANKÓW KOMERCYJNYCH S.A.:**

On 14 June 2022, PKO Bank Polski S.A. and 7 other commercial banks, i.e. Alior Bank S.A., BNP Paribas Bank Polska S.A., ING Bank Śląski S.A., mBank S.A., Millennium Bank S.A., Bank Polska Kasa Opieki S.A. and Santander Bank Polska S.A. (the Participating Banks) formed a system for the protection of commercial banks, which is referred to in Chapter 10a of the Banking Law. The system is supervised by the PFSA.

(IN PLN MILLION)

The aim of the protection system is to ensure the liquidity and solvency of the Participating Banks on the terms and conditions and to the extent specified in the protection system agreement, as well as to support the resolution regime carried out by the Bank Guarantee Fund (BGF). The Participating Banks formed the company System Ochrony Banków Komercyjnych S.A. as the system's Management Entity with a share capital of PLN 1 million. SOBK established an assistance fund to provide funds for the financing of the protection system's tasks. The fund is financed by contributions from participating banks. Each Participating Bank was obliged to pay an amount equal to 0.40% of the guaranteed funds as at the end of the first quarter of 2022. The Bank's contribution to the aid fund of PLN 872 million was paid on 2 August 2022. In order to provide funds for the financing of the protection system's tasks, the Group made another payment to the aid fund managed by SOBK S.A. of PLN 84 million in the third quarter of 2022. In total, in 2022 the Group paid PLN 956 million to aid fund.

FEE FOR THE BORROWER SUPPORT FUND:

The Act of 14 July 2022 on crowdfunding for businesses and support for borrowers introduced changes in the operation of the Borrower Support Fund, which will offer support to borrowers of up to PLN 2,000 per month, payable over a period of up to 36 months. Repayment of the support will begin after two years in 144 equal and interest-free instalments. The customers who have repaid the first 100 instalments in time may be relieved from the obligation to repay a part of the support received. A customer can benefit from the support when one of the following conditions is met:

- at least one of the borrowers is unemployed;
- the monthly housing loan servicing costs exceed 50 per cent of the customer's monthly income;
- monthly income after deduction of the loan costs does not exceed PLN 1 552 per person in a one-person household or PLN 1 200 per person in a multi-person household in 2022.

From this, the Fund has been injected with additional funds of approximately PLN 1.4 billion until the end of 2022. In 2022, the Group recognised a cost in respect of additional payments to the Borrower Support Fund of 314 million.

28. TAX ON CERTAIN FINANCIAL INSTITUTIONS

ACCOUNTING POLICIES:

As of 1 February 2016, the Act of 15 January 2016 on tax on certain financial institutions came into force, which covered, among other things, banks and insurance companies. The tax is charged on the surplus of a Bank's total assets above PLN 4 billion, based on the trial balance as at the end of each month. The tax base of insurance companies within one Group is determined jointly as the surplus of total assets over PLN 2 billion Banks are entitled to reduce the tax base by deducting, among other things, own funds and the value of Treasury securities held. Additionally, banks reduce the tax base by the value of assets acquired from the NBP, constituting collateral of a refinancing loan granted by the NBP. Insurance companies are entitled to reduce their tax base by the value of assets accumulated under the contracts for Employee Capital Plans that they service, as referred to in the Act on Employee Capital Plans of 4 October 2018. As a result of the amendment to the Act on taxation of certain financial institutions, effective from 7 May 2022, both banks and insurance companies may reduce the tax base by the value of bonds purchased and loans or advances, respectively, issued or granted by the Bank Guarantee Fund or an asset management entity referred to in the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution.
The tax rate for all taxpayers is 0.0366% per month, and the tax is paid monthly by the 25th day of the month following the month to which it relates.

The tax paid is not tax-deductible for corporate income tax purposes.

FINANCIAL INFORMATION

TAX ON CERTAIN FINANCIAL INSTITUTIONS	2022	2021
PKO Bank Polski S.A.	(1 190)	(986)
PKO Życie Towarzystwo Ubezpieczeń S.A.	(3)	(5)
PKO Bank Hipoteczny S.A.	(70)	(84)
PKO Towarzystwo Ubezpieczeń S.A.	(3)	(4)
Total	**(1 266)**	**(1 079)**

(IN PLN MILLION)

29. INCOME TAX

ACCOUNTING POLICIES:

Corporate income tax is recognized as current tax and deferred tax. The current income tax is recognized in the income statement. Deferred income tax, depending on the source of temporary differences, is recorded in the income statement or in other comprehensive income.

- **CURRENT TAX**

Current income tax is calculated on the basis of gross accounting profit adjusted by non-taxable income, taxable income that does not constitute accounting income, non-tax deductible expenses and tax-deductible costs which are not accounting costs, in accordance with tax regulations. These items mainly include income and expenses relating to accrued interest receivable and payable, allowances for expected credit losses and provisions for off-balance financial liabilities granted.
Group companies are corporate income tax payers. The amount of the companies' current tax liability is transferred to offices of the tax administration authorities with jurisdiction over their location.

Corporate income tax liabilities of individual Group companies for 2022 will be paid in accordance with the schedules stipulated by the relevant tax regulations.

Pursuant to the principles governing the statute of limitations for tax liabilities, the correctness of income tax settlements may be audited within five years of the end of the year in which the deadline for the submission of the respective tax returns passed.

- **DEFERRED INCOME TAX**

Deferred tax is recognized in the amount of the difference between the tax base of assets and liabilities and their carrying amounts for the purpose of financial reporting. The Group recognises deferred tax liabilities and assets in the statement of financial position. Changes in deferred tax liabilities and assets are recognized in mandatory charges to profit, with the exception of the effects of the measurement of financial assets measured at fair value through other comprehensive income, hedging instruments which are recognized in other comprehensive income, where changes in deferred tax liabilities and assets are recognized in other comprehensive income. In determining deferred income tax, deferred tax assets and liabilities as at the beginning and as at the end of the reporting period are taken into account. The carrying amount of a deferred tax asset is reviewed as at the end of each reporting period and is subject to appropriate reduction to the extent it is no longer probable that taxable income sufficient for a partial or full realisation of this deferred tax asset would be generated.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply in the period in which the asset is realized or liability is settled, using tax rates (and tax laws) that prevail at the reporting date. those whose future use is certain at the reporting date.
For deferred income tax calculation the Group uses the 19% tax rate for entities operating in the territory of Poland, the 18% tax rate for entities operating in Ukraine and the 20.6% tax rate for entities operating in Sweden

The Group offsets deferred tax assets against deferred tax liabilities only if it has a legally enforceable right to set off current income tax assets against current income tax liabilities and the deferred income tax is attributable to the same taxable entity and the same taxation authority.

FINANCIAL INFORMATION:

- **TAX EXPENSE**

	2022	2021
Income tax expense recognized in the income statement	**(1 416)**	**(1 640)**
Current income tax expense	(2 051)	(1 558)
Deferred income tax on temporary differences	635	(82)
Income tax expense recognized in other comprehensive income in respect of temporary differences	**779**	**1 671**
Total	**(637)**	**31**

(IN PLN MILLION)

- RECONCILIATION OF THE EFFECTIVE TAX RATE

RECONCILIATION OF THE EFFECTIVE TAX RATE	2022	2021
Profit or loss before tax	4 749	6 513
Tax at the statutory rate in force in Poland (19%)	(902)	(1 237)
Effect of different tax rates of foreign entities	1	1
Effect of permanent differences between profit before income tax and taxable income, including:	**(514)**	**(403)**
non-deductible impairment losses on investments in subordinates	(10)	-
non-deductible allowances for expected credit losses on credit exposures and securities	(44)	(45)
contributions and payments to the Bank Guarantee Fund	(78)	(91)
tax on certain financial institutions	(240)	(205)
cost of legal risk of mortgage loans in convertible currencies	(143)	(25)
interest on foreign exchange gains in Sweden	27	(9)
3% flat-rate income tax on interest for non-residents	-	(1)
dividend income	3	3
Borrower Support Fund	(60)	-
other permanent differences	31	(30)
Income tax expense recognized in the income statement	(1 416)	(1 640)
Effective tax rate (%)	29.82	25.18

(IN PLN MILLION)

- NET DEFERRED TAX ASSETS

DEFERRED TAX LIABILITIES AND ASSETS 2022	As at the beginning of the period	INCOME STATEMENT	OTHER COMPREHENSIVE INCOME	As at the end of the period
Interest accrued on receivables (loans)	235	133	-	368
Interest on securities	159	63	-	222
Valuation of securities	20	(19)	(1)	-
Valuation of derivative financial instruments	33	24	(17)	40
Difference between carrying amount and tax base of property, plant and equipment and intangible assets	206	17	-	223
Taxable income on the reversal of IBNR allowance, which was previously tax deductible, on implementation of IFRS 9	39	(13)	-	26
Prepaid costs	59	(30)	-	29
Interest on foreign exchange gains in Sweden	288	(288)	-	-
Other taxable temporary differences	26	59	-	85
Deferred tax liabilities, gross	**1 065**	**(54)**	**(18)**	**993**
Interest accrued on liabilities	40	174	-	214
Valuation of derivative financial instruments	952	75	362	1 389
Valuation of securities	459	17	396	872
Provision for employee benefits	102	(2)	3	103
Allowances for expected credit losses	1 341	136	-	1 477
Fair value measurement of loans	146	11	-	157
Commissions to be settled in time using the straight-line valuation method and effective interest rate	877	284	-	1 161
Other deductible temporary differences	36	2	-	38
Provision for costs to be incurred	61	12	-	73
Tax loss brought forward	6	(5)	-	1
Impact of legal risk of mortgage loans in convertible currencies	342	(21)	-	321
Premium on securities	76	46	-	122
Difference between carrying amount and tax base of property, plant and equipment and intangible assets, including leased assets	387	(148)	-	239
Deferred tax asset, gross	**4 825**	**581**	**761**	**6 167**
Total effect of temporary differences	**3 760**	**635**	**779**	**5 174**
Deferred tax liabilities (presented in the statement of financial position)	**356**	**(325)**	**(18)**	**13**
Deferred tax assets (presented in the statement of financial position)	**4 116**	**310**	**761**	**5 187**

The Group took into account the right to recognize deferred tax assets in connection with the right to apply the tax preference in respect of the settlements covered by the Regulation of the Minister of Finance of 11 March 2022 on suspending the collection of income tax on certain types of income (revenues) associated with mortgage loans granted for housing purposes, as amended by the Regulation of 20 December 2022, which is effective until 31 December 2024.

(IN PLN MILLION)

DEFERRED TAX LIABILITIES AND ASSETS 2021	As at the beginning of the period	INCOME STATEMENT	OTHER COMPREHENSIVE INCOME	As at the end of the period
Interest accrued on receivables (loans)	257	(22)	-	235
Interest on securities	149	10	-	159
Valuation of securities	302	14	(296)	20
Valuation of derivative financial instruments	90	33	(90)	33
Difference between carrying amount and tax base of property, plant and equipment and intangible assets	178	28	-	206
Taxable income on the reversal of IBNR allowance, which was previously tax deductible, on implementation of IFRS 9	52	(13)	-	39
Prepaid costs	103	(44)	-	59
Interest on foreign exchange gains in Sweden	279	9	-	288
Other taxable temporary differences	32	(6)	-	26
Deferred tax liabilities, gross	**1 442**	**9**	**(386)**	**1 065**
Interest accrued on liabilities	45	(5)	-	40
Valuation of derivative financial instruments	6	85	861	952
Valuation of securities	1	32	426	459
Provision for employee benefits	86	18	(2)	102
Allowances for expected credit losses	1 283	58	-	1 341
Fair value measurement of loans	131	15	-	146
Commissions to be settled in time using the straight-line valuation method and effective interest rate	840	37	-	877
Other deductible temporary differences	53	(17)	-	36
Provision for costs to be incurred	54	7	-	61
Tax loss brought forward	5	1	-	6
Impact of legal risk of mortgage loans in convertible currencies	476	(134)	-	342
	40	36	-	76
Difference between carrying amount and tax base of property, plant and equipment and intangible assets, including leased assets	593	(206)	-	387
Deferred tax asset, gross	**3 613**	**(73)**	**1 285**	**4 825**
Total effect of temporary differences	**2 171**	**(82)**	**1 671**	**3 760**
Deferred tax liabilities (presented in the statement of financial position)	**372**	**370**	**(386)**	**356**
Deferred tax assets (presented in the statement of financial position)	**2 543**	**288**	**1 285**	**4 116**

- ### Tax Group

Pursuant to the agreement dated 3 November 2021, PKO Bank Polski S.A., PKO Bank Hipoteczny S.A. and PKO Leasing S.A. have extended the operation of PGK PKO Banku Polskiego S.A. ("PGK PKO Bank Polski S.A."), which was established pursuant to the agreement dated 5 November 2018, for a further three fiscal years (2022 - 2024). These agreements have been registered with the relevant head of the tax office.

A tax group is an institution of the tax law stipulated in the provisions of the Corporate Income Tax Act. Its creation means that the income of the Tax Group companies will be consolidated for corporate income tax purposes and that certain solutions will be available facilitating the application of specific regulations of the Corporate Income Tax Act, dedicated specifically to tax groups.

(IN PLN MILLION)

PKO Bank Polski S.A. is the parent of PGK PKO Banku Polskiego S.A. PGK PKO Banku Polskiego S.A. was established for three tax years. Current income tax settlements are presented broken down into receivables and liabilities of PKO Bank Polski S.A. and receivables and liabilities of subsidiaries included in the Tax Group.

- **TAX POLICY**

The Bank has a Tax Strategy for PKO Bank Polski S.A. in place, adopted by resolution of the Management Board No 392/C/2021 of 5 October 2021, approved by resolution of the Supervisory Board no. 154/2021 of 14 October 2021. On 17 December 2021, the Strategy was published on the Bank's website at: https://www.pkobp.pl/grupa-pko-banku-polskiego/pko-bank-polski/strategia-podatkowa/.

In the execution of its statutory annual obligations resulting from Article 27c of the Corporate Income Tax Act, the Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna Tax Group prepared in 2022 the Information on the tax strategy implemented in 2021, which is available on the Bank's website at https://www.pkobp.pl/grupa-pko-banku-polskiego/pko-bank-polski/strategia-podatkowa/ or: https://www.pkobp.pl/informacja-o-realizowanej-strategii-podatkowej/. The Bank On 20 December 2022, the Bank notified the head of the competent tax office of the address of the webpage on which the Information is available.

Corporate income tax paid on the income earned by the PKO Bank Polski S.A. Group in the years 2022 and 2021 by country of operations:

Corporate income tax	2022	2021
Capital Group	**2 053**	**1 558**
Poland	1 791	1 526
Sweden	259	6
Ukraine	3	26

Tax systems of countries in which the Bank and the PKO Bank Polski S.A. Group entities have their registered offices or branches are often subject to amendments to laws, including as a result of operations aimed at tightening the tax system, both at national and international level.

In addition, understanding of some of the regulations of the tax law, due to their ambiguity, may in practice lead to inconsistent individual interpretations of the tax authorities, differing from the interpretation by the taxpayer, and the resulting disputes may only be resolved by the national or European courts. Therefore, interpretations of the tax law by the tax authorities differing from the practices implemented by the Bank or the PKO Bank Polski S.A. Group entities cannot be eliminated and may have a significant unfavourable impact on their operations and financial condition, despite the various actions aimed at mitigating this risk, which are regularly undertaken and allowed by law.

On 23 December 2021, PKO Finance AB (hereinafter "Company") received from the Swedish tax authorities a negative decision concerning the long-standing dispute relating to doubts about taxation in Sweden of foreign exchange gains on loans granted to the Bank and liabilities in respect of the issue. Based on this decision, the Company must pay SEK 160 726 808 in additional income tax and interest for the fiscal year 2019.

The company did not have funds for the payment of this tax liability, which was due by 26 January 2022. Pursuant to the guarantee agreement concluded on 15 May 2020 between the Bank and PKO Finance AB, the Company asked the Bank to pay SEK 160 726 808 to its current account with the Swedish tax office. Despite having made the payment, the Company disagrees with the verdict of the Swedish tax office and intends to use the appeal procedure to regain the amount mentioned above. The tax consultancy from Sweden was engaged for this purpose.

As potential tax liabilities of PKO Finance AB for 2015-2016 have become time-barred, the Group has decided to reverse the deferred tax liabilities for 2015-2016 in the amount of PLN 74 million in 2022.

At the same time, due to the realization of exchange differences on the Bank's loans and liabilities in respect of the issue in 2022, the Company reported an income tax liability for 2022 in the amount of PLN 188 million (SEK 446 million, as at 31 December 2021 the deferred tax liabilities amounted to PLN 288 million). On 13 February 2022, the Company paid the tax (after receiving the transfer from the Bank, on account of the guarantee) following the interpretation of the Swedish tax authorities in order to avoid potential penalty interest of 3.75 p.a. However, the Company disagrees with this interpretation and will pursue its claim through an overpayment procedure.

30. Earnings per share

Basic earnings per share is calculated by dividing profit or loss attributable to ordinary shareholders of the Bank by the weighted average number of ordinary shares outstanding during the period.

Diluted earnings per share is calculated by dividing the profit attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period, adjusted for the effect of all dilutive potential ordinary shares.

INCOME STATEMENT	2022	2021
Net profit attributable to equity holders of the parent company	**3 333**	**4 874**
Weighted average number of ordinary shares during the period (in million)	1 250	1 250
Earnings per share		
– basic earnings per share for the period (PLN)	2.67	3.90
– diluted earnings per share for the period (PLN)	2.67	3.90

There were no discontinued operations in the years ended 31 December 2022 and 31 December 2022 respectively.

In the years 2022 and 2021, there were no dilutive instruments.

SUPPLEMENTARY NOTES TO THE STATEMENT OF FINANCIAL POSITION – FINANCIAL INSTRUMENTS

31. Cash and balances with the Central Bank

Accounting policies:

Classification into valuation categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "General accounting policies for financial instruments".

The item "Cash and balances with the central bank" presents cash recognized at nominal value, and funds in the current account and deposits with the Central Bank measured at amortized cost, and if there is no schedule for future cash flows, at amounts due, including interest on those funds (if any).

Financial information:

CASH AND BALANCES WITH THE CENTRAL BANK	31.12.2022	31.12.2021
Current account with the Central Bank	7 750	8 006
Cash	4 215	3 581
Deposits with the Central Bank	3 951	-
Other	1	-
Total	**15 917**	**11 587**

32. Amounts due from banks

Accounting policies:

Valuation and classification into categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "General accounting policies for financial instruments".

(IN PLN MILLION)

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For more information on credit risk exposures, see note "CREDIT RISK – FINANCIAL INFORMATION".

AMOUNTS DUE FROM BANKS	31.12.2022	31.12.2021
Measured at amortized cost	**16 103**	**9 010**
Deposits with banks	13 374	7 218
Current accounts	2 215	1 243
Loans and advances granted	513	546
Cash in transit	1	3
Gross carrying amount	**16 103**	**9 010**
Allowances for expected credit losses	(2)	-
Net carrying amount	**16 101**	**9 010**

AMOUNTS DUE FROM BANKS BY MATURITY	31.12.2022	31.12.2021
up to 1 month	15 935	8 808
1 to 3 months	102	191
3 months to 1 year	56	6
1 to 5 years	8	5
Total	**16 101**	**9 010**

33. HEDGE ACCOUNTING AND OTHER DERIVATIVE INSTRUMENTS

ACCOUNTING POLICIES:

The Group uses derivative financial instruments for risk management purposes related to the Bank's operations.

The Group most often uses the following derivative instruments: IRS, CIRS, FX Swap, options, commodity swap, FRA, Forward and Futures.

Derivative financial instruments are stated at fair value from the transaction date.

A derivative is presented under "Derivative hedging instruments" (if the instrument qualifies for hedge accounting) or "Other derivatives" (if the instrument does not qualify for hedge accounting) - as an asset if its fair value is positive or a liability if its fair value is negative.

For other derivatives (not designated for hedge accounting), the Group recognises changes in the fair value of the instruments and the gain or loss on the settlement of these instruments in either the net gain or loss on financial instruments, depending on the type of instrument.

The Group applies hedge accounting to hedge its interest rate risk and foreign exchange risk. The hedging transactions are concluded to mitigate the risk of incurring losses as a result of unfavourable changes in foreign currency exchange rates and interest rates. Cash flows related to the transactions performed, the fair value of assets held and the shares in the net assets of foreign entities are hedged.

Interest rate risk includes in particular:

- the risk related to the repricing (change in interest rates) frequency and dates mismatch of the assets and liabilities, and of off-balance sheet items (repricing date mismatch risk);
- the risk following from the change in the angle of inclination and shape of the yield curve (yield curve risk);
- the risk resulting from an imperfect match between the reference rates used in respect of banking products and the changes in the market rates, or from imperfect transmission systems of changes in market interest rates on those products (base risk);
- risks resulting from options, including embedded options, e.g. restrictions on interests on loans (option risk).

The Group's foreign exchange risk arises as a result of transactions performed as part of:

- core business activities;
- trading activities;
- contracts concluded by the Group which generate foreign exchange risk.

Foreign exchange risk arising from the Group's activities is managed, where required, by specialized units as part of their own operations based on the data received on open currency positions.

The Group has a system of threshold values and limits attributed to particular interest rate and foreign exchange risks, aimed at determining the maximum allowable risk level which ensures that the strategic tolerance limits are not exceeded.

The Group decided to continue to apply the provisions of IAS 39 and did not apply IFRS 9 to hedge accounting.

- **CASH FLOW HEDGES**

Changes in the fair value of a derivative financial instrument designated as a cash flow hedge are recognized directly in other comprehensive income in respect of the portion constituting the effective portion of the hedge. The ineffective portion of a hedge is recognized in the income statement in the item "Gains/ (losses) financial transactions" or "Net foreign exchange gains (losses)".

Amounts transferred directly to other comprehensive income are transferred to the income statement in the same period or periods in which the hedged planned transaction affects the income statement. Interest and foreign exchange gains/losses are presented in the income statement in "Net interest income" and "Net foreign exchange gains (losses)", respectively.

The Group hedges both assets that generate interest income and liabilities that generate interest expense using IRS or CIRS transactions.

The Group consistently applies the method of presenting the total net interest income/(expense) on hedging instruments for all hedging strategies in the line "derivative hedging instruments" under "Net interest income" – the positive total amount for a period is presented in "Interest income" and the negative total amount is presented in "Interest expenses".

The effectiveness tests comprise the measurement of hedging transactions net of interest accrued and foreign exchange gains (losses) on the nominal value of the hedging transactions (in the case of CIRS transactions).

Hedge effectiveness is verified through the use of prospective and retrospective effectiveness tests. The tests are performed on a monthly basis.

- **HEDGES OF NET INVESTMENTS IN FOREIGN OPERATIONS**

Changes in the fair value of a derivative financial instrument designated for the purposes of hedging interest in the net assets of a foreign operation whose functional currency is a foreign currency are recognized directly in other comprehensive income in respect of the portion constituting the effective portion of the hedge. The ineffective portion of a hedge is recognized in the income statement in the item "Net foreign exchange gains (losses)".

Gains and losses associated with the hedging instrument relating to the effective portion of the hedge, which were recognized in other comprehensive income, are reclassified to profit or loss as a reclassification adjustment in accordance with paragraphs 48-49 of IAS 21 "The Effects of Changes in Foreign Exchange Rates" upon disposal or partial disposal of the foreign operation.

Hedge effectiveness is verified through the use of prospective and retrospective effectiveness tests.

- **FAIR VALUE HEDGES**

Changes in the fair value of a derivative hedging instrument designated as fair value hedge are recognized in "Gains/ (losses) financial transactions", net of the interest component. The interest component is presented in the same line item as interest income on the hedged item, i.e. in item "Net interest income".

The Group hedges both assets that generate interest income and liabilities that generate interest expense using IRS or CIRS transactions. The Group consistently applies the method of presenting the total net interest income/(expense) on hedging instruments for all hedging strategies in the line "derivative hedging instruments" under "Net interest income" – the positive total amount for a period is presented in "Interest income" and the negative total amount is presented in "Interest expenses".

(IN PLN MILLION)

A change in the fair value adjustment to the hedged item is recognized in "Gains/ (losses) financial transactions" .

The part of the fair value adjustment which is not hedged is recognized:

- for a hedged item which is a financial asset or a financial liability classified as measured at fair value through profit or loss – as income or costs, as appropriate, in gains/(losses) on financial transactions;
- for a hedged item which is a financial asset measured at fair value through other comprehensive income – in other comprehensive income, where the change in the fair value of financial instruments measured at fair value through other comprehensive is presented.

The effectiveness tests comprise the measurement of hedging transactions net of accrued interest.

Hedge effectiveness is verified through the use of prospective and retrospective effectiveness tests. The tests are performed on a monthly basis.

The items securities, loans and advances to customers and amounts due to customers include an adjustment for fair value hedge accounting for securities, loans and advances to customers and amounts due to customers, respectively, representing the hedged item.

ESTIMATES AND JUDGMENTS

The fair value of derivative instruments other than options is determined using valuation models based on discounted cash flows which may be obtained from a given financial instrument. The measurement techniques for financial instruments other than options are based on yield curves constructed on the basis of available market data (deposit rates on the interbank market, quotations of IRS transactions). Options are valued using option pricing models. The variables and assumptions used in a valuation include, where available, data derived from observable markets.

The fair value of derivatives includes the Group's own credit risk, DVA (debit value adjustment) as well as counterparty credit risk, CVA (credit value adjustment). The process of calculation of CVA and DVA adjustments includes the selection of a method for determining the spread of the counterparty's or the Group's credit risk (e.g. a market price method based on the continuous price quotations of debt instruments issued by the counterparty, a method of spread implied from Credit Default Swap contracts), an estimation of the probability of default by the counterparty or the Group and the recovery rate, as well as the calculation of CVA and DVA adjustments.

The Group made simulations to assess the potential impact of changes in the yield curves on the transaction value.

ESTIMATED CHANGE IN VALUATION OF HEDGING DERIVATIVES OTHER THAN OPTIONS FOLLOWING A PARALLEL SHIFT IN YIELD CURVES:	31.12.2022		31.12.2021	
	+50bp scenario	-50bp scenario	+50bp scenario	-50bp scenario
IRS	(741)	755	(844)	859
CIRS	(5)	5	(20)	20
other instruments	(5)	5	-	-
Total	**(751)**	**765**	**(864)**	**879**

ESTIMATED CHANGE IN VALUATION OF DERIVATIVES OTHER THAN OPTIONS FOLLOWING A PARALLEL SHIFT IN YIELD CURVES:	31.12.2022		31.12.2021	
	+50bp scenario	-50bp scenario	+50bp scenario	-50bp scenario
IRS	(723)	737	(829)	844
CIRS	(33)	33	(85)	86
other instruments	(7)	7	(13)	13
Total	**(763)**	**777**	**(927)**	**943**

33.1. HEDGE ACCOUNTING – FINANCIAL INFORMATION

TYPES OF HEDGING STRATEGIES APPLIED BY THE GROUP

As at 31 December 2022 the Group had had active relationships as part of:

- 6 strategies for hedging cash flow volatility;
- 5 strategies for hedging fair value volatility.

In 2022, the Group terminated the hedging relationships:

- as part of the hedging strategy "Hedges against fluctuations in cash flows from variable interest loans in PLN, resulting from interest rate risk, using IRS transactions", the Group terminated hedging relationships due to the discontinuation of hedge accounting. The effect of discontinuing hedge accounting in the above relationships on profit or loss was PLN (-17.8) million;
- as part of the hedging strategy ""Hedges against fluctuations in cash flows from variable interest loans in convertible currencies, resulting from interest rate risk, using IRS transactions", due to failure to meet the prospective effectiveness test. The effect of discontinuing hedge accounting in the above relationships on profit or loss was PLN 1.1 million.
- as part of the hedging strategy "Hedging fair value volatility of fixed-interest-rate loans in convertible currencies resulting from interest rate risk, using IRS transactions", due to failure to meet the prospective effectiveness test. The effect of discontinuing hedge accounting in the above relationships on profit or loss was PLN 2.6 million.
- as part of the hedging strategy "Hedging fair value volatility of fixed-interest-rate security measured at fair value through other comprehensive income in convertible currencies resulting from interest rate risk, using IRS transactions", due to failure to meet the prospective effectiveness test.The effect of discontinuing hedge accounting in the above relationships on profit or loss was PLN 3 million.

In 2022, the Group discontinued the following hedging strategies as a result of the expiry of transactions:

- Hedge of net investment in a foreign operation whose functional currency is a foreign currency against foreign currency risk resulting from translation of the operation's financial results and financial position into PLN in the consolidated financial statements of the PKO Bank Polski S.A. Group using forward or NDF transactions;
- Hedges against fluctuations in cash flows on variable interest PLN loans, resulting from interest rate risk, and hedging against fluctuations in cash flows on financial liabilities in a convertible currency resulting from foreign currency risk, using two CIRS transactions;
- Hedges against fluctuations in cash flows on deposits in PLN, resulting from interest rate risk, using IRS transactions.

No other changes were made to other active hedging strategies in 2022.

In 2021, the Group introduced one strategy for a hedge of net investment in a foreign operation and three hedging strategies constituting a cash flow hedge.

The tables below summarize the types of strategies applied by the Group.

TYPE OF HEDGING STRATEGY	CASH FLOW HEDGES (STRATEGIES NO: 1,2,3,4,5,6,7,9,14,15,16)	
RISK HEDGED	foreign exchange risk and interest rate risk	interest rate risk
HEDGING INSTRUMENT	float – float CIRSs fixed – float CIRSs	fixed - float IRSs
HEDGED ITEM	• the portfolio of floating interest loans in foreign currencies and • the portfolio of short-term negotiated deposits in PLN, including their future renewals. In designating the hedged item, the Group used the IAS39 AG 99C in the version adopted by the European Union, or • fixed interest rate financial liability denominated in foreign currency or • the portfolio of floating interest rate regular savings products in PLN or • a financial liability in foreign currencies	the portfolio of loans in PLN or foreign currencies indexed to a floating interest rate
SOURCES OF HEDGE INEFFECTIVENESS	• margin on the hedging instrument • differences in discount on the hedged item and the hedging instrument • CVA/DVA adjustment of the hedging instrument	• change in market parameters between the moment of determining the terms and conditions relating to the hedged item and the moment of concluding the hedge • differences in discount on the hedged item and the hedging instrument • CVA/DVA adjustment of the hedging instrument
	The period in which cash flows are expected to occur and affect the financial results: January 2022 – August 2024	The period in which cash flows are expected to occur and affect the financial results: January 2023 – December 2032

TYPE OF HEDGING STRATEGY	FAIR VALUE VOLATILITY HEDGES (STRATEGY NO: 8,10,11,12,17,18)
RISK HEDGED	interest rate risk
HEDGING INSTRUMENT	fixed - float IRSs
HEDGED ITEM	interest rate risk component relating to a fixed interest rate loan or security in a foreign currency or in PLN, which corresponds to the market IRS rate interest rate risk component of a portfolio of financial liabilities replicated by a portfolio of fixed-rate instruments measured at amortised cost, corresponding to the market IRS ate
SOURCES OF HEDGE INEFFECTIVENESS	• change in market parameters between the moment of determining the terms and conditions relating to the hedged item and the moment of concluding the hedge • CVA/DVA adjustment of the hedging instrument • difference between the present value of the floating leg of IRS and the present value of the nominal value of a security

(IN PLN MILLION)

TYPE OF HEDGING STRATEGY	HEDGES OF NET INVESTMENTS IN FOREIGN OPERATIONS (STRATEGY NO: 13)
RISK HEDGED	foreign exchange risk
HEDGING INSTRUMENT	Forward or NDF transaction spot price component
HEDGED ITEM	an amount of the net investment in a foreign operation equal to or lower than the total net carrying amount of the foreign operation's assets recognized in the consolidated financial statements of the Group
SOURCES OF HEDGE INEFFECTIVENESS	none

HEDGED ITEM 31.12.2022	CARRYING AMOUNT OF THE HEDGED ITEM	ITEM OF THE STATEMENT OF FINANCIAL POSITION	CHANGE IN THE FAIR VALUE OF THE HEDGED ITEM	STRATEGY NO
Cash flow hedges				
Loans in CHF	225	Loans and advances to customers	19	5
Financial liability in USD	249	Amounts due to customers		
Loans in PLN	74 721	Loans and advances to customers	5 969	2
Loans in EUR	1 314	Loans and advances to customers	64	3; 4
Loans in PLN	2 101	Loans and advances to customers	(195)	9
Financial liability in EUR	499	Securities in issue		
Loans in PLN	4 622	Loans and advances to customers	(8)	14
Financial liability in EUR	999	Securities in issue		
Fair value hedges				
Security in EUR	30	Securities measured at amortized cost	(6)	10
Security in EUR	202	Securities measured at fair value through other comprehensive income	(8)	11
Security in USD	81	Securities measured at fair value through other comprehensive income	(3)	11
Loans in EUR	13	Loans and advances to customers	(1)	8
Security in PLN	-	Securities measured at fair value through other comprehensive income	(21)	12
Portfolio of financial liabilities in PLN	2 841	Amounts due to customers	(38)	17
Portfolio of financial liabilities in EUR	729	Amounts due to customers	20	18
Total			**5 792**	

(IN PLN MILLION)

HEDGED ITEM 31.12.2021	CARRYING AMOUNT OF THE HEDGED ITEM	ITEM OF THE STATEMENT OF FINANCIAL POSITION	CHANGE IN THE FAIR VALUE OF THE HEDGED ITEM	STRATEGY NO
Cash flow hedges				
Loans in CHF	265	Loans and advances to customers	8	5
Financial liability in USD	293	Amounts due to customers		
Loans in PLN	92 480	Loans and advances to customers	4 454	2
Loans in EUR	663	Loans and advances to customers	(1)	3; 4
Loans in PLN	2 530	Loans and advances to customers	(250)	9
Financial liability in EUR	599	Securities in issue		
Loans in PLN	4 883	Loans and advances to customers	17	14
Financial liability in EUR	1 053	Securities in issue		
Loans in PLN	3 393	Loans and advances to customers	(186)	15
Financial liability in USD	875	Securities in issue		
Deposits in PLN	200	Amounts due to customers	(1)	16
Fair value hedges				
Security in EUR	30	Securities measured at amortized cost	-	10
Security in EUR	202	Securities measured at fair value through other comprehensive income	(1)	11
Security in USD	130	Securities measured at fair value through other comprehensive income	1	11
Loans in EUR	15	Loans and advances to customers	-	8
Loans in USD	75	Loans and advances to customers	-	8
Security in PLN	-	Securities measured at fair value through other comprehensive income	(25)	12
Hedge of net investment in foreign operation				
Net investment in foreign operation whose functional currency is a foreign currency (UAH)	544	Net assets of a foreign operation	5	13
Total			4 021	

(IN PLN MILLION)

Hedging derivative 31.12.2022		Nominal amount of hedging derivatives	Nominal-weighted average margin / Nominal-weighted average fixed interest rate	Carrying amount (fair value of hedging instruments)		Ineffective portion of cash flow hedges recognized in the income statement / Fair value adjustment to the hedged item	Change in the fair value of hedging instruments since designation	Strategy No
				Assets	Liabilities			
Cash flow hedges								
IRS PLN	PLN	74 721	2.5090%	31	6 331	-	(5 928)	2; 16
IRS EUR	EUR	1 314	1.6952%	-	176	-	(65)	3; 4
CIRS PLN-CHF	float PLN	4 622	0.4614%	677	-	(8)	671	14; 15
	float CHF	1 112	0.3555%					
CIRS CHF/USD	float CHF	225	-	-	32	(3)	(21)	5; 15
	fixed USD	249	0.3871%					
CIRS CHF/EUR	float CHF	1 112	-	-	797	5	(656)	14
	fixed EUR	999	0.6970%					
CIRS PLN/EUR	float PLN	2 101	0.0000%	181	-	-	199	9
	fixed EUR	499	0.7690%					
Fair value hedges								
IRS EUR	EUR	974	1.5789%	75	91	25	(6)	8; 10; 11; 18
IRS USD	USD	81	1.5128%	14	-	(18)	3	8; 11
IRS PLN	PLN	2 841	6.2990%	64	42	(58)	30	12; 17
Total				1 042	7 469	(57)	(5 773)	

(IN PLN MILLION)

Hedging derivative 31.12.2021		Nominal amount of hedging derivatives	Nominal-weighted average margin / Nominal-weighted average fixed interest rate	Carrying amount (fair value of hedging instruments)		Ineffective portion of cash flow hedges recognized in the income statement / Fair value adjustment to the hedged item	Change in the fair value of hedging instruments since designation	Strategy No
				Assets	Liabilities			
Cash flow hedges								
IRS PLN	PLN	92 680	2.2587%	55	4 361	(6)	(4 433)	2; 16
IRS CHF	CHF	-	-	-	-	(1)	-	3
IRS EUR	EUR	663	0.0865%	9	2	-	3	3; 4
CIRS PLN-CHF	float PLN	8 276	0.3093%	588	-	16	541	14; 15
	float CHF	1 993	0.2362%					
CIRS CHF/USD	float CHF	1 083	-	-	56	-	(52)	5; 15
	fixed USD	1 168	1.8581%					
CIRS CHF/EUR	float CHF	1 175		-	374	(10)	(322)	14
	fixed EUR	1 053	0.6852%					
CIRS PLN/EUR	float PLN	2 530	0.0000%	271	-	2	255	9
	fixed EUR	599	0.6879%					
Fair value hedges								
IRS EUR	EUR	247	(0.2178)%	7	1	(3)	1	8; 10; 11
IRS USD	USD	205	0.9993%	2	8	3	(1)	8; 11
IRS PLN	PLN	-	-	-	-	(25)	-	12
Hedge of net investment in foreign operation								
FWD	PLN	74		1	3	-	(5)	13
	UAH	544						
Total				**933**	**4 805**	**(24)**	**(4 013)**	

CARRYING AMOUNT OF HEDGING INSTRUMENTS	31.12.2022		31.12.2021	
	Assets	Liabilities	Assets	Liabilities
Cash flow hedges	**888**	**7 336**	**924**	**4 794**
interest rate risk – IRS	31	6 507	65	4 363
foreign exchange risk and interest rate risk – CIRS	857	829	859	431
Fair value hedges	**154**	**133**	**8**	**9**
interest rate risk – IRS	154	133	8	9
Hedges of net investments in foreign operations	-	-	**1**	**3**
foreign exchange risk – Forward	-	-	1	3
Total	**1 042**	**7 469**	**933**	**4 806**

(IN PLN MILLION)

- **CASH FLOW HEDGES**

CHANGE IN OTHER COMPREHENSIVE INCOME RELATING TO CASH FLOW HEDGES AND AN INEFFECTIVE PORTION OF CASH FLOW HEDGES	2022	2021
Accumulated other comprehensive income at the beginning of the period, net	**(3 699)**	**355**
Impact on other comprehensive income during the period, gross	**(1 901)**	**(5 003)**
Gains/losses recognized in other comprehensive income during the period	(6 525)	(4 112)
Amounts transferred from other comprehensive income to the income statement, of which:	4 624	(891)
- net interest income	3 588	(399)
- net foreign exchange gains/ (losses)	1 036	(492)
Tax effect	**382**	**949**
Accumulated other comprehensive income at the end of the period, net	**(5 218)**	**(3 699)**
Ineffective portion of cash flow hedges recognized in the income statements, including in:	**(5)**	**1**
Foreign exchange gains/ (losses)	(5)	8
Gains/(losses) on financial transactions	-	(7)

- **FAIR VALUE HEDGES AND HEDGES OF NET INVESTMENTS IN FOREIGN OPERATIONS**

INTEREST RATE AND FOREIGN EXCHANGE RISK HEDGES	31.12.2022	31.12.2021
Fair value measurement of the hedging derivative instrument	**20**	**(3)**
Interest rate risk hedge – fixed - float IRSs	20	(1)
Foreign exchange risk hedge – forward	-	(2)
Fair value adjustment of the hedged instrument attributable to the hedged risk	**(51)**	**(25)**
Interest rate risk hedge, of which:	(51)	(25)
Securities	(30)	(2)
Loans and advances to customers	(8)	(1)
Fair value adjustment recognized in OCI	(69)	(22)
Amounts due to customers	56	-
Foreign exchange risk hedge – shares in a foreign entity whose functional currency is a foreign currency	-	**(4)**

- **HEDGES OF NET INVESTMENTS IN FOREIGN OPERATIONS**

CHANGE IN OTHER COMPREHENSIVE INCOME RELATING TO HEDGES OF NET INVESTMENTS IN FOREIGN OPERATIONS AND AN INEFFECTIVE PORTION OF CASH FLOW HEDGES	31.12.2022	31.12.2021
Accumulated other comprehensive income at the beginning of the period, net	**(4)**	-
Impact on other comprehensive income during the period, gross	**4**	**(4)**
Gains/losses recognized in other comprehensive income during the period	4	(4)
Accumulated other comprehensive income at the end of the period, net	-	**(4)**

(IN PLN MILLION)

NOMINAL VALUE OF HEDGING INSTRUMENTS BY MATURITY (in original currencies)	up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Total
31.12.2022						
Hedge type: Cash flow hedges						
Hedged risk: interest rate risk						
PLN fixed - float IRSs	-	1 501	29 674	42 269	1 278	**74 722**
EUR fixed – float IRSs	-	-	150	1 110	54	**1 314**
Risk hedged: foreign exchange and interest rate risks						
Float CHF/float PLN CIRSs						
float CHF	535	-	-	577	-	**1 112**
float PLN	2 204	-	-	2 418	-	**4 622**
CIRS fixed USD/float CHF						
fixed USD	-	-	133	116	-	**249**
float CHF	-	-	120	105	-	**225**
Float PLN/fixed EUR CIRSs						
float PLN	-	-	-	2 101	-	**2 101**
fixed EUR	-	-	-	499	-	**499**
CIRS fixed EUR/float CHF						
fixed EUR	500	-	-	500	-	**1 000**
float CHF	535	-	-	577	-	**1 112**
Hedge type: Fair value hedges						
Hedged risk: interest rate risk						
PLN fixed – float IRSs	-	-	-	-	2 841	**2 841**
USD fixed – float IRSs	-	-	-	81	-	**81**
EUR fixed – float IRSs	-	-	100	748	126	**974**

(IN PLN MILLION)

NOMINAL VALUE OF HEDGING INSTRUMENTS BY MATURITY (in original currencies)	up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Total
31.12.2021						
Hedge type: Cash flow hedges						
Hedged risk: interest rate risk						
PLN fixed - float IRSs	1 800	1 800	21 078	60 949	7 053	**92 680**
EUR fixed - float IRSs	-	-	569	90	4	**663**
Risk hedged: foreign exchange and interest rate risks						
Float CHF/float PLN CIRSs						
float CHF	-	-	881	1 112	-	**1 993**
float PLN	-	-	3 654	4 622	-	**8 276**
CIRS fixed USD/float CHF						
fixed USD	-	-	919	249	-	**1 168**
float CHF	-	-	858	225	-	**1 083**
Float PLN/fixed EUR CIRSs						
float PLN	-	-	428	2 101	-	**2 529**
fixed EUR	-	-	99	499	-	**598**
CIRS fixed EUR/float CHF						
fixed EUR			54	999		**1 053**
float CHF			63	1 112		**1 175**
Hedge type: Fair value hedges						
Hedged risk: interest rate risk						
USD fixed - float IRSs	-	-	-	205	-	**205**
EUR fixed - float IRSs	-	-	-	217	30	**247**
Hedge type: Hedges of net investments in foreign operations						
Hedged risk: foreign exchange risk						
Forward PLN/UAH – currency purchase	-	27	46	-	-	**73**
Forward PLN/UAH - sale of currency	-	186	358	-	-	**544**

33.2. OTHER DERIVATIVE INSTRUMENTS – FINANCIAL INFORMATION

OTHER DERIVATIVE INSTRUMENTS - BY TYPE	31.12.2022		31.12.2021	
	Assets	Liabilities	Assets	Liabilities
IRS	8 275	8 101	4 640	4 791
CIRS	408	350	694	602
FX Swap	1 245	1 039	586	312
Options	842	926	520	665
Commodity swap[1]	1 380	1 384	2 812	2 807
FRA	24	24	44	44
Forward	577	799	321	497
Commodity Forward[2]	404	355	1 286	1 276
Other	7	-	-	14
Total	**13 162**	**12 978**	**10 903**	**11 008**

[1] The item includes valuation of gas market participation contracts: assets of PLN 1 229 million (PLN 2 574 million as at 31 December 2021) – and liabilities of PLN 1 237 million (PLN 2 574 million as at 31 December 2021).
[2] The item includes valuation of contracts for CO_2 emission allowances.

(IN PLN MILLION)

	31.12.2022	31.12.2021
CVA and CDA adjustments	146	(10)

NOMINAL AMOUNTS OF UNDERLYING INSTRUMENTS (BUY AND SELL TOGETHER) other derivative instruments						
31.12.2022	up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	more than 5 years	Total
IRS	**6 730**	**16 972**	**88 148**	**236 010**	**53 496**	**401 356**
Purchase	3 365	8 486	44 074	118 005	26 748	200 678
Sale	3 365	8 486	44 074	118 005	26 748	200 678
CIRS	**14 124**	**-**	**2 870**	**31 020**	**2 168**	**50 182**
Purchase	7 025	-	1 435	15 362	1 084	24 906
Sale	7 099	-	1 435	15 658	1 084	25 276
FX Swap	**34 144**	**32 795**	**36 739**	**29 127**	**-**	**132 805**
Purchase of currencies	17 045	16 362	18 356	14 769	-	66 532
Sale of currencies	17 099	16 433	18 383	14 358	-	66 273
Options	**21 765**	**46 129**	**62 797**	**29 681**	**1 787**	**162 159**
Purchase	10 817	22 857	31 486	14 871	892	80 923
Sale	10 948	23 272	31 311	14 810	895	81 236
FRA	**-**	**-**	**38 913**	**1 910**	**-**	**40 823**
Purchase	-	-	20 016	932	-	20 948
Sale	-	-	18 897	978	-	19 875
Forward	**7 492**	**25 761**	**30 224**	**6 519**	**-**	**69 996**
Purchase of currencies	3 752	12 891	15 150	3 120	-	34 913
Sale of currencies	3 740	12 870	15 074	3 399	-	35 083
Other, including commodity swap, commodity forward and futures	**1 091**	**2 171**	**6 877**	**251**	**-**	**10 390**
Purchase	546	1 108	3 431	126	-	5 211
Sale	545	1 063	3 446	125	-	5 179
Total	85 346	123 828	266 568	334 518	57 451	867 711

(IN PLN MILLION)

NOMINAL AMOUNTS OF UNDERLYING INSTRUMENTS (BUY AND SELL TOGETHER) other derivative instruments						
31.12.2021	up to 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	more than 5 years	Total
IRS	**12 202**	**21 092**	**75 924**	**253 584**	**70 590**	**433 392**
Purchase	6 101	10 546	37 962	126 792	35 295	216 696
Sale	6 101	10 546	37 962	126 792	35 295	216 696
CIRS	-	-	**4 723**	**41 005**	**7 438**	**53 166**
Purchase	-	-	2 345	20 321	3 718	26 384
Sale	-	-	2 378	20 684	3 720	26 782
FX Swap	**35 949**	**25 886**	**18 396**	**24 898**	-	**105 129**
Purchase of currencies	17 988	12 959	9 196	12 477	-	52 620
Sale of currencies	17 961	12 927	9 200	12 421	-	52 509
Options	**27 076**	**27 666**	**58 663**	**29 268**	**1 203**	**143 876**
Purchase	13 518	13 835	29 296	14 616	601	71 866
Sale	13 558	13 831	29 367	14 652	602	72 010
FRA	-	-	**13 457**	-	-	**13 457**
Purchase	-	-	6 126	-	-	6 126
Sale	-	-	7 331	-	-	7 331
Forward	**12 809**	**11 284**	**19 068**	**20 888**	-	**64 049**
Purchase of currencies	6 401	5 638	9 510	10 398	-	31 947
Sale of currencies	6 408	5 646	9 558	10 490	-	32 102
Other, including commodity swap, commodity forward and futures	**2 132**	**1 321**	**4 970**	**1 499**	**23**	**9 945**
Purchase	1 067	668	2 481	750	9	4 975
Sale	1 065	653	2 489	749	14	4 970
Total	90 168	87 249	195 201	371 142	79 254	823 014

34. Securities

Accounting policies

Valuation and classification into categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "General accounting policies for financial instruments".

The item "Securities" also includes an adjustment relating to fair value hedge accounting for securities representing hedged items (note "Hedge accounting and other financial instruments").

(IN PLN MILLION)

FINANCIAL INFORMATION

For more information on credit risk exposures, see note "CREDIT RISK – FINANCIAL INFORMATION".

SECURITIES	held for trading	not held for trading, measured at fair value through profit or loss	measured at fair value through other comprehensive income	measured at amortized cost	Total
31.12.2022					
Debt securities	**164**	**578**	**65 211**	**68 556**	**134 509**
NBP money bills	-	-	80	-	80
Treasury bonds (in PLN)	89	191	43 066	45 893	89 239
Treasury bonds (in foreign currencies)	2	321	4 397	713	5 433
corporate bonds (in PLN) secured with the State Treasury guarantees	3	-	9 373	12 100	21 476
municipal bonds (in PLN)	14	-	5 054	6 182	11 250
corporate bonds (in PLN)[1]	56	66	2 852	1 989	4 963
corporate bonds (in foreign currencies)	-	-	389	1 679	2 068
Equity securities	**29**	**1 124**	**-**	**-**	**1 153**
shares in other entities - not listed	-	358	-	-	358
shares in other entities - listed	27	115	-	-	142
participation units in investment funds, investment certificates, rights to shares, pre-emptive rights	2	651	-	-	653
Total (excluding adjustment relating to fair value hedge accounting)	**193**	**1 702**	**65 211**	**68 556**	**135 662**
Adjustment relating to fair value hedge accounting (note "Hedge accounting and other financial instruments")	-	-	-	(30)	(30)
Total	**193**	**1 702**	**65 211**	**68 526**	**135 632**

[1] The item includes bonds of international financial organizations of PLN 3 550 million.

(IN PLN MILLION)

SECURITIES	held for trading	not held for trading, measured at fair value through profit or loss	measured at fair value through other comprehensive income	measured at amortized cost	Total
31.12.2021					
Debt securities	**216**	**785**	**61 863**	**71 282**	**134 146**
NBP money bills	-	-	810	-	810
Treasury bonds (in PLN)	69	261	39 613	50 816	90 759
Treasury bonds (in foreign currencies)	2	350	3 169	-	3 521
corporate bonds (in PLN) secured with the State Treasury guarantees	4	-	9 894	12 092	21 990
municipal bonds (in PLN)	16	-	4 135	5 022	9 173
corporate bonds (in PLN)[1]	125	174	3 810	1 937	6 046
corporate bonds (in foreign currencies)	-	-	432	1 415	1 847
Equity securities	**32**	**1 264**	-	-	**1 296**
shares in other entities - not listed	-	326	-	-	326
shares in other entities - listed	31	144	-	-	175
participation units in investment funds, investment certificates, rights to shares, pre-emptive rights	1	794	-	-	795
Total (excluding adjustment relating to fair value hedge accounting)	**248**	**2 049**	**61 863**	**71 282**	**135 442**
Adjustment relating to fair value hedge accounting (note "Hedge accounting and other financial instruments")	-	-	-	(2)	(2)
Total	**248**	**2 049**	**61 863**	**71 280**	**135 440**

[1] The item includes bonds of international financial organizations of PLN 3 652 million

The item "Treasury bonds in PLN and in foreign currencies" comprises Polish Treasury bonds. As at 31 December 2022 and 31 December 2021, the item "Treasury bonds in foreign currencies" comprises also Treasury bonds of Ukraine in the amount of PLN 420 million (PLN 1 162 million as at 31 December 2021) and Treasury bonds of the United States in the amount of PLN 640 million (none as at 31 December 2021), respectively.

	31.12.2022	31.12.2021
allowance not reducing the fair value of securities measured at fair value through other comprehensive income	62	39

(IN PLN MILLION)

SECURITIES BY MATURITY (excluding adjustments relating to fair value hedge accounting)	held for trading	not held for trading, measured at fair value through profit or loss	measured at fair value through other comprehensive income	measured at amortized cost	Total
31.12.2022					
without a stated maturity – equity securities	29	1 124	-	-	1 153
up to 1 month	19	46	3 222	1 514	4 801
1 to 3 months	-	-	278	211	489
3 months to 1 year	17	28	3 729	1 275	5 049
1 to 5 years	104	465	37 935	37 705	76 209
more than 5 years	24	39	20 047	27 851	47 961
Total	193	1 702	65 211	68 556	135 662

SECURITIES BY MATURITY (excluding adjustments relating to fair value hedge accounting)	held for trading	not held for trading, measured at fair value through profit or loss	measured at fair value through other comprehensive income	measured at amortized cost	Total
31.12.2021					
without a stated maturity – equity securities	32	1 264	-	-	1 296
up to 1 month	8	2	954	-	964
1 to 3 months	3	-	371	18	392
3 months to 1 year	70	60	1 587	5 019	6 736
1 to 5 years	92	541	35 656	38 185	74 474
more than 5 years	43	182	23 295	28 060	51 580
Total	248	2 049	61 863	71 282	135 442

35. Repo and reverse repo transactions

Reverse repo transactions are measured at amortized cost. The difference between the purchase and repurchase (sale) price constitutes interest income and is settled over the period of the agreement using the effective interest rate.

Repo transactions are transactions of sale of securities with a granted promise of repurchase within a defined contractual term and at a specified price. The securities that are a component of repo transactions are not eliminated from the statement of financial position and are measured in accordance with the principles specified for each category of securities. The difference between the sale price and the repurchase price is recognized as interest expense and it is settled over the term of the contract using the effective interest rate.

At 31 December 2022, the value of reverse repo transactions amounted to PLN 7 million (PLN 0 at 31 December 2021). As at 31 December 2022 and 2021, the Group did not conclude any reverse repo transactions.

36. Loans and advances to customers

Accounting policies:

Loans and advances to customers are classified in the individual measurement categories in accordance with the principles for selecting the business model and evaluating the characteristics of contractual cash flows referred to in the note “General accounting policies for financial instruments”.

Loans and advances to customers include:

- amounts due from loans and advances granted,
- factoring receivables
- and finance lease receivables.

The category of loans and advances to customers measured at fair value through profit or loss includes the following products: cash loans, credit cards and revolving loans, whose contractual formula for interest calculation includes a multiplier.

The Group adjusts the gross carrying amount of housing loans measured at amortised cost by recognizing the effect of:

- legal risk related to potential litigation for the portfolio of mortgage loans in convertible currencies and existing legal claims related to loan exposures recognized as at the balance sheet date in the statement of financial position (see "Cost of legal risk of mortgage loans in convertible currencies")
- the so-called statutory credit holidays, recognized in the second half of 2022.

  THE STATUTORY CREDIT HOLIDAYS were introduced by the Act of 14 July 2022 on the crowdfunding of business ventures and on assistance for borrowers (hereinafter: the "Act"), containing a package of assistance for mortgage borrowers. According to the Act, statutory credit holidays apply to mortgage loans granted in Polish zloty and provide the possibility to suspend loan repayment for up to 8 months between 2022 and 2023 – two months in each of Q3 and Q4 of 2022 and one month in each of the four quarters of 2023. The loan repayment suspension can be used by the customer if the agreement was concluded before 1 July 2022 and the loan period ends after 31 December 2022. Credit holidays can only be used for one loan. The repayment schedule of loan instalments is extended by the number of credit holiday months used.

  The Group believes that the entitlement of customers to benefit from the suspension of loan repayments is a statutory cash flow modification that occurs on the date the Act has been signed by the President, i.e. 14 July 2022.

  The Group adjusted the gross carrying amount of mortgage loans for PLN 3,111 million by deducting interest income. The value of the adjustment was determined as the difference between the present value of the estimated cash flows resulting from the loan agreements, taking into account the suspension of instalment payments, and the present gross carrying amount of the loan portfolio. The loss calculation is based on the assumption that approximately 63% of customers holding a PLN-denominated mortgage loan will choose to benefit from credit holidays (customer participation rate).

  By the end of December 2022 285.7 thousand of the Group's customers applied for a suspension of mortgage repayment, representing 52% of the total number and 67% of the gross carrying amount of total loans eligible for credit holidays. The total number of suspensions applied for as at 31 December 2022 was 1 831 thousand (including suspensions in 2023 amounting to 805.3 thousand), representing 42% of the maximum number of instalments to be suspended for all eligible customers.

  As at 31 December 2022, the Group has assessed the adequacy of the level of credit holiday loss in terms of value, using the following assumptions:

  1) the level of customer participation in credit holidays in 2023 will be similar to that in 2022 – this analysis is based on a breakdown of customers into 4 groups illustrating their level of activity to date, on the basis of which the potential level of activity for 2023 has been determined;
  2) for the group of customers who applied for credit holidays in 2022 but did not apply for suspensions of principal and interest instalments for 2023 at the end of the year, an interest rate revaluation effect was taken into account, calculated on the basis of the change in base rates between the date of recognition of the loss on credit holidays and 31 December 2022;
  3) the loss on all principal and interest instalment suspensions effected in 2022 and requested for 2023 was reduced by the effect of prepayments witnessed on the basis of customer behaviour in the second half of 2022 and projected for 2023, prudentially adjusted for uncertainty regarding possible prepayments in 2023;

(IN PLN MILLION)

4) on the basis of monthly data on the inflow of new applications in 2022, using an extrapolation function, the trend of applications that may arrive by the end of the programme was established on the basis of which, using interest rates as at 31 December 2022, the potential loss was estimated.

The results of the above analysis confirmed that the credit holiday loss recognised by the Group in the amount of PLN 3,111 million is at an adequate level. An increase in the customer participation rate in the future, and thus the level of costs arising from it, could potentially be driven by factors such as rising unemployment levels, changing customer behaviour and rising market interest rates.

In addition, the Group adjusts the gross carrying amount of residential and consumer loans measured at amortised cost by recognising the impact of potential reimbursements to customers for the expected early repayment of active consumer and mortgage loans in the future.

The recognition of finance lease receivables is described in note "Leases" Section "Leases – Lessor".

The item "Loans and advances to customers" also includes an adjustment relating to fair value hedge accounting for loans representing hedged items (see the note "Hedge accounting and other financial instruments").

ESTIMATES AND JUDGMENTS: "Net expected credit losses", "Cost of legal risk of mortgage loans in convertible currencies"

The sensitivity of the loss amount to a +/- 10 pp change in the customer participation rate is presented in the table below:

IMPACT ON CREDIT HOLIDAY LOSS	increase in customer participation rate by 10 pp	decrease in customer participation rate by 10 pp
("+" increase; "()" decrease)	482	(482)

FINANCIAL INFORMATION

For more information on credit risk exposures, see note "CREDIT RISK – FINANCIAL INFORMATION".

LOANS AND ADVANCES TO CUSTOMERS 31.12.2022	not held for trading, measured at fair value through profit or loss	measured at amortized cost	Total
retail and private banking	**3 480**	**129 944**	**133 424**
real estate	4	103 303	103 307
consumer	3 476	26 548	30 024
finance lease receivables	-	93	93
companies and enterprises	**44**	**31 286**	**31 330**
real estate	-	5 382	5 382
business	44	13 496	13 540
factoring receivables	-	243	243
finance lease receivables	-	12 165	12 165
corporate	**41**	**66 934**	**66 975**
real estate	-	118	118
business	41	57 607	57 648
factoring receivables	-	3 348	3 348
finance lease receivables	-	5 861	5 861
Loans and advances to customers (excluding adjustment relating to fair value hedge accounting)	**3 565**	**228 164**	**231 729**
Adjustment relating to fair value hedge accounting (note "Hedge accounting and other financial instruments")	-	(8)	(8)
Total	**3 565**	**228 156**	**231 721**

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS 31.12.2021	not held for trading, measured at fair value through profit or loss	measured at fair value through other comprehensive income	measured at amortized cost	Total
retail and private banking	**4 462**	**2**	**139 716**	**144 180**
real estate	4	-	113 532	113 536
consumer	4 458	2	26 077	30 537
finance lease receivables	-	-	107	107
companies and enterprises	**43**	**-**	**31 443**	**31 486**
real estate	-	-	5 532	5 532
business	43	-	13 579	13 622
factoring receivables	-	-	150	150
finance lease receivables	-	-	12 182	12 182
corporate	**54**	**-**	**58 581**	**58 635**
real estate	-	-	75	75
business	54	-	50 471	50 525
factoring receivables	-	-	2 773	2 773
finance lease receivables	-	-	5 262	5 262
Loans and advances to customers (excluding adjustment relating to fair value hedge accounting)	**4 559**	**2**	**229 740**	**234 301**
Adjustment relating to fair value hedge accounting (note "Hedge accounting and other financial instruments")	-	-	(1)	(1)
Total	4 559	2	229 739	234 300

LOANS AND ADVANCES TO CUSTOMERS BY MATURITY (excluding adjustments relating to fair value hedge accounting)	not held for trading, mandatorily measured at fair value through profit or loss	measured at amortized cost	Total
31.12.2022			
up to 1 month	730	10 799	11 529
1 to 3 months	453	9 581	10 034
3 months to 1 year	1 733	34 606	36 339
1 to 5 years	603	75 253	75 856
more than 5 years	46	97 925	97 971
Total	3 565	228 164	231 729

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS BY MATURITY (excluding adjustments relating to fair value hedge accounting)	not held for trading, mandatorily measured at fair value through profit or loss	measured at amortized cost	measured at amortized cost	Total
31.12.2021				
up to 1 month	794	-	11 362	12 156
1 to 3 months	554	-	10 533	11 087
3 months to 1 year	2 110	-	31 172	33 282
1 to 5 years	1 058	-	77 551	78 609
more than 5 years	43	2	99 121	99 166
Total	4 559	2	229 739	234 300

37. Amounts due to banks

ACCOUNTING POLICIES: Valuation and classification into categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "GENERAL ACCOUNTING POLICIES FOR FINANCIAL INSTRUMENTS".

FINANCIAL INFORMATION

AMOUNTS DUE TO BANKS	31.12.2022	31.12.2021
Measured at fair value through profit or loss:	**2**	**-**
Liabilities in respect of a short position in securities	2	-
Measured at amortized cost	**3 009**	**3 821**
Deposits from banks	1 936	2 814
Current accounts	1 057	995
Other monetary market deposits	16	12
Total	3 011	3 821

AMOUNTS DUE TO BANKS BY MATURITY	31.12.2022	31.12.2021
Measured at fair value through profit or loss:	**2**	**-**
up to 1 month	2	-
Measured at amortized cost:	**3 009**	**3 821**
up to 1 month	2 963	3 761
1 to 3 months	31	20
3 months to 1 year	15	40
Total	3 011	3 821

38. Amounts due to customers

ACCOUNTING POLICIES: Valuation and classification into categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "GENERAL ACCOUNTING POLICIES FOR FINANCIAL INSTRUMENTS". Detailed policies concerning "Liabilities in respect of insurance products" are described in note "Assets and liabilities in respect of insurance activities".

The item "Amounts due to customers" also includes an adjustment relating to fair value hedge accounting for amounts due to customers representing hedged items (note "Hedge accounting and other financial instruments").

(IN PLN MILLION)

FINANCIAL INFORMATION

AMOUNTS DUE TO CUSTOMERS	Amounts due to households	Amounts due to business entities	Amounts due to state budget entities	Total
31.12.2022				
Measured at fair value through profit or loss	**778**	**5**	**-**	**783**
Liabilities in respect of a short position in securities	-	5	-	5
Liabilities in respect of insurance products	778	-	-	778
Measured at amortized cost	**263 033**	**58 634**	**17 188**	**338 855**
Cash on current accounts and overnight deposits of which	180 298	40 290	16 224	236 812
savings accounts and other interest-bearing assets	41 953	12 933	11 615	66 501
Term deposits	82 127	17 748	913	100 788
Other liabilities	515	596	51	1 162
Liabilities in respect of insurance products	93	-	-	93
Amounts due to customers (excluding adjustment relating to fair value hedge accounting)	**263 811**	**58 639**	**17 188**	**339 638**
Adjustment relating to fair value hedge accounting (note "Hedge accounting and other financial instruments")	(56)	-	-	(56)
Total	263 755	58 639	17 188	339 582

AMOUNTS DUE TO CUSTOMERS	Amounts due to households	Amounts due to business entities	Amounts due to state budget entities	Total
31.12.2021				
Measured at fair value through profit or loss	**1 067**	**-**	**-**	**1 067**
Liabilities in respect of insurance products	1 067	-	-	1 067
Measured at amortized cost	**244 545**	**56 854**	**19 830**	**321 229**
Cash on current accounts and overnight deposits of which	204 465	45 991	19 731	270 187
savings accounts and other interest-bearing assets	57 213	16 585	13 301	87 099
Term deposits	39 201	10 125	76	49 402
Other liabilities	735	738	23	1 496
Liabilities in respect of insurance products	144	-	-	144
Amounts due to customers (excluding adjustment relating to fair value hedge accounting)	**245 612**	**56 854**	**19 830**	**322 296**
Total	245 612	56 854	19 830	322 296

(IN PLN MILLION)

AMOUNTS DUE TO CUSTOMERS BY MATURITY (excluding adjustment relating to fair value hedge accounting)	31.12.2022	31.12.2021
Measured at fair value through profit or loss:	**783**	**1 067**
up to 1 month	5	-
1 to 5 years	1	2
more than 5 years	777	1 065
Measured at amortized cost:	**338 855**	**321 229**
up to 1 month	272 288	285 686
1 to 3 months	29 307	12 658
3 months to 1 year	10 392	11 444
1 to 5 years	21 520	5 932
more than 5 years	5 348	5 509
Total	339 638	322 296

AMOUNTS DUE TO CUSTOMERS BY SEGMENT	31.12.2022	31.12.2021
Amounts due to customers (excluding adjustment relating to fair value hedge accounting)	339 638	322 296
retail and private banking	234 382	215 028
Corporate	55 812	58 389
companies and enterprises	48 562	47 657
other liabilities (including liabilities in respect of insurance products)	882	1 222
Adjustment relating to fair value hedge accounting (note "Hedge accounting and other financial instruments")	(56)	-
Total	339 582	322 296

39. Financing received

Accounting policies: Valuation and classification into categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "General accounting policies for financial instruments".

Financial information

FINANCING RECEIVED	31.12.2022	31.12.2021
Loans and advances received from:	**2 294**	**2 461**
banks	309	740
international financial organisations	1 972	1 706
other financial institutions	13	15
Liabilities in respect of debt securities in issue:	**15 510**	**23 872**
mortgage covered bonds issued by PKO Bank Hipoteczny S.A.	12 057	13 143
bonds issued by PKO Bank Hipoteczny S.A.	1 265	3 474
bonds issued by PKO Finance AB	-	3 541
bonds issued by the PKO Leasing S.A. Group	2 188	3 642
bonds issued by KREDOBANK S.A.	-	72
Subordinated liabilities	**2 781**	**2 716**
Total	20 585	29 049

(IN PLN MILLION)

39.1. LOANS AND ADVANCES RECEIVED

LOANS AND ADVANCES RECEIVED BY MATURITY	31.12.2022	31.12.2021
up to 1 month	-	48
1 to 3 months	11	40
3 months to 1 year	1 107	212
1 to 5 years	1 176	2 161
Total	2 294	2 461

LOANS AND ADVANCES RECEIVED FROM BANKS

Date of receipt	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
10.06.2019	150	PLN	15.06.2023	150	-
04.12.2019	500	PLN	04.12.2023	159	281
08.05.2020	600	UAH	25.04.2025	-	89
11.09.2020	450	UAH	05.09.2025	-	67
09.10.2020	600	UAH	03.10.2025	-	89
11.12.2020	600	UAH	05.12.2025	-	89
13.08.2021	750	UAH	09.08.2024	-	112
31.12.2021	13	PLN	31.12.2021	-	13
Total				309	740

LOANS AND ADVANCES RECEIVED FROM INTERNATIONAL FINANCIAL ORGANIZATIONS

Date of receipt of a loan or advance by the Group	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
25.09.2013	120	EUR	25.09.2023	130	138
28.10.2016	40	EUR	13.01.2022	-	4
28.09.2017	50	EUR	30.11.2022	-	57
28.11.2018	50	EUR	30.11.2022	-	115
13.04.2018	40	EUR	31.03.2023	11	54
23.10.2018	746	PLN	23.10.2023	1 126	648
10.02.2021	50	EUR	02.02.2026	235	230
06.12.2021	50	EUR	27.11.2026	235	230
06.12.2021	50	EUR	27.11.2026	235	230
Total				1 972	1 706

(IN PLN MILLION)

LOANS AND ADVANCES RECEIVED FROM OTHER FINANCIAL INSTITUTIONS

Date of receipt	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
25.10.2021	100	UAH	24.10.2023	13	15

39.2. LIABILITIES IN RESPECT OF DEBT SECURITIES IN ISSUE

LIABILITIES IN RESPECT OF DEBT SECURITIES IN ISSUE BY MATURITY	31.12.2022	31.12.2021
Measured at amortized cost:		
up to 1 month	2 669	1 067
1 to 3 months	791	1 820
3 months to 1 year	2 851	9 978
1 to 5 years	9 138	10 946
more than 5 years	61	61
Total	15 510	23 872

BONDS ISSUED BY PKO BANK HIPOTECZNY S.A.

Issue date	Type of interest rate	Interest (index + margin)	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
17.12.2020	variable	WIBOR3M +0.28	224	PLN	17.03.2022	-	224
03.02.2021	variable	WIBOR3M +0.25	83	PLN	09.05.2022	-	83
29.03.2021	variable	WIBOR3M +0.35	95	PLN	03.10.2022	-	95
21.05.2021	zero-coupon		364	PLN	24.01.2022	-	364
22.06.2021	zero-coupon		384	PLN	24.01.2022	-	384
26.07.2021	zero-coupon		300	PLN	24.02.2022	-	300
26.07.2021	variable	WIBOR3M +0.33	418	PLN	23.11.2022	-	418
06.09.2021	zero-coupon		489	PLN	04.04.2022	-	488
18.10.2021	zero-coupon		311	PLN	23.05.2022	-	309
18.10.2021	zero-coupon		381	PLN	22.04.2022	-	380
29.11.2021	zero-coupon		280	PLN	17.03.2022	-	279
29.11.2021	variable	WIBOR3M +0.20	150	PLN	23.05.2022	-	150
24.01.2022	variable	WIBOR3M+0.28	124	PLN	25.07.2023	126	-
24.02.2022	variable	WIBOR3M+0.30	115	PLN	19.05.2023	116	-
03.10.2022	zero-coupon		293	PLN	03.04.2023	286	-
02.11.2022	zero-coupon		125	PLN	09.05.2023	121	-
02.11.2022	zero-coupon		100	PLN	03.04.2023	98	-
16.12.2022	zero-coupon		232	PLN	16.03.2023	228	-
16.12.2022	zero-coupon		300	PLN	16.06.2023	290	-
Total						1 265	3 474

(IN PLN MILLION)

Bonds issued by PKO Finance AB

In September 2022, it redeemed bonds amounting to PLN 3 958 million.

Issue date	Type of interest rate	Interest rate	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
25.07.2012	fixed	4.00	50	EUR	25.07.2022	-	234
26.09.2012	fixed	4.63	805	USD	26.09.2022	-	3 307
Total						-	3 541

Bonds issued by the PKO Leasing SA Group

Issue date	Type of interest rate	Interest rate (index + margin)	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
26.09.2019[1]	variable	WIBOR 3M + margin	2 135	PLN	28.12.2029	1067	2 139
06.08.2021	variable	WIBOR 3M + margin	193	PLN	07.02.2022	-	193
10.09.2021	variable	WIBOR 6M + margin	303	PLN	28.01.2022	-	303
08.10.2021	variable	WIBOR 3M + margin	278	PLN	25.03.2022	-	277
15.11.2021	variable	WIBOR 3M + margin	326	PLN	07.03.2022	-	326
02.12.2021	variable	WIBOR 3M + margin	140	PLN	12.04.2022	-	139
17.12.2021	variable	WIBOR 6M + margin	267	PLN	29.04.2022	-	265
10.10.2022	variable	WIBOR 3M + margin	311	PLN	17.01.2023	310	-
24.10.2022	variable	WIBOR 3M + margin	164	PLN	01.02.2023	163	-
14.11.2022	variable	WIBOR 3M + margin	182	PLN	10.03.2023	179	-
28.11.2022	variable	WIBOR 3M + margin	225	PLN	27.03.2023	222	-
05.12.2022	variable	WIBOR 3M + margin	164	PLN	13.04.2023	161	-
22.12.2022	variable	WIBOR 3M + margin	88	PLN	24.04.2023	86	-
Total						2 188	3 642

[1] The bonds issued as part of securitization of lease receivables taken up by the PKO Leasing SA Group as part of the acquisition of Raiffeisen Leasing Polska S.A. and issued as part of securitization of lease receivables conducted in September 2019. Bonds are secured with securitized lease receivables (see the Note "Information on securitization of the lease portfolio and portfolio sale of receivables").

Bonds issued by KREDOBANK SA

Issue date	Type of interest rate	Interest rate (index + margin)	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
01.12.2017	variable	UIRD[1] 6M+0.75	233	UAH	26.11.2022	-	35
13.07.2018	variable	UIRD[1] 6M+0.75	250	UAH	28.12.2022	-	37
Total						-	72

[1] Ukrainian Index of Retail Deposit Rates

(IN PLN MILLION)

Mortgage-covered bonds issued by PKO Bank Hipoteczny SA

Issue date	Type of interest rate	Interest (index + margin)	Nominal value	Currency	Maturity	Carrying amount at 31.12.2022	Carrying amount at 31.12.2021
24.10.2016	fixed	0.125	500	EUR	24.06.2022	-	2 300
02.02.2017	fixed	0.82	25	EUR	02.02.2024	118	116
30.03.2017	fixed	0.625	500	EUR	24.01.2023	2 359	2 312
28.04.2017	variable	WIBOR3M +0.69	500	PLN	18.05.2022	-	501
27.09.2017	fixed	0.75	500	EUR	27.08.2024	2 351	2 303
27.10.2017	variable	WIBOR3M +0.60	500	PLN	27.06.2023	500	500
02.11.2017	fixed	0.47	54	EUR	03.11.2022	-	249
22.03.2018	fixed	0.75	500	EUR	24.01.2024	2 360	2 314
27.04.2018	variable	WIBOR3M +0.49	698	PLN	25.04.2024	708	701
18.05.2018	variable	WIBOR3M +0.32	100	PLN	29.04.2022	-	98
27.07.2018	variable	WIBOR3M +0.62	500	PLN	25.07.2025	507	501
24.08.2018	fixed	3.4875	60	PLN	24.08.2028	61	61
26.10.2018	variable	WIBOR3M +0.66	230	PLN	28.04.2025	233	231
08.03.2019	fixed	0.125	100	EUR	24.06.2022	-	460
10.06.2019	variable	WIBOR3M +0.60	245	PLN	30.09.2024	244	246
02.12.2019	variable	WIBOR3M +0.51	250	PLN	02.12.2024	251	250
04.07.2022	fixed	2.125	500	EUR	25.06.2025	2 365	-
Total						12 057	13 143

39.3. Subordinated liabilities

Type of liability	Type of interest rate	Notional amount	Currency	Period	Carrying amount 31.12.2022	Carrying amount 31.12.2021
Subordinated bonds	6M WIBOR +0.0155	1 700	PLN	28.08.2017 - 28.08.2027	1 752	1 710
Subordinated bonds	6M WIBOR +0.0150	1 000	PLN	05.03.2018 - 06.03.2028	1 029	1 006
Total					2 781	2 716

The subordinated bonds were designated for increasing the Group's supplementary funds (Tier 2) upon approval of the Polish Financial Supervision Authority. Due to unfavourable market circumstances, a decision was made on 1 August 2022 to abandon the early redemption of the series OP0827 subordinated bonds issued by the Bank on 28 August 2017. On the same day, the Management Board of PKO Bank Polski S.A. decided not to proceed with the Bank's issue of subordinated bonds in the format of subordinated bonds with a ten-year maturity (on 26 April 2022, a resolution of the Bank's Management Board was adopted to authorise the issue of such bonds).

On 8 August 2022, the Management Board of the Bank approved the establishment of a programme for the issue of Eurobonds by the Bank as the issuer (the Euro Medium Term Notes Programme – the "EMTN Programme") of up to EUR 4 billion. Under the EMTN Programme, it will be possible to issue unsecured Eurobonds in any currency, including those in respect of which obligations may be classified as eligible liabilities or as the Bank's own funds. Bonds issued under the EMTN Programme will be registered with the international central securities depository (ICSD) operated by Euroclear Bank SA/NV or Clearstream Banking société anonyme. The Bank may apply for admission of individual series of Eurobonds to trading on a regulated market operated by the Luxembourg Stock Exchange, the Warsaw Stock Exchange.

On 16 December 2022, the Moody's Investors Service rating agency assigned a (P)Baa3 rating to the EMTN Programme, for the unsecured bonds designated as Senior Non Preferred.

On 20 December 2022, the Prospectus for the EMTN Programme was approved by the Commission de Surveillance du Secteur Financier (CSSF) in Luxembourg.

On 1 February 2023, as part of the inaugural issue under the EMTN programme, the Bank issued 3-year Senior Preferred Notes with a total value of EUR 750 million, with the option of early redemption two years after issue. The coupon of the issue is fixed, at 5.625%, payable annually until the early redemption date, and variable thereafter, with quarterly payments. Moody's Investors Service has assigned a rating of A3 to the issue. The bonds were admitted to trading on a regulated market on the Luxembourg Stock Exchange.

OTHER SUPPLEMENTARY NOTES TO THE STATEMENT OF FINANCIAL POSITION AND CONTINGENT LIABILITIES

40. Assets and liabilities in respect of insurance activities

Accounting policies:

The Group presents its insurance activities under the following headings in the statement of financial position:

- **Assets in respect of insurance activities** are receivables on account of reinsurance and share of reinsurers in technical reserves.

  Reinsurance receivables include receivables from reinsurers and reinsurance brokers resulting from concluded outward reinsurance contracts. Reinsurance receivables are measured at the amounts due less impairment allowances.

  The reinsurer's share in the technical provisions is determined on the basis of the gross provisions and the conditions specified in the reinsurance contracts. Therefore, as in the case of technical provisions, the majority of the reinsurer's share in the provisions is determined on the basis of individual methods. In the case of the reinsurer's share appointed at the level of aggregated data, the granularity of calculations is applied, which enables proper consideration of the parameters of the reinsurance contract, e.g. defining the reinsurance contract at the level of the claim year or policy year. The reinsurer's share in the technical provisions is determined adequately and carefully.

- **Liabilities in respect of insurance activities** comprise insurance technical reserves to cover current and future claims and costs which may arise from the insurance contracts concluded, i.e. unearned premium and unexpired risk reserves, outstanding claims and benefits reserve, reserve for bonuses and discounts for the insured, life insurance reserve, and other, as well as deferred reinsurance commission and reinsurance related liabilities.

  Technical provisions are created to cover current and future claims and costs that may result from concluded insurance contracts. Provisions include both events that have occurred in the past but have not yet been settled, as well as events that will occur in the future. In most cases, provisions are created on an individual basis at the level of individual policies or claims, with the exception of, inter alia, IBNR reserve, which is determined at the level of homogeneous risk groups. All provisions are calculated using classical actuarial methods. The provisions take into account not only the expected claims and benefits payments and costs, but also any other cash flows resulting from concluded insurance contracts, e.g. bonuses and rebates. Provisions are created adequately and prudently in such a way as to include a certain risk margin.

  Reinsurance commissions in the part falling for future reporting periods are settled in time according to the rules governing the creation of the provision for premiums with the reinsurer's share.

(IN PLN MILLION)

Reinsurance liabilities include current liabilities towards reinsurers resulting from settlements made on the basis of outward reinsurance contracts. Reinsurance liabilities are recognized at their nominal value and measured at the amount required as at the balance sheet date.

- **AMOUNTS DUE TO CUSTOMERS – "LIABILITIES IN RESPECT OF INSURANCE PRODUCTS":** Liabilities in respect of insurance products include liabilities from unit-linked products, safe capital product, structured products and insurance deposits. Technical reserves for life insurance where the investment risk is borne by the insurer are presented as liabilities in respect of insurance products measured at fair value. The measurement of these provisions is based on the value of the corresponding assets measured at fair value. Provisions measure at amortized cost include other provisions in respect of investment products which are mainly calculated using actuarial methods (provisions for life insurance, provisions for claims, etc.).

The Group recognises net income on insurance activities under commission income – in the line "offering insurance products" which comprises premium income, costs of insurance activities, claims and change in technical reserves, and the impact of the reinsurer's share in the aforementioned items. The accounting policies for recognizing commission income on sales of insurance products linked to loans and advances are described in note "Interest income and expenses".

ASSET IN RESPECT OF INSURANCE ACTIVITIES	31.12.2022	31.12.2021
Reinsurers' share in technical reserves	532	865
Receivables in respect of reinsurance	23	46
Total	555	911

LIABILITIES IN RESPECT OF INSURANCE ACTIVITIES	31.12.2022	31.12.2021
Technical reserves	1 281	1 233
Deferred reinsurance commission	426	725
Liabilities in respect of reinsurance	25	50
Total	1 732	2 008

Other financial information, see: Liabilities in respect of insurance products and Net income from insurance business

41. INTANGIBLE ASSETS

ACCOUNTING POLICIES:

SOFTWARE - Acquired computer software licences are recognized in the amount of costs incurred on the purchase and preparation of the software for use, taking into consideration accumulated amortization and impairment losses.

GOODWILL - Goodwill arising on acquisition of subsidiaries is recognized under "Intangible assets" and goodwill arising on acquisition of associates and joint ventures is recognized under "Investments in associates and joint ventures". The test for goodwill impairment is carried out at least at the end of each year.

CUSTOMER RELATIONS AND VALUE IN FORCE - As a result of a settlement of the transaction, two components of intangible assets that are recognized separately from goodwill, i.e. customer relations and value in force, representing the present value of future profits from concluded insurance contracts, were identified. These components of intangible assets are amortized by declining balance method based on the rate of economic benefits consumption arising from their use.

OTHER INTANGIBLE ASSETS – Other intangible assets acquired by the Group are recognized at the cost of purchase or manufacture, less accumulated amortization and impairment losses.

DEVELOPMENT COSTS – The costs of completed development projects are classified as intangible assets in connection with the expected economic benefits to be obtained and meeting specific terms and conditions, i.e. if there is a possibility and intention to complete and use the internally generated intangible asset, there are appropriate technical and financial resources to complete the development and to use the asset and it is possible to reliably measure the expenditure incurred during its development which can be directly attributed to generating the intangible asset.

CAPITAL EXPENDITURE – The carrying amount of property, plant and equipment items is increased by additional capital expenditure incurred during their use, provided that they satisfy the criteria for classification to fixed assets.

The Group classifies the effects of in-house development work that can be used for the Group's operations as intangible assets. It classifies the effects of development work carried out for the Group's own purposes, which constitutes the stage of development and implementation of a new solution, as intangible assets if it can demonstrate the following:

1) the feasibility of completing the intangible asset so that it will be available for use or sale;
2) its intention to complete the intangible asset and use or sell it;
3) its ability to use or sell the intangible asset;
4) the manner in which the intangible asset generates probable future economic benefits, i.e. its usefulness (in accordance with IAS 36 Impairment of Assets);
5) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
6) its ability to measure the expenditure attributable to the intangible asset during its development reliably.

Right-of-use assets are presented in the same items in which the underlying assets would be presented, if they were owned by the Group.

RELATED NOTES:

- Useful lives – note "Administrative expenses";
- Impairment losses – note "Net impairment losses on non-financial assets"

(IN PLN MILLION)

FINANCIAL INFORMATION

INTANGIBLE ASSETS	Software	Goodwill	Future profit on concluded insurance contracts	Customer relations	Other, including capital expenditure	of which: software	Total
2022							
Gross carrying amount at the beginning of the period	**5 908**	**1 407**	**140**	**158**	**776**	**642**	**8**
Purchase	45	-	-	-	492	492	537
Transfers from capital expenditure	504	-	-	-	(504)	(504)	-
Scrapping and sale	(18)	-	-	(64)	-	-	(82)
Other	-	-	1	-	38	41	39
Gross carrying amount at the end of the period	**6 439**	**1 407**	**141**	**94**	**802**	**671**	**8 883**
Accumulated amortization as at the beginning of the period	**(4 203)**	**-**	**(118)**	**(117)**	**(92)**	**-**	**(4 530)**
Amortization charge for the period	(483)	-	(6)	(7)	(4)	-	(500)
Scrapping and sale	18	-	-	34	-	-	52
Other	5	-	(1)	-	-	-	
Accumulated amortization as at the end of the period	**(4 663)**	**-**	**(125)**	**(90)**	**(96)**	**-**	**(4 974)**
Impairment losses as at the beginning of the period	**(18)**	**(354)**	**-**	**(9)**	**(15)**	**(2)**	**(396)**
Recognized during the period	-	-	-	(21)	-	-	(21)
Other	-	-	-	30	5	2	35
Impairment losses as at the end of the period	**(18)**	**(354)**	**-**	**-**	**(10)**	**-**	**(382)**
Carrying amount as at the beginning of the period, net	1 687	1 053	22	32	669	640	3 463
Carrying amount as at the end of the period, net	1 758	1 053	16	4	696	671	3 527

(IN PLN MILLION)

INTANGIBLE ASSETS	Software	Goodwill	Future profit on concluded insurance contracts	Customer relations	Other, including capital expenditure	of which: software	Total
2021							
Gross carrying amount at the beginning of the period	6 137	1 437	141	158	569	433	8 442
Purchase	44	-	-	-	551	550	595
Transfers from capital expenditure	387	-	-	-	(387)	(341)	-
Scrapping and sale	(682)	-	-	-	(2)	-	(684)
Other	22	(30)	(1)	-	45	-	36
Gross carrying amount at the end of the period	5 908	1 407	140	158	776	642	8 389
Accumulated amortization as at the beginning of the period	(4 440)	-	(110)	(105)	(91)	-	(4 746)
Amortization charge for the period	(440)	-	(8)	(12)	(4)	-	(464)
Scrapping and sale	681	-	-	-	2	-	683
Other	(4)	-	-	-	1	-	(3)
Accumulated amortization as at the end of the period	(4 203)	-	(118)	(117)	(92)	-	(4 530)
Impairment losses as at the beginning of the period	(18)	(384)	-	-	(13)	-	(415)
Recognized during the period	-	-	-	(9)	(2)	(2)	(11)
Other	-	30	-	-	-	-	30
Impairment losses as at the end of the period	(18)	(354)	-	(9)	(15)	(2)	(396)
Carrying amount as at the beginning of the period, net	1 679	1 053	31	53	465	433	3 281
Carrying amount as at the end of the period, net	1 687	1 053	22	32	669	640	3 463

From the Bank's perspective, expenditure incurred on the Integrated Information System (IIS) is a significant item of intangible assets. The total capital expenditure incurred on the IIS in 2006–2022 was PLN 1 392 million (PLN 1 462 million in 2005-2021).

The net carrying amount of the Integrated Information System (IIS) as at 31 December 2022 was PLN 651 million (PLN 629 million as at 31 December 2021). The expected useful life of the system is 24 years. As at 31 December 2022, its remaining useful life is 8 years.

- **Goodwill**

Net goodwill	31.12.2022	31.12.2021
Nordea Bank Polska S.A.	747	747
PKO Życie Towarzystwo Ubezpieczeń S.A.	91	91
Raiffeisen - Leasing Polska SA and its subsidiaries (PKO Leasing SA)	57	57
PKO Towarzystwo Funduszy Inwestycyjnych S.A.	150	150
Assets taken over from CFP sp. z o.o.	8	8
Total	1 053	1 053

(IN PLN MILLION)

GOODWILL	IMPAIRMENT TEST – METHOD
NORDEA BANK POLSKA S.A.	The Group performs impairment tests of goodwill on acquisition of Nordea Bank Polska S.A. based on a discounted dividend model, by comparing the carrying amount of cash-generating units ('CGUs") with their recoverable value. The residual value of a CGU has been calculated by extrapolating the cash flow projections beyond the projection period using the growth rate adopted at a level of 3.5%. Cash flow projections used in the impairment test covered a period of 10 years and are based on the assumptions included in the financial plan of the Group for 2023. A discount rate of 12.50%, taking into account the risk-free rate and risk premium, was used for the discounting of the future cash flows. At the time of the acquisition, two cash-generating units ("CGUs") were distinguished to which the goodwill arising from the acquisition of Nordea Bank Polska SA was allocated – retail and corporate CGUs, corresponding to the operating segments. The Group recognised an impairment loss on the goodwill attributable to the corporate CGU of PLN 117 million on 30 June 2020. Goodwill of Nordea Bank Polska S.A. of PLN 747 million belongs to the retail segment. As at 31 December 2022, the Group performed an impairment test in respect of goodwill on the acquisition of Nordea Bank Polska S.A. assigned to the retail CGU. The test did not identify impairment.
PKO TOWARZYSTWO FUNDUSZY INWESTYCYJNYCH S.A.	The impairment test was carried out on the basis of the three-year financial forecast prepared by the Company based on the discounted dividend method, taking into account the residual value. No impairment of goodwill was identified.
PKO ŻYCIE TOWARZYSTWO UBEZPIECZEŃ S.A.	The impairment test carried out was developed on the basis of the present value of expected future cash flows for the Bank, taking into account the residual value. Future cash flows were estimated on the basis prepared by the Company's 10 year financial forecast. No impairment of goodwill was identified.
PKO LEASING PRO S.A.	The goodwill arising on the acquisition of the Company was allocated to the whole of PKO Leasing S.A. as the immediate parent company, which acquired the assets of PKO Leasing Pro S.A. in the merger. The impairment test was prepared on the basis of the present value of the expected future cash flows generated by the Company, estimated on the basis of the financial forecast prepared by the Company for five years with the simultaneous fading out of activities thereafter. No further impairment was identified.
RAIFFEISEN - LEASING POLSKA S.A. AND ITS SUBSIDIARIES (PKO LEASING S.A.)	The goodwill that arose on the acquisition of these companies was allocated to the portion of the assets of the PKO Leasing S.A. Group that was separately recorded in the accounts as assets of the Raiffeisen-Leasing Polska S.A. Group that was acquired. The impairment test was carried out on the basis of the five-year financial forecast prepared by the Company based on the discounted dividend method, taking into account the residual value. No impairment of goodwill was identified.

In the impairment tests described above, a discount rate of 7.555% (except for Nordea Bank Polska S.A.) was used to discount future cash flows, taking into account the risk-free rate equal to the yield of 10-year treasury bonds as at the date of valuation and a premium for market risk and risk ratio determined for projects of PKO Bank Polski S.A.

The valuation methods and forecast periods were adapted to the specific features of activities related to the assets or companies being valued.

(IN PLN MILLION)

42. PROPERTY, PLANT AND EQUIPMENT

ACCOUNTING POLICIES:

PROPERTY, PLANT AND EQUIPMENT – are measured at the cost of purchase or manufacture, less accumulated depreciation and impairment losses.

INVESTMENT PROPERTIES – are measured according to the accounting policies applied to property, plant and equipment.

CAPITAL EXPENDITURE – The carrying amount of property, plant and equipment items is increased by additional capital expenditure incurred during their use, provided that they satisfy the criteria for classification to fixed assets.

Right-of-use assets are presented in the same items in which the underlying assets would be presented, if they were owned by the Group.

RELATED NOTES:

- Useful lives – note "Administrative expenses";
- Impairment losses – note "Net impairment losses on non-financial assets"

FINANCIAL INFORMATION

- PROPERTY, PLANT AND EQUIPMENT

PROPERTY, PLANT AND EQUIPMENT	Land and buildings	Machinery and equipment, including computer hardware	Fixed assets under construction	Other, including vehicles	Total
2022					
Gross carrying amount at the beginning of the period	3 977	1 768	217	909	6 871
Purchase, including modifications	165	37	175	28	405
Transfers from capital expenditure	50	142	(234)	42	-
Scrapping and sale	(46)	(92)		(58)	(196)
Other	(25)	(23)	(4)	(18)	(70)
Gross carrying amount at the end of the period	4 121	1 832	154	903	7 010
Accumulated depreciation as at the beginning of the period	(1 789)	(1 352)	-	(522)	(3 663)
Depreciation charge for the period	(317)	(153)	-	(60)	(530)
Scrapping and sale	29	91	-	31	151
Other	21	16	-	14	51
Accumulated depreciation as at the end of the period	(2 056)	(1 398)	-	(537)	(3 991)
Impairment losses as at the beginning of the period	(95)	(1)	(4)	-	(100)
Recognized during the period	(3)	-	-	-	(3)
Other	1	-	1	(1)	1
Impairment losses as at the end of the period	(97)	(1)	(3)	(1)	(102)
Carrying amount as at the beginning of the period, net	2 093	415	213	387	3 108
Carrying amount as at the end of the period, net	1 968	433	151	365	2 917

(IN PLN MILLION)

PROPERTY, PLANT AND EQUIPMENT	Land and buildings	Machinery and equipment, including computer hardware	Fixed assets under construction	Other, including vehicles	Total
2021					
Gross carrying amount at the beginning of the period	3 807	1 715	289	834	6 645
Purchase, including modifications	106	12	207	91	416
Transfers from capital expenditure	89	153	(275)	33	-
Scrapping and sale	(82)	(124)	(1)	(52)	(259)
Other	57	12	(3)	3	69
Gross carrying amount at the end of the period	3 977	1 768	217	909	6 871
Accumulated depreciation as at the beginning of the period	(1 553)	(1 332)	-	(498)	(3 383)
Depreciation charge for the period	(329)	(138)	-	(67)	(534)
Scrapping and sale	70	123	-	43	236
Other	23	(5)	-	-	18
Accumulated depreciation as at the end of the period	(1 789)	(1 352)	-	(522)	(3 663)
Impairment losses as at the beginning of the period	(97)	(1)	(3)	-	(101)
Recognized during the period	(1)	-	-	-	(1)
Other	3	-	(1)	-	2
Impairment losses as at the end of the period	(95)	(1)	(4)	-	(100)
Carrying amount as at the beginning of the period, net	2 157	382	286	336	3 161
Carrying amount as at the end of the period, net	2 093	415	213	387	3 108

Investment properties	31.12.2022	31.12.2021
Gross carrying amount	62	62
Accumulated depreciation	(23)	(20)
Impairment losses	(3)	(3)
Net carrying amount	36	39

43. Assets held for sale

Accounting policies:

Only assets available for immediate sale in the current condition are classified as assets held for sale, provided that their sale is highly probable, i.e. the entity has decided to sell the asset and started to actively seek a buyer to complete the sale process. In addition, such assets are offered for sale at a price which is reasonable in view of their current fair value and it is expected that the sale will be completed within one year from the date of classification of the asset into this category.

These assets are recognized at the lower of their carrying amount and fair value less costs to sell. Impairment losses on non-current assets held for sale are recognized in the income statement for the period in which the losses were recognized. Assets classified to this category are not depreciated.

(IN PLN MILLION)

When the respective classification criteria to this category are no longer met, the Group reclassifies the asset from non-current assets held for sale to another category of assets (as appropriate). Assets reclassified from assets held for sale are measured at the lower of: 1) the carrying amount from before the moment of their classification to non-current assets held for sale, less amortization/depreciation that would have been recorded had the asset (or disposal group) not been classified as held for sale; 2) the recoverable amount as at the date of the decision to discontinue the sale.

RELATED NOTES:

- Useful lives – note "Administrative expenses";
- Impairment losses – note "Net impairment losses on non-financial assets"

FINANCIAL INFORMATION

NON-CURRENT ASSETS HELD FOR SALE	31.12.2022	31.12.2021
Land and buildings	11	19
Total gross	**11**	**19**
Impairment losses	(1)	(1)
Total	10	18

Non-current assets held for sale - CHANGES IN IMPAIRMENT LOSSES	31.12.2022	31.12.2021
As at the beginning of the period	(1)	(3)
Recognized during the period	-	(2)
Other	-	4
As at the end of the period	(1)	(1)

44. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

44.1. JOINT VENTURES:

FINANCIAL INFORMATION

- CENTRUM ELEKTRONICZNYCH USŁUG PŁATNICZYCH ESERVICE SP. Z O.O.

The Bank holds shares entitling to 34% votes at the General Meeting of Shareholders, and the second is a shareholder of EVO International Payments Acquisition GmbH in Germany.

According to the agreement signed by the partners, regulating the principles of cooperation, decisions regarding the significant activities of the company require consent of both shareholders.

Both Shareholders have the right to appoint their representatives in the Supervisory Board: in the case of the Supervisory Board consisting of 5 members, PKO Bank Polski S.A. has the right to appoint 2 members (in the case of 7 members, PKO appoints 3 members). The Bank has two representatives on the Supervisory Board consisting of 7 people and indicates the independent member. Decisions reserved to the competence of the Supervisory Board regarding significant activities require the consent of at least one representative of PKO Bank Polski S.A. and one representative of the other shareholder.

- OPERATOR CHMURY KRAJOWEJ SP. Z O.O.

The Bank holds shares in the Company which carry 50% of votes at the Shareholders' Meeting, with Polski Fundusz Rozwoju S.A. being the other shareholder.

In accordance with the Company's Articles of Association:

- each of the shareholders is personally entitled to appoint and dismiss members of the Management Board and the Supervisory Board, with the Bank and PFR having the right to appoint an equal number of members of each of the said bodies;
- additionally, the Bank has the exclusive right to appoint the President of the Management Board and PFR has the exclusive right to appoint the Chair of the Supervisory Board;

(IN PLN MILLION)

- all key decisions relating to the Company's operations must be taken by a unanimous resolution of the Supervisory Board or by a unanimous resolution of the Shareholders' Meeting.

- **BSAFER SP. Z O.O.**

PKO VC - fizan (a subsidiary of PKO Bank Polski S.A.) holds the company's shares carrying 35.06% of votes at the Shareholders' Meeting, and the other majority shareholder of the company is Michał Pilch 59.740%.

Pursuant to the Articles of Association, decisions regarding the significant activities of the Company (i.e. activities that have a significant impact on the amount of returns generated by the Company, where returns are understood as e.g. dividends, increasing or decreasing the share capital of the Company, passing or returning additional payments, the value of the Company's shares in the balance sheet of the shareholder) were reserved to the competence of the General Shareholders' Meeting and require the consent of both shareholders.

JOINT VENTURES	31.12.2022	31.12.2021
"Centrum Obsługi Biznesu" sp. z o.o.	-	-
Acquisition price	17	17
Change in net investment	(17)	(17)
Centrum Elektronicznych Usług Płatniczych eService sp. z o.o. Group	275	265
Value of shares as at the date of obtaining joint control	197	197
Change in net investment	130	121
Dividend	(53)	(53)
Operator Chmury Krajowej sp. z o.o.	10	20
Value of shares as at the date of obtaining joint control	61	43
Increase in purchase price	-	18
Change in net investment	(51)	(41)
BSafer sp. z o.o.	-	-
Acquisition price	1	1
Impairment loss	(1)	(1)
Total	**285**	**285**

CHANGE IN INVESTMENTS IN JOINT VENTURES	2022	2021
Investments in joint ventures as at the beginning of the period	285	291
Share in profits and losses	53	29
Dividend	(53)	(53)
Other	-	18
Investments in joint ventures as at the end of the period	**285**	**285**

SELECTED INFORMATION ON JOINT VENTURES

A summary of the financial data separately for each joint venture of the Group is presented below. The amounts presented are derived from the financial statements of the individual entities prepared in accordance with the IFRSs or the Polish Accounting Standards (PAS). In the case of companies which have subsidiaries, the presented data is derived from the consolidated financial statements of these companies. The figures for 2021 are derived from audited financial statements.

Centrum Elektronicznych Usług Płatniczych eService sp. z o.o.	31.12.2022	31.12.2021
type of accounting standards – IFRSs		
Current assets	384	336
Non-current assets	184	169
Current liabilities	107	177
Non-current liabilities	132	28
	01.01-31.12.2022	01.01-31.12.2021
Revenue	620	541
Profit/(loss) for the period	182	132
Other comprehensive income	8	6
Total comprehensive income	190	-
Dividends received from the company	53	54

"Centrum Obsługi Biznesu" sp. z o.o.	31.12.2022	31.12.2021
type of accounting standards – PASs		
Current assets	4	5
Non-current assets	75	73
Current liabilities	84	85
Non-current liabilities	-	-
	01.01-31.12.2022	01.01-31.12.2021
Revenue	23	14
Profit/(loss) for the period	1	(3)

Operator Chmury Krajowej sp. z o.o.	31.12.2022	31.12.2021
type of accounting standards – PASs		
Current assets	113	133
Non-current assets	56	58
Current liabilities	43	70
Non-current liabilities	14	7
	01.01-31.12.2021	01.01-31.12.2021
Revenue	213	133
Profit/(loss) for the period	(20)	(34)

BSafer sp. z o.o. (in PLN thousand)	31.12.2022	31.12.2021
type of accounting standards – PASs		
Current assets	10	345
Non-current assets	15	74
Current liabilities	35	40
Non-current liabilities	111	387
	01.01-31.12.2022	01.01-31.12.2021
Revenue	-	440
Profit/(loss) for the period	(50)	(467)

The Group did not recognize any additional impairment losses on goodwill and investments in joint ventures in 2022.

(IN PLN MILLION)

44.2. Associates

Financial information

- **Bank Pocztowy S.A.**

PKO Bank Polski S.A. is a significant investor – it holds 25% plus 10 votes at the Company's shareholders' meeting. Poczta Polska S.A. is the other shareholder. Through its representatives on the Supervisory Board and the Company's Shareholders' Meeting, the Bank participates in the policymaking process, including decisions on dividends and other ways of profit distribution.

- **"Poznański Fundusz Poręczeń Kredytowych" sp. z o.o.**

PKO Bank Polski S.A. holds 33.33% votes at the Company's Shareholders' Meeting. The Bank has two representatives on the Company's Supervisory Board which consists of 4 people. Other shareholders have one representative each on the Supervisory Board. Through its representatives on the Supervisory Board and the Company's Shareholders' Meeting, the Bank participates in the policymaking process, including decisions on dividends and other ways of profit distribution.

- **SYSTEM OCHRONY BANKÓW KOMERCYJNYCH S.A.**

PKO Bank Polski S.A. holds shares in the company carrying 21.1% of the votes at the Shareholders' Meeting. The remaining shares are held by: Alior Bank S.A. (8.08% of shares), Bank Polska Kasa Opieki S.A. (14.74% of shares), Bank Millenium S.A. (8.51% of shares), BNP Paribas Bank Polska S.A. (9.44% of shares), ING Bank Śląski S.A. (13.01% of shares), mBank S.A. (12.19% of shares), Santander Bank Polska S.A. (12.91% of shares).

In accordance with the Company's Articles of Association:

a) key operational and financial decisions must be approved by the General Meeting, including, but not limited to, the following matters: granting of aid, granting of support, admission of a new bank to the protection scheme, making additional contributions to the aid fund, appointment and removal of the President of the Management Board, dissolution of the Company, cancellation of the liability for aid granted or any other act having such effect;

b) the number of members of the Supervisory Board corresponds to the number of shareholders of the company,

ASSOCIATES	31.12.2022	31.12.2021
Bank Pocztowy S.A.	-	-
Acquisition price	184	184
Change in net investment	73	73
Impairment loss	(257)	(257)
"Poznański Fundusz Poręczeń Kredytowych" sp. z o.o.	-	-
Acquisition price	2	2
Change in net investment	4	4
Impairment loss	(6)	(6)
Total	-	-

CHANGE IN INVESTMENTS IN ASSOCIATES	2022	2021
Value of investments in associates at the beginning of the period	-	-
Share in profits and losses	19	2
Net impairment loss	-	12
Share in the change in other comprehensive income	(19)	(14)
Value of investments in associates at the end of the period	-	-

The impairment test performed as at 31 December 2022 and 31 December 2021 maintained the carrying amount of Bank Pocztowy as at 31 December 2022 at the previous level, i.e. PLN 0.

As at 31 December 2022, and as at 31 December 2021, the parent entity did not have any share in contingent liabilities of associates acquired together with another investor.

(IN PLN MILLION)

SELECTED INFORMATION ON ASSOCIATES

A summary of the financial data separately for each associate of the Group was presented below. The amounts presented are derived from the financial statements of the individual entities prepared in accordance with the IFRSs or the Polish Accounting Standards (PAS). In the case of companies which have subsidiaries, the presented data is derived from the consolidated financial statements of these companies. The figures for 2021 are derived from audited financial statements.

Bank Pocztowy S.A. (figures as published by the company)	31.12.2022	31.12.2021
type of accounting standards – IFRSs		
Total assets	9 232	9 112
Total liabilities	8 647	8 708
	01.01-31.12.2022	**01.01-31.12.2021**
Revenue	141	334
Profit/(loss) for the period	23	31
Other comprehensive income	(78)	(260)
Total comprehensive income	(55)	(229)

"Poznański Fundusz Poręczeń Kredytowych" sp. z o.o.	31.12.2022	31.12.2021
type of accounting standards – PASs		
Current assets	37	37
Current liabilities	3	3
Non-current liabilities	15	15
	01.01-31.12.2022	**01.01-31.12.2021**
Revenue	2	2
Profit/(loss) for the period	-	-

The figures for System Ochrony Banków Komercyjnych sp. z o.o. are below PLN 1 million

45. OTHER ASSETS

ACCOUNTING POLICIES:

Valuation and classification of other financial assets into categories is carried out in accordance with the principles for determining the business model and assessing the characteristics of contractual cash flows referred to in note "GENERAL ACCOUNTING POLICIES FOR FINANCIAL INSTRUMENTS".

OTHER FINANCIAL ASSETS recognized in this item are stated at amounts due, comprising also potential interest on such assets, taking into consideration provisions for expected credit losses.

OTHER NON-FINANCIAL ASSETS are measured in accordance with the valuation principles applicable to specific categories of assets recognized in this item.

INVENTORIES are measured at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The value of inventories disbursement is determined by specific identification of individual purchase prices or production costs of components, which relate to realisation of specific projects.

FINANCIAL INFORMATION

For more information on credit risk exposures, see note "CREDIT RISK – FINANCIAL INFORMATION".

OTHER ASSETS	31.12.2022	31.12.2021
Other financial assets	**1 867**	**1 895**
Settlements in respect of card transactions	620	1 252
Settlement of financial instruments	134	109
Receivables in respect of cash settlements	340	233
Receivables and settlements in respect of trading in securities	24	14
Sale of foreign currencies	118	4
Trade receivables	229	215
Other	402	68
Other non-financial assets	**937**	**710**
Inventories	287	191
Assets for sale	126	89
Prepayments and deferred costs	131	99
VAT receivable	45	195
Receivables from the State Budget in respect of flat-rate income tax	12	-
Receivables from settlements with the National Clearing House	1	-
Pozostałe1	335	136
Total	**2 804**	**2 605**

[1] under "Other" as at 31 December 2022 includes an amount of PLN 186 million (PLN 281 million of gross receivables and PLN (95) million of gross adjustments to other assets) due to the recognition of receivables for capital paid out to customers and an amount of PLN 40 million due to claims by the Group for reimbursement of costs for non-contractual use of capital (see note "Cost of legal risk of mortgage loans in convertible currencies").

- **OTHER NON-FINANCIAL ASSETS**

OTHER NON-FINANCIAL ASSETS	31.12.2022	31.12.2021
Gross amount	1 274	1 040
Impairment losses	(337)	(330)
Net carrying amount	**937**	**710**

Other non-financial assets – CHANGES IN IMPAIRMENT LOSSES	2022	2021
As at the beginning of the period	(330)	(268)
Recognized during the period	(66)	(84)
Derecognition of assets and settlements	36	30
Reversed during the period	27	41
Other	(4)	(49)
As at the end of the period	**(337)**	**(330)**

- **MANAGEMENT OF FORECLOSED COLLATERAL – ITEM "ASSETS FOR SALE"**

Foreclosed collaterals as a result of restructuring or debt collection activities are either designated for sale or used by the Group for internal purposes. Details of the foreclosed assets are analysed in order to determine whether they can be used by the Group for internal purposes. All of the assets foreclosed as a result of restructuring and debt collection activities in the years ended 31 December 2022 and 31 December 2021, respectively, were designated as held for sale. Activities undertaken by the Group are aimed at selling assets as soon as possible. The primary procedure for the sale of assets is an open tender. In justified cases, the sale follows a different procedure depending on the specifics of the sold property.

(IN PLN MILLION)

- **OTHER NON-FINANCIAL ASSETS – INVENTORIES**

OTHER ASSETS – INVENTORIES	31.12.2022	31.12.2021
Goods	264	185
Materials	22	16
Inventory write-downs	1	(10)
Total	**287**	**191**

46. OTHER LIABILITIES

ACCOUNTING POLICIES:

Valuation and classification of other liabilities into categories is carried out in accordance with the principles referred to in note "GENERAL ACCOUNTING POLICIES FOR FINANCIAL INSTRUMENTS".

Other financial liabilities included in this item are measured at amounts due which cover potential interest on the liabilities, and the accrual for future payments in reliably estimated, justified amounts necessary to meet the present obligation as at the end of the reporting period.
Other non-financial liabilities are measured in accordance with the measurement policies binding for particular types of liabilities recognized in this item.

FINANCIAL INFORMATION

OTHER LIABILITIES	31.12.2022	31.12.2021
Other financial liabilities	**4 387**	**3 335**
Costs to be paid	783	669
Interbank settlements	868	377
Liabilities arising from investing activities and internal operations	134	176
Amounts due to suppliers	205	222
Liabilities and settlements in respect of trading in securities	354	295
Settlement of financial instruments	40	47
liabilities in respect of foreign exchange activities	762	329
Liabilities in respect of payment cards	315	244
Lease liabilities	896	959
Other	30	17
Other non-financial liabilities	**2 627**	**2 031**
Deferred income	562	651
Liability in respect of tax on certain financial institutions	105	100
Liabilities in respect of a contribution to the Bank Guarantee Fund maintained in the form of payment obligations	847	725
to the Resolution Fund	461	374
to the Bank Guarantee Fund	386	351
Liabilities under the public law	478	258
Pozostałe1	635	297
Total	**7 014**	**5 366**

[1] including PLN 132 million due to the recognition of a liability relating to the reimbursement of principal and interest instalments paid by customers on mortgage loans in convertible currencies (see note "Cost of legal risk of mortgage loans in convertible currencies")

The item "Liabilities in respect of contributions to the Bank Guarantee Fund" includes an obligation to pay contributions to the BGF (see note "Assets pledged to secure liabilities and financial assets transferred").

As at 31 December 2022 and as at 31 December 2021, the Group did not have any liabilities in respect of which it did not meet its contractual obligations.

47. Provisions

Accounting policies:

- **Provisions for financial liabilities and guarantees granted**

The provision for financial liabilities and guarantees is established at the amount of the expected credit losses (for details please see the note "Net expected credit losses").

In the portfolio analysis, when determining provisions, portfolio parameters estimated using statistical methods are used, based on historical observations of exposures with the same characteristics, the parameters which define a marginal probability of evidence of impairment, the average utilization of an off-balance sheet liability and the level of anticipated loss in the event of impairment in subsequent months in the period from the reporting date to the horizon of the calculation of the anticipated loss.

With regard to exposures which are material on an individual basis, and are subject to assessment, the provision is determined on a case by case basis – as the difference between the expected amount of the balance sheet exposure which will arise as a result of an off-balance sheet liability at the date of overdue amounts arising treated as evidence of impairment, and the present value of the expected future cash flows obtained from the exposure.

- **Provisions for legal claims, excluding legal claims relating to mortgage loans in convertible currencies**

The provisions for legal claims include disputes with business partners, customers and external institutions (e.g. UOKiK), and are created based on an evaluation of the probability of a court case being lost by the Group and the expected amount of payment (litigation pending has been discussed in the detail in the note "Legal claims"). Provisions for legal claims are recognized in the amount of expected outflow of economic benefits.

- **Provisions for potential legal claims against the Bank relating to mortgage loans in convertible currencies**

The provisions are described in the note "Cost of the legal risk of mortgage loans in convertible currencies".

- **Provisions for refunds of costs to the customers on early repayment of consumer loans**

The amount of the provision for refunds of costs to customers on early repayment of consumer loans is affected by the percentage of prepaid consumer loans, expected amount of consumer claims referring to refunds of loan costs prepaid before the balance sheet data and the average amount of the refund. The expected amount of consumer claims and the average amount of the refund are based on the historical data relating to the number of claims filed and the average amounts of the refunds to customers.

- **Provision for pensions and other defined post-employment benefits**

The provision for retirement and disability benefits resulting from the Labour Code is recognized individually for each employee on the basis of an actuarial valuation. The provision for employee benefits is determined on the basis of the Group's internal regulations.

Valuation of the provision for employee benefits is performed using actuarial techniques and assumptions. The calculation of the provision includes all retirement and pension benefits expected to be paid in the future. The provision was recognized on the basis of a list of persons with all necessary employee information, in particular the length of their service, age and gender. The provisions calculated are equal to discounted future payments, taking into account staff turnover.

- **Provision for accrued holiday entitlements**

The provision for accrued holiday entitlements is recognized at the amount of expected inflows of cash, excluding discounting, based on the number of days of holiday remaining to be utilized by the Bank's employees and average monthly salary.

- **Other provisions**

Other provisions mainly include provisions for potential claims on the sale of receivables, described in detail in the Note "Information on securitization of the lease portfolio and package sale of receivables".

Provisions for future payments are measured at reliably estimated, justified amounts necessary to meet the present obligation as at the end of the reporting period. All provisions are recognized in the profit and loss account, excluding actuarial gains and losses recognized in other comprehensive income.

(IN PLN MILLION)

If the effect of the time value of money is material, the amount of the provision is determined by discounting the estimated future cash flows to their present value, using the discount rate before tax which reflects the current market assessments of the time value of money and the potential risk related to a given obligation.

ESTIMATES AND JUDGMENTS:

The Group updated its estimates of provisions for pensions and other liabilities in respect of defined post-employment benefit plans as at 31 December 2021 using an external independent actuary's calculations. The provisions calculated are equal to discounted future payments, taking into account staff turnover.

COMPONENTS AFFECTING THE PROVISION AMOUNT (%)	31.12.2022	31.12.2021
financial discount rate adopted	6.80	3.60
weighted average ratio of employee mobility	9.46	9.26
average remaining period of service in years	7.40	7.60
10-year average assumed annual increase in the basis calculation of retirement benefits	3.55	2.66

The impact of the increase/decrease in the financial discount rate and of the planned increases of 1 p.p. in the provision base on the decrease/increase in the value of the provision for retirement and other defined benefit post-employment plans as at 31 December 2022 and as at 31 December 2021 is presented in the tables below:

ESTIMATED CHANGE IN PROVISION for pensions and other liabilities in respect of defined post-employment benefits	31.12.2022		31.12.2021	
	+1pp scenario	-1pp scenario	+1pp scenario	-1pp scenario
Discount rate	(4)	5	(4)	4
Planned increases in base amounts	6	(4)	5	(4)

The Group performed a sensitivity analysis of the provision for reimbursement for customers on early repayments of consumer and mortgage loans before the balance sheet date as at 31 December 2021 and 31 December 2021 due to changes in the number of claims and average value of a refund.

ESTIMATED CHANGE IN PROVISION	Change in the number of claims		Change in the average amount of reimbursement	
	-10%	10%	-10%	10%
31.12.2022				
Provision for refunds of costs to customers on early repayment of consumer and mortgage loans	(1)	1	(1)	1

ESTIMATED CHANGE IN PROVISION	Change in the number of claims		Change in the average amount of reimbursement	
	-10%	10%	-10%	10%
31.12.2021				
Provision for refunds of costs to customers on early repayment of consumer and mortgage loans	(1)	1	(1)	1

(IN PLN MILLION)

Bank Polski

FINANCIAL INFORMATION

FOR THE YEAR ENDED 31.12.2022	Provisions for financial liabilities and guarantees granted[1]	Provisions for legal claims, excluding legal claims relating to repaid mortgage loans in convertible currencies	Provisions for legal claims against the bank relating to mortgage loans in convertible currencies	Provisions for refunds of costs to customers on early repayment of consumer and mortgage loans	Provisions for pensions and other defined post-employment benefits	Restructuring	Provision for accrued holiday entitlements	Other provisions, including provisions for employee disputed claims	Total
As at the beginning of the period	**675**	**106**	**595**	**17**	**57**	**47**	**111**	**49**	**1 657**
Increases, including increases of existing provisions	159	12	383	13	16	-	36	51	670
Utilized amounts	-	(8)	(127)	(12)	(5)	(12)	(15)	(34)	(213)
Unused provisions reversed during the period	(2)	(7)	-	-	(1)	-	(13)	(2)	(25)
Other changes and reclassifications	1	-	-	-	(1)	-	-	1	1
As at the end of the period	833	103	851	18	66	35	119	65	2 090
Short-term provisions	688	6	-	17	10	35	119	7	882
Long-term provisions	145	97	851	1	56	-	-	58	1 208

[1] See note "Credit risk – financial information".

(IN PLN MILLION)

FOR THE YEAR ENDED 31.12.2021	Provisions for financial liabilities and guarantees granted[1]	Provisions for legal claims, excluding legal claims relating to repaid mortgage loans in convertible currencies	Provisions for legal claims against the bank relating to mortgage loans in convertible currencies	Provisions for refunds of costs to customers on early repayment of consumer and mortgage loans	Provisions for pensions and other defined post-employment benefits	Restructuring	Provision for accrued holiday entitlements	Other provisions, including provisions for employee disputed claims	Total
As at the beginning of the period	**629**	**102**	**426**	**24**	**63**	**39**	**96**	**123**	**1 502**
Increases, including increases of existing provisions	48	10	189	27	7	19	42	41	383
Utilized amounts	-	(3)	(20)	(34)	(3)	(10)	(17)	(8)	(95)
Unused provisions reversed during the period	(3)	(3)	-	-	(10)	-	(10)	(8)	(34)
Other changes and reclassifications	1	-	-	-	-	(1)	-	(99)	(99)
As at the end of the period	675	106	595	17	57	47	111	49	1 657
Short-term provisions	571	7	-	16	8	47	111	7	767
Long-term provisions	104	99	595	1	49	-	-	42	890

[1] See note “Credit risk – financial information”.

(IN PLN MILLION)

Provisions for disability and retirement benefits(actuarial provision)	2022	2021
Liability at the beginning of the period	53	61
Current service cost	3	3
Interest expense	2	1
Actuarial (gains) and losses recognized in other comprehensive income	9	(9)
Benefits paid	(4)	(3)
Liability at the end of the period (net)	63	53

Breakdown of actuarial gains and losses (actuarial provision)	Total amount of provisions	
	2022	2021
Change in financial assumptions	(10)	(11)
Other changes	19	2
Total actuarial (gains) and losses	9	(9)

48. Contingent liabilities and off-balance sheet liabilities received and granted

Accounting policies:

As part of its operations, the Group enters into transactions that are not recognised as assets or liabilities in the statement of financial position when concluded but give rise to contingent liabilities. In accordance with IAS 37, the contingent liability is:

- a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group entities;
- a present obligation that arises from past events but is not recognised in the statement of financial position because it is not probable that an outflow of cash or other assets will be required to settle the obligation, or the amount of the obligation (liability) cannot be measured reliably.

For the principles of recognising provisions for off-balance sheet commitments granted, see the note "Provisions".

Upon initial recognition financial guarantee agreements are stated at fair value. In subsequent periods, as at the balance sheet date, financial guarantees are measured at the higher of:

- allowances for expected credit losses; or
- the amount of commission recognized initially, less accumulated amortization in accordance with IFRS 15.

Financial information

- **Securities programmes covered with underwriting agreements (maximum Group's commitment to take up securities)**

As at 31 December 2022 and 31 December 2021, no underwriting agreements have been entered into.

- **Contractual commitments**

VALUE OF CONTRACTUAL COMMITMENTS CONCERNING	31.12.2022	31.12.2021
intangible assets	81	19
property, plant and equipment	141	115
Total	222	134

(IN PLN MILLION)

- **Financial and guarantee commitments granted**

FINANCIAL AND GUARANTEE COMMITMENTS GRANTED 31.12.2022	Total	Provisions per IFRS 9	Net carrying amount
Credit lines and limits	70 380	(590)	69 790
real estate	3 683	(21)	3 662
business	52 455	(414)	52 041
consumer	10 650	(155)	10 495
in respect of factoring	2 749	-	2 749
in respect of finance leases	843	-	843
Other	2 825	-	2 825
Total financial commitments granted, including:	73 205	(590)	72 615
irrevocable commitments granted	30 579	(301)	30 278
POCI	5	(1)	4
Guarantees and sureties granted			
guarantees in domestic and foreign trading	10 578	(236)	10 342
to financial entities	2 735	-	2 735
to non-financial entities	7 772	(236)	7 536
to public entities	71	-	71
domestic municipal bonds (state budget entities)	315	-	315
letters of credit to non-financial entities	1 514	(7)	1 507
payment guarantees to financial entities	71	-	71
Total guarantees and sureties granted, including:	12 478	(243)	12 235
irrevocable commitments granted	4 812	(234)	4 578
performance guarantee	3 640	(203)	3 437
POCI	284	(5)	279
Total financial and guarantee commitments granted	85 683	(833)	84 850

(IN PLN MILLION)

FINANCIAL AND GUARANTEE COMMITMENTS GRANTED 31.12.2021	Total	Provisions per IFRS 9	Net carrying amount
Credit lines and limits	65 732	(415)	65 317
real estate	5 265	(19)	5 246
business	46 941	(303)	46 638
consumer	10 698	(93)	10 605
in respect of factoring	2 116	-	2 116
in respect of finance leases	712	-	712
Other	2 670	-	2 670
Total financial commitments granted, including:	68 402	(415)	67 987
irrevocable commitments granted	22 374	(190)	22 184
POCI	14	(1)	13
Guarantees and sureties granted			
guarantees in domestic and foreign trading	10 088	(256)	9 832
to financial entities	2 288	-	2 288
to non-financial entities	7 774	(256)	7 518
to public entities	26	-	26
domestic municipal bonds (state budget entities)	408	-	408
Letters of credit to non-financial entities	1 238	(4)	1 234
payment guarantees to financial entities	65	-	65
Total guarantees and sureties granted, including:	11 799	(260)	11 539
irrevocable commitments granted	5 100	(255)	4 845
performance guarantee	3 389	(203)	3 186
POCI	45	(2)	43
Total financial and guarantee commitments granted	80 201	(675)	79 526

For more information on credit risk exposures, see note "CREDIT RISK – FINANCIAL INFORMATION".

- NOMINAL VALUE OF COMMITMENTS GRANTED BY MATURITY

COMMITMENTS GRANTED BY MATURITY AS AT 31.12.2022	up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	more than 5 years	Total
commitments granted – financial	14 588	5 101	26 792	18 860	7 864	73 205
commitments granted - guarantees and sureties	519	937	4 098	4 632	2 292	12 478
Total	15 107	6 038	30 890	23 492	10 156	85 683

(IN PLN MILLION)

COMMITMENTS GRANTED BY MATURITY AS AT 31.12.2021	up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	more than 5 years	Total
commitments granted – financial	12 663	4 674	24 479	16 441	10 145	68 402
commitments granted - guarantees and sureties	466	1 855	3 336	3 792	2 350	11 799
Total	13 129	6 529	27 815	20 233	12 495	80 201

- **OFF-BALANCE SHEET LIABILITIES RECEIVED**

OFF-BALANCE SHEET LIABILITIES RECEIVED BY NOMINAL VALUE	31.12.2022	31.12.2021
Financial	110	258
Guarantees	9 516	7 331
Total	9 626	7 589

49. LEGAL CLAIMS

As at 31 December 2022, the total value of the subject matter of litigation in court proceedings (trials) pending in which the companies belonging to the PKO Bank Polski S.A. Group were defendants amounted to PLN 8 254 million (as at 31 December 2021: PLN 4 350 million), and the total value of the subject matter of litigation in court proceedings (trials) pending in which the companies belonging to the PKO Bank Polski S.A. Group were claimants as at 31 December 2022 was PLN 2 808 million (as at 31 December 2021: PLN 2 792 million).

- **LITIGATION AGAINST THE BANK RELATING TO MORTGAGE LOANS IN CONVERTIBLE CURRENCIES**

As at 31 December 2022, 19 522 on court proceedings were pending against the Bank (as at 31 December 2021: 12 349) relating to mortgage loans granted in previous years in foreign currency with a total value in dispute of PLN 7,725 million (as at 31 December 2021: PLN 3 855 million), including one group proceeding with 72 loan agreements. The subject matter of the Bank's clients' actions is mainly claims for declaration of invalidity of an agreement or for payment of amounts paid by the client to the Bank in performance of an invalid agreement. Customers allege abusive provisions or that the agreements are contrary to the law. None of the clauses used by the Bank in the agreements was entered in the register of prohibited contractual clauses. The number of lawsuits filed by customers against the Bank is significantly influenced by the intensive advertising campaign of law firms, which encourages borrowers to commission to them – for a fee – conducting cases against banks.

The Group monitors the status of court rulings in cases indexed or denominated in foreign currencies on an ongoing basis with respect to the shaping and possible changes in rulings.

As at 31 December 2022, 995 final rulings have been issued by the courts in cases against the Bank (including 954 rulings after 3 October 2019). 106 of these rulings (including in 67 rulings issued after 3 October 2019) are favourable for the Bank.

On 29 January 2021, in connection with the discrepancies in the interpretation of legal provisions in the jurisprudence of the Supreme Court and common courts and in order to ensure the uniformity of jurisprudence, the First President of the Supreme Court submitted a request for the full panel of the Civil Chamber of the Supreme Court to resolve the following legal issues concerning the subject of loans denominated and indexed in foreign currencies (legal basis: Article 83 § 1 of the Act of 8 December 2017 on the Supreme Court):

1. If a provision of an indexed or denominated loan agreement relating to the method of determining the foreign currency exchange rate is found to constitute an illicit contractual provision and is not binding on the consumer

– is it then possible to assume that another method of determining the foreign currency exchange rate resulting from law or custom takes its place?

If the above question is answered in the negative:

2. In the event that it is impossible to establish a foreign currency exchange rate binding on the parties in a loan agreement indexed to such a currency, can the remainder of the agreement still be binding for the parties?
3. If it is not possible to establish a binding rate for a foreign currency in a loan agreement denominated in a foreign currency, can the remainder of the agreement still be binding for the parties?

Notwithstanding the content of the answers to questions 1 to 3:

4. In the event of the invalidity or ineffectiveness of a loan agreement, in the performance of which the bank disbursed to the borrower all or part of the amount of the loan and the borrower made repayments of the loan, do separate claims for wrongful performance arise for each of the parties, or does only a single claim arise, equal to the difference in performance, for the party whose total performance was higher?
5. Where a loan agreement is invalid or ineffective as a result of the unlawful nature of certain of its terms, does the limitation period for the bank's claim for repayment of the sums paid under the loan begin to run from the time at which those sums were paid?
6. If, in the case of the invalidity or ineffectiveness of a loan agreement, either party has a claim for repayment of a performance made in performance of that agreement, may that party also claim a fee for the use of its funds by the other party?

A session of the full composition of the Civil Chamber for the examination of the aforementioned application was held on 11 May 2021. Before passing its resolution, the Supreme Court decided to consult five public institutions. Their opinions were prepared and sent to the Supreme Court. On 2 September 2021, the Supreme Court decided to apply to the CJEU for preliminary rulings on questions relating to the judicial system, which do not directly concern the issue of foreign currency loans.

In 2021, two resolutions of the Supreme Court and one ruling of the Court of Justice of the European Union were issued, which are significant from the perspective of the claims of Swiss franc borrowers. On 7 May 2021, the Supreme Court, represented by 7 judges of the Civil Chamber, passed the following resolution in case III CZP 6/21:

1) A prohibited contractual clause (Article 385^1 § 1 of the Civil Code) is, from the beginning, by operation of law, ineffective in favour of the consumer, who may however subsequently grant an informed and voluntary consent for such a clause and thus make it effective retrospectively.
2) If a loan agreement cannot be binding without the ineffective clause, the consumer and the lender are entitled to bring separate claims for repayment of the benefits provided in the performance of the agreement (Article 410 § 1 in conjunction with Article 405 of the Civil Code). The lender may claim repayment of the benefit from the moment the loan agreement became permanently ineffective.

The resolution has the force of a legal rule, which means that an ordinary panel of the Supreme Court may not withdraw from the interpretation presented in an earlier resolution that has the force of a legal rule. If any panel of the Supreme Court intends to withdraw from a legal rule, it must present the legal issue for resolution to the full panel of the Chamber. In its justification for the said resolution, the Supreme Court referred to an earlier opinion (resolution III CZP 11/20 dated 16 February 2021) that the period of limitation of claims resulting from a loan agreement which is invalid due to the elimination of abusive clauses commences after the consumer has expressed informed consent not to be bound by the abusive clauses. The Supreme Court decided that since a consumer has the right to remedy an abusive contractual clause and express his/her willingness to be bound by it, the lender cannot be certain whether the agreement is effective until the consumer makes such a decision, and the agreement is ineffective (suspended) until such time. The lender's claims may not arise before such ineffectiveness (suspension) ceases to exist (which generally occurs as a result of the borrower's statement), and therefore the period of limitation commences at that moment.

Taking into account the content of the Supreme Court's resolution III CZP 6/21 and the non-uniform decisions of the common courts made against it, the Bank has filed lawsuits against customers whose agreements have been validly annulled, or whose lawsuits were served on the Bank before 31 December 2019, for the return of the capital paid out and the cost of using the capital. The issue of the mutual settlement of the parties to a credit agreement after its collapse is the subject of preliminary questions to the CJEU in Case C-520/21, to which another bank is a party. The questions referred in this case relate, inter alia, to the right of banks to recover from their customers the benefits received by the latter in connection with the provision of capital by the bank to them and the nonrecovery of that capital for the duration of the loan agreement. On 16 February 2023, an opinion of the General Ombudsman was delivered. The Ombudsman took the view that the provisions of Directive 93/13 do not preclude a consumer, in addition to reimbursing funds paid under an invalid contract, from also claiming additional benefits from a bank, but that it is nevertheless for the national court to determine, in the light of national law, whether consumers are entitled to pursue such claims and, if so, to rule on their merits. The Ombudsman did not rule out that such claims may constitute an abuse of law. With respect to analogous claims of banks exceeding the performance (paid-up capital), the General Ombudsman found that they conflict with the provisions of Directive 93/13. The Ombudsman's opinion is not beneficial to banks, but the CJEU is not bound by this opinion. It needs to be noted that the case in which the questions referred for a preliminary ruling in Case C-520/21 were raised does not concern the bank's claims. The Bank's claims against the customer were raised in another case, which also raised preliminary questions of a similar content to Case C-520/21. This case is registered under reference C-756/22. The Bank is not a party to these proceedings.

The bank is a party to other proceedings before the CJEU. In the Bank's case, a preliminary question was put to the CJEU regarding the possibility for the Authorities entitled to do so to bring extraordinary complaints to the Supreme Court in cases that ended with a final and favourable decision for the Bank. The case was registered at the CJEU under reference C-720/21. The bank has filed a written position in the case and is awaiting action on the part of the CJEU.

- **LITIGATION AGAINST THE BANK CONCERNING MORTGAGE LOANS BEARING INTEREST AT A FLOATING RATE**

The bank has been served with 5 lawsuits in which customers challenge that the mortgage agreement was based on a floating interest rate structure and the rules for setting the WIBOR benchmark rate. The Bank disputes the validity of the claims raised in these cases.

- **ACTIVITIES OF THE GROUP UNDERTAKEN IN CONNECTION WITH A PROPOSAL OF THE CHAIR OF THE POLISH FINANCIAL SUPERVISION AUTHORITY AND THE EXPECTED MEETING OF THE SUPREME COURT REGARDING LOANS GRANTED IN FOREIGN CURRENCIES**

In December 2020, the Chair of the Polish Financial Supervision Authority (hereinafter: the PFSA Chair) made a proposal aimed at providing a systemic solution to the problem of housing loans in Swiss francs. In accordance with this solution, the banks would voluntarily offer settlement agreements to their customers. Under such agreements, the customers would repay their loans to the bank as if they had been originally granted in PLN with interest at WIBOR plus a historical margin applied to such loans.

The Group has analysed the benefits and risks associated with the possible approaches to the issue of foreign currency housing loans. In the Group's opinion, for both the Bank and its customers it is better to reach a compromise and conclude a settlement agreement than engage in long legal disputes whose outcome is uncertain.

On 23 April 2021, the Extraordinary General Shareholders' Meeting approved the possibility of offering settlement agreements to the customers. Subsequently, by a resolution dated 27 May 2021, the Supervisory Board approved the terms and conditions for offering settlement agreements proposed by the PFSA Chair. The process of amicable resolution of disputes concerning the validity of housing loan agreements was launched on 4 October 2021. The settlements are offered during mediation proceedings conducted by the Mediation Centre of the PFSA Court of Arbitration, during court proceedings and during proceedings initiated by a motion for settlement.

- **PROCEEDINGS BEFORE THE PRESIDENT OF THE OFFICE OF COMPETITION AND CONSUMER PROTECTION (UOKiK)**

Two proceedings have been brought before the President of UOKiK ex officio and are currently in progress:

- Proceedings initiated on 26 July 2017 ex officio concerning using practices which violate the collective interests of customers. The Bank is charged with collecting higher instalments on loans and advances denominated in foreign currencies than those arising from the information on foreign exchange risk presented to the consumers before concluding agreements and transferring potential foreign exchange risk to the consumers. The Bank responded to the charges in its letter of 23 September 2017. In a letter dated 14 March 2019, the President of UOKiK asked the Bank 16 detailed questions in order to establish the circumstances that are necessary to resolve the case to which the Bank replied by letter dated 10 May 2019. In a letter of 9 June 2021, the President of UOKiK extended the deadline for concluding the proceedings until 30 September 2021. By the decision of 18 November 2021, the President of UOKiK called on the Bank to provide further information, extending the deadline for concluding the proceedings to 31 December 2021. The Bank fulfilled the UOKiK President's request on 6 December 2021. As at 31 December 2022, the Group had not set up a provision for these proceedings.
- Proceedings initiated ex officio on 12 March 2019 on the acknowledgement that the provisions of the template agreement are inadmissible. The proceedings are related to modification clauses which specify the circumstances

in which the Bank is entitled to amend the terms and conditions of the agreement, including the amount of fees and commission. In the opinion of the President of UOKiK the modification clauses applied by the Bank give the Bank unilateral unlimited and arbitrary possibilities of modifying the execution of the agreement. Consequently, the President of UOKiK is of the opinion that the clauses applied by the Bank shape the rights and obligations of the consumers in a way that is contrary to good practice and are a gross violation of their interests, which justifies the conclusion that they are abusive. In a letter of 31 May 2019, the Bank commented on the allegations of the President of UOKiK, indicating that they are unfounded. The Bank pointed out, among other things, that the contested clauses are specific and they precisely define the circumstances entitling the Bank to change the template. By order of 7 June 2022, UOKiK summoned the Bank to provide a range of information regarding the disputed clauses, the Bank's turnover and the revenue generated from changes in fees and commissions based on the disputed clauses. The UOKiK summons was implemented on 11 July and 30 September 2022. By order of 13 January 2023, the President of UOKiK extended the deadline for completion of the proceedings until 28 April 2023. As at 31 December 2022, the Group had not set up a provision for these proceedings.

- **PROCEEDINGS BEFORE THE COURT OF COMPETITION AND CONSUMER PROTECTION**

Two proceedings involving the Bank are pending before the Court of Competition and Consumer Protection:

- **PROCEEDINGS ON SPREAD CLAUSES**

The proceedings were initiated by the Bank's appeal (submitted on 13 November 2020) against the decision of the President of UOKiK dated 16 October 2020. In the said decision, the President of UOKiK declared the provisions of the template agreement "Annex to the housing loan/mortgage loan agreement" in the section "Appendix to the annex 'Rules for determining foreign exchange spreads at PKO BP S.A.'" as inadmissible provisions and prohibited their use. In addition, the President of UOKiK ordered that all consumers being parties to the assessed annexes about the decision to declare them inadmissible and its consequences be informed no later than within nine months from the effective date of the decision and ordered that a declaration be published whose text was indicated in the decision on the Bank's website not later than 1 month from the effective date of the decision and to keep it there for 4 months. Furthermore, the President of UOKiK imposed a fine on the Bank of PLN 41 million, payable to the Financial Education Fund. In its appeal against that decision, the Bank requested that the decision be amended by finding that there had been no breach of the ban on the use of prohibited contractual clauses, or by discontinuing the proceedings. It was also requested that the decision be annulled or amended by waiving or substantially reducing the fine. The appeal raised a number of substantive and procedural grounds of appeal. The Bank's main arguments consist in pointing out that the decision of the President of UOKiK is a manifestation of unlawful and groundless interference with the Bank's pricing policy, pointing out that there are no substantive grounds for the intervention of the President of UOKiK, i.e. there are no grounds for concluding that the Bank applied prohibited contractual provisions, and pointing out that the penalty imposed on the Bank is abnormally high. In response to the appeal, the President of UOKiK sustained the position expressed in the decision appealed against. The Bank is currently waiting for a hearing date to be set.

- **PROCEEDINGS RELATED TO RESTRICTIVE PRACTICES ON THE MARKET OF PAYMENTS WITH PAYMENT CARDS IN POLAND**

The Bank is a party to proceedings initiated by the President of the Office of Competition and Consumer Protection (UOKiK) on the basis of a decision dated 23 April 2001 upon the request of the Polish Trade and Distribution Organization – Employers Association (Polska Organizacja Handlu i Dystrybucji – Związek Pracodawców) against operators of the Visa and Europay payment systems and banks issuing Visa and Europay/ Eurocard/ Mastercard banking cards.

The claims under these proceedings relate to the use of practices limiting competition on the market of banking card payments in Poland, consisting of applying pre-agreed "interchange" fees for transactions made using the Visa and Europay/Eurocard/Mastercard cards as well as limiting access to this market for external entities. On 29 December 2006, the UOKiK recognised practices involving the joint determination of interchange fees as restrictive of competition and ordered them to be abandoned, at the same time imposing, inter alia, a fine of PLN 16.6 million on the Bank. The Bank appealed against the decision of the President of UOKiK to the Court for Competition and Consumer Protection (Sąd Ochrony Konkurencji i Konsumentów - SOKiK). In its ruling dated 21 November 2013, SOKiK reduced the penalty imposed on the Bank to PLN 10.4 million. The parties to the proceedings appealed against the ruling. The Court of Appeal in Warsaw in its ruling dated 6 October 2015 reinstated the initial amount of the imposed fines set in the decision of the UOKiK, i.e. the fine of PLN 16.6 million (the fine imposed on PKO Bank Polski S.A.) and the fine of PLN 4.8 million (the fine imposed on Nordea Bank Polska S.A., and PKO Bank Polski S.A. is a legal successor of Nordea Bank Polska SA through a merger under Article 492 § 1(1) of the Commercial Companies Code).

The Bank paid the fine in October 2015. As a result of a cassation appeal brought by the Bank, the Supreme Court in a ruling dated 25 October 2017 annulled the contested ruling of the Court of Appeal in Warsaw and submitted the case for re-examination. The fine paid by the Bank was reimbursed to the Bank on 21 March 2018. On 23 November 2020, the Court of Appeal in Warsaw issued a ruling in which it revoked the ruling of the District Court in Warsaw dated 21 November 2013 and submitted it for re-examination. As at 31 December 2022 the Group recorded a provision for this litigation of PLN 21 million.

- **CLAIMS FOR DAMAGES IN RESPECT OF THE INTERCHANGE FEE**

The Bank was served eight summons to participate, as an outside intervener on the defendant's side, in cases relating to the interchange fees. Other banks are defendants in the case. The claims vis-à-vis the sued banks total PLN 903 million and are pursued as damages for differences in interchange fees resulting from applying practices that restrict competition. Since these proceedings are not pending against the Bank, their value was not included in the total value of the cases against the Bank.

If the courts find the claims justified, the defendants may claim recourse in separate court proceedings from other banks, including, among others, from PKO Bank Polski S.A. As at 31 December 2022, the Bank joined eight proceedings as an outside intervener. Two of these proceedings resulted in final judgments in favour of the defendants dismissing the plaintiffs' claims, and one in a non-final judgment dismissing the plaintiffs' claim to a significant extent due to the acceptance of part of the statute of limitations.

- **RE-PRIVATIZATION CLAIMS RELATING TO PROPERTIES HELD BY THE GROUP**

As at the date of the consolidated financial statements, there are:

- two proceedings to which the Bank is a party. In one proceeding, the Bank filed a cassation appeal against an unfavourable final judgment dismissing the Bank's claims. The second proceeding, concerning the annulment of the decision refusing to grant the applicant temporary ownership of the Bank's property, is pending before the Supreme Administrative Court, as the other party has filed a cassation appeal.
- three proceedings, two of which are suspended, to which the other Bank Group companies are parties. Two proceedings are at the administrative stage, one at the judicial and administrative stage.

The probability of serious claims arising against the Group as a result of the aforesaid proceedings is low.

50. EQUITY AND SHAREHOLDING STRUCTURE OF THE BANK

ACCOUNTING POLICIES:

Equity constitutes capital and reserves created in accordance with the legal regulations. The classification to particular components discussed below results from the Polish Commercial Companies Code, the Banking Law and the requirements of IAS 1.

Equity components of the subsidiaries other than share capital, in proportion to the parent's interest in the subsidiary, are added to respective equity components of the parent. The Group's equity includes only those parts of the equity of the subsidiaries which arose after the acquisition of shares by the parent. In accordance with the legislation in force in Poland, only the equity of the parent company and the equity of specific subsidiaries, determined on the basis of separate financial statements, are distributable.

Equity components:

- • Share capital is the capital of the parent, stated at the nominal value in accordance with the Articles of Association and entry in the Register of Businesses.
- Supplementary capital is created according to the Articles of Association of the Group entities, from annual write-offs from net profit, made until this capital reaches at least one third of the share capital and is intended to cover balance sheet losses that may arise in connection with the Bank's operations. Supplementary capital may also be used for other purposes, in particular for increasing the share capital.
- General banking risk fund at PKO Bank Polski S.A. is created from profit after tax in accordance with the Banking Law, and it is to cover unidentified risks of the Bank's operations.
- Other reserves are created from the appropriation of net profit. Other reserves are intended to cover any potential balance-sheet losses or for other purposes, in particular for the payment of dividends, interim dividends or the purchase of treasury shares for cancellation.

(IN PLN MILLION)

- Non-controlling interests represent the part of capital in a subsidiary, which cannot be directly or indirectly assigned to the parent company.
- Accumulated other comprehensive income includes the effects of the measurement of financial assets at fair value through other comprehensive income, allowances for expected credit losses on these assets, the effective portion of cash flow hedges and hedges of net investment in foreign operation in hedge accounting, as well as actuarial gains and losses. Deferred tax on those items is recognized in other comprehensive income. Moreover, the item includes the share of the parent in the total other comprehensive income of associates and joint ventures and foreign exchange differences on translation to Polish currency of the net result of the foreign operation at an exchange rate constituting the arithmetic mean of the average foreign exchange rates as at the day ending each of the months in the financial year, as published by the National Bank of Poland.

FINANCIAL INFORMATION

- **SHAREHOLDING STRUCTURE OF THE BANK**

According to the information available as at 31 December 2022, the Bank's shareholding structure is as follows:

ENTITY NAME	number of shares	% of votes	Nominal value of 1 share	Ownership interest (%)
As at 31 December 2022				
State Treasury	367 918 980	29.43%	PLN 1	29.43%
Nationale Nederlanden Otwarty Fundusz Emerytalny[1]	108 266 112	8.66%	PLN 1	8.66%
Allianz fund group[1,2]	106 567 559	8.53%	PLN 1	8.53%
Other shareholders[3]	667 247 349	53.38%	PLN 1	53.38%
Total	**1 250 000 000**	**100%**	---	**100%**
As at 31 December 2021				
State Treasury	367 918 980	29.43%	PLN 1	29.43%
Nationale Nederlanden Otwarty Fundusz Emerytalny[1]	103 500 000	8.28%	PLN 1	8.28%
Allianz fund group[4]	96 568 413	7.73%	PLN 1	7.73%
Other shareholders[2]	682 012 607	54.56%	PLN 1	54.56%
Total	**1 250 000 000**	**100%**	---	**100%**

[1] Calculation of shareholdings as at the end of the year published by PTE in bi-annual and annual information about the structure of fund assets and quotation from the WSE Statistic Bulletin.

[2] The group includes: Allianz Polska Open Pensions Fund, Allianz Polska Voluntary Pension Fund, Drugi Allianz Polska Open Pension Fund.

[3] Including Bank Gospodarstwa Krajowego, which as at 31 December 2022 and 31 December 2021 held 24,487,297 shares carrying 1.96% of the votes at the GSM.

[4] The figure as at 31 December 2021 includes shares held by former funds: Aviva Open Pension Fund and Allianz Open Pension Fund; it does not include shares held by Allianz Polska Voluntary Pension Fund.

All shares of PKO Bank Polski S.A. carry the same rights and obligations. No shares are preference shares, in particular with respect to voting rights (one share carries one vote) or dividend. The Articles of Association of PKO Bank Polski S.A. limit the voting right of shareholders holding more than 10% of the total number of votes at the General Shareholders' Meeting and prohibit these shareholders from exercising more than 10% of the total number of votes at the General Shareholders' Meeting. The above restriction does not apply to:

- those shareholders who on the date of passing the resolution of the General Shareholders' Meeting introducing the limitation of the voting rights had rights from the shares representing more than 10% of the total number of votes in the Bank (i.e. the State Treasury and BGK);
- shareholders who have rights from A-series registered shares (the State Treasury);
- shareholders acting jointly with the shareholders referred to in the second bullet point based on agreements concluded concerning the joint execution of voting rights on shares. Moreover, limitations to the voting rights of the shareholders expire at the moment when the share of the State Treasury in the Bank's share capital drops below 5%.

(IN PLN MILLION)

In accordance with § 6 (2) of the PKO Bank Polski S.A.'s Articles of Association, the conversion of A-series registered shares into bearer shares and the transfer of these shares requires the approval of the Council of Ministers in the form of a resolution. Conversion into bearer shares or transfer of A-series registered shares, after obtaining the aforementioned approval, results in the expiry of the aforementioned restrictions in respect of shares subject to conversion into bearer shares or transfer, to the extent to which this approval was given.

Pursuant to Art. 13 (1) (26) of the Act dated 16 December 2016 on the rules for managing the State property, the shares of PKO Bank Polski S.A. owned by the State Treasury may not be sold (excluding statutory exceptions).

The Bank's shares are listed on the Warsaw Stock Exchange.

- **Structure of PKO Bank Polski S.A.'s share capital:**

Series	Type of shares	Number of shares	Nominal value of 1 share	Nominal value of the series
A Series	ordinary registered shares	312 500 000	PLN 1	312 500 000
A Series	ordinary bearer shares	197 500 000	PLN 1	197 500 000
B Series	ordinary bearer shares	105 000 000	PLN 1	105 000 000
C Series	ordinary bearer shares	385 000 000	PLN 1	385 000 000
D Series	ordinary bearer shares	250 000 000	PLN 1	250 000 000
Total	- - -	1 250 000 000	- - -	1 250 000 000

In 2022 and in 2021, there were no changes in the amount of the share capital of PKO Bank Polski S.A. Shares of PKO Bank Polski S.A. issued are not preference shares and are fully paid up.

FAIR VALUE OF FINANCIAL INSTRUMENTS

51. Fair value hierarchy

Accounting policies:

Depending on the classification of financial assets and liabilities to a specific level of the hierarchy, different methods of fair value measurement are used.

- **Level 1: Prices quoted on active markets**

Financial assets and liabilities whose fair value is stated directly at prices quoted (not adjusted) on active markets for identical assets and liabilities. In this category, the Group classifies financial and equity instruments for which there is an active market and for which the fair value is determined with reference to the market value, which is a bid price:

- debt securities valued using fixing from the Bondspot platform or Bloomberg or Reuters information services;
- debt and equity securities which are traded on regulated markets, including in the Biuro Maklerskie PKO BP portfolio;
- derivative instruments, which are traded on a regulated market.

- **LEVEL 2: VALUATION TECHNIQUES BASED ON OBSERVABLE MARKET DATA**

Financial assets and liabilities whose fair value is determined using valuation models where all significant entry data are observable on the market directly (as prices) or indirectly (based on prices). In this category, the Group classifies financial instruments for which there is no active market:

FINANCIAL ASSETS AND LIABILITIES MEASURED AT FAIR VALUE	VALUATION METHOD (TECHNIQUE)	OBSERVABLE INPUTS
DERIVATIVE FINANCIAL INSTRUMENTS – CIRS, IRS, FRA	The discounted future cash flows model based on the yield curves.	Yield curves are built based on market rates, market data of the money market, market transactions of FRA, IRS, OIS, basis swap.
DERIVATIVE FINANCIAL INSTRUMENTS – CURRENCY OPTION, INTEREST RATE OPTIONS, EQUITY OPTIONS, FX FORWARD, FX SWAP TRANSACTIONS	Valuation models specific for particular type of a currency option, interest rate option and Equity option. The model of discounted future cash flows based on yield curves for FX forward and FX swap transactions.	Yield curves built based on money market rates, market rate of swap points, volatility levels for specific currency pairs, NBP fixing exchange rates.
MUNICIPAL BONDS IN PLN	Yield curve and risk margin model.	Yield curves are built based on market rates, money market data, IRS transactions market.
CORPORATE BONDS	Yield curve and risk margin model.	Yield curves are built based on market rates, money market data, IRS transactions market.
COMMODITY SWAP TRANSACTIONS	Commodity price curve model.	Commodity price and yield curves are built based on money market rates, market rates of SWAP points.
NBP MONEY MARKET BILLS	Yield curve method	Yield curves are built based on money market data and OIS (overnight index swap) transactions market.
LIABILITIES IN RESPECT OF INSURANCE PRODUCTS MEASURED AT FAIR VALUE	A provision for life insurance in which the deposit risk is borne by the policyholder, in insurance with the insurance capital fund, is set up for each active policy individually, at the end of the reporting period. The provision is equal to the individual balance of the fund as at the date at which the provisions are created, and is equal to the number of units accumulated under the individual fund balance multiplied by the price as at the date of valuation.	Number of fund units, unit price

- **LEVEL 3: OTHER VALUATION TECHNIQUES**

Financial assets and liabilities whose fair value is determined using valuation models for which input data is not based on observable market data (unobservable input data). In this category, the Group classified financial instruments, which are valued using internal valuation models.

The fair value of equity and debt securities classified as financial assets is determined by the organizational units of the Head Office responsible for them, including the Treasury Products Department and the Brokerage House. In their internal regulations, these units specify the detailed measurement methods, including determination of the data sources used for measurement purposes and the method of performing the calculation.

The Credit Risk Department develops the assumptions of the fair value model for financial assets arising from loans and advances granted or other financing agreements being the substitute of loans. The Assets and Liabilities Management Committee approves the fair value model for loan exposures.

FINANCIAL ASSETS AND LIABILITIES MEASURED AT FAIR VALUE	VALUATION METHOD (TECHNIQUE)	UNOBSERVABLE INPUT
FINANCIAL INSTRUMENTS NOT HELD FOR TRADING, MANDATORILY MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS		
LOANS AND ADVANCES TO CUSTOMERS	Discounted cash flow method.	Effective margin on loans.
OF VISA INC. PREFERENCE	Estimation of the fair value based on the current market value of the listed ordinary shares of Visa Inc., including a discount which takes into account the limited liquidity of C-series shares and the terms and conditions of conversion of C-series shares into ordinary shares.	Discount taking into account the limited liquidity of C-series shares and the terms of converting the C-series shares into ordinary shares.
A-SERIES PREFERRED SHARES OF VISA INC.	Estimation of the fair value based on the current market value of the listed ordinary shares of Visa Inc., including a discount which takes into account the limited liquidity of A-series Preferred shares and the terms and conditions of conversion of A-series Preferred shares into A-series shares	Discount taking into account the limited liquidity of A-series Preferred shares and the terms of converting the A-series Preferred shares into A-series shares
CORPORATE BONDS	Yield curve and risk margin model. Yield curves are built based on market rates, money market data and IRS transactions market data.	Credit spread (credit margins determined on the basis of initial margins modified by credit indices quotes ascribed to issuers based on their ratings and business sectors).
SHARES IN BIURO INFORMACJI KREDYTOWEJ S.A.	Estimation of the fair value based on the present value of projected results of the company	Projected results of the company. Discount rate.
SHARES IN POLSKI STANDARD PŁATNOŚCI SP. Z O.O.	Estimation of the fair value based on the present value of projected results of the company	Projected results of the company. Discount rate.
SHARES IN SOCIETY FOR WORLDWIDE INTERBANK FINANCIAL TELECOMMUNICATION	Market value of the shares estimated by the company.	Market value estimated by the company. Discount rate.
SHARES IN KRAJOWA IZBA ROZLICZENIOWA S.A.	Estimation of the fair value based on the present value of projected results of the company	Projected results of the company. Discount rate.
SHARES IN WAŁBRZYSKA SPECJALNA STREFA EKONOMICZNA “INVEST-PARK” SP Z O.O.	Fair value determined by an appraiser using the net adjusted assets method.	Value of the company’s net assets.
SHARES IN WIELKOPOLSKA GILDIA ROLNO-OGRODNICZA S.A.	Fair value determined by an appraiser using the net adjusted assets method.	Value of the company’s net assets.

(IN PLN MILLION)

FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME		
CORPORATE BONDS	Yield curve and risk margin model. Yield curves are built based on market rates, money market data and IRS transactions market data.	Credit spread (credit margins determined on the basis of initial margins modified by credit indices quotes ascribed to issuers based on their ratings and business sectors).
LOANS AND ADVANCES TO CUSTOMERS	Discounted cash flow method.	Effective margin on loans.

FINANCIAL INFORMATION

ASSETS MEASURED AT FAIR VALUE 31.12.2022	Carrying amount	Level 1 Prices quoted on active markets	Level 2 Valuation techniques based on observable market data	Level 3 Other valuation techniques
Hedging derivatives	1 042	-	1 042	-
Other derivative instruments	13 162	1	13 161	-
Securities	**67 106**	**52 864**	**13 198**	**1 044**
held for trading	**193**	**193**	**-**	**-**
debt securities	164	164	-	-
shares in other entities - listed	27	27	-	-
participation units in investment funds, investment certificates, rights to shares, pre-emptive rights	2	2	-	-
not held for trading, measured at fair value through profit or loss	**1 702**	**1 180**	**120**	**402**
debt securities	578	511	22	45
shares in other entities - listed	115	115	-	-
shares in other entities - not listed	358	-	1	357
participation units in investment funds, investment certificates, rights to shares, pre-emptive rights	651	554	97	-
measured at fair value through other comprehensive income	**65 211**	**51 491**	**13 078**	**642**
debt securities	65 211	51 491	13 078	642
Loans and advances to customers	**3 565**	**-**	**-**	**3 565**
not held for trading, measured at fair value through profit or loss	**3 565**	**-**	**-**	**3 565**
housing loans	4	-	-	4
business loans	85	-	-	85
consumer loans	3 476	-	-	3 476
Total financial assets measured at fair value	**84 875**	**52 865**	**27 401**	**4 609**

(IN PLN MILLION)

LIABILITIES MEASURED AT FAIR VALUE		Level 1	Level 2	Level 3
31.12.2022	Carrying amount	Prices quoted on active markets	Valuation techniques based on observable market data	Other valuation techniques
Hedging derivatives	7 469	-	7 469	-
Other derivative instruments	12 978	-	12 978	-
Liabilities in respect of a short position in securities	7	7	-	-
Liabilities in respect of insurance products	778	-	778	-
Total financial liabilities measured at fair value	21 232	7	21 225	-

ASSETS MEASURED AT FAIR VALUE 31.12.2021	Carrying amount	Level 1 Prices quoted on active markets	Level 2 Valuation techniques based on observable market data	Level 3 Other valuation techniques
Hedging derivatives	933	-	933	-
Other derivative instruments	10 903	-	10 903	-
Securities	**64 160**	**49 262**	**13 748**	**1 150**
held for trading	**248**	**191**	**-**	**57**
debt securities	216	159	-	57
shares in other entities - listed	31	31	-	-
participation units in investment funds, investment certificates, rights to shares, pre-emptive rights	1	1	-	-
not held for trading, measured at fair value through profit or loss	**2 049**	**1 546**	**26**	**477**
debt securities	785	614	19	152
shares in other entities - listed	144	144	-	-
shares in other entities - not listed	326	-	1	325
participation units in investment funds, investment certificates, rights to shares, pre-emptive rights	794	788	6	-
measured at fair value through other comprehensive income	**61 863**	**47 525**	**13 722**	**616**
debt securities	61 863	47 525	13 722	616
Loans and advances to customers	**4 561**	**-**	**-**	**4 561**
not held for trading, measured at fair value through profit or loss	**4 559**	**-**	**-**	**4 559**
housing loans	4	-	-	4
business loans	97	-	-	97
consumer loans	4 458	-	-	4 458
measured at fair value through other comprehensive income	**2**	**-**	**-**	**2**
consumer loans	2	-	-	2
Total financial assets measured at fair value	80 557	49 262	25 584	5 711

(IN PLN MILLION)

LIABILITIES MEASURED AT FAIR VALUE		Level 1	Level 2	Level 3
31.12.2021	Carrying amount	Prices quoted on active markets	Valuation techniques based on observable market data	Other valuation techniques
Hedging derivatives	4 806	-	4 806	-
Other derivative instruments	11 008	-	11 008	-
Liabilities in respect of insurance products	1 067	-	1 067	-
Total financial liabilities measured at fair value	**16 881**	**-**	**16 881**	**-**

IMPACT OF ESTIMATES ON FAIR VALUE MEASUREMENT OF LEVEL 3 FINANCIAL INSTRUMENTS	31.12.2022		31.12.2021	
	Fair value in		Fair value in	
	positive scenario	negative scenario	positive scenario	negative scenario
Shares in Visa Inc.[1]	145	133	128	113
Other equity investments[2]	189	171	191	173
Corporate bonds[3]	681	679	762	760
Loans and advances to customers[4]	3 583	3 547	4 582	4 536

[1] scenario assuming a discount rate in respect of the future conditions of converting C-series shares to ordinary shares at a level of 0%/100% respectively
[2] Scenario assuming a change in the discount rate of +/- 0.5 p.p.
[3] scenario assuming a change in the credit spread of +/-10%
[4] scenario assuming a change in the company's value of +/- 0.5%

RECONCILIATION OF CHANGES DURING THE REPORTING PERIOD TO FAIR VALUE AT LEVEL 3	2022	2021
Opening balance at the beginning of the period	**5 711**	**7 343**
Increase in exposure to equity instruments	25	16
Decrease in exposure to equity instruments	(3)	(152)
Increase in exposure to corporate bonds	9	57
Decrease in exposure to corporate bonds	(74)	(10)
Increase in exposure to loans and advances to customers	775	828
Decrease in exposure to loans and advances to customers	(1 610)	(2 076)
Reclassification from “measured at amortized cost” to “measured at fair value through profit or loss”	-	39
Reclassification from “measured at fair value through profit or loss” to “measured at amortised cost”	(207)	-
Net gain/(loss) on financial instruments measured at fair value through profit or loss	51	57
Change in the valuation recognized in OCI	(68)	(101)
Foreign exchange differences	8	10
Other	(8)	(300)
Closing balance	**4 609**	**5 711**

52. FINANCIAL ASSETS AND FINANCIAL LIABILITIES NOT PRESENTED AT FAIR VALUE IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

The Group holds financial instruments which are not presented at fair value in the statement of financial position.

For many financial instruments, the market values are unattainable hence the presented fair values are estimated with the use of an array of measurement techniques.

All model calculations include certain simplifying assumptions and therefore are sensitive to those assumptions. For certain categories of financial instruments, it has been assumed that their carrying amount equals approximately their fair values, which is due to the lack of expected material differences between their carrying amount and fair value resulting from the features of these categories (such as short-term nature, high correlation with market parameters, the unique nature of the instrument).

ITEM	MAJOR METHODS AND ASSUMPTIONS USED WHEN ESTIMATING FAIR VALUES OF FINANCIAL INSTRUMENTS NOT MEASURED AT FAIR VALUE
AMOUNTS DUE FROM AND TO BANKS	• interbank placements and deposits – the model based on expected cash flows discounted using the current interbank market rates; • interbank deposits and placements with maturities of up to 7 days or with variable interest, loans or advances granted and received on the interbank market with variable interest (with interest rate changes occurring every 3 months or less) – fair value equals the carrying amount
SECURITIES	• treasury bonds – market quotations; • corporate bonds in PLN secured with the State Treasury guarantees - discounted cash flow method, calculated using yield curves, prices available from Bloomberg (BVAL – Bloomberg Valuation Service) and Refinitiv Eikon • corporate and municipal bonds – discounted cash flow method, calculated using yield curves and credit margins
LOANS AND ADVANCES TO CUSTOMERS	• not impaired: the model based on estimating the present value of future cash flows by discounting cash flows using current interest rates; the model takes into account the credit risk margin and adjusted maturities derived from the loan agreements. The current level of margins was determined for transactions concluded in the last quarter ending on the balance sheet date involving instruments with a similar credit risk profile. The current margin for loans in PLN adjusted for the cost of foreign currency acquisition in basis-swap transactions was applied to loans in foreign currencies. • finance lease receivables, loans and factoring: the fair value of lease, loan and factoring receivables was estimated using a model based on the contractual present value of future cash flows discounted at current interest rates taking into account a margin for credit risk. Margins were taken into account while maintaining the division into main product groups, i.e. finance lease receivables with a floating interest rate, finance lease receivables with a fixed interest rate, finance lease receivables in respect of real estate. The model used to determine the fair value of lease, loan and factoring receivables uses valuation techniques based on parameters not derived from the market, and therefore it is included in the third valuation category. • impaired: fair values are equal to carrying amounts; • loans and advances to customers: a part of the housing loan portfolio (the "old" housing loan portfolio), loans with no specific repayment schedule, loans due as at the moment of valuation – fair values are equal to carrying amounts;
AMOUNTS DUE TO CUSTOMERS	• deposits and other amounts due to customers other than banks, with fixed maturities; the model of expected cash flows discounted using current interest rates appropriate for the individual deposit products. The fair value is calculated for each deposit and liability,

	and then the fair values for the entire deposit portfolio are grouped by product type and by customer segment. • amounts due to customers: liabilities with no specific repayment schedule, other specific products for which no active market exists – fair values are equal to carrying amounts.
SECURITIES IN ISSUE	PKO Bank Hipoteczny S.A. • mortgage covered bonds – listed on the Luxembourg Stock Exchange (in EUR) and on the Warsaw Stock Exchange (in PLN); • bonds under the Public Bond Issue Programme – listed on the Catalyst market; • bonds of the Bond Issue Programme an individual agreement – the model of expected cash flows discounted using the current interbank market rates and market quotations.
	PKO Finance AB: quotations on the Luxembourg Stock Exchange.
	PKO Leasing S.A. The model of expected cash flows discounted using the current market quotations
SUBORDINATED LIABILITIES	The model of expected cash flows discounted based on yield curves
CASH AND BALANCES WITH THE CENTRAL BANK AND AMOUNTS DUE TO THE CENTRAL BANK	Fair values are equal to carrying amounts.
OTHER FINANCIAL ASSETS AND FINANCIAL LIABILITIES	Fair values are equal to carrying amounts.

(IN PLN MILLION)

31.12.2022	carrying amount	fair value		
		Level 1	Level 2	Level 3
Cash and balances with Central Bank	15 917	4 215	11 702	-
Amounts due from banks	16 101	-	16 098	-
Securities (excluding adjustments relating to fair value hedge accounting)	**68 556**	**49 891**	**7 779**	**1 733**
Treasury bonds (in PLN)	45 893	38 773	-	23
Treasury bonds (in foreign currencies)	713	708	-	-
corporate bonds (in PLN) secured with the State Treasury guarantees	12 100	10 410	-	-
municipal bonds (in PLN)	6 182	-	6 332	-
corporate bonds (in PLN)	1 989	-	-	1 710
corporate bonds (in foreign currencies)	1 679	-	1 447	-
Reverse repo transactions	7	-	7	-
Loans and advances to customers (excluding adjustment relating to fair value hedge accounting)	**228 164**	-	-	**230 438**
housing loans	108 803	-	-	108 642
business loans	71 103	-	-	72 955
consumer loans	26 548	-	-	27 152
factoring receivables	3 591	-	-	3 592
finance lease receivables	18 119	-	-	18 097
Other financial assets	1 867	-	-	1 867
Amounts due to Central bank	9	-	9	-
Amounts due to banks	3 011	-	3 009	-
Amounts due to customers (excluding adjustment relating to fair value hedge accounting)	**338 854**	-	-	**337 983**
amounts due to households	263 032	-	-	262 128
amounts due to business entities	58 634	-	-	58 667
amounts due to public sector	17 188	-	-	17 188
Loans and advances received	2 294	-	-	2 283
Securities in issue	15 510	11 798	1 265	2 187
Subordinated liabilities	2 781	-	2 603	-
Other financial liabilities	4 387	-	-	4 387

(IN PLN MILLION)

31.12.2021	carrying amount	fair value		
		Level 1	Level 2	Level 3
Cash and balances with Central Bank	11 587	3 581	8 006	-
Amounts due from banks	9 010	-	9 009	-
Securities (excluding adjustments relating to fair value hedge accounting)	**71 282**	**57 930**	**6 507**	**1 780**
Treasury bonds (in PLN)	50 816	46 867	-	-
corporate bonds (in PLN) secured with the State Treasury guarantees	12 092	11 063	-	-
municipal bonds (in PLN)	5 022	-	5 075	-
corporate bonds (in PLN)	1 937	-	-	1 780
corporate bonds (in foreign currencies)	1 415	-	1 432	-
Loans and advances to customers (excluding adjustment relating to fair value hedge accounting)	**229 740**	**-**	**-**	**231 385**
housing loans	119 139	-	-	118 351
business loans	64 050	-	-	65 907
consumer loans	26 077	-	-	26 636
factoring receivables	2 923	-	-	2 923
finance lease receivables	17 551	-	-	17 568
Other financial assets	1 895	-	-	1 895
Amounts due to Central bank	8	-	8	-
Amounts due to banks	3 821	-	3 821	-
Amounts due to customers (excluding adjustment relating to fair value hedge accounting)	**321 229**	**-**	**-**	**321 213**
amounts due to households	244 545	-	-	244 529
amounts due to business entities	56 854	-	-	56 854
amounts due to public sector	19 830	-	-	19 830
Loans and advances received	2 461	-	-	2 461
Securities in issue	23 872	16 989	3 475	3 642
Subordinated liabilities	2 716	-	2 719	-
Other financial liabilities	3 335	-	-	3 335

RISK MANAGEMENT IN THE GROUP

53. Risk management within the Group

Risk management is one of the most important internal processes in both the Bank and other entities of the PKO Bank Polski S.A. Group.

It is aimed at ensuring (in the changing environment) the profitability of business activities while ensuring an appropriate level of control and keeping the risk level within the risk tolerances and limits system adopted by the Bank and the Group, in a changing macroeconomic environment. The level of risk is an important part of the planning processes.

The Group identifies risks in its operations and analyses the impact of each type of risk on its business. All the risks are managed; some of them have a material effect on the profitability and capital needed to cover them. The following risks are considered material for the Group: credit risk, risk of foreign currency mortgage loans for households, currency risk, interest rate risk, liquidity risk (including financing risk), operating risk, business risk, risk of macroeconomic changes and model risk. The materiality of all the identified risks is assessed by the Group on a regular basis, at least annually.

A detailed description of the management policies for material risks is presented in the "Report on capital adequacy and other information subject to publication by the PKO Bank Polski S.A. Group".

Risk management objective

The objective of the risk management is to strive to maintain the level of risk within the accepted tolerances in order to:

- protect shareholder value;
- protect customer deposits;
- support the Group in conducting efficient operations.

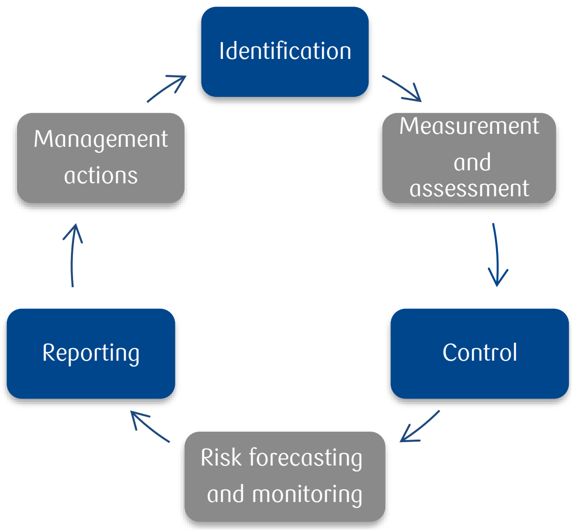
The risk management objectives are achieved, in particular, by providing appropriate information on the risks, so that decisions are made in full awareness of the particular risks involved.

Main principles of risk management

Risk management at the Group is based, in particular, on the following principles:

- the risk management covers all the risks identified;
- the risk management process is appropriate from the perspective of the scale of operations and materiality, scale and complexity of a given risk, and adjusted on an on-going basis to take account of the new risks and their sources;
- risk management methods (especially models and their assumptions) and risk measurement or assessment systems are tailored to the scale and complexity of individual risks, the current and planned operations of the Group and its operating environment, and are periodically verified and validated;
- the area of risk management remains organizationally independent of business activities;
- risk management is integrated into the planning and controlling systems;
- the level of risk is monitored and controlled on an on-going basis;
- the risk management process supports the implementation of the Bank's strategy in compliance with the Risk Management Strategy, in particular with respect to the level of risk tolerance.

RISK MANAGEMENT PROCESS



The process of risk management in the Group consists of the following stages:

- RISK IDENTIFICATION:

Risk identification consists of recognizing the existing and potential sources of risk and estimating the significance of its potential impact on the Bank's and the Group's operations. As part of risk identification, the Group entities identify the risks considered to be material in the Bank's or the Group's operations.

- RISK MEASUREMENT AND ASSESSMENT:

Risk measurement and assessment are aimed at determining the scale of threats connected with the risks arising. Risk measurement covers determining the risk assessment measures adequate to the type and significance of the risk, and data availability. Quantitative and qualitative risk measurement results are the basis for the risk assessment aimed at identifying the scale or scope of risk.

As part of risk measurement, the Bank's Group carries out:

- specific stress tests which are conducted separately for individual risk types and are used to assess sensitivity of a given risk to unfavourable market conditions,
- comprehensive stress tests conducted jointly for the concentration risk and risks regarded as material, used to determine sensitivity of the capital adequacy measures and Bank's results to the occurrence of a negative scenario of changes in the environment and the functioning of the Bank's Group.

The stress-tests are conducted by the Bank's Group based on assumptions which ensure a sound assessment of the risk, in particular taking into account the Recommendations of the Polish Financial Supervision Authority.

- RISK CONTROL:

Risk control involves the determination of risk control mechanisms adjusted to the scale and complexity of the Group's activities, especially in the form of strategic tolerance limits for the individual types of risk. Strategic risk tolerance limits are subject to regular monitoring, and if they are exceeded, the Bank's Group takes management actions.

- RISK FORECASTING AND MONITORING:

Risk forecasting involves foreseeing future risk levels, taking into account the assumed business development projections, and internal and external events. Risk level forecasts are assessed by the Bank and the Bank's Group (so-called "reverse stress tests") in order to verify their accuracy.

Risk monitoring involves observing deviations from the forecasts or the adopted benchmarks (e.g. limits, thresholds, plans, prior period measurements, recommendations and instructions issued by external supervisory and regulatory authority). Risk monitoring and forecasting frequency is adequate to the materiality and variability of specific risks.

- **RISK REPORTING:**

Risk reporting consists in informing about the results of the risk identification, measurement, assessment and forecasting, causes of changes in the risks, actions taken and recommended. The scope, frequency and form of the reporting are adjusted to the managerial level of the recipients. If potential liquidity problems arise, the Supervisory Board is immediately informed about significant changes in the risk level, and in particular, about threats and remedial actions taken, and of their impact on the Bank's liquidity level.

- **MANAGEMENT ACTIONS:**

Management actions consist of determining the desired risk level favourable for building the structure of assets and liabilities. Management actions may result, in particular, in:

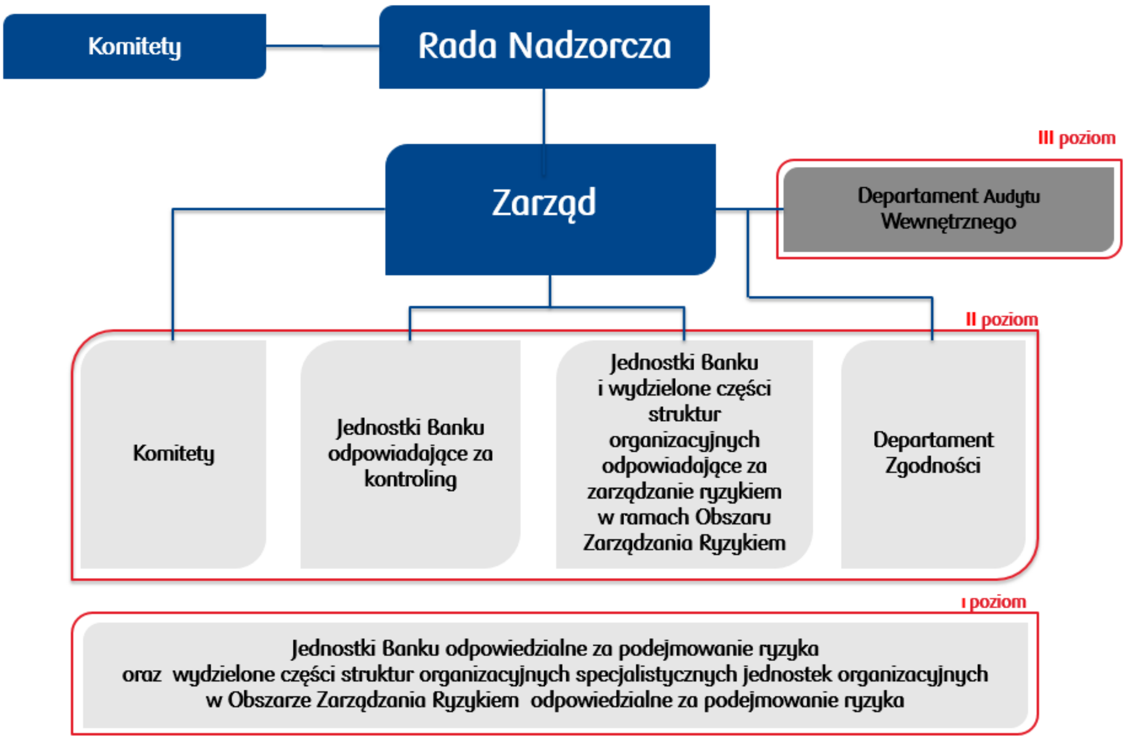
- acceptance of the risk – determining the acceptable risk level, taking into account business needs and developing management actions in the event that the level is exceeded;
- reduction of the risk – mitigation of the impact of the risk factors or effects of its materialization (e.g. By reducing or diversifying the risk exposure, determining limits, utilizing collaterals);
- transfer of the risk – transferring responsibility for covering potential losses (e.g. by transferring the risk to another entity with the use of legal instruments, such as insurance contracts, security services agreements for a building, accepting guarantees);
- risk avoidance – resignation from the risk-generating activity or elimination of the probability of materialization of the risk factor, including in particular determination of zero tolerance to risk.

ORGANIZATION OF RISK MANAGEMENT WITHIN THE GROUP

The Bank supervises the functioning of individual entities in the PKO Bank Polski S.A. Group. As part of its supervisory role, the Bank monitors their risk management systems and supports their development. In addition, the Bank takes into account the level of risk in particular Group companies for the purpose of the risk monitoring and reporting system at Group level. Risk management in the Bank takes place in all of the organizational units of the Bank.

The organization of risk management in PKO Bank Polski SA is presented in the diagram below:

Organizacja zarządzania ryzykiem bankowym



The Supervisory Board supervises and evaluates the risk management process, in particular, on the basis of regular reports on the risk, taking into account the adequacy and effectiveness of the risk management system and information about the implementation of the risk management strategy, also at the level of limits which limit the risk and conclusion from stress tests, and if necessary, orders the verification of the process.

The Supervisory Board is supported by the following committees: the Supervisory Board for Nominations and Remuneration Committee, the Supervisory Board Risk Committee and the Supervisory Board Audit Committee.

In respect of risk management, the Management Board of PKO Bank Polski SA is responsible for strategic risk management, including supervising and monitoring actions taken by the Bank in respect of risk management. The Management Board makes major decisions affecting the risk profile of the Bank and adopts internal regulations concerning risk management. It ensures operation of the risk management system, monitors and assesses its functioning, and transfers the respective information to the Supervisory Board. In its risk management activities, the Management Board is supported by the following committees:

- the Risk Committee;
- the Asset and Liability Committee (ALCO);
- the Bank's Credit Committee;
- the Operational Risk Committee.

The risk management process is carried out at three independent but complementary levels:

THE FIRST LEVEL – is formed of organizational structures responsible for product management, selling products and servicing customers, and of other structures which perform operational tasks that generate risk, which function based on internal regulations. This function is performed by all of the Bank's and the Group's entities. The Bank's entities implement appropriate risk controls, including in particular limits, designed by them and located at the second level. They also ensure that they are met by means of appropriate controls.

At the same time, the Group entities and the Bank are obliged to have comparable and consistent systems for the risk assessment and control, taking into account the specific characteristics of each entity and its market.

THE SECOND LEVEL – covers compliance units and involves the identification, measurement, evaluation and/or control, monitoring and reporting of significant types of risks, and of the threats and irregularities identified; the tasks are performed by dedicated organizational structures acting on the basis of the applicable internal regulations of the Bank; the objective of these structures is to ensure that the tasks performed as part of the first level are properly governed in the internal regulations of the Bank and that they effectively limit the risk, support risk measurement, assessment and analysis and contribute to operational effectiveness. The function is performed, in particular. by the Risk Management Area, the Compliance Department and relevant committees. The second level supports actions taken to eliminate unfavourable deviations from the financial plan, with respect to the amounts impacting the quantitative strategic risk tolerance limits specified in the financial plan. These tasks are performed in particular in the entities of the Bank responsible for controlling.

THE THIRD LEVEL – consists of the internal audit function which performs independent audits of individual components of the Bank's management system, including the risk management system, and the internal control system; the internal audit operates independently of the first and second levels and may support their actions by way of consultation, but without the possibility to impact the decisions taken. The function is performed in accordance with the Bank's internal regulations concerning the operation of the internal control system.

The independence of the levels consists of ensuring organizational separation at the following levels:

- the function of the second level with regard to creating system solutions is independent of the function of the first level;
- the function of the third level is independent of the functions of the first and second levels.

RISK MANAGEMENT WITHIN THE GROUP

The Bank, as the parent company in the Bank's Group, determines the key risk management principles applied in the Bank's Group, supervises the implementation in the Group entities of the risk management principles resulting from the risk management strategy, taking into account the adequacy of these principles to the activities of the Bank's Group entities, and exercises control over the risk in the Bank's Group with respect to significant types of risk. Entities in the Bank's Group create and update internal regulations concerning the management of specific risks, upon consultation with the Bank and taking into account recommendations issued by the Bank and the Risk Management Strategy.

The risk management function in the Group entities is executed, in particular, by:

- participation of the units from the Bank's Risk Management Area or of the relevant committees of the Bank in consulting large transactions in the Group entities;
- the assessments and reviews of the internal regulations concerning risk management in individual Group entities by the Bank's units from Risk Management Area and the Compliance Department;
- reporting of the Group risks to the relevant committees of the Bank or to the Management Board;
- monitoring the strategic limits of risk tolerance for the Group.

54. SPECIFIC ACTIVITIES IN THE AREA OF RISK MANAGEMENT UNDERTAKEN BY THE GROUP N 2022

During the twelve months ended 31 December 2022:

- The Group monitored the situation of its customers and adjusted its credit policy with a view to securing a good quality loan portfolio. As part of the measurement of credit exposures, the Group specifically took into account information on customers' economic ties with counterparties in Ukraine, Belarus and Russia. For specific actions taken by the Group in the area of risk management in relation to the situation in Ukraine, see note "IMPACT OF THE GEOPOLITICAL SITUATION IN UKRAINE ON PKO BANK POLSKI SA GROUP" Section "RISK MANAGEMENT IN RELATION TO THE SITUATION IN UKRAINE".
- Internal regulations were adapted to the requirements of Recommendation R of the PFSA regarding the quarterly monitoring of legal collateral that is taken into account in the estimation of expected credit losses in order to ensure the identification of market conditions/events that may or do affect the legal effectiveness of the collateral and its value taken into account in the estimation of these losses.
- In order to mitigate the level of credit risk resulting from interest rate increases and inflation, changes were made to the parameters used in the assessment of the creditworthiness of individual borrowers applying for housing loans (in accordance with the PFSA's Recommendation S). As part of these changes, the minimum value of the interest rate buffer was increased to 5 p.p., the minimum subsistence costs were increased, and the maximum acceptable DStI (debt service to income) values were changed.
- In terms of interest rate risk, the banking sector was challenged by larger than expected increases in interest rates. In a series of interest rate increases commenced in the fourth quarter of 2021, the reference rate was increased to 6.75% as at the end of 2022, resulting in persistent negative valuation of the portfolio of debt instruments and derivative instruments hedging interest income. At the same time, the customers' interest in mortgage loans temporarily based on fixed interest rates continues, affecting the interest income sensitivity measures.
- The Group maintained a safe level of liquidity, allowing for a quick and effective response to potential threats. The Group structured its sources of funding accordingly by adjusting its deposit offering (in particular deposit interest rates) to meet current needs and by repaying maturing funds raised from the financial market through issuance,
- The tasks aimed at expanding the IT systems that enable the collection of ESG data, in particular on environmental risks, and preparing for the systemic disclosure of this data were carried out (see note ESG Risk management).

55. CREDIT RISK MANAGEMENT

- **DEFINITION**

Credit risk is defined as the risk losses being incurred as a result of a customer's default on its liabilities towards the Group or the risk of a decrease in the economic value of amounts due to the Group as a result of deterioration of a customer's ability to settle liabilities.

- **RISK MANAGEMENT OBJECTIVE**

The objective of credit risk management is to minimize losses on the loan portfolio as well as to minimize the risk of occurrence of loans at risk of impairment, while maintaining the expected level of profitability and value of the loan portfolio.

The Bank and the Group subsidiaries are guided mainly by the following credit risk management principles:

- every loan transaction is subject to comprehensive credit risk assessment, which is reflected in an internal rating or credit scoring;
- credit risk relating to loan transactions is measured at the stage of examining a loan application and on a regular basis, as part of the monitoring process, taking into consideration changes in external conditions and in the financial standing of the borrowers and links between the Group's customers;
- credit risk assessment of exposures is separated from the sales function by ensuring an appropriate organizational structure, independence in developing and validating tools supporting an assessment of credit risk and independence of decisions approving deviations from the suggestions resulting from using these tools;
- terms and conditions of a loan transactions offered to a customer depend on the assessment of credit risk level generated by the transaction;
- credit decisions may be taken solely by persons authorized to do so;
- the cyclical measurement of portfolio credit risk is carried out on the total credit exposures of customers as well as on different cross-sections of the portfolio, such as customer groups, credit product groups,
- credit risk is diversified, in particular, in terms of geographical areas, industries, products and customers;
- an expected credit risk level is secured by collateral received by the Group, risk margins from customers and impairment allowances (provisions) for expected credit losses;
- an incentive system contributes to compliance with the credit risk management policies and principles adopted by the Group.

The aforementioned principles are implemented by the Group through the use of advanced credit risk management methods, both at the level of individual credit exposures and of the entire loan portfolio of the Group. These methods are verified and developed to ensure compliance with the requirements of the internal rating-based method (IRB), i.e. an advanced credit risk measurement method which may be used to calculate the capital requirements for credit risk, subject to approval by the Polish Financial Supervision Authority.

The Group entities which have significant credit risk levels (the KREDOBANK SA Group, the PKO Leasing SA Group, PKO Bank Hipoteczny SA and Finansowa Kompania "Prywatne Inwestycje" sp. z o.o.) manage their credit risk individually, but the methods used for credit risk assessment and measurement are adjusted to the methods used by PKO Bank Polski S.A., taking into account the specific nature of activities of these companies.

Any changes to the solutions used by the Group's subsidiaries must be agreed every time with the Bank's units responsible for risk management.

The aforementioned companies measure their credit risk regularly and the results of such measurements are submitted to the Bank.

Within the structures of PKO Bank Hipoteczny SA, the KREDOBANK SA Group and the PKO Leasing SA Group, there are organizational units in the risk management areas which are responsible, in particular, for:

- developing methodologies for credit risk assessment and recognition of provisions and allowances;
- control over and monitoring of credit risk in the lending process;
- quality and efficiency of the restructuring and debt collection processes;

In these companies, the credit decision limits depend primarily on: the amount of the exposure to a given customer, the amount of an individual credit transaction and the duration of the lending period.

The process of credit decision-making in PKO Bank Hipoteczny SA, the KREDOBANK SA Group and the PKO Leasing SA Group is supported by credit committees which are involved in the process for credit transactions which generate an increased credit risk level.

The description of performing the estimates of expected credit losses is disclosed in the Note "Allowances for expected credit losses".

- **MEASUREMENT AND ASSESSMENT OF CREDIT RISK: CREDIT RISK MEASUREMENT AND ASSESSMENT METHODS**

In order to assess the level of credit risk and profitability of its loan portfolios, the Group uses different credit risk measurement and valuation methods, including:

- probability of default (PD);
- loss given default (LGD);
- credit conversion factor (CCF);
- expected credit loss (ECL);
- credit value at risk (CVaR);
- the share and structure of impaired credit exposures;
- coverage ratio of impaired loans;
- cost of credit risk;
- stress testing.

The Group systematically expands the scope of credit risk measures adopted, taking into account the requirements of the IRB method, and extends the use of risk measures to cover the entire loan portfolio of the Group.

The portfolio credit risk measurement methods allow, among other things, to reflect the credit risk in the price of products, determine the best conditions of financing availability and determine the level of impairment allowances.

The Group performs analyses and stress-tests relating to the impact of the potential changes in the macroeconomic environment on the quality of the Group's loan portfolio, and the results of such analyses and stress tests are presented in reports to the Bank's governing bodies. Such information enables identification and implementation of the measures mitigating the negative effects of the impact of unfavourable market conditions on the Group's profit or loss.

The credit risk assessment process at the Bank's Group takes into account the requirements of the Polish Financial Supervision Authority as laid down in the PFSA Recommendations.

- **MEASUREMENT AND ASSESSMENT OF CREDIT RISK: RATING AND SCORING METHODS**

The Group assesses the risk of individual credit transactions with the use of scoring and rating methods. which are supported by dedicated IT applications. The risk assessment method is defined in the Group's internal regulations whose main aim is to ensure a uniform and objective evaluation of credit risk during the lending process.

The Group evaluates the credit risk of retail customers in two dimensions: qualitative and quantitative borrowing capacity assessment. A quantitative creditworthiness assessment consists of examining a customer's financial position, and the qualitative risk assessment involves scoring and assessing a customer's credit history obtained from the Group's internal records and external databases.

In the case of some corporate customers in the small- and medium-sized enterprises segment who meet certain criteria, the Group assesses credit risk using the scoring method. Such assessment refers to low-value, non-complex loan transactions and it is performed in two dimensions: a customer's borrowing capacity and his creditworthiness. An assessment of the borrowing capacity consists of examining a customer's economic and financial position, and the assessment of creditworthiness involves scoring and evaluating the customer's credit history obtained from the Group's internal records and external databases.

In other cases, the rating method is used for institutional customers.

An assessment of the credit risk associated with financing institutional customers is performed by the Group in two dimensions: the customer and the transaction. The measures involved include an evaluation of a customer's creditworthiness, i.e. the rating, and an assessment of the transaction risk, i.e. the customer's ability to repay the amounts due at the amounts and dates specified.

Rating models for institutional customers are developed using the Group's internal data, thus ensuring that they are tailored to the risk profiles of the Group's customers. Models are based on a statistical dependence analysis between the default and a customer's risk scoring. The scoring includes an evaluation of financial ratios, qualitative factors and behavioural factors. A customer's risk assessment depends on the size of the assessed enterprise. In addition, the Group applies a model for the assessment of credited entrepreneurs in the formula of specialized lending, which allows an adequate credit risk assessment of large projects involving real estate financing (e.g. office space, retail space, industrial space) and infrastructure projects (e.g. telecommunication, industrial or public utility infrastructure).

Rating models are implemented within the IT tool which supports the assessment of the Group's credit risk associated with the financing of institutional customers.

In order to examine the correct operation of the methods applied by the Group, credit risk assessment methodologies relating to individual loan exposures are subject to periodical reviews.

The credit risk assessment process in the Group takes into account the requirements of the Polish Financial Supervision Authority as defined in Recommendation S concerning good practices for the management of mortgage-secured loan exposures and Recommendation T concerning good practices for the management of retail credit exposures.

In the lending process for corporate Customers and SME Customers evaluated with the use of the rating method, the Group each time assesses the impact of environmental, social and governance factors (ESG factors) on the Customer's creditworthiness, and identifies credit transactions with an increased financial leverage (levered transactions). The Group also examines the impact of credit transactions on ESG and classifies them to four categories, from transactions with a positive impact on ESG to those with a material negative impact. When assessing the ESG factors, the Group takes into account such factors as the risk of climate change and its impact on the customer's operations, potential influence of the customer on climate, factors related to human capital or health and safety, and governance factors (including the corporate culture and internal audit).

Information on rating and scoring assessments is widely used in the Group to manage credit risk, in the system of credit decision authorizations, to determine the amounts triggering the credit risk assessment services and in the credit risk measurement and reporting system.

- **MEASUREMENT AND ASSESSMENT OF CREDIT RISK: CREDIT RISK FORECASTING AND MONITORING**

Credit risk forecasting and monitoring involves preparing risk level forecasts and monitoring deviations from the forecasts or the adopted benchmarks (e.g. limits, thresholds, plans, prior period measurements, recommendations and instructions issued by external supervisory and regulatory authority), and performing (specific and comprehensive) stress tests. Risk level forecasts are subject to backtesting.

Credit risk is monitored at the level of individual customers, groups of related customers, credit transactions and their collateral, and at portfolio level.

Credit risk monitoring at the individual loan transaction level is governed, in particular, by the Group's internal regulations concerning:

- assessment of the credit risk related to customer financing;
- methods of assessing customers;
- identification of groups of related entities;
- evaluation of collateral and inspection of investments;
- recognition of allowances for expected credit losses;
- Early Warning System;
- operating procedures.

In order to accelerate the response to the warning signals noted reflecting an increased credit risk level, the Group uses and develops an IT application, the Early Warning System (EWS).

Credit risk monitoring at the portfolio level consists of:

- supervising the level of the portfolio credit risk on the basis of the adopted tools used for measuring credit risk, taking into consideration the identified sources of credit risk and analysing the effects and actions taken as part of system management;
- recommending preventive measures in the event of identifying an increased level of credit risk.

- **REPORTING OF CREDIT RISK**

Credit risk reporting includes periodical reporting of the loan portfolio risk exposure.

The Group prepares monthly and quarterly credit risk reports. Credit risk reporting should ensure the fullest possible information on credit risk, in particular regarding the effectiveness of the credit risk management policy, identification of sources and factors of credit risk, measurement of the cost of credit risk, monitoring of compliance with limits and taking corrective and preventive action.

In addition to information for the Bank, the reports also include information on the level of credit risk in the Group entities where a material level of credit risk was identified (e.g. the KREDOBANK SA Group, the PKO Leasing SA Group, PKO Bank Hipoteczny SA).

- **MANAGEMENT ACTIONS RELATING TO CREDIT RISK**

The purpose of management actions is to shape and optimize the credit risk management system and credit risk level at the Group.

The credit risk management actions include particularly:

- issuing internal regulations governing the credit risk management system at the Group;
- issuing recommendations, guidelines for conduct, explanations and interpretation of the Group's internal regulations;
- taking decisions regarding the acceptable level of credit risk, including in particular lending decisions;
- developing and improving credit risk control ls and mechanisms which make it possible to maintain the credit risk level within the limits acceptable to the Group;
- developing and monitoring the operation of credit risk management controls;
- developing and improving credit risk assessment methods and models;
- developing and improving IT tools used in credit risk management;
- planning actions and issuing recommendations.

The main credit risk management tools used by the Group include:

- strategic limits of tolerance to credit risk and concentration risk which set the maximum level of these risks the Bank, the Group entities and the Bank's Group are ready to accept. These limits take into account, among other things, the requirements of the CRR Regulation, the Polish Banking Law or Recommendations S and T.
- internal limits of tolerance to credit risk or concentration risk including:
    - limits determining the level of tolerance to portfolio credit risk and concentration risk;
    - industry-related limits, which reduce the risk level related to financing institutional customers conducting business activities in industries characterized by a high level of credit risk;
    - competence limits, which set the maximum level of competences to make lending decision with respect to customers, including customers shared by the entities belonging to the Bank's Group;
- verifying the quality of lending processes in order to identify the causes of late repayments and inadequacies in the lending process,
- branch rating representing a synthetic assessment of the quality of the branch's work in lending processes.
- threshold amounts which trigger involvement of risk analysts in the credit risk assessment, including with respect to transactions with customers shared by the entities belonging to the Bank's Group.

Credit risk management tools from the customer and transaction level include:

- minimum transaction requirements determined for a given type of transaction (e.g. maximum loan amount, required collateral);
- the principles of defining credit availability, including cut-offs – the minimum number of points awarded in the process of qualitative assessment with the use of a scoring system, or the customer's rating class above which a lending transaction can be concluded with a customer;

- minimum credit margins - credit risk margins relating to a given credit transaction concluded by the Group with a given customer, where the interest rate offered to the customer should not be lower than the reference rate plus an appropriate credit risk margin.

- **USE OF CREDIT RISK MITIGATION TECHNIQUES – COLLATERAL**

Collateral management policy plays a significant role in establishing minimum transaction terms. The Bank's and the Group entities' collateral management policy is meant to properly protect them against credit risk to which the Group is exposed, including first of all by establishing collateral that is as liquid as possible. Collateral may be considered liquid if it is possible to be sold without a significant decrease in its price and at a time which does not expose the Bank to a change in the collateral value due to price fluctuations typical of a given asset.

The Group strives to diversify collateral in terms of its forms and assets used as collateral.

The Group evaluates collateral from the perspective of the actual possibility of using it to satisfy its claims.

In addition, when assessing collateral, the Group takes into account the following factors:

- the economic, financial and economic or social and financial position of entities which provide personal guarantees;
- the condition and market value of the assets accepted as collateral and their vulnerability to depreciation in the period of maintaining the collateral (the impact of the technological wear and tear of a collateralized asset on its value),
- potential economic benefits to the Group resulting from a specific method of securing receivables, including, in particular, the possibility of reducing allowances for expected credit losses;
- the method of establishing collateral, including the typical duration and complexity of formalities, as well as the necessary costs (the costs of maintaining collateral and the enforcement against the collateral), using the Group's internal regulations concerning the assessment of collateral;
- the complexity, time-consuming nature and economic and legal conditions of the effective realization of collateral, in the context of enforcement restrictions and the applicable principles for the distribution of the sums obtained from individual enforcement or in the course of bankruptcy proceedings, the ranking of claims;
- the type of collateral depends on the level of risk of a given customer or transaction.

When granting loans intended to finance housing and commercial funding properties, a mortgage is an obligatory type of collateral.

Until effective protection is established (depending on the type and amount of a loan), the Group may accept temporary collateral in a different form.

With regard to consumer loans, usually personal guarantees (a civil law surety/guarantee, a bill of exchange) are used or collateral is established on the customer's bank account, car or securities.

The collateral for loans intended for the financing of small- and medium-sized enterprises as well as corporate customers is established, among other things: on receivables from business operations, bank accounts, movables, real estate or securities. The collateral management policy is set out in the internal regulations of the Group's subsidiaries.

When concluding lease agreements, the PKO Leasing SA Group, as the owner of the assets leased, treats the assets leased as collateral.

See also the information in the note "COLLATERAL".

56. CREDIT RISK – FINANCIAL INFORMATION

56.1. FINANCIAL ASSETS BY STAGE

- **AMOUNTS DUE FROM BANKS**

As at 31 December 2022 and 31 December 2021 all amounts due from banks were classified as Stage 1.

(IN PLN MILLION)

Bank Polski

- **SECURITIES**

SECURITIES (excluding adjustments relating to fair value hedge accounting) 31.12.2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: measured at fair value through other comprehensive income					
Gross carrying amount	**64 413**	**422**	**374**	**65 209**	**359**
NBP money bills	80	-	-	80	-
Treasury bonds (in PLN)	43 066	-	-	43 066	-
Treasury bonds (in foreign currencies)	3 977	420	-	4 397	-
corporate bonds (in PLN) secured with the State Treasury guarantees	9 373	-	-	9 373	-
municipal bonds (in PLN)	5 052	2	-	5 054	-
corporate bonds (in PLN)	2 476	-	374	2 850	359
corporate bonds (in foreign currencies)	389	-	-	389	-
Allowances for expected credit losses	**-**	**-**	**2**	**2**	**2**
corporate bonds (in PLN)	-	-	2	2	2
Net carrying amount	**64 413**	**422**	**376**	**65 211**	**361**
NBP money bills	80	-	-	80	-
Treasury bonds (in PLN)	43 066	-	-	43 066	-
Treasury bonds (in foreign currencies)	3 977	420	-	4 397	-
corporate bonds (in PLN) secured with the State Treasury guarantees	9 373	-	-	9 373	-
municipal bonds (in PLN)	5 052	2	-	5 054	-
corporate bonds (in PLN)	2 476	-	376	2 852	361
corporate bonds (in foreign currencies)	389	-	-	389	-
Measurement method: at amortized cost					
Gross carrying amount	**68 290**	**336**	**-**	**68 626**	**-**
Treasury bonds (in PLN)	45 898	-	-	45 898	-
Treasury bonds (in foreign currencies)	713	-	-	713	-
corporate bonds (in PLN) secured with the State Treasury guarantees	12 108	-	-	12 108	-
municipal bonds (in PLN)	6 206	-	-	6 206	-
corporate bonds (in PLN)	1 817	195	-	2 012	-
corporate bonds (in foreign currencies)	1 548	141	-	1 689	-
Allowances for expected credit losses	**(45)**	**(25)**	**-**	**(70)**	**-**
Treasury bonds (in PLN)	(5)	-	-	(5)	-
corporate bonds (in PLN) secured with the State Treasury guarantees	(8)	-	-	(8)	-
municipal bonds (in PLN)	(24)	-	-	(24)	-
corporate bonds (in PLN)	(4)	(19)	-	(23)	-
corporate bonds (in foreign currencies)	(4)	(6)	-	(10)	-
Net carrying amount	**68 245**	**311**	**-**	**68 556**	**-**
Treasury bonds (in PLN)	45 893	-	-	45 893	-
Treasury bonds (in foreign currencies)	713	-	-	713	-
corporate bonds (in PLN) secured with the State Treasury guarantees	12 100	-	-	12 100	-
municipal bonds (in PLN)	6 182	-	-	6 182	-
corporate bonds (in PLN)	1 813	176	-	1 989	-
corporate bonds (in foreign currencies)	1 544	135	-	1 679	-
Total securities					
Gross carrying amount	132 703	758	374	133 835	359
Allowances for expected credit losses	(45)	(25)	2	(68)	2
Net carrying amount	132 658	733	376	133 767	361

(IN PLN MILLION)

SECURITIES (excluding adjustments relating to fair value hedge accounting) 31.12.2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: measured at fair value through other comprehensive income					
Gross carrying amount	**61 474**	**44**	**397**	**61 915**	**380**
NBP money bills	810	-	-	810	-
Treasury bonds (in PLN)	39 613	-	-	39 613	-
Treasury bonds (in foreign currencies)	3 169	-	-	3 169	-
corporate bonds (in PLN) secured with the State Treasury guarantees	9 894	-	-	9 894	-
municipal bonds (in PLN)	4 091	44	-	4 135	-
corporate bonds (in PLN)	3 465	-	397	3 862	380
corporate bonds (in foreign currencies)	432	-	-	432	-
Allowances for expected credit losses	**-**	**-**	**(52)**	**(52)**	**(52)**
corporate bonds (in PLN)	-	-	(52)	(52)	(52)
Net carrying amount	**61 474**	**44**	**345**	**61 863**	**328**
NBP money bills	810	-	-	810	-
Treasury bonds (in PLN)	39 613	-	-	39 613	-
Treasury bonds (in foreign currencies)	3 169	-	-	3 169	-
corporate bonds (in PLN) secured with the State Treasury guarantees	9 894	-	-	9 894	-
municipal bonds (in PLN)	4 091	44	-	4 135	-
corporate bonds (in PLN)	3 465	-	345	3 810	328
corporate bonds (in foreign currencies)	432	-	-	432	-
Measurement method: at amortized cost					
Gross carrying amount	**70 936**	**402**	**-**	**71 338**	**-**
Treasury bonds (in PLN)	50 816	-	-	50 816	-
corporate bonds (in PLN) secured with the State Treasury guarantees	12 097	-	-	12 097	-
municipal bonds (in PLN)	4 982	57	-	5 039	-
corporate bonds (in PLN)	1 750	207	-	1 957	-
corporate bonds (in foreign currencies)	1 291	138	-	1 429	-
Allowances for expected credit losses	**(30)**	**(26)**	**-**	**(56)**	**-**
corporate bonds (in PLN) secured with the State Treasury guarantees	(5)	-	-	(5)	-
municipal bonds (in PLN)	(16)	(1)	-	(17)	-
corporate bonds (in PLN)	(3)	(17)	-	(20)	-
corporate bonds (in foreign currencies)	(6)	(8)	-	(14)	-
Net carrying amount	**70 906**	**376**	**-**	**71 282**	**-**
Treasury bonds (in PLN)	50 816	-	-	50 816	-
corporate bonds (in PLN) secured with the State Treasury guarantees	12 092	-	-	12 092	-
municipal bonds (in PLN)	4 966	56	-	5 022	-
corporate bonds (in PLN)	1 747	190	-	1 937	-
corporate bonds (in foreign currencies)	1 285	130	-	1 415	-
Total securities					
Gross carrying amount	132 410	446	397	133 253	380
Allowances for expected credit losses	(30)	(26)	(52)	(108)	(52)
Net carrying amount	132 380	420	345	133 145	328

(IN PLN MILLION)

- **LOANS AND ADVANCES TO CUSTOMERS**

LOANS AND ADVANCES TO CUSTOMERS (excluding adjustment relating to fair value hedge accounting) 31.12.2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: measured at fair value through other comprehensive income					
Gross carrying amount	**-**	**-**	**1**	**1**	**1**
consumer loans	-	-	1	1	1
Allowances for expected credit losses	**-**	**-**	**(1)**	**(1)**	**(1)**
consumer loans	-	-	(1)	(1)	(1)
Net carrying amount	-	-	-	-	-
consumer loans	-	-	-	-	-
Measurement method: at amortized cost					
Gross carrying amount	**195 148**	**33 864**	**8 899**	**237 911**	**212**
housing loans	98 224	11 016	1 860	111 100	94
business loans	57 136	14 283	4 118	75 537	58
consumer loans	23 702	3 160	1 877	28 739	56
factoring receivables	3 562	19	38	3 619	-
finance lease receivables	12 524	5 386	1 006	18 916	4
Allowances for expected credit losses	**(959)**	**(3 287)**	**(5 501)**	**(9 747)**	**16**
housing loans	(118)	(837)	(1 342)	(2 297)	(14)
business loans	(398)	(1 586)	(2 450)	(4 434)	(3)
consumer loans	(356)	(654)	(1 181)	(2 191)	34
factoring receivables	(6)	-	(22)	(28)	-
finance lease receivables	(81)	(210)	(506)	(797)	(1)
Net carrying amount	**194 189**	**30 577**	**3 398**	**228 164**	**228**
housing loans	98 106	10 179	518	108 803	80
business loans	56 738	12 697	1 668	71 103	55
consumer loans	23 346	2 506	696	26 548	90
factoring receivables	3 556	19	16	3 591	-
finance lease receivables	12 443	5 176	500	18 119	3
Loans and advances to customers, total					
Gross carrying amount	195 148	33 864	8 900	237 912	213
Allowances for expected credit losses	(959)	(3 287)	(5 502)	(9 748)	15
Net carrying amount	194 189	30 577	3 398	228 164	228

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS (excluding adjustment relating to fair value hedge accounting) 31.12.2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: measured at fair value through other comprehensive income					
Gross carrying amount	-	-	**3**	**3**	**3**
consumer loans	-	-	3	3	3
Allowances for expected credit losses	-	-	**(1)**	**(1)**	**(1)**
consumer loans	-	-	(1)	(1)	(1)
Net carrying amount	-	-	**2**	**2**	**2**
consumer loans	-	-	2	2	2
Measurement method: at amortized cost					
Gross carrying amount	**192 555**	**36 543**	**9 329**	**238 427**	**235**
housing loans	104 386	14 830	2 005	121 221	81
business loans	49 182	14 471	4 537	68 190	50
consumer loans	23 064	3 152	1 643	27 859	47
factoring receivables	2 900	18	28	2 946	-
finance lease receivables	13 023	4 072	1 116	18 211	57
Allowances for expected credit losses	**(708)**	**(2 263)**	**(5 716)**	**(8 687)**	**(6)**
housing loans	(68)	(671)	(1 343)	(2 082)	(19)
business loans	(337)	(933)	(2 870)	(4 140)	(14)
consumer loans	(233)	(525)	(1 024)	(1 782)	28
factoring receivables	(5)	-	(18)	(23)	-
finance lease receivables	(65)	(134)	(461)	(660)	(1)
Net carrying amount	**191 847**	**34 280**	**3 613**	**229 740**	**229**
housing loans	104 318	14 159	662	119 139	62
business loans	48 845	13 538	1 667	64 050	36
consumer loans	22 831	2 627	619	26 077	75
factoring receivables	2 895	18	10	2 923	-
finance lease receivables	12 958	3 938	655	17 551	56
Loans and advances to customers, total					
Gross carrying amount	192 555	36 543	9 332	238 430	238
Allowances for expected credit losses	(708)	(2 263)	(5 717)	(8 688)	(7)
Net carrying amount	191 847	34 280	3 615	229 742	231

- OTHER FINANCIAL ASSETS

OTHER FINANCIAL ASSETS	Stage 1	Stage 2	Stage 3	Total	of which POCI
31.12.2022					
Gross amount	1 868	-	146	2 014	-
Allowances for expected credit losses	(1)	-	(146)	(147)	-
Net carrying amount	**1 867**	-	-	**1 867**	-

OTHER FINANCIAL ASSETS	Stage 1	Stage 2	Stage 3	Total	of which POCI
31.12.2021					
Gross amount	1 895	-	136	2 031	-
Allowances for expected credit losses	-	-	(136)	(136)	-
Net carrying amount	**1 895**	-	-	**1 895**	-

(IN PLN MILLION)

Bank Polski

- **FINANCIAL AND GUARANTEE COMMITMENTS GRANTED**

FINANCIAL AND GUARANTEE COMMITMENTS GRANTED 31.12.2022	STAGE 1		STAGE 2		STAGE 3		Total	Provisions per IFRS 9	Net carrying amount
	Notional amount	Provision	Notional amount	Provision	Notional amount	Provision			
Credit lines and limits	**62 990**	**(137)**	**7 250**	**(406)**	**140**	**(47)**	**70 380**	**(590)**	**69 790**
real estate	3 568	(13)	107	(5)	8	(3)	3 683	(21)	3 662
business	47 016	(97)	5 332	(281)	107	(36)	52 455	(414)	52 041
consumer	8 818	(27)	1 807	(120)	25	(8)	10 650	(155)	10 495
in respect of factoring	2 745	-	4	-	-	-	2 749	-	2 749
in respect of finance leases	843	-	-	-	-	-	843	-	843
Other	**2 824**	-	-	-	**1**	-	**2 825**	-	**2 825**
Total financial commitments granted, including:	**65 814**	**(137)**	**7 250**	**(406)**	**141**	**(47)**	**73 205**	**(590)**	**72 615**
irrevocable commitments granted	27 050	(60)	3 429	(211)	100	(30)	30 579	(301)	30 278
POCI	-	-	1	-	4	(1)	5	(1)	4
Guarantees and sureties granted									
guarantees in domestic and foreign trading	8 539	(5)	1 360	(72)	679	(159)	10 578	(236)	10 342
to financial entities	2 735	-	-	-	-	-	2 735	-	2 735
to non-financial entities	5 733	(5)	1 360	(72)	679	(159)	7 772	(236)	7 536
to public entities	71	-	-	-	-	-	71	-	71
domestic municipal bonds (state budget entities)	315	-	-	-	-	-	315	-	315
letters of credit to non-financial entities	1 343	(1)	171	(6)	-	-	1 514	(7)	1 507
payment guarantees to financial entities	71	-	-	-	-	-	71	-	71
Total guarantees and sureties granted, including:	**10 268**	**(6)**	**1 531**	**(78)**	**679**	**(159)**	**12 478**	**(243)**	**12 235**
irrevocable commitments granted	2 903	(5)	1 262	(71)	647	(158)	4 812	(234)	4 578
performance guarantee	2 499	(2)	860	(54)	281	(147)	3 640	(203)	3 437
POCI	-	-	-	-	284	(5)	284	(5)	279
Total financial and guarantee commitments granted	**76 082**	**(143)**	**8 781**	**(484)**	**820**	**(206)**	**85 683**	**(833)**	**84 850**

(IN PLN MILLION)

FINANCIAL AND GUARANTEE COMMITMENTS GRANTED 31.12.2021	STAGE 1		STAGE 2		STAGE 3		Total	Provisions per IFRS 9	Net carrying amount
	Notional amount	Provision	Notional amount	Provision	Notional amount	Provision			
Credit lines and limits	**57 054**	**(125)**	**8 580**	**(262)**	**98**	**(28)**	**65 732**	**(415)**	**65 317**
real estate	5 130	(12)	131	(5)	4	(2)	5 265	(19)	5 246
business	39 921	(96)	6 949	(187)	71	(20)	46 941	(303)	46 638
consumer	9 179	(17)	1 496	(70)	23	(6)	10 698	(93)	10 605
in respect of factoring	2 112	-	4	-	-	-	2 116	-	2 116
in respect of finance leases	712	-	-	-	-	-	712	-	712
Other	2 670	-	-	-	-	-	2 670	-	2 670
Total financial commitments granted, including:	59 724	(125)	8 580	(262)	98	(28)	68 402	(415)	67 987
irrevocable commitments granted	17 917	(47)	4 401	(129)	56	(14)	22 374	(190)	22 184
POCI	-	-	-	-	14	(1)	14	(1)	13
Guarantees and sureties granted									
guarantees in domestic and foreign trading	7 777	(9)	1 842	(56)	469	(191)	10 088	(256)	9 832
to financial entities	2 288	-	-	-	-	-	2 288	-	2 288
to non-financial entities	5 463	(9)	1 842	(56)	469	(191)	7 774	(256)	7 518
to public entities	26	-	-	-	-	-	26	-	26
domestic municipal bonds (state budget entities)	408	-	-	-	-	-	408	-	408
letters of credit to non-financial entities	1 172	-	65	(4)	1	-	1 238	(4)	1 234
payment guarantees to financial entities	65	-	-	-	-	-	65	-	65
Total guarantees and sureties granted, including:	9 422	(9)	1 907	(60)	470	(191)	11 799	(260)	11 539
irrevocable commitments granted	2 794	(8)	1 837	(56)	469	(191)	5 100	(255)	4 845
performance guarantee	1 200	(2)	1 948	(38)	241	(163)	3 389	(203)	3 186
POCI	-	-	-	-	45	(2)	45	(2)	43
Total financial and guarantee commitments granted	69 146	(134)	10 487	(322)	568	(219)	80 201	(675)	79 526

(IN PLN MILLION)

56.2. CHANGE IN THE GROSS CARRYING AMOUNT

- ### SECURITIES

SECURITIES - CHANGE IN THE GROSS CARRYING AMOUNT DURING THE PERIOD (excluding adjustment relating to fair value hedge accounting) 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: measured at fair value through other comprehensive income					
Gross carrying amount at the beginning of the period	**61 474**	**44**	**397**	**61 915**	**380**
Transfer from stage 2 and 3 to stage 1	44	(44)	-	-	-
Transfer from stage 1 and 3 to stage 2	(512)	512	-	-	-
Granting or purchase of financial instruments	92 999	-	-	92 999	-
Utilization of limit or disbursement of tranches	219	-	1	220	-
Repayments	(78 669)	-	(3)	(78 672)	-
Non-substantial modifications	(7)	-	-	(7)	-
Derecognition, including sale	(11 251)	(94)	-	(11 345)	-
Other changes[1]	116	4	(21)	99	(21)
Gross carrying amount at the end of the period	**64 413**	**422**	**374**	**65 209**	**359**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement, discount, premium

SECURITIES - CHANGE IN THE GROSS CARRYING AMOUNT DURING THE PERIOD (excluding adjustment relating to fair value hedge accounting) 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: measured at fair value through other comprehensive income					
Gross carrying amount at the beginning of the period	**73 000**	**68**	**457**	**73 525**	**438**
Transfer from stage 2 and 3 to stage 1	49	(49)	-	-	-
Transfer from stage 1 and 3 to stage 2	(44)	44	-	-	-
Granting or purchase of financial instruments	49 597	-	-	49 597	-
Utilization of limit or disbursement of tranches	90	1	-	91	-
Repayments	(53 305)	(20)	(60)	(53 385)	(58)
Derecognition, including sale	(5 319)	-	-	(5 319)	-
Other changes[1]	(2 594)	-	-	(2 594)	-
Gross carrying amount at the end of the period	**61 474**	**44**	**397**	**61 915**	**380**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement, discount, premium

SECURITIES - CHANGE IN THE GROSS CARRYING AMOUNT DURING THE PERIOD (excluding adjustment relating to fair value hedge accounting) 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Gross carrying amount at the beginning of the period	**70 936**	**402**	-	**71 338**	-
Transfer from stage 2 and 3 to stage 1	56	(56)	-	-	-
Transfer from stage 1 and 3 to stage 2	(6)	6	-	-	-
Granting or purchase of financial instruments	2 330	-	-	2 330	-
Utilization of limit or disbursement of tranches	120	1	-	121	-
Repayments	(6 925)	(30)	-	(6 955)	-
Derecognition, including sale	(8)	-	-	(8)	-
Other changes[1]	1 787	13	-	1 800	-
Gross carrying amount at the end of the period	**68 290**	**336**	-	**68 626**	-

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement, discount, premium

(IN PLN MILLION)

SECURITIES - CHANGE IN THE GROSS CARRYING AMOUNT DURING THE PERIOD (excluding adjustment relating to fair value hedge accounting) 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Gross carrying amount at the beginning of the period	**46 330**	**228**	-	**46 558**	-
Transfer from stage 2 and 3 to stage 1	25	(25)	-	-	-
Transfer from stage 1 and 3 to stage 2	(216)	216	-	-	-
Granting or purchase of financial instruments	25 838	-	-	25 838	-
Utilization of limit or disbursement of tranches	108	1	-	109	-
Repayments	(2 051)	(23)	-	(2 074)	-
Derecognition, including sale	(41)	-	-	(41)	-
Other changes[1]	943	5	-	948	-
Gross carrying amount at the end of the period	**70 936**	**402**	-	**71 338**	-

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement, discount, premium

- **Loans and advances to customers**

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Real estate loans					
Gross carrying amount at the beginning of the period	**104 386**	**14 830**	**2 005**	**121 221**	**81**
Transfer from stage 2 and 3 to stage 1	9 170	(9 139)	(31)	-	
Transfer from stage 1 and 3 to stage 2	(7 075)	7 245	(170)	-	
Transfer from stage 1 and 2 to stage 3	(120)	(269)	389	-	
Granting or purchase of financial instruments	7 517	355	40	7 912	36
Utilization of limit or disbursement of tranches	8 670	346	149	9 165	9
Repayments	(18 190)	(1 222)	(275)	(19 659)	(14)
Non-substantial modifications	(241)	(355)	(1)	(597)	-
Derecognition, including sale	(6 179)	(297)	(50)	(6 526)	(43)
Write-off	-	-	(542)	(542)	(1)
Other changes[1]	260	(478)	6	(214)	26
Gross carrying amount at the end of the period	**98 224**	**11 016**	**1 860**	**111 100**	**94**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Real estate loans					
Gross carrying amount at the beginning of the period	**102 746**	**13 702**	**1 953**	**118 401**	**85**
Transfer from stage 2 and 3 to stage 1	3 055	(3 048)	(7)	-	-
Transfer from stage 1 and 3 to stage 2	(5 632)	5 704	(72)	-	-
Transfer from stage 1 and 2 to stage 3	(89)	(413)	502	-	-
Granting or purchase of financial instruments	2 712	295	21	3 028	17
Utilization of limit or disbursement of tranches	14 261	383	118	14 762	5
Repayments	(12 256)	(1 199)	(240)	(13 695)	(11)
Non-substantial modifications	74	4	-	78	-
Derecognition, including sale	(1 057)	(183)	(24)	(1 264)	(19)
Write-off	-	-	(267)	(267)	(6)
Other changes[1]	572	(415)	21	178	10
Gross carrying amount at the end of the period	**104 386**	**14 830**	**2 005**	**121 221**	**81**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Business loans					
Gross carrying amount at the beginning of the period	**49 182**	**14 471**	**4 537**	**68 190**	**50**
Transfer from stage 2 and 3 to stage 1	3 215	(3 194)	(21)	-	-
Transfer from stage 1 and 3 to stage 2	(5 614)	5 693	(79)	-	-
Transfer from stage 1 and 2 to stage 3	(207)	(288)	495	-	-
Granting or purchase of financial instruments	18 669	1 091	274	20 034	59
Utilization of limit or disbursement of tranches	20 615	2 523	350	23 488	3
Repayments	(29 209)	(2 380)	(986)	(32 575)	(28)
Non-substantial modifications	(57)	(87)	(20)	(164)	1
Derecognition, including sale	(2 996)	(136)	(115)	(3 247)	(92)
Write-off	-	-	(472)	(472)	3
Category change	6	3	-	9	-
Other changes[1]	3 532	(3 413)	155	274	62
Gross carrying amount at the end of the period	**57 136**	**14 283**	**4 118**	**75 537**	**58**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Business loans					
Gross carrying amount at the beginning of the period	**44 346**	**13 689**	**5 450**	**63 485**	**57**
Transfer from stage 2 and 3 to stage 1	1 302	(1 292)	(10)	-	-
Transfer from stage 1 and 3 to stage 2	(3 035)	3 122	(87)	-	-
Transfer from stage 1 and 2 to stage 3	(155)	(494)	649	-	-
Granting or purchase of financial instruments	12 200	2 086	181	14 467	25
Utilization of limit or disbursement of tranches	14 001	2 038	146	16 185	13
Repayments	(22 390)	(1 605)	(732)	(24 727)	(41)
Non-substantial modifications	(152)	(50)	(25)	(227)	(1)
Derecognition, including sale	(481)	(14)	(150)	(645)	(137)
Write-off	-	-	(918)	(918)	-
Category change	-	-	(1)	(1)	-
Other changes[1]	3 546	(3 009)	34	571	134
Gross carrying amount at the end of the period	**49 182**	**14 471**	**4 537**	**68 190**	**50**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Consumer loans					
Gross carrying amount at the beginning of the period	**23 064**	**3 152**	**1 643**	**27 859**	**47**
Transfer from stage 2 and 3 to stage 1	1 203	(1 174)	(29)	-	-
Transfer from stage 1 and 3 to stage 2	(1 825)	1 897	(72)	-	-
Transfer from stage 1 and 2 to stage 3	(372)	(427)	799	-	-
Granting or purchase of financial instruments	10 349	483	131	10 963	23
Utilization of limit or disbursement of tranches	1 125	199	217	1 541	3
Repayments	(10 501)	(515)	(230)	(11 246)	(22)
Non-substantial modifications	(10)	(7)	(2)	(19)	-
Derecognition, including sale	(84)	(56)	(64)	(204)	(52)
Write-off	-	-	(589)	(589)	(4)
Category change	219	21	(34)	206	3
Other changes[1]	534	(413)	107	228	58
Gross carrying amount at the end of the period	**23 702**	**3 160**	**1 877**	**28 739**	**56**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Consumer loans					
Gross carrying amount at the beginning of the period	**20 240**	**2 855**	**1 447**	**24 542**	**53**
Transfer from stage 2 and 3 to stage 1	524	(505)	(19)	-	-
Transfer from stage 1 and 3 to stage 2	(1 309)	1 353	(44)	-	-
Transfer from stage 1 and 2 to stage 3	(313)	(405)	718	-	-
Granting or purchase of financial instruments	10 896	382	91	11 369	12
Utilization of limit or disbursement of tranches	1 458	182	123	1 763	5
Repayments	(8 780)	(456)	(205)	(9 441)	(14)
Non-substantial modifications	(5)	(3)	(4)	(12)	-
Derecognition, including sale	(123)	(12)	(50)	(185)	(46)
Write-off	-	-	(504)	(504)	(10)
Category change	(3)	(11)	(24)	(38)	-
Other changes[1]	479	(228)	114	365	47
Gross carrying amount at the end of the period	**23 064**	**3 152**	**1 643**	**27 859**	**47**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Finance lease receivables					
Gross carrying amount at the beginning of the period	**13 023**	**4 072**	**1 116**	**18 211**	**57**
Transfer from stage 2 and 3 to stage 1	607	(571)	(36)	-	-
Transfer from stage 1 and 3 to stage 2	(3 166)	3 366	(200)	-	-
Transfer from stage 1 and 2 to stage 3	(206)	(358)	564	-	-
Granting or purchase of financial instruments	6 033	952	66	7 051	-
Utilization of limit or disbursement of tranches	57	4	22	83	-
Repayments	(3 564)	(1 199)	(368)	(5 131)	(54)
Non-substantial modifications	(209)	(813)	(122)	(1 144)	-
Derecognition, including sale	(37)	(72)	(14)	(123)	-
Write-off	-	-	(24)	(24)	-
Other changes[1]	(14)	5	2	(7)	1
Gross carrying amount at the end of the period	**12 524**	**5 386**	**1 006**	**18 916**	**4**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

(IN PLN MILLION)

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Finance lease receivables					
Gross carrying amount at the beginning of the period	**13 436**	**2 909**	**992**	**17 337**	**75**
Transfer from stage 2 and 3 to stage 1	437	(424)	(13)	-	-
Transfer from stage 1 and 3 to stage 2	(2 382)	2 449	(67)	-	-
Transfer from stage 1 and 2 to stage 3	(221)	(455)	676	-	-
Granting or purchase of financial instruments	6 100	1 225	77	7 402	-
Utilization of limit or disbursement of tranches	83	1	38	122	5
Repayments	(4 238)	(918)	(313)	(5 469)	(24)
Non-substantial modifications	(112)	(657)	(192)	(961)	-
Derecognition, including sale	(105)	(58)	(7)	(170)	-
Write-off	-	-	(76)	(76)	-
Other changes[1]	25	-	1	26	1
Gross carrying amount at the end of the period	**13 023**	**4 072**	**1 116**	**18 211**	**57**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2022	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Factoring receivables					
Gross carrying amount at the beginning of the period	**2 900**	**18**	**28**	**2 946**	-
Transfer from stage 2 and 3 to stage 1	8	(6)	(2)	-	-
Transfer from stage 1 and 3 to stage 2	(9)	10	(1)	-	-
Transfer from stage 1 and 2 to stage 3	(14)	(2)	16	-	-
Granting or purchase of financial instruments	870	-	-	870	-
Utilization of limit or disbursement of tranches	885	7	1	893	-
Repayments	(1 093)	(8)	(5)	(1 106)	-
Other changes[1]	15	-	1	16	-
Gross carrying amount at the end of the period	**3 562**	**19**	**38**	**3 619**	-

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

LOANS AND ADVANCES TO CUSTOMERS - CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD 2021	Stage 1	Stage 2	Stage 3	Total	of which POCI
Measurement method: at amortized cost					
Factoring receivables					
Gross carrying amount at the beginning of the period	**1 532**	**94**	**23**	**1 649**	-
Transfer from stage 2 and 3 to stage 1	209	(208)	(1)	-	-
Transfer from stage 1 and 3 to stage 2	(23)	23	-	-	-
Transfer from stage 1 and 2 to stage 3	(4)	(3)	7	-	-
Granting or purchase of financial instruments	918	-	-	918	-
Utilization of limit or disbursement of tranches	331	112	-	443	-
Repayments	(63)	-	(1)	(64)	-
Gross carrying amount at the end of the period	**2 900**	**18**	**28**	**2 946**	-

(IN PLN MILLION)

- **OTHER FINANCIAL ASSETS:**

OTHER FINANCIAL ASSETS – CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Gross carrying amount at the beginning of the period	**1 895**	**-**	**136**	**2 031**	**-**
Transfer from stage 1 and 2 to stage 3	(12)	-	12	-	-
Granting or purchase of financial instruments	1 667	-	-	1 667	-
Utilization of limit or disbursement of tranches	20	-	-	20	-
Repayments	(1 706)	-	-	(1 706)	-
Write-off	-	-	(3)	(3)	-
Other changes[1]	4	-	1	5	-
Gross carrying amount at the end of the period	**1 868**	**-**	**146**	**2 014**	**-**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

OTHER FINANCIAL ASSETS – CHANGE IN GROSS CARRYING AMOUNT DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Gross carrying amount at the beginning of the period	**1 937**	**-**	**138**	**2 075**	**-**
Transfer from stage 1 and 2 to stage 3	(1)	-	1	-	-
Granting or purchase of financial instruments	1 731	-	-	1 731	-
Utilization of limit or disbursement of tranches	11	-	-	11	-
Repayments	(1 772)	-	(3)	(1 775)	-
Derecognition, including sale	(9)	-	-	(9)	-
Other changes[1]	(2)	-	-	(2)	-
Gross carrying amount at the end of the period	**1 895**	**-**	**136**	**2 031**	**-**

[1] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

56.3. CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES

- **SECURITIES**

SECURITIES – CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: measured at fair value through other comprehensive income					
As at the beginning of the period	**-**	**-**	**(52)**	**(52)**	**(52)**
Transfer from stage 1 and 3 to stage 2	4	(4)	-	-	-
Increase due to recognition and purchase	(12)	-	-	(12)	-
Changes in credit risk (net)[1]	(3)	2	41	40	41
Decrease due to derecognition	6	-	-	6	-
Other adjustments[2]	5	2	13	20	13
As at the end of the period	**-**	**-**	**2**	**2**	**2**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

(IN PLN MILLION)

SECURITIES – CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: measured at fair value through other comprehensive income					
As at the beginning of the period	**-**	**-**	**(14)**	**(14)**	**(14)**
Transfer from stage 1 and 3 to stage 2	1	(1)	-	-	-
Increase due to recognition and purchase	(41)	-	-	(41)	-
Changes in credit risk (net)[1]	21	-	(35)	(14)	(35)
Decrease due to derecognition	9	-	-	9	-
Other adjustments[2]	10	1	(3)	8	(3)
As at the end of the period	**-**	**-**	**(52)**	**(52)**	**(52)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

SECURITIES – CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: at amortized cost					
As at the beginning of the period	**(30)**	**(26)**	**-**	**(56)**	**-**
Transfer from stage 1 and 3 to stage 2	1	(1)	-	-	-
Increase due to recognition and purchase	(8)	-	-	(8)	-
Changes in credit risk (net)[1]	(7)	1	-	(6)	-
Other adjustments[2]	(1)	1	-	-	-
As at the end of the period	**(45)**	**(25)**	**-**	**(70)**	**-**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

SECURITIES – CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: at amortized cost					
As at the beginning of the period	**(20)**	**(16)**	**-**	**(36)**	**-**
Transfer from stage 1 and 3 to stage 2	10	(10)	-	-	-
Increase due to recognition and purchase	(13)	-	-	(13)	-
Changes in credit risk (net)[1]	4	(9)	-	(5)	-
Other adjustments[2]	(11)	9	-	(2)	-
As at the end of the period	**(30)**	**(26)**	**-**	**(56)**	**-**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

(IN PLN MILLION)

- **LOANS AND ADVANCES TO CUSTOMERS**

LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: at amortized cost					
Real estate loans					
As at the beginning of the period	**(68)**	**(671)**	**(1 343)**	**(2 082)**	**(19)**
Transfer from stage 2 and 3 to stage 1	(25)	25	-	-	-
Transfer from stage 1 and 3 to stage 2	305	(320)	15	-	-
Transfer from stage 1 and 2 to stage 3	35	126	(161)	-	-
Increase due to recognition and purchase	(19)	(9)	(24)	(52)	(24)
Changes in credit risk (net)[1]	(79)	(137)	81	(135)	(9)
Decrease due to derecognition	26	11	25	62	21
Changes due to modification without derecognition (net)	(2)	-	(1)	(3)	-
Write-off	-	-	203	203	1
Other adjustments[2]	(291)	138	(137)	(290)	16
As at the end of the period	**(118)**	**(837)**	**(1 342)**	**(2 297)**	**(14)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: at amortized cost					
Real estate loans					
As at the beginning of the period	**(58)**	**(621)**	**(1 404)**	**(2 083)**	**(27)**
Transfer from stage 2 and 3 to stage 1	(4)	4	-	-	-
Transfer from stage 1 and 3 to stage 2	163	(176)	13	-	-
Transfer from stage 1 and 2 to stage 3	26	164	(190)	-	-
Increase due to recognition and purchase	(7)	(6)	(9)	(22)	(1)
Changes in credit risk (net)[1]	(120)	(52)	13	(159)	3
Decrease due to derecognition	2	8	12	22	1
Changes due to modification without derecognition (net)	(3)	(3)	-	(6)	-
Write-off	-	-	267	267	7
Other adjustments[2]	(67)	11	(45)	(101)	(2)
As at the end of the period	**(68)**	**(671)**	**(1 343)**	**(2 082)**	**(19)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

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LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: at amortized cost					
Business loans					
As at the beginning of the period	**(337)**	**(933)**	**(2 870)**	**(4 140)**	**(14)**
Transfer from stage 2 and 3 to stage 1	(36)	34	2	-	-
Transfer from stage 1 and 3 to stage 2	522	(532)	10	-	-
Transfer from stage 1 and 2 to stage 3	49	83	(132)	-	-
Increase due to recognition and purchase	(243)	(63)	(118)	(424)	(63)
Changes in credit risk (net)[1]	206	(608)	375	(27)	(8)
Decrease due to derecognition	17	14	55	86	35
Changes due to modification without derecognition (net)	(3)	(1)	1	(3)	(1)
Update of the applied estimation method (net)	-	3	(24)	(21)	-
Write-off	-	-	473	473	(3)
Other adjustments[2]	(573)	417	(222)	(378)	51
As at the end of the period	**(398)**	**(1 586)**	**(2 450)**	**(4 434)**	**(3)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: at amortized cost					
Business loans					
As at the beginning of the period	**(289)**	**(931)**	**(3 304)**	**(4 524)**	**(6)**
Transfer from stage 2 and 3 to stage 1	(14)	13	1	-	-
Transfer from stage 1 and 3 to stage 2	203	(208)	5	-	-
Transfer from stage 1 and 2 to stage 3	47	126	(173)	-	-
Increase due to recognition and purchase	(159)	(51)	(143)	(353)	(9)
Changes in credit risk (net)[1]	(43)	110	(257)	(190)	(8)
Decrease due to derecognition	6	6	117	129	2
Changes due to modification without derecognition (net)	(5)	8	8	11	-
Update of the applied estimation method (net)	-	1	(2)	(1)	-
Write-off	-	-	918	918	-
Other adjustments[2]	(83)	(7)	(40)	(130)	7
As at the end of the period	**(337)**	**(933)**	**(2 870)**	**(4 140)**	**(14)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

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LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: at amortized cost					
Consumer loans					
As at the beginning of the period	**(233)**	**(525)**	**(1 024)**	**(1 782)**	**28**
Transfer from stage 2 and 3 to stage 1	(26)	25	1	-	-
Transfer from stage 1 and 3 to stage 2	304	(316)	12	-	-
Transfer from stage 1 and 2 to stage 3	208	237	(445)	-	-
Increase due to recognition and purchase	(111)	(12)	(60)	(183)	(36)
Changes in credit risk (net)[1]	(23)	(152)	(384)	(559)	(7)
Decrease due to derecognition	2	7	32	41	27
Changes due to modification without derecognition (net)	(2)	(2)	3	(1)	-
Update of the applied estimation method (net)	6	1	9	16	5
Write-off	-	-	589	589	4
Other adjustments[2]	(481)	83	86	(312)	13
As at the end of the period	**(356)**	**(654)**	**(1 181)**	**(2 191)**	**34**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: at amortized cost					
Consumer loans					
As at the beginning of the period	**(209)**	**(426)**	**(975)**	**(1 610)**	**(4)**
Transfer from stage 2 and 3 to stage 1	(9)	9	-	-	-
Transfer from stage 1 and 3 to stage 2	229	(238)	9	-	-
Transfer from stage 1 and 2 to stage 3	162	227	(389)	-	-
Increase due to recognition and purchase	(102)	(14)	(40)	(156)	(1)
Changes in credit risk (net)[1]	(287)	(114)	27	(374)	24
Decrease due to derecognition	5	7	22	34	-
Changes due to modification without derecognition (net)	(9)	(4)	(6)	(19)	-
Update of the applied estimation method (net)	2	12	5	19	-
Write-off	-	-	504	504	10
Other adjustments[2]	(15)	16	(181)	(180)	(1)
As at the end of the period	**(233)**	**(525)**	**(1 024)**	**(1 782)**	**28**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

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LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: at amortized cost					
Finance lease receivables					
As at the beginning of the period	**(65)**	**(134)**	**(461)**	**(660)**	**(1)**
Transfer from stage 2 and 3 to stage 1	(24)	17	7	-	-
Transfer from stage 1 and 3 to stage 2	17	(54)	37	-	-
Transfer from stage 1 and 2 to stage 3	2	27	(29)	-	-
Increase due to recognition and purchase	(52)	(76)	(71)	(199)	-
Changes in credit risk (net)[1]	23	(39)	(99)	(115)	-
Decrease due to derecognition	19	47	109	175	-
Update of the applied estimation method (net)	-	1	(3)	(2)	-
Write-off	-	-	14	14	-
Other adjustments[2]	(1)	1	(10)	(10)	-
As at the end of the period	**(81)**	**(210)**	**(506)**	**(797)**	**(1)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: at amortized cost					
Finance lease receivables					
As at the beginning of the period	**(44)**	**(83)**	**(459)**	**(586)**	**(2)**
Transfer from stage 2 and 3 to stage 1	(9)	7	2	-	-
Transfer from stage 1 and 3 to stage 2	9	(23)	14	-	-
Transfer from stage 1 and 2 to stage 3	1	31	(32)	-	-
Increase due to recognition and purchase	(41)	(56)	(81)	(178)	-
Changes in credit risk (net)[1]	10	(32)	(73)	(95)	-
Decrease due to derecognition	10	21	105	136	1
Update of the applied estimation method (net)	-	1	-	1	-
Write-off	-	-	76	76	-
Other adjustments[2]	(1)	-	(13)	(14)	-
As at the end of the period	**(65)**	**(134)**	**(461)**	**(660)**	**(1)**

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

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LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2022					
Measurement method: at amortized cost					
Factoring receivables					
As at the beginning of the period	(5)	-	(18)	(23)	-
Transfer from stage 2 and 3 to stage 1	(7)	5	2	-	-
Transfer from stage 1 and 3 to stage 2	7	(8)	1	-	-
Transfer from stage 1 and 2 to stage 3	4	4	(8)	-	-
Increase due to recognition and purchase	(2)	-	-	(2)	-
Changes in credit risk (net)[1]	(2)	(1)	-	(3)	-
Other adjustments[2]	(1)	-	1	-	-
As at the end of the period	(6)	-	(22)	(28)	-

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

LOANS AND ADVANCES TO CUSTOMERS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES DURING THE PERIOD	Stage 1	Stage 2	Stage 3	Total	of which POCI
2021					
Measurement method: at amortized cost					
Factoring receivables					
As at the beginning of the period	(2)	-	(19)	(21)	-
Transfer from stage 1 and 2 to stage 3	(1)	-	1	-	-
Increase due to recognition and purchase	(1)	-	-	(1)	-
Other adjustments[2]	(1)	-	-	(1)	-
As at the end of the period	(5)	-	(18)	(23)	-

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest, measurement.

- **OTHER FINANCIAL ASSETS:**

OTHER FINANCIAL ASSETS - CHANGES IN ALLOWANCES FOR EXPECTED CREDIT LOSSES IN THE PERIOD – Stage 3	2022	2021
As at the beginning of the period	(136)	(138)
Changes in credit risk (net)[1]	(13)	(2)
Decrease due to derecognition	-	4
Write-off	3	-
Other adjustments[2]	(1)	-
As at the end of the period	(147)	(136)

[1] Changes in credit risk (net) include the effect on the amount of the allowance due to increases or decreases in the amount of financial assets due to accrued and paid interest income, the effect of the passage of time on expected losses, changes in estimates due to updates or reviews of risk parameters and changes in economic forecasting data.
[2] Other changes comprise the effect of foreign exchange rate changes, interest.

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56.4. OTHER DISCLOSURES

MAXIMUM EXPOSURE TO CREDIT RISK - FINANCIAL INSTRUMENTS NOT SUBJECT TO IMPAIRMENT REQUIREMENTS	31.12.2022	31.12.2021
Hedging derivatives	1 042	933
Other derivative instruments	13 162	10 903
Securities:	1 895	2 297
held for trading	193	248
not held for trading, measured at fair value through profit or loss	1 702	2 049
Loans and advances to customers not held for trading, measured at fair value through profit or loss	3 565	4 559
housing loans	4	4
business loans	85	97
consumer loans	3 476	4 458
Total	19 664	18 692

- **MODIFICATIONS**

FINANCIAL ASSETS SUBJECT TO MODIFICATION	2022		2021	
Financial assets subject to modification during the period:	Stage 2	Stage 3	Stage 2	Stage 3
valuation amount at amortized cost before modification	2 594	298	1 064	608
gain (loss) on modification	(59)	(4)	(8)	(4)
Financial assets subject to modification since initial recognition:	31.12.2022		31.12.2021	
gross carrying amount of financial assets subject to modification for which expected losses were calculated over the lifetime and which are classified as Stage 1 after modification	1 637		38	

- **RECEIVABLES WRITTEN OFF DURING THE PERIOD, SUBJECT TO RECOVERY PROCEDURES**

The table below presents the outstanding amounts of financial assets to be repaid, which were written down during the reporting period and which are still subject to debt recovery activities.

RECEIVABLES WRITTEN OFF	2022		2021	
	Partly written off	Entirely written off	Partly written off	Entirely written off
Loans and advances to customers	96	179	39	965
housing loans	15	21	5	183
business loans	11	120	14	584
consumer loans	70	24	20	122
finance lease receivables	-	14	-	76
Other financial assets	-	1	-	-
Total	96	180	39	965

The Group adopted the following criteria for writing off receivables:

- the receivable has fully matured and, in particular, is the consequence of a loan, advance, contractual overdraft, guarantee or warranty of loan, advance or bond repayment;
- in accordance with IAS and IFRS the allowance for expected credit losses:
  - covers 100% of the gross carrying amount of the asset; or

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- exceeds 90% of the gross carrying amount of the asset and: actions have been or are still being taken in respect of the receivable which did not lead to its recovery, and the assessment of the probability of recovering the receivable (which, in particular, accounts for the decisions of the bailiff or the receiver) transferability of collateral, level of satisfaction, record in the land and mortgage register indicate that the entire receivable will not be recovered, or that the repayments of the receivable did not cover interest accrued on a current basis over the past 12 calendar months.

- **PAST DUE FINANCIAL ASSETS SUBJECT TO IMPAIRMENT OR IMPAIRED**

PAST DUE FINANCIAL ASSETS SUBJECT TO IMPAIRMENT OR IMPAIRED (net)	up to 30 days	30 to 90 days	over 90 days	TOTAL
31.12.2022				
Stage 1	**2 395**	**16**	**1**	**2 412**
Loans and advances to customers:	2 395	16	1	2 412
housing loans	226	4	-	230
business loans	784	1	-	785
consumer loans	324	1	-	325
factoring receivables	240	10	1	251
finance lease receivables	821	-	-	821
Stage 2	**2 449**	**423**	**55**	**2 927**
Loans and advances to customers:	2 449	423	55	2 927
housing loans	498	125	36	659
business loans	542	68	4	614
consumer loans	201	79	12	292
factoring receivables	4	5	-	9
finance lease receivables	1 204	146	3	1 353
Stage 3	**358**	**299**	**1 151**	**1 808**
Loans and advances to customers:	358	299	1 151	1 808
housing loans	34	36	238	308
business loans	106	43	483	632
consumer loans	55	60	316	431
factoring receivables	3	2	21	26
finance lease receivables	160	158	93	411
Total	**5 202**	**738**	**1 207**	**7 147**

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PAST DUE FINANCIAL ASSETS SUBJECT TO IMPAIRMENT OR IMPAIRED (net)	up to 30 days	30 to 90 days	over 90 days	TOTAL
31.12.2021				
Stage 1	**2 581**	**-**	**-**	**2 581**
Loans and advances to customers:	2 581	-	-	2 581
housing loans	84	-	-	84
business loans	1 035	-	-	1 035
consumer loans	165	-	-	165
factoring receivables	557	-	-	557
finance lease receivables	740	-	-	740
Stage 2	**1 549**	**333**	**52**	**1 934**
Loans and advances to customers:	1 549	333	52	1 934
housing loans	402	99	37	538
business loans	141	47	4	192
consumer loans	160	54	8	222
factoring receivables	6	11	-	17
finance lease receivables	840	122	3	965
Stage 3	**321**	**272**	**923**	**1 516**
Loans and advances to customers:	321	272	923	1 516
housing loans	57	47	160	264
business loans	47	26	433	506
consumer loans	42	51	217	310
factoring receivables	2	4	17	23
finance lease receivables	173	144	96	413
Total	**4 451**	**605**	**975**	**6 031**

To specify whether a loan is overdue, the Group takes into account the minimum levels of matured amounts exceeding PLN 400 and 1% with reference to the debtor's entire credit exposure in the balance sheet of the Bank and other entities belonging to the Bank's Group.

Loans and advances to customers were secured by the following collateral established for the Group: mortgages, registered pledges, transfer of ownership, restrictions on a deposit account, insurance of the credit exposure, as well as guarantees and sureties.

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- QUALITY OF THE PORTFOLIO COVERED BY THE RATING MODEL FOR LOANS AND ADVANCES GRANTED TO CUSTOMERS

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2022	Gross carrying amount				
	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
REAL ESTATE LOANS	**98 224**	**11 016**	**1 860**	**111 100**	**94**
0.00 - 0.02%	1 215	1	-	1 216	-
0.02 - 0.07%	32 102	136	-	32 238	-
0.07 - 0.11%	18 312	125	-	18 437	-
0.11 - 0.18%	16 904	229	-	17 133	1
0.18 - 0.45%	17 498	1 954	-	19 452	5
0.45 - 1.78%	6 772	4 398	-	11 170	8
1.78 - 99.99%	820	4 142	-	4 962	13
100%	-	-	1 860	1 860	66
no internal rating	4 601	31	-	4 632	1
CORPORATE LOANS, FACTORING RECEIVABLES, FINANCE LEASE RECEIVABLES	**73 222**	**19 688**	**5 162**	**98 072**	**62**
0.00 - 0.45%	13 647	313	-	13 960	-
0.45 - 0.90%	9 021	344	-	9 365	-
0.90 - 1.78%	10 835	754	-	11 589	-
1.78 - 3.55%	22 308	4 877	-	27 185	1
3.55 - 7.07%	12 012	6 832	-	18 844	-
7.07 - 14.07%	3 617	4 466	-	8 083	-
14.07 - 99.99%	1 723	2 067	-	3 790	-
100%	-	-	5 162	5 162	61
no internal rating	59	35	-	94	-
CONSUMER LOANS	**23 702**	**3 160**	**1 878**	**28 739**	**57**
0.00 - 0.45%	5 070	51	-	5 121	-
0.45 - 0.90%	6 004	103	-	6 107	-
0.90 - 1.78%	5 359	311	-	5 670	-
1.78 - 3.55%	3 540	488	-	4 028	-
3.55 - 7.07%	1 805	528	-	2 333	1
7.07 - 14.07%	831	528	-	1 359	1
14.07 - 99.99%	225	1 099	-	1 324	2
100%			1 878	1 877	52
no internal rating	868	52	-	920	1
Total	195 148	33 864	8 900	237 912	213

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CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2021	Gross carrying amount				
	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
REAL ESTATE LOANS	**104 386**	**14 830**	**2 005**	**121 221**	**81**
0.00 - 0.02%	7 420	16	-	7 436	-
0.02 - 0.07%	36 546	367	-	36 913	1
0.07 - 0.11%	15 527	514	-	16 041	1
0.11 - 0.18%	16 429	1 280	-	17 709	1
0.18 - 0.45%	18 461	5 132	-	23 593	5
0.45 - 1.78%	5 543	4 679	-	10 222	8
1.78 - 99.99%	714	2 823	-	3 537	8
100%	-	-	1 912	1 912	57
no internal rating	3 746	19	93	3 858	-
CORPORATE LOANS, FACTORING RECEIVABLES, FINANCE LEASE RECEIVABLES	**65 105**	**18 561**	**5 681**	**89 347**	**107**
0.00 - 0.45%	10 733	123	-	10 856	-
0.45 - 0.90%	7 489	1 749	-	9 238	-
0.90 - 1.78%	10 282	748	-	11 030	-
1.78 - 3.55%	18 883	3 699	-	22 582	1
3.55 - 7.07%	10 224	6 864	-	17 088	-
7.07 - 14.07%	3 730	3 071	-	6 801	-
14.07 - 99.99%	166	1 931	-	2 097	-
100%	-	-	5 396	5 396	106
no internal rating	3 598	376	285	4 259	-
CONSUMER LOANS	**23 064**	**3 152**	**1 646**	**27 862**	**50**
0.00 - 0.45%	7 605	171	-	7 776	-
0.45 - 0.90%	5 840	221	-	6 061	-
0.90 - 1.78%	4 411	432	-	4 843	-
1.78 - 3.55%	3 254	608	-	3 862	-
3.55 - 7.07%	1 062	579	-	1 641	-
7.07 - 14.07%	528	396	-	924	1
14.07 - 99.99%	80	688	-	768	1
100%	-	-	1 595	1 595	45
no internal rating	284	57	51	392	3
Total	192 555	36 543	9 332	238 430	238

(IN PLN MILLION)

- **QUALITY OF THE PORTFOLIO COVERED BY THE RATING MODEL FOR OFF-BALANCE SHEET LIABILITIES**

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2022	Gross carrying amount				
	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
OFF-BALANCE SHEET LIABILITIES					
0.00 - 0.45%	23 912	1 294	-	25 206	-
0.45 - 0.90%	12 720	98	-	12 818	-
0.90 - 1.78%	10 742	834	-	11 576	-
1.78 - 3.55%	8 639	1 406	-	10 045	-
3.55 - 7.07%	5 872	1 456	-	7 328	-
7.07 - 14.07%	2 542	2 323	-	4 865	-
14.07 - 99.99%	27	135	-	162	-
100%	-	-	820	820	289
no internal rating	11 628	1 235	-	14 568	-
Total	76 082	8 781	820	85 683	289

[1] This item refers mainly the State Treasury exposures and credit lines for derivative transactions.

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2021	Gross carrying amount				
	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
OFF-BALANCE SHEET LIABILITIES					
0.00 - 0.45%	17 128	124	-	17 252	1
0.45 - 0.90%	8 287	1 505	-	9 792	-
0.90 - 1.78%	9 117	567	-	9 684	-
1.78 - 3.55%	7 746	985	-	8 731	-
3.55 - 7.07%	7 139	2 185	-	9 324	-
7.07 - 14.07%	2 505	3 656	-	6 161	-
14.07 - 99.99%	37	109	-	146	-
100%	-	-	1 609	1 609	58
no internal rating	4 869	1 354	-	6 223	-
Total	56 828	10 485	1 609	68 922	59

[1] This item refers mainly the State Treasury exposures and credit lines for derivative transactions.

- **QUALITY OF THE PORTFOLIO COVERED BY THE RATING MODEL FOR AMOUNTS DUE FROM BANKS**

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2022	Gross carrying amount				
AMOUNTS DUE FROM BANKS	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
EXTERNAL RATINGS	16 103	-	-	16 103	-
AAA	700	-	-	700	-
AA	4 205	-	-	4 205	-
A	9 797	-	-	9 797	-
BBB	148	-	-	148	-
BB	26	-	-	26	-
B	2	-	-	2	-
CCC	1 225	-	-	1 225	-
Total	16 103	-	-	16 103	-

(IN PLN MILLION)

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2021	Gross carrying amount				
AMOUNTS DUE FROM BANKS	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
EXTERNAL RATINGS	**9 010**	**-**	**-**	**9 010**	**-**
AA	374	-	-	374	-
A	7 579	-	-	7 579	-
BBB	424	-	-	424	-
BB	22	-	-	22	-
B	595	-	-	595	
CCC	16	-	-	16	
Total	9 010	-	-	9 010	-

- **Quality of the portfolio covered by the rating model for debt securities**

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2022	Gross carrying amount				
DEBT SECURITIES	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
EXTERNAL RATINGS	**106 502**	**-**	**-**	**106 502**	**-**
AAA	5 715	-	-	5 715	-
AA	41	-	-	41	-
A	96 728	-	-	96 728	-
BBB	1 550	-	-	1 550	-
BB	2 468	-	-	2 468	-
INTERNAL RATINGS	**26 201**	**758**	**374**	**27 333**	**359**
0.00-0.45%	24 663	420	-	25 083	-
0.45-0.90%	720	2	-	722	-
0.90-1.78%	62	76	-	138	-
1.78-3.55%	202	-	-	202	-
3.55-7.07%	188	113	-	301	-
7.07-14.07%	-	147	-	147	-
100.00%	-	-	374	374	359
no internal rating	**366**	**-**	**-**	**366**	**-**
Total	132 703	758	374	133 835	359

(IN PLN MILLION)

CREDIT RISK EXPOSURES BY PD PARAMETER 31.12.2021	Gross carrying amount				
DEBT SECURITIES	Stage 1	Stage 2	Stage 3	TOTAL	of which POCI
EXTERNAL RATINGS	**107 189**	**-**	**-**	**107 189**	**-**
AAA	3 654	-	-	3 654	-
AA	42	-	-	42	-
A	98 986	-	-	98 986	-
BBB	2 071	-	-	2 071	-
BB	2 436	-	-	2 436	-
INTERNAL RATINGS	**25 221**	**446**	**397**	**26 064**	**380**
0.00-0.45%	22 224	-	-	22 224	-
0.45-0.90%	1 469	101	-	1 570	-
0.90-1.78%	146	-	-	146	-
1.78-3.55%	211	83	-	294	-
3.55-7.07%	13	100	-	113	-
7.07-14.07%	15	162	-	177	-
100%	-	-	397	397	380
no internal rating	**1 143**	**-**	**-**	**1 143**	**-**
Total	132 410	446	397	133 253	380

57. OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES

The Group enters into offsetting arrangements, i.e. ISDA agreements (International Swaps and Derivatives Association Master Agreements) and GMRA agreements (Global Master Repurchase Agreements), which make it possible to offset financial assets and liabilities (close out netting) in the event of an infringement with respect to one of the parties of the agreement. These agreements are of particular importance to mitigate the risk posed by derivative instruments, because they enable offsetting both matured liabilities (mitigating the settlement risk) and non-matured liabilities of the parties (mitigating the pre-settlement risk). However, these agreements do not meet the requirements set out in IAS 32, because the right to offset is conditional on the occurrence of a specific future event (instances of infringement).

Exposures arising from derivatives are further secured by margin deposits provided by counterparties as part of executing CSA (Credit Support Annex).

OFFSETTING ASSETS	Total financial assets	Derivatives	Reverse repo transactions
31.12.2022			
Recognized financial assets, gross	14 215	14 208	7
Financial liabilities subject to offsetting, gross	(4)	(4)	-
Financial assets recognized in the statement of financial position, net	14 211	14 204	7
Amounts subject to enforceable framework agreement or similar agreement concerning offsetting, including related to:	1 628	1 628	-
(i) recognized financial instruments which do not meet the offsetting criteria	912	912	-
(ii) financial collateral (including cash)	716	716	-
Net amount	12 583	12 576	7

(IN PLN MILLION)

OFFSETTING LIABILITIES	Total financial liabilities	Derivatives	Repo transactions
31.12.2022			
Recognized financial liabilities, gross	20 451	20 451	-
Financial liabilities subject to offsetting, gross	(4)	(4)	-
Financial assets recognized in the statement of financial position, net	20 447	20 447	-
Amounts subject to enforceable framework agreement or similar agreement concerning offsetting, including related to:	2 978	2 978	-
(i) recognized financial instruments which do not meet the offsetting criteria	912	912	-
(ii) financial collateral (including cash)	2 066	2 066	-
Net amount	17 469	17 469	-

OFFSETTING ASSETS	Total financial assets	Derivatives	Reverse repo transactions
31.12.2021			
Recognized financial assets, gross	11 837	11 837	-
Financial liabilities subject to offsetting, gross	(1)	(1)	-
Financial assets recognized in the statement of financial position, net	11 836	11 836	-
Amounts subject to enforceable framework agreement or similar agreement concerning offsetting, including related to:	2 631	2 631	-
(i) recognized financial instruments which do not meet the offsetting criteria	1 104	1 104	-
(ii) financial collateral (including cash)	1 527	1 527	-
Net amount	9 205	9 205	-

OFFSETTING LIABILITIES	Total financial liabilities	Derivatives	Repo transactions
31.12.2021			
Recognized financial liabilities, gross	15 815	15 815	-
Financial liabilities subject to offsetting, gross	(1)	(1)	-
Financial assets recognized in the statement of financial position, net	15 814	15 814	-
Amounts subject to enforceable framework agreement or similar agreement concerning offsetting, including related to:	2 631	2 631	-
(i) recognized financial instruments which do not meet the offsetting criteria	1 104	1 104	-
(ii) financial collateral (including cash)	1 527	1 527	-
Net amount	13 183	13 183	-

58. Managing credit concentration risk in the Group

The Group defines credit concentration risk as the risk arising from a considerable exposure to single customers or groups of related customers whose repayment capacity depends on a common risk factor. The Group analyses the concentration risk, among other things, towards:

- the largest entities (customers);
- the largest groups of related customers;
- industry sectors;
- geographical regions;

- currencies;
- exposures secured with a mortgage.

- **RISK MANAGEMENT OBJECTIVE**

The objective of concentration risk management is to ensure a safe structure of the loan portfolio by mitigating threats arising from excessive concentrations relating to exposures characterized by a potential to generate significant losses at the Bank.

- **MEASUREMENT AND ASSESSMENT OF CONCENTRATION RISK**

The Group measures and assesses concentration risk by examining the actual aggregate exposure to a customer or to a group of related customers and the actual aggregate exposure to individual groups of loan portfolios.

The Group's actual exposure complies with the definition of exposure in the CRR, which comprises all assets or off-balance sheet items, including exposures in the banking and trading book and indirect exposures arising from the security applied.

Concentration risk is identified by recognizing the factors due to which the risk may arise or the level of the Group's exposure may change, including potential risk factors resulting, for example, from planned activities of the Group. In the process of identifying concentration risk, the Group:

- identifies and updates the structure of the group of related customers;
- aggregates the exposures towards a customer or a group of related customers;
- applies exemptions from regulatory limits for large exposures, in accordance with the CRR.

The Bank's tolerance to concentration risk is determined by:

- external regulatory limits arising from Art. 395 of the CRR and from Article 79a of the Banking Law;
- internal limits of the Group;
    - strategic limits of concentration risk tolerance;
    - limits that define the appetite for concentration risk.

The Group uses the following to measure concentration risk:

- the exposure concentration ratio of the Group towards a customer or a group of related customers in relation to the Group's Tier 1 capital;
- Gini coefficient;
- graphs of portfolio concentration (Lorenz curve).

To measure concentration risk and evaluate the effect of internal and external factors on the concentration risk, the Bank performs stress tests with respect to concentration risk for large exposures.

- **MONITORING AND FORECASTING CONCENTRATION RISK**

The Group monitors concentration risk:

- on an individual level, by verifying the exposure concentration ratio for a customer or a group of related customers, each time before applying for a decision on granting financing or increasing the amount of the exposure, and before taking other actions resulting in increasing the Bank's exposure on other accounts;
- on a systemic level, by:
    - daily control over the Bank's compliance with the external concentration limit and identifying large exposures;
    - monthly control over the Bank's compliance with the limit arising from Article 79a of the Banking Law;
    - monthly or quarterly control over compliance with the Group's internal limits with respect to concentration risk;
    - monitoring early warning ratios with respect to concentration;

The Group forecasts changes in the level of concentration risk as part of its analyses and reviews of internal limits and the concentration risk management policy, and in the process of concentration risk stress testing.

The Group performs stress tests to examine, for example, the effect of macroeconomic factors on individual concentrations, the impact of decisions of other financial market participants, decisions on customer mergers, dependency on other risks, for example, currency risk, which may contribute to the materialization of concentration risk, and the effect of other factors from the internal and external environment on the concentration risk.

Concentration risk is tested as part of comprehensive stress tests which enable evaluating the forecast effect of correlated credit, interest rate, currency, operating and liquidity risks and concentration risk on the expected credit losses of the Group.

- **CONCENTRATION RISK REPORTING**

Reports on currency risk are prepared on a daily, monthly and quarterly basis.

Concentration risk reporting comprises periodic (monthly or quarterly) reporting to the Bank's relevant bodies on the scale of exposure to concentration risk, which may lead to a significant change in the Bank's risk profile, including in particular:

- utilization of limits defining risk appetite and exceeding those limits;
- early warning ratios;
- stress-test results;
- on portfolio concentration risk and concentration of the Group's largest exposures and compliance with concentration standards arising from the Banking Law.

- **MANAGEMENT ACTIONS RELATING TO CONCENTRATION RISK**

The purpose of management actions is to shape and optimize the concentration risk management process and concentration risk level at the Group (preventing excessive concentrations).

Management actions comprise in particular:

- publishing the Bank's internal regulations on the process of concentration risk management, defining the tolerance level for concentration risk, determining limits and threshold amounts;
- issuing recommendations, guidelines for conduct, explanations and interpretations of internal regulations;
- taking decisions concerning an acceptable level of concentration risk, including in particular decisions determining the threshold values of limits reflecting concentration risk appetite;
- developing and improving concentration risk control tools which make it possible to maintain the concentration risk level within the limits acceptable to the Bank;
- developing and improving concentration risk assessment methods taking into account the changeability of the macroeconomic situation, including crises on foreign and domestic markets and changeability of the regulatory environment;
- developing and improving IT tools to support concentration risk management.

- **EXPECTED IMPACT OF REGULATORY CHANGES ON THE CONCENTRATION OF THE GROUP'S EXPOSURE IN 2023**

The Group anticipates an increase in the level of exposure concentration in connection with Article 500a of the CRR Regulation, which provides for the possibility of applying a 0% risk weight for exposures to the State Treasury in the denominated or domestic currency of another Member State only until the end of 2022 (the 0% risk weight allows exposures to be excluded from the concentration limit).

- **CONCENTRATION BY THE LARGEST ENTITIES (CUSTOMERS)**

The risk of concentration of exposures to individual customers and groups of related customers is monitored in accordance with the CRR, which is translated into the Bank's Group. The Group does not assume an exposure to a customer or a group of related customers the value of which exceeds 25% of the value of its consolidated Tier 1 capital.

As at 31 December 2022 and 31 December 2021, concentration limits were not exceeded. As at 31 December 2022, the largest exposure to a single entity accounted amounted to 42.78% [1] of the consolidated Tier 1 capital (42.49% [1] of the consolidated Tier 1 capital as at 31 December 2021).

(IN PLN MILLION)

The Group's exposure to the 20 largest non-banking customers [2]:

31.12.2022				31.12.2021			
No.	Credit exposures include loans, advances, purchased debt, bill of exchange discounts, realized guarantees, and interest receivables as well as off-balance sheet and capital exposures	Share in the loan portfolio, including off-balance sheet and capital exposures	Concentration ratio (relation of exposure to the value of the consolidated T1 capital)	No.	Credit exposures include loans, advances, purchased debt, bill of exchange discounts, realized guarantees, and interest receivables as well as off-balance sheet and capital exposures	Share in the loan portfolio, including off-balance sheet and capital exposures	Concentration ratio (relation of exposure to the value of the consolidated T1 capital)
1.[1]	16 314	4.43%	42.78%	1.[1]	16 370	4.51%	42.49%
2.	4 700	1.28%	12.32%	2.	5 939	1.64%	15.42%
3.[1]	3 676	1.00%	9.64%	3.	2 607	0.72%	6.77%
4.	2 756	0.75%	7.23%	4.	2 453	0.68%	6.37%
5.	2 453	0.67%	6.43%	5.	2 377	0.65%	6.17%
6.	2 164	0.59%	5.67%	6.	1 984	0.55%	5.15%
7.	1 928	0.52%	5.05%	7.	1 774	0.49%	4.60%
8.	1 775	0.48%	4.65%	8.	1 549	0.43%	4.02%
9.	1 657	0.45%	4.35%	9.	1 538	0.42%	3.99%
10.[1]	1 618	0.44%	4.24%	10.	1 485	0.41%	3.86%
11.	1 595	0.43%	4.18%	11.	1 436	0.40%	3.73%
12.	1 462	0.40%	3.83%	12.	1 341	0.37%	3.48%
13.	1 374	0.37%	3.60%	13.	1 235	0.34%	3.20%
14.	1 326	0.36%	3.48%	14.	1 207	0.33%	3.13%
15.	1 296	0.35%	3.40%	15.	1 167	0.32%	3.03%
16.	1 237	0.34%	3.24%	16.	1 115	0.31%	2.90%
17.	1 191	0.32%	3.12%	17.	1 056	0.29%	2.74%
18.	1 134	0.31%	2.97%	18.	1 015	0.28%	2.63%
19.	1 124	0.31%	2.96%	19.	955	0.26%	2.48%
20.	1 008	0.26%	2.65%	20.	941	0.26%	2.44%
Total	51 788	14.06%	135.79%	Total	49 544	13.66%	128.60%

[1] exposure excluded or partly excluded from the exposure concentration limit under the CRR.

[2] off-balance sheet exposure includes the liability arising from derivative transactions in an amount equal to their balance sheet equivalent

- **CONCENTRATION BY THE LARGEST GROUPS OF RELATED CUSTOMERS**

The largest concentration of the Group's exposure to a group of related borrowers amounted to 4.77% of the Group's loan portfolio (4.82% as at 31 December 2021).

As at 31 December 2022 and 31 December 2021, the largest concentration of the Group's exposures was, respectively: 46.09%[1] of the consolidated Tier 1 capital and 45.45%[1] of the consolidated Tier 1 capital.

(IN PLN MILLION)

The Group's exposure[2] to 5 largest groups of related customers[3]

31.12.2022				31.12.2021			
No.	Credit exposures include loans, advances, purchased debt, bill of exchange discounts, realized guarantees, and interest receivables as well as off-balance sheet and capital exposures	Share in the loan portfolio, including off-balance sheet and capital exposures	Concentration ratio (relation of exposure to the value of the consolidated T1 capital)	No.	Credit exposures include loans, advances, purchased debt, bill of exchange discounts, realized guarantees, and interest receivables as well as off-balance sheet and capital exposures	Share in the loan portfolio, including off-balance sheet and capital exposures	Concentration ratio (relation of exposure to the value of the consolidated T1 capital)
1.1	17 578	4.77%	46.09%	1.1	17 509	4.82%	45.45%
2.	5 851	1.59%	15.34%	2.	6 287	1.73%	16.32%
3.1	3 688	1.00%	9.67%	3.	2 977	0.82%	7.73%
4.	2 869	0.78%	7.52%	4.	2 868	0.79%	7.44%
5.	2 762	0.75%	7.24%	5.	2 744	0.76%	7.12%
Total	32 748	8.89%	85.86%	Total	32 385	8.92%	84.06%

[1] exposure partly excluded from the exposure concentration limit under the CRR

[2] off-balance sheet exposure includes the liability arising from derivative transactions in an amount equal to their balance sheet equivalent

[3] the list does not include exposure to the State Treasury (relevant for groups in which the State Treasury has control)

- ### CONCENTRATION BY INDUSTRY

The structure of the Group's exposure by industry sector is dominated by entities operating in the "Financial and insurance activity" and "Industrial processing" sections. The Group's exposure to these sectors represents approximately 37% of the entire industry portfolio (38% as at 31 December 2021).

SECTION SYMBOL	SECTION NAME	31.12.2022		31.12.2021	
		EXPOSURE	NUMBER OF ENTITIES	EXPOSURE	NUMBER OF ENTITIES
K	Financial and insurance activities	19.00	1.80	25.11	1.48
C	Industrial processing	17.95	10.49	16.58	9.69
L	Real estate administration	9.90	11.13	11.56	21.22
G	Wholesale and retail trade, repair of motor vehicles	12.45	20.88	10.66	21.50
O	Public administration and national defence, obligatory social security	9.89	1.59	13.08	3.28
Other exposures		30.81	54.11	23.01	42.83
Total		100.00	100.00	100.00	100.00

(IN PLN MILLION)

- **Concentration by geographical regions**

The Group's loan portfolio is diversified in terms of geographical concentration.

The structure of the loan portfolio by geographical regions is identified by the Group depending on a customer type – it differs for the Retail Market Area (ORD) and for the Corporate and Investment Banking Area (OKI).

In 2022, as in 2021, the largest concentration of the ORD loan portfolio was in the Warsaw region, which accounts for 16.6% of the ORD portfolio (as at 31 December 2021: 16.9%)

CONCENTRATION OF CREDIT RISK BY GEOGRAPHICAL REGION FOR RETAIL CUSTOMERS	31.12.2022	31.12.2021
Warsaw region	16.58	16.89
Katowice region	11.00	10.75
Poznań region	10.34	10.28
Kraków region	8.28	8.27
Łódź region	8.61	8.59
Wrocław region	10.86	10.71
Gdańsk region	10.20	10.29
Lublin region	7.04	7.01
Białystok region	6.34	6.33
Szczecin region	8.23	8.14
Head Office	0.68	0.65
Other	0.60	0.50
Foreign countries	1.24	1.59
Total	**100.00**	**100.00**

In 2022, as in 2021, the largest concentration of the ORD loan portfolio was in the central macroregion which accounts for 42.7% of the ORD portfolio (as at 31 December 2021: 42.8%)

CONCENTRATION OF CREDIT RISK BY GEOGRAPHICAL REGION FOR INSTITUTIONAL CUSTOMERS	31.12.2022	31.12.2021
Head Office	3.61	5.15
central macroregion	42.75	42.79
northern macroregion	9.00	8.15
western macroregion	11.84	12.35
southern macroregion	9.88	9.10
south-eastern macroregion	10.27	10.63
north-eastern macroregion	4.16	4.20
south-western macroregion	6.44	6.14
Foreign countries	2.05	1.49
Total	**100.00**	**100.00**

(IN PLN MILLION)

- **CONCENTRATION OF CREDIT RISK BY CURRENCY**

As at 31 December 2022, the share of exposures in convertible currencies other than PLN in the entire Group's portfolio amounted to 17% and it remained at a similar level to 2021. Loans in the EUR are dominating in the structure of foreign currency loans. Their share in the Group's foreign currency loan portfolio as at the end of 2022 was 69.9% (as at 31 December 2021: 56.7%). A consistent decrease in CHF loans has been observed, mainly as a result of the activities related to concluding settlement agreements with customers holding housing loans in this currency. The share of loans in CHF in the Group's portfolio as at the end of 2021 amounted to 3.5% (as at 31 December 2021: 4.9%)

CONCENTRATION OF CREDIT RISK BY CURRENCY	31.12.2022	31.12.2021
PLN	82.97	83.64
Foreign currencies, of which:	17.03	16.36
CHF	3.50	4.89
EUR	11.90	9.27
USD	1.04	1.29
UAH	0.01	0.01
GBP	0.56	0.84
Other	0.02	0.06
Total	**100.00**	**100.00**

- **OTHER TYPES OF CONCENTRATION**

The Group analyses the structure of its housing loan portfolio by LTV levels. As at the end of 2022, the highest concentration was in the range of LTV 0%–40% (as at the end of 2021 – in the range of 41%–60%).

THE GROUP'S HOUSING LOAN PORTFOLIO STRUCTURE BY LTV	31.12.2022	31.12.2021
0% - 40%	43.96	33.25
41%-60%	39.93	42.21
61% - 80%	14.00	21.46
81% - 90%	1.60	2.38
91% - 100%	0.22	0.38
over 100%	0.29	0.32
Total	**100.00**	**100.00**

	31.12.2022	31.12.2021
average LTV for the portfolio of loans in CHF	47.27%	51.23%
average LTV for the entire portfolio	44.11%	50.52%

59. COLLATERAL

In the period ended 31 December 2022 and 31 December 2021, the Group did not make any changes in its collateral policies.

The Group takes into account the collateral held for credit exposures when estimating the expected credit loss. With respect to individually significant exposures that meet the conditions for impairment, future collateral recoveries are estimated individually and taken into account in determining the expected loss, with a weight corresponding to the assessment of the probability of implementation of the debt recovery scenario. The value of collateral recoveries estimated under the recovery scenario for impaired exposures at the balance sheet date was PLN 1 098 million (as at 31 December 2021: PLN 1 098 million).

The Group does not have any exposures for which, due to the value of the collateral, it has not recognized an allowance for expected credit loss.

See also information in notes "CREDIT RISK MANAGEMENT", "USE OF CREDIT RISK MITIGATION TECHNIQUES – COLLATERAL".

(IN PLN MILLION)

60. Exposure to the counterparty credit risk

CONCENTRATION OF CREDIT RISK – INTERBANK MARKET AND NON-WHOLESALE MARKET – EXPOSURE AS AT 31.12.2022*

Counterparty	Country	Rating	Interbank market – wholesale			Non-wholesale market			Total
			Deposit (nominal value)	Derivatives (market value, excluding collateral if positive)	Securities (nominal value)	Nominal balance sheet exposure	Nominal off-balance sheet exposure	Cash on NOSTRO accounts	
Counterparty 1	Poland	A	66	(32)	7 667	-	-	-	7 733
Counterparty 2	Luxembourg	AAA	-	-	3 656	-	-	-	3 656
Counterparty 3	Switzerland	AA	880	-	-	-	-	-	880
Counterparty 4	Switzerland	AA	704	-	-	-	-	-	704
Counterparty 5	Germany	AAA	694	-	-	-	-	-	694
Counterparty 6	Switzerland	AA	593	-	-	-	-	-	593
Counterparty 7	France	A	484	-	-	-	-	-	484
Counterparty 8	Switzerland	AA	399	-	-	-	-	-	399
Counterparty 9	Belgium	A	-	103	-	-	-	290	393
Counterparty 10	Germany	AA	-	335	-	3	29	5	372
Counterparty 11	France	A	-	353	-	-	-	-	353
Counterparty 12	Germany	BBB	56	260	-	-	-	-	316
Counterparty 13	Switzerland	AA	300	-	-	-	-	-	300
Counterparty 14	Poland	A	279	15	-	-	-	-	294
Counterparty 15	United States of America	AA	-	-	-	4	11	192	207
Counterparty 16	Poland	A	-	18	2	150	-	-	170
Counterparty 17	France	A	-	42	-	-	-	91	133
Counterparty 18	Germany	A	-	-	-	-	-	126	126
Counterparty 19	United States of America	AA	-	-	-	-	-	124	124
Counterparty 20	Germany	A	-	70	-	-	-	4	74

* Excluding exposures to the State Treasury and the National Bank of Poland

(IN PLN MILLION)

CONCENTRATION OF CREDIT RISK – INTERBANK MARKET AND NON-WHOLESALE MARKET – EXPOSURE AS AT 31.12.2021*									
			Interbank market - wholesale			Non-wholesale market			Total
Counterparty	Country	Rating	Deposit (nominal value)	Derivatives (market value, excluding collateral if positive)	Securities (nominal value)	Nominal balance sheet exposure	Nominal off-balance sheet exposure	Cash on NOSTRO accounts	
Counterparty 1	Poland	A	-	5	7 668	-	-	-	7 673
Counterparty 2	Luxembourg	AAA	-	-	3 656	-	-	-	3 656
Counterparty 26	Germany	BBB	-	516	-	-	-	19	535
Counterparty 10	Germany	AA	-	394	-	-	10	5	409
Counterparty 9	Belgium	A	-	75	-	-	-	181	256
Counterparty 12	Germany	BBB	-	245	-	-	-	-	245
Counterparty 16	Poland	A	-	12	5	150	-	-	167
Counterparty 28	Poland	BBB	155	4	3	-	-	1	163
Counterparty 14	Poland	A	74	58	-	-	-	-	132
Counterparty 23	France	A	-	131	-	-	-	-	131
Counterparty 34	United Kingdom	NONE	-	116	-	-	-	-	116
Counterparty 11	France	A	-	109	-	-	-	-	109
Counterparty 89	United Kingdom	AA	-	98	-			-	98
Counterparty 15	United States of America	AA	-	5	-	3	12	66	86
Counterparty 33	Norway	AA	-	84	-	-	-	-	84
Counterparty 78	Russian Federation	BBB						79	79
Counterparty 24	Ireland	AA	-	-	-	-	-	75	75
Counterparty 19	United States of America	AA	-	-	-	-	-	71	71
Counterparty 21	Austria	A	-	-	-	-	-	46	46
Counterparty 86	France	A	-	40	-	-	-	-	40

* Excluding exposures to the State Treasury and the National Bank of Poland

In order to limit the credit risk in respect of derivative transactions and securities transactions, the Group concludes with its counterparties framework agreements (under the ZBP, ISDA and ICMA standards). The framework agreements allow to offset mutual amounts payable (reduction of the settlement risk) and non-payable (reduction of pre-settlement risk), resulting from transactions, and also utilize the close-out netting mechanism upon termination of the framework agreement as a result of default or an event justifying termination with regard to one or both parties to the agreement.

Moreover, the Group concludes with its counterparties collateral agreements (CSA – Credit Support Annex under the ISDA standard, or a Collateral Agreement under the ZBP standard), under which each party undertakes, upon meeting the premises stipulated therein, to establish appropriate collateral together with the right to offset. Exemptions include derivative transactions concluded between members of the Group: PKO Bank Polski S.A. and PKO Bank Hipoteczny S.A., which have been exempted from the obligations imposed by the EMIR Regulation regarding the exchange of collateral.

The Group had access to two clearing houses (CCP) through which it settles clears interest rate derivative transactions specified in the EMIR Regulation with selected domestic and foreign counterparties.

As of 1 September 2022, the Group entered into the Initial Margin (IM) exchange requirement under the EMIR Regulation. The requirement applies to certain types of derivative transactions, not cleared at a CCP, entered into on or after 1 September 2022 with counterparties that have also entered into the requirement. Initial margin is deposited with the depositary by the two parties to the transaction, in the form of acceptable securities, when the so-called IM threshold (the amount by which the IM threshold is reduced) is exceeded. The amount of the calculated IM requirement is monitored until the threshold IM is exceeded. The Group signs IM documentation with its counterparties, based on the ISDA standard.

61. FORBEARANCE PRACTICES

Forbearance is defined by the Group as actions aimed at amending contractual terms agreed with a debtor or an issuer, forced by the debtor's or issuer's difficult financial situation (restructuring activities introducing concessions that otherwise would not have been granted). The aim of forbearance activities is to restore a debtor's or an issuer's ability to settle their liabilities towards the Group and to maximize the efficiency of non-performing loans management, i.e. obtaining the highest possible recoveries while minimizing the costs incurred.

Forbearance changes in repayment terms may consist of:

- dividing the debt due into instalments;
- changing the repayment scheme (annuity payments, degressive payments);
- extending the loan period;
- changing the interest rate;
- changing the margin;
- reducing the debt.

As a result of concluding a forbearance agreement and repaying the amounts due under it on a timely basis, a non-performing loan becomes a performing loan.

The provision of facilities within the framework of forbearance, as a premise of impairment, results in the recognition of the premise of impairment and the classification of the credit exposure into the portfolio of exposures at risk of impairment.

The inclusion of such exposures in the portfolio of performing exposures (discontinuing recognition of the forbearance agreement as an impairment trigger) takes place at least 12 months after the introduction of forbearance, provided that all payments in arrears and at least six scheduled payments have been made by the customer and, in the Group's opinion, the current situation of the customer does not pose a threat to their compliance with the terms of the restructuring agreement (except where the forbearance agreement comprises reducing the receivables).

(IN PLN MILLION)

Exposures cease to meet the criteria of a forborne exposure when all of the following conditions are met:

- at least 24 months have passed from the date of including the exposure into the portfolio of performing exposures (conditional period);
- as at the end of the conditional period referred to above, the customer has no debt towards the Group overdue for more than 30 days;
- at least 12 instalments have been repaid on a timely basis and in the amounts agreed.

Forborne exposures are monitored on an on-going basis. Throughout the whole period of their recognition allowances are recognized for these exposures in the amount of expected losses over the life horizon of the exposure.

31.12.2022	Instruments with modified terms and conditions	Refinancing	Total gross	Impairment losses	Total, net
Performing exposures					
Not held for trading, measured at fair value through profit or loss	12	-	12	-	12
consumer loans	12	-	12	-	12
Measured at amortized cost:	755	2	757	(57)	700
housing loans	213	-	213	(12)	201
business loans	350	2	352	(24)	328
consumer loans	103	-	103	(13)	90
finance lease receivables	89	-	89	(8)	81
Total performing exposures	**767**	**2**	**769**	**(57)**	**712**
Non-performing exposures					
Not held for trading, measured at fair value through profit or loss	74	-	74	-	74
consumer loans	29	-	29	-	29
corporate bonds	45	-	45	-	45
Measured at fair value through OCI:	374	-	374	2	376
corporate bonds	374	-	374	2	376
Measured at amortized cost:	1 754	45	1 799	(856)	943
housing loans	356	-	356	(251)	105
business loans	1 200	42	1 242	(554)	688
consumer loans	176	3	179	(40)	139
factoring receivables	7	-	7	(2)	5
finance lease receivables	15	-	15	(9)	6
Total non-performing exposures	**2 202**	**45**	**2 247**	**(854)**	**1 393**
TOTAL EXPOSURES SUBJECT TO FORBEARANCE	**2 969**	**47**	**3 016**	**(911)**	**2 105**

(IN PLN MILLION)

31.12.2021	Instruments with modified terms and conditions	Refinancing	Total gross	Impairment losses	Total, net
Performing exposures					
Not held for trading, measured at fair value through profit or loss	13	-	13	-	13
consumer loans	13	-	13	-	13
Measured at amortized cost:	706	1	707	(66)	641
housing loans	266	-	266	(25)	241
business loans	358	1	359	(27)	332
consumer loans	82	-	82	(14)	68
Total performing exposures	719	1	720	(66)	654
Non-performing exposures					
Not held for trading, measured at fair value through profit or loss	193	-	193	-	193
consumer loans	39	-	39	-	39
corporate bonds	154	-	154	-	154
Measured at fair value through OCI:	397	-	397	(52)	345
corporate bonds	397	-	397	(52)	345
Measured at amortized cost:	2 280	48	2 328	(1 165)	1 163
housing loans	464	-	464	(266)	198
business loans	1 588	46	1 634	(857)	777
consumer loans	158	2	160	(32)	128
finance lease receivables	70	-	70	(10)	60
Total non-performing exposures	2 870	48	2 918	(1 217)	1 701
TOTAL EXPOSURES SUBJECT TO FORBEARANCE	3 589	49	3 638	(1 283)	2 355

LOANS AND ADVANCES TO CUSTOMERS SUBJECT TO FORBEARANCE	2022	2021
Recognized interest income on forborne loans and advances granted to customers	143	87

62. Information on securitization of the lease portfolio and package sale of receivables

In September 2019, the Group, through PKO Leasing SA, conducted securitization of lease receivables with a value of PLN 2,500 million. On 26 September 2019, the Company sold lease receivables to the special-purpose vehicle Polish Lease Prime 1 Designated Activity Company (Polish Lease Prime 1 DAC) with its registered office in Dublin (Ireland). The receivables purchased by the SPV were financed mainly with an issue of securities (bonds) conducted on 26 September 2019 with the redemption date falling on 28 December 2029 and with funds obtained as part of the PKO Leasing SA Group. Bonds with a nominal value of PLN 1,835 million were taken up by entities from outside the PKO Bank Polski S.A. Group. The objective and benefit of selling these receivables to the SPV was to obtain and diversify sources of long-term financing.

As at 31 December 2022, the value of receivables constituting the object of the securitization transaction for lease receivables amounted to PLN 992 million, and as at 31 December 2021 it was PLN 1,992 million.

Carrying amounts of the financial assets and financial liabilities covered by securitization are presented in the table below:

(IN PLN MILLION)

SECURITIZATION	Transaction amount	Amount of risk remaining at the Group	Transaction amount	Amount of risk remaining at the Group
	31.12.2022		31.12.2021	
carrying amount of assets	992	992	1 992	1 992
carrying amount of liabilities	1 067	1 067	2 139	2 139
Net position	**(75)**	**(75)**	**(147)**	**(147)**

Moreover, in 2022 the Group effected package sales (balance sheet and off-balance sheet receivables) of nearly 43 thousand individual receivables from retail and business customers amounting to more than PLN 1 351 million (PLN 1 331 million in 2021). The total carrying amount of the provisions for potential claims on the sale of receivables as at 31 December 2022 amounted to PLN 4 million (as at 31 December 2021, it was PLN 2 million).

As a result of the sale of the receivables all risks and rewards were transferred, hence the Group derecognized these assets.

The Group did not receive any securities on account of the aforementioned transactions.

63. Management of currency risk associated with mortgage loans for individuals

The Group analyses its portfolio of convertible currency mortgage loans to individuals in a specific manner. The Group monitors the quality of the portfolio on an on-going basis and reviews the risk of deterioration of the portfolio quality. Currently, the quality of the portfolio is at an acceptable level. The Group takes the risk into consideration in the capital adequacy and equity management.

According to the reports on the Financial Stability Committee meetings published on 28 March 2022, 23 September 2022 and 9 December 2022, the legal risk of foreign currency housing loans remains the most significant source of risks to financial system stability identified by the FSC, as the number of court cases related to these loans continues to increase and a significant share of these cases ends in the annulment of loan agreements. In the FSC's view, court decisions leading to the annulment of an agreement, and even more so those compromising the economic logic of settlements between the parties after such annulment, are not proportionate to the effects of the most frequently challenged contractual provisions, they distort the functioning of basic market mechanisms and generate very significant burdens for the banking sector. This could result in a significant weakening of its resilience, with negative consequences for depositors and the banks' ability to continue to finance the development of the Polish economy. In the FSC's opinion, it is reasonable to recall the publicly available positions presented by the NBP and the Office of the Polish Financial Supervision Authority in relation to the proceedings before the Supreme Court. The legal system should not disregard the principles of economics and social justice and unjustifiably favour foreign currency borrowers over those who, at the same time, decided to take a PLN loan, for example to avoid the exchange risk. The abusiveness of contractual provisions, as raised by borrowers, cannot be used instrumentally to avoid unfavourable consequences of the agreement concluded, related to the materialization of the exchange rate risk. In accordance with market economy principles, including the principles of consideration and equivalence of benefits, the provision of financial capital should be accompanied by an obligation to return it and by remuneration from the recipient of the capital, at least covering the costs incurred. In the FSC's view, amicable solutions (customer settlements) remain a valuable alternative to the judicial route to dispute resolution.

HOUSING LOANS AND ADVANCES TO INDIVIDUALS (RETAIL AND PRIVATE BANKING) BY CURRENCY	31.12.2022			31.12.2021		
	gross	impairment loss	net	gross	impairment loss	net
in local currency	**93 835**	**(1 400)**	**92 435**	**99 887**	**(1 212)**	**98 675**
PLN	93 502	(1 353)	92 149	99 435	(1 191)	98 244
UAH	333	(47)	286	452	(21)	431
in foreign currency	**11 637**	**(765)**	**10 872**	**15 610**	**(749)**	**14 861**
CHF	9 353	(677)	8 676	13 100	(679)	12 421
EUR	2 244	(83)	2 161	2 469	(67)	2 402
USD	34	(5)	29	33	(3)	30
OTHER	6	-	6	8	-	8
Total	**105 472**	**(2 165)**	**103 307**	**115 497**	**(1 961)**	**113 536**

(IN PLN MILLION)

Convertible currency housing loans and advances to individuals by the granting date		Indexed	Denominated	Total	Indexed	Denominated	Total
		31.12.2022			31.12.2021		
up to 2002	Gross amount	-	28	**28**	-	42	**42**
	Allowances for credit losses	-	(1)	**(1)**	-	(1)	**(1)**
	Net amount	-	27	**27**	-	41	**41**
	Number of loans granted	-	2 737	**2 737**	-	3 930	**3 930**
from 2003 to 2006	Gross amount	-	1 976	**1 976**	-	2 939	**2 939**
	Allowances for credit losses	-	(111)	**(111)**	-	(108)	**(108)**
	Net amount	-	1 865	**1 865**	-	2 831	**2 831**
	Number of loans granted	-	30 771	**30 771**	-	37 734	**37 734**
from 2007 to 2009	Gross amount	-	4 911	**4 911**	-	7 240	**7 240**
	Allowances for credit losses	-	(490)	**(490)**	-	(515)	**(515)**
	Net amount	-	4 421	**4 421**	-	6 725	**6 725**
	Number of loans granted	-	35 811	**35 811**	-	45 782	**45 782**
from 2010 to 2012	Gross amount	2 439	2 268	**4 707**	2 807	2 567	**5 374**
	Allowances for credit losses	(76)	(85)	**(161)**	(55)	(68)	**(123)**
	Net amount	2 363	2 183	**4 546**	2 752	2 499	**5 251**
	Number of loans granted	8 741	10 344	**19 085**	9 739	11 208	**20 947**
from 2013 to 2016	Gross amount	4	11	**15**	4	11	**15**
	Allowances for credit losses	-	(2)	**(2)**	-	(2)	**(2)**
	Net amount	4	9	**13**	4	9	**13**
	Number of loans granted	18	34	**52**	18	37	**55**
Total	**Gross carrying amount**	**2 443**	**9 194**	**11 637**	**2 811**	**12 799**	**15 610**
	Allowances for credit losses	**(76)**	**(689)**	**(765)**	**(55)**	**(694)**	**(749)**
	Net carrying amount	**2 367**	**8 505**	**10 872**	**2 756**	**12 105**	**14 861**
	Number of loans granted	**8 759**	**79 697**	**88 456**	**9 757**	**98 691**	**108 448**

64. Interest rate risk management

Interest rate risk management

- ### Definition

Interest rate risk is a risk of losses being incurred on the Group's balance sheet and off-balance sheet items sensitive to interest rate fluctuations, as a result of changes in market interest rates.

- ### Risk management objective

To reduce the potential losses resulting from market interest rate fluctuations to an acceptable level by properly shaping the structure of balance sheet and off-balance sheet items.

- ### Risk identification and measurement

The Group uses the following measures of interest rate risk: interest income sensitivity, economic value sensitivity, value at risk (VaR), stress tests and repricing gaps.

- ### Control

Control over interest rate risk consists of determining interest rate risk limits and thresholds tailored to the scale and complexity of the Group's operations, in particular the strategic limit of tolerance to interest rate risk.

- ### Risk forecasting and monitoring

The following measures are monitored by the Group on a regular basis:

- the levels of interest rate risk measures;
- utilization of the strategic limit of tolerance to interest rate risk;
- utilization of internal limits and thresholds of interest rate risk.

- ### Reporting

Reports on interest rate risk are prepared on a daily, weekly, monthly and quarterly basis. The reports contain information on interest rate risk exposure and on the risk limits utilization. The reports are addressed mainly to: ALCO, RC, the Management Board, the Risk Committee and the Supervisory Board.

- ### Management actions

The main tools for interest rate risk management used by the Group are:

- interest rate risk management procedures;
- currency risk limits and thresholds;
- transactions that reduce interest income sensitivity or economic value sensitivity.

The Group established limits and thresholds for interest rate risk comprising, among other things, the following: interest income sensitivity, sensitivity of the economic value and losses.

Financial information

The PKO Bank Polski S.A. Group's exposure to interest rate risk remained within the adopted limits as at 31 December 2022 and 31 December 2021. The Group was mainly exposed to PLN interest rate risk. Interest rate risk generated by the Group companies did not materially affect interest rate risk of the entire Group and therefore did not change its risk profile significantly.

The Group categorizes its portfolios from the perspective of interest rate risk management:

- the banking book - comprises balance sheet and off-balance sheet items not included in the trading book, in particular items resulting from the Group's core activities, transactions concluded for investment and liquidity purposes and their hedging transactions;
- the trading book - comprises transactions concluded on financial instruments as part of activities conducted on own account and on behalf of the customers.

The Group's exposure to interest rate risk remained within the adopted limits as at 31 December 2022 and 31 December 2021. Due to the principle of keeping interest rate risk in the trading book at a limited level, this risk is primarily generated by positions in the banking book.

In order to mitigate the interest rate risk of the banking book, the Group uses limits and thresholds, as well as risk mitigation transactions based on information on the level of risk (using a measure of interest income sensitivity, a measure of economic value sensitivity, shock analyses and repricing gap) and planned business development. In order to hedge the level of future cash flows and the volatility of fair value arising from interest rate risk, hedging strategies approved by the Bank's Management Board are applied using IRS/CIRS transactions as part of hedge accounting, which are described in Chapter 13.

BANKING BOOK

In order to monitor interest rate risk the Group in applies interest rate risk measures that reflect the identified five main types of interest rate risk:

- the risk of revaluation date mismatch;
- the yield curve risk;
- the basis risk;
- the customer option risk; and
- credit spread risk in the banking book (CSRBB).

- #### SENSITIVITY OF INTEREST INCOME

The sensitivity of interest income to sudden shifts in the yield curve is determined by a potential financial effect of such a shift reflected in a changed amount of interest income in a given time horizon. The change results from the mismatch between revaluation dates of assets, liabilities and off-balance sheet liabilities granted and received (in particular derivative instruments) sensitive to interest rate fluctuations.

Sensitivity of interest income in the banking book of the Group to the abrupt shift in the yield curve of 100 bp down in a one-year horizon in all currencies is shown in the table below::

NAME OF THE MEASURE	31.12.2022	31.12.2021
Sensitivity of interest income (PLN million)	(769)	(864)

- #### SENSITIVITY OF ECONOMIC VALUE

Sensitivity of economic value reflects the fair value changes of items in the portfolio arising from the parallel shift of the yield curves by 100 bp up or down (the most unfavourable of the scenarios mentioned).

The table below presents the economic value sensitivity measure (stress-test) of the banking book of the Group in all currencies as at 31 December 2022 and 31 December 2021:

NAME OF THE MEASURE	31.12.2022	31.12.2021
Sensitivity of economic value (PLN million)	(891)	(1 319)

TRADING BOOK

In order to monitor the interest rate risk in the trading book the Group applies the value-at-risk (VaR) measure.

- #### VALUE AT RISK

The IR VaR measure is a potential amount of loss that may be incurred in normal market conditions in a specific time (i.e. horizon) and with an assumed level of probability related to changes in interest rate curves.

The IR VaR in the Bank's trading book is shown in the table below:

NAME OF THE MEASURE	31.12.2022	31.12.2021
IR VaR for a 10-day time horizon at a confidence level of 99% (PLN million):		-
Average value	37	17
Maximum value	86	34
Value at the end of the period	56	31

65. Currency risk management

Currency risk management

- **Definition**

Currency risk is the risk of incurring losses due to unfavourable exchange rate fluctuations. The risk is generated by maintaining open currency positions in various foreign currencies.

- **Risk management objective**

To reduce the potential losses resulting from exchange rate fluctuations to an acceptable level by properly shaping the currency structure of balance sheet and off-balance sheet items.

- **Risk identification and measurement**

The Group uses the following measures of the currency risk: value-at-risk (VaR) and stress tests.

- **Control**

Control over currency risk consists of determining currency risk limits and thresholds tailored to the scale and complexity of the Group's operations, in particular the strategic limit of tolerance to currency risk.

- **Risk forecasting and monitoring**

The following measures are monitored by the Group on a regular basis:

- the level of currency risk measures;
- utilization of the strategic limit of tolerance to currency risk ;
- utilization of internal limits and thresholds of currency risk.

- **Reporting**

Reports on currency risk are prepared on a daily, weekly, monthly and quarterly basis. The reports contain information on liquidity risk exposure and on the risk limits utilization. The reports are addressed mainly to: ALCO, RC, the Management Board, the Risk Committee and the Supervisory Board.

- **Management actions**

The main tools for currency risk management used by the Group are:

- currency risk management procedures;
- currency risk limits and thresholds;
- defining allowable types of foreign currency transactions.

The Group has set limits and thresholds for currency risk for, among other things: currency positions, Value at Risk calculated for a 10-day time horizon and loss on the currency market.

FINANCIAL INFORMATION

- **SENSITIVITY MEASURES**

The FX VaR measure is a potential value of loss that may occur in normal market conditions at a specific time (i.e. horizon) and with an assumed level of probability related to changes in foreign exchange rates.

Stress tests are used to estimate loss in the event of abrupt changes on the currency market which are not described using statistical measures by default.

The Bank's FX VaR, in aggregate for all currencies, is presented in the table below:

NAME OF SENSITIVITY MEASURE	31.12.2022	31.12.2021
VaR for a 10-day time horizon at a confidence level of 99% (in PLN million)[1]	128	3

[1] Taking into account the nature of the operation of the other Group companies which generate material currency risk and the specific characteristics of the market in which they operate, the Group does not determine the consolidated VaR sensitivity measure. Such companies use their own risk measures to manage their interest rate risk. KREDOBANK SA applies the 10-day VaR which amounted to PLN 0.2 million as at 31 December 2022 and to PLN 0.1 million as at 31 December 2021.

- **FOREIGN CURRENCY POSITION**

The Group's foreign currency positions are presented in the table below:

FOREIGN CURRENCY POSITION[1]	31.12.2022	31.12.2021
EUR	(206)	106
CHF	(1 625)	(44)
Other (Global, Net)	3	(84)

[1] The positions do not include structural positions in UAH (PLN 461.8 million) and in EUR (PLN 23.5 million), for which the Bank obtained approval from the PFSA to exclude them from the calculation of the currency positions, not affecting the Bank's profit or loss.

Currency positions (in addition to volatility of foreign exchange rates) are a key factor determining the level of currency risk to which the Group is exposed. The foreign currency positions are determined by all foreign currency transactions concluded, both in the statement of financial position and off-balance sheet transactions, with the exception of structural positions in UAH (PLN 461.8 million) and in EUR (PLN 23.5 million), for which the Bank obtained approval from the PFSA to exclude them from the calculation of the currency positions.

65.1. FINANCIAL ASSETS AND LIABILITIES BY CURRENCY

Financial assets BY CURRENCY	Currency translated to PLN						
31.12.2022	**PLN**	**CHF**	**EUR**	**USD**	**UAH**	**Other**	**Total**
Cash and balances with Central Bank	13 908	42	1 349	248	66	304	15 917
Amounts due from banks	5 957	13	5 481	3 119	1 225	306	16 101
Hedging derivatives	953	-	75	14	-	-	1 042
Other derivative instruments	11 689	-	1 214	245	-	14	13 162
Securities	**127 871**	**-**	**2 663**	**4 997**	**101**	**-**	**135 632**
- held for trading	191	-	2	-	-	-	193
- not held for trading, mandatorily measured at fair value through profit or loss	1 091	-	441	170	-	-	1 702
- measured at fair value through other comprehensive income	60 425	-	1 237	3 448	101	-	65 211
- measured at amortized cost	66 164	-	983	1 379	-	-	68 526
Reverse repo transactions	7	-	-	-	-	-	7
Loans and advances to customers	**193 721**	**8 906**	**26 135**	**1 612**	**1 278**	**69**	**231 721**
- not held for trading, mandatorily measured at fair value through profit or loss	3 565	-	-	-	-	-	3 565
- measured at amortized cost	190 156	8 906	26 135	1 612	1 278	69	228 156
Other financial assets	1 613	12	146	44	4	48	1 867
Total assets	**355 719**	**8 973**	**37 063**	**10 279**	**2 674**	**741**	**415 449**

(IN PLN MILLION)

Financial liabilities and off-balance sheet liabilities BY CURRENCY	Currency translated to PLN						
31.12.2022	PLN	CHF	EUR	USD	UAH	Other	Total
Amounts due to Central bank	9	-	-	-	-	-	9
- measured at amortized cost	9	-	-	-	-	-	9
Amounts due to banks	**908**	-	**1 930**	**153**	**1**	**19**	**3 011**
- measured at fair value through profit or loss	2	-	-	-	-	-	2
- measured at amortized cost	906	-	1 930	153	1	19	3 009
Hedging derivatives	7 202	-	267	-	-	-	7 469
Other derivative instruments	11 606	-	1 230	129	-	13	12 978
Amounts due to customers	**288 102**	**1 349**	**29 540**	**14 851**	**2 259**	**3 481**	**339 582**
- measured at fair value through profit or loss	783	-	-	-	-	-	783
- measured at amortized cost	287 319	1 349	29 540	14 851	2 259	3 481	338 799
Loans and advances received	968	-	1 313	-	13	-	2 294
Securities in issue	5 953	-	9 557	-	-	-	15 510
Subordinated liabilities	2 781	-	-	-	-	-	2 781
Other financial liabilities	2 939	3	865	294	35	251	4 387
Provisions for financial liabilities and guarantees granted	714	3	97	6	3	10	833
Total liabilities	321 182	1 355	44 799	15 433	2 311	3 774	388 854
Financial and guarantee commitments granted	68 226	119	11 310	4 941	187	900	85 683

Financial assets BY CURRENCY	Currency translated to PLN						
31.12.2021	PLN	CHF	EUR	USD	UAH	Other	Total
Cash and balances with Central Bank	10 651	35	543	124	76	158	11 587
Amounts due from banks	4 088	6	3 699	151	612	454	9 010
Hedging derivatives	915	-	16	2	-	-	933
Other derivative instruments	10 296	-	509	88	-	10	10 903
Securities	**129 770**	-	**2 643**	**2 619**	**408**	-	**135 440**
- held for trading	246	-	2	-	-	-	248
- not held for trading, mandatorily measured at fair value through profit or loss	1 395	-	506	148	-	-	2 049
- measured at fair value through other comprehensive income	58 261	-	1 407	1 787	408	-	61 863
- measured at amortized cost	69 868	-	728	684	-	-	71 280
Loans and advances to customers	**197 485**	**12 706**	**20 268**	**1 483**	**2 195**	**163**	**234 300**
- not held for trading, mandatorily measured at fair value through profit or loss	4 559	-	-	-	-	-	4 559
- measured at fair value through other comprehensive income	-	-	-	-	2	-	2
- measured at amortized cost	192 926	12 706	20 268	1 483	2 193	163	229 739
Other financial assets	1 802	1	47	24	7	14	1 895
Total assets	355 007	12 748	27 725	4 491	3 298	799	404 068

(IN PLN MILLION)

Financial liabilities and off-balance sheet liabilities BY CURRENCY	Currency translated to PLN						
31.12.2021	PLN	CHF	EUR	USD	UAH	Other	Total
Amounts due to Central bank	8	-	-	-	-	-	8
- measured at amortized cost	8	-	-	-	-	-	8
Amounts due to banks	**877**	**-**	**2 725**	**178**	**1**	**40**	**3 821**
- measured at amortized cost	877	-	2 725	178	1	40	3 821
Hedging derivatives	4 795	-	3	8	-	-	4 806
Other derivative instruments	10 218	-	682	98	-	10	11 008
Amounts due to customers	**284 715**	**932**	**21 776**	**9 579**	**2 301**	**2 993**	**322 296**
- measured at fair value through profit or loss	1 067	-	-	-	-	-	1 067
- measured at amortized cost	283 648	932	21 776	9 579	2 301	2 993	321 229
Loans and advances received	941	-	1 059	-	461	-	2 461
Securities in issue	10 202	-	10 291	3 307	72	-	23 872
Subordinated liabilities	2 716	-	-	-	-	-	2 716
Other financial liabilities	2 058	6	727	92	46	406	3 335
Provisions for financial liabilities and guarantees granted	560	3	101	4	3	4	675
Total liabilities	**317 090**	**941**	**37 364**	**13 266**	**2 884**	**3 453**	**374 998**
Financial and guarantee commitments granted	66 544	130	8 308	4 146	486	587	80 201

66. LIQUIDITY RISK MANAGEMENT

- **DEFINITION**

Liquidity risk is the risk of the inability to settle liabilities as they become due because of an absence of liquid assets. The lack of liquidity may be due to the inappropriate structure of assets and liabilities, including off-balance sheet, a mismatch of cash flows, customers failing to settle their liabilities, a sudden withdrawal of funds by the customers or other market events.

The Group also manages financing risk which takes into account the risk of losing the existing sources of financing and inability to renew the required means of financing or the loss of access to new sources of financing.

- **RISK MANAGEMENT OBJECTIVE**

To ensure the necessary level of funds needed to settle current and future liabilities (also potential ones) as they become due, taking into account the nature of the activities conducted and the needs which may arise due to changes in the market environment, by appropriately establishing the structure of balance sheet and off-balance sheet assets and liabilities.

- **RISK IDENTIFICATION AND MEASUREMENT**

The Group uses the following measures of the liquidity risk:

- contractual and adjusted liquidity gap;
- liquidity surplus;
- liquidity coverage ratio (LCR);
- net stable funding ratio (NSFR);
- liquidity reserve;
- the ratio of stable funds to illiquid assets;
- measures of stability of the deposit and loan portfolios;

- liquidity stress tests.
- **CONTROL**

Control over liquidity risk consists in determining liquidity risk limits and thresholds tailored to the scale and complexity of the Group's operations, in particular the strategic limit of tolerance to liquidity risk.

- **RISK FORECASTING AND MONITORING**

The following measures are monitored by the Group on a regular basis:

- utilization of the strategic limit of tolerance to liquidity risk ;
- utilization of regulatory liquidity standards;
- utilization of internal limits and thresholds of liquidity risk;
- concentration of the sources of financing;
- early warning indicators - monitored for the early detection of unfavourable occurrences which may have a negative impact on the Group's or the financial sector's liquidity position (when exceeded, early warning indicators trigger liquidity contingency plans).

The Group also makes regular forecasts of liquidity risk which take into account the current developments in the Group's operations. Liquidity forecasts include primarily the levels of selected liquidity risk measures envisaged in the forecasts of the Group's assets and liabilities and in selected stress test scenarios.

- **REPORTING**

Liquidity reports are developed on a daily, weekly, monthly and quarterly basis and once a year, an in-depth long-term liquidity analysis is performed. The reports gather the information on liquidity risk exposure and updates on the use of limits for that risk. The reports are addressed mainly to: ALCO, RC, the Management Board, the Risk Committee and the Supervisory Board.

- **MANAGEMENT ACTIONS / RISK MANAGEMENT TOOLS**

The main tools for liquidity risk management used by the Group are:

- procedures for liquidity risk management, in particular contingency plans;
- limits and thresholds to mitigate short-term, medium-term and long-term liquidity risk;
- supervisory liquidity standards;
- deposit, investment and securities purchase and sale transactions as well as derivatives, including transactions for the sale or purchase of securities;
- transactions ensuring long-term financing of the lending activities.

The Group's policy concerning liquidity is based on keeping an appropriate level of liquidity surplus and supervisory and internal measures of liquidity risk and financing through appropriate shaping of the portfolio of liquid securities, and stable sources of financing (a stable deposit base, in particular). In liquidity risk management, money market instruments, including NBP open market operations, are also used.

FINANCIAL INFORMATION

- **LIQUIDITY GAP**

The adjusted liquidity gap comprises a set of particular balance sheet and off-balance sheet categories in respect of their adjusted maturities. The liquidity gaps presented below represent the sum of adjusted liquidity gaps of the Bank (adjustments relate to, among other things, the Bank's core deposits from non-financial entities and their maturities, overdrafts and credit cards and their maturities, and liquid securities and their maturities), PKO Bank Hipoteczny, PKO Leasing SA, KREDOBANK SA and PKO Życie Towarzystwo Ubezpieczeń SA, and the contractual liquidity gaps of the other Group companies.

(IN PLN MILLION)

	on demand	0 - 1 month	1 - 3 months	3 - 6 months	6 - 12 months	12 - 24 months	24 - 60 months	more than 60 months
31.12.2022								
Adjusted periodic gap	9 400	69 449	(8 423)	(576)	(316)	20 757	25 046	(115 337)
Adjusted cumulative periodic gap	9 400	78 849	70 426	69 850	69 534	90 291	115 337	
31.12.2021								
Adjusted periodic gap	10 053	88 341	(7 419)	(6 794)	(826)	15 397	32 251	(131 003)
Adjusted cumulative periodic gap	10 053	98 394	90 975	84 181	83 355	98 752	131 003	-

[1] brought to comparability with the data as at 31 December 2021.

In all time horizons, the adjusted cumulative liquidity gap of the Group, determined as the sum of the adjusted liquidity gaps of the Bank, PKO Bank Hipoteczny SA, PKO Leasing SA, KREDOBANK SA and PKO Życie Towarzystwo Ubezpieczeń SA and the contractual liquidity gaps of the other Group companies, was positive both as at 31 December 2022 and 31 December 2021. This means that the Group has a surplus of the assets receivable over the liabilities payable.

- **SUPERVISORY LIQUIDITY MEASURES**

The following supervisory liquidity measures (specified by the provisions approved at the EU level) are regularly set and monitored at the Group:

- Liquidity Coverage Ratio (LCR) - defining the relation of high-quality liquid assets to net outflows in the 30-day horizon in stress conditions (supervisory measure specified in the CRR Regulation);
- Net Stable Funding Ratio (NSFR) - a measure defining the relationship of items providing stable funding to items requiring stable funding;

SUPERVISORY LIQUIDITY MEASURES	31.12.2022	31.12.2021
NSFR - net stable funding ratio	131.5%	129.0%
LCR - liquidity coverage ratio	169.1%	193.3%

In the period ended 31 December 2022 and 31 December 2021, liquidity measures remained above their respective supervisory limits.

- **CORE DEPOSIT BASE**

As at 31 December 2022, the core deposit base constituted approx. 91.2% of all deposits placed with the Bank (excluding the interbank market), which represents a decrease of around 3.1 p.p. compared with the end of 2021.

- **STRUCTURE OF THE SOURCES OF FINANCING**

Structure of the sources of financing	31.12.2022	31.12.2021
Total deposits (excluding interbank market)	84.07	81.12
Interbank market deposits	0.68	0.94
Equity	10.09	10.39
Market financing	5.16	7.55
Total	**100.00**	**100.00**

(IN PLN MILLION)

66.1. CONTRACTUAL CASH FLOWS FROM THE GROUP'S FINANCIAL LIABILITIES, INCLUDING DERIVATIVE FINANCIAL INSTRUMENTS

CONTRACTUAL CASH FLOWS FROM THE FINANCIAL LIABILITIES, EXCLUDING DERIVATIVE FINANCIAL INSTRUMENTS

The amounts disclosed comprise non-discounted future cash flows, both in respect of principal and interest (if applicable), in accordance with the contract, for the entire period to the date of the liability's maturity. Where the party to whom the Group has a liability is able to select the settlement deadline, it has been assumed that the earliest date on which the Group is obliged to settle the liability shall be taken into account. Where the Group is obliged to settle the liabilities in instalments, each instalment is allocated to the earliest period in which the Group might be obligated to settle. In the case of liabilities where instalment amounts are not fixed, the terms binding as at the reporting date have been adopted.

CONTRACTUAL CASH FLOWS FROM THE GROUP'S FINANCIAL LIABILITIES, EXCLUDING DERIVATIVE FINANCIAL INSTRUMENTS	Up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	More than 5 years	Contractual amount	Carrying amount
31.12.2022							
Amounts due to Central bank	9	-	-	-	-	9	**9**
Amounts due to banks	3 032	31	15	-	-	3 078	**3 011**
Amounts due to customers	273 135	29 704	11 461	24 577	7 901	346 778	**339 582**
Loans and advances received	47	28	1 166	1 697	-	2 938	**2 294**
Securities in issue	2 712	1 047	2 691	9 655	62	16 167	**15 510**
Subordinated liabilities	-	119	116	2 503	1 036	3 774	**2 781**
Lease liabilities	21	39	161	448	229	898	**896**
Other financial liabilities	3 481	31	81	94	-	3 687	**3 491**
Total	282 437	30 999	15 691	38 974	9 228	377 329	367 574
Off-balance sheet liabilities							
financing granted	14 588	5 101	26 792	18 860	7 864	73 205	
guarantees granted	519	937	4 098	4 632	2 292	12 478	

CONTRACTUAL CASH FLOWS FROM THE GROUP'S FINANCIAL LIABILITIES, EXCLUDING DERIVATIVE FINANCIAL INSTRUMENTS	Up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	More than 5 years	Contractual amount	Carrying amount
31.12.2021							
Amounts due to Central bank	8	-	-	-	-	8	**8**
Amounts due to banks	3 809	20	40	-	-	3 869	**3 821**
Amounts due to customers	285 741	12 671	11 489	6 159	6 737	322 797	**322 296**
Loans and advances received	39	47	431	2 328	-	2 845	**2 461**
Securities in issue	1 089	1 795	10 185	11 443	64	24 576	**23 872**
Subordinated liabilities	-	25	62	585	2 857	3 529	**2 716**
Lease liabilities	20	39	193	547	255	1 054	**959**
Other financial liabilities	2 281	-	-	95	-	2 376	**2 376**
Total	292 987	14 597	22 400	21 157	9 913	361 054	358 509
Off-balance sheet liabilities							
financing granted	12 663	4 674	24 479	16 441	10 145	68 402	
guarantees granted	466	1 855	3 336	3 792	2 350	11 799	

(IN PLN MILLION)

- **CONTRACTUAL CASH FLOWS FROM LIABILITIES IN RESPECT OF DERIVATIVE FINANCIAL INSTRUMENTS FOR WHICH THE VALUATION AS AT THE BALANCE SHEET DATE WAS NEGATIVE (A LIABILITY) AND WHICH ARE SETTLED ON A GROSS BASIS**

The amounts disclosed comprise non-discounted future cash flows, both in respect of principal and interest (if applicable).

CONTRACTUAL CASH FLOWS FROM LIABILITIES IN RESPECT OF DERIVATIVE FINANCIAL INSTRUMENTS FOR WHICH THE VALUATION AS AT THE BALANCE SHEET DATE WAS NEGATIVE (A LIABILITY) AND WHICH ARE SETTLED ON A GROSS BASIS 31.12.2022	Up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	More than 5 years	Contractual amount
outflows (principal and interest)	(14 567)	(16 306)	(16 697)	(10 228)	(166)	(57 964)
inflows (principal and interest)	14 269	15 789	15 368	9 712	526	55 664

CONTRACTUAL CASH FLOWS FROM LIABILITIES IN RESPECT OF DERIVATIVE FINANCIAL INSTRUMENTS FOR WHICH THE VALUATION AS AT THE BALANCE SHEET DATE WAS NEGATIVE (A LIABILITY) AND WHICH ARE SETTLED ON A GROSS BASIS 31.12.2021	Up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	More than 5 years	Contractual amount
outflows (principal and interest)	(10 897)	(9 528)	(9 016)	(15 320)	(225)	(44 986)
inflows (principal and interest)	10 844	9 429	9 204	14 851	623	44 951

- **CONTRACTUAL CASH FLOWS FROM LIABILITIES IN RESPECT OF DERIVATIVE FINANCIAL INSTRUMENTS FOR WHICH THE VALUATION AS AT THE BALANCE SHEET DATE WAS NEGATIVE (A LIABILITY) AND WHICH ARE SETTLED ON A NET BASIS**

In the case of IRS and NDF transactions, non-discounted future net cash flows in respect of interest and principal have been presented and in the case of the remaining derivative instruments settled on a net basis, the amount of the valuation as at 31 December 2022 and as at 31 December 2021, respectively, was adopted as the cash flow amount.

CONTRACTUAL CASH FLOWS FROM LIABILITIES IN RESPECT OF DERIVATIVE FINANCIAL INSTRUMENTS FOR WHICH THE VALUATION AS AT THE BALANCE SHEET DATE WAS NEGATIVE (A LIABILITY) AND WHICH ARE SETTLED ON A NET BASIS 31.12.2022	Up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	More than 5 years	Contractual amount
IRS	(477)	(1 655)	(1 203)	(268)	(25)	(3 628)
other derivatives: options, FRA, NDF	(279)	(692)	(1 713)	(609)	(19)	(3 312)

(IN PLN MILLION)

CONTRACTUAL CASH FLOWS FROM LIABILITIES IN RESPECT OF DERIVATIVE FINANCIAL INSTRUMENTS FOR WHICH THE VALUATION AS AT THE BALANCE SHEET DATE WAS NEGATIVE (A LIABILITY) AND WHICH ARE SETTLED ON A NET BASIS	Up to 1 month (inclusive)	1 to 3 months (inclusive)	3 months to 1 year (inclusive)	1 year to 5 years inclusive	More than 5 years	Contractual amount
31.12.2021						
IRS	(114)	(180)	(108)	(470)	(15)	(887)
other derivatives: options, FRA, NDF	(1 603)	(711)	(2 529)	(845)	(7)	(5 695)

66.2. Assets pledged as collateral for liabilities and transferred financial assets

- **Collateral for mortgage covered bonds of PKO Bank Hipoteczny S.A.**

The mortgage covered bonds are secured by loans secured by the highest priority mortgage. Additionally, the basis for the issue of mortgage covered bonds may also be PKO Bank Hipoteczny SA's own funds:

- invested in securities issued or guaranteed by the National Bank of Poland, the European Central Bank, governments and central banks of members of the European Union and/or the Organization for Economic Cooperation and Development, excluding countries that are restructuring or have restructured their foreign debt in the past 5 years;
- deposited with the National Bank of Poland;
- held in cash.

The CIRS and FX-Forward transactions which hedge the foreign exchange and interest-rate risk of the issued EUR mortgage covered bonds, and the IRS transactions hedging interest rate risk of the issued PLN fixed-interest-rate mortgage covered bonds were also recognized in the register of collaterals for mortgage covered bonds.

In 2022 and in the previous years the mortgage covered bonds cover pool did not include asset-backed securities (ABS) that do not meet the requirements described in paragraph 1 of Article 80 of the Guideline (EU) 2015/510 of the European Central Bank of 19 December 2014 on the implementation of the Eurosystem monetary policy framework (ECB/2014/60) (recast).

ASSETS PLEDGED AS COLLATERAL FOR LIABILITIES – ASSETS PLEDGED AS COLLATERAL FOR MORTGAGE COVERED BONDS	31.12.2022	31.12.2021
nominal value of loans	18 560	21 779
nominal value of the overcollateralization in the form of securities issued by the State Treasury, denominated in PLN	285	130

- **Receivables covered by securitization of lease receivables**

For detailed information see the note "Information on securitization of the lease portfolio and package sale of receivables".

- **Security for loans received**

The loan received by the Group to support the financing of investment projects in Ukraine is secured by Ukrainian government bonds in the amount of PLN 14 million.

(IN PLN MILLION)

- **FUND FOR THE PROTECTION OF GUARANTEED FUNDS**

ASSETS PLEDGED AS COLLATERAL FOR LIABILITIES – FUND FOR THE PROTECTION OF GUARANTEED FUNDS	31.12.2022	31.12.2021
Value of the fund	1 016	1 036
Nominal value of the collateral	1 300	1 100
Type of collateral	Treasury bonds	Treasury bonds
Maturity of collateral	25.04.2024	25.04.2024
Carrying amount of the collateral	1 258	1 093

The assets pledged as collateral for the fund are Treasury bonds which mature in the period that ensures securing the carrying amount over the period specified in the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution. The Fund is increased or decreased on 1 July of each year, in proportion to the amount representing the basis for calculation of the mandatory reserve deposits. These assets are treated as assets pledged as collateral for own liabilities.

- **FUNDS SECURING LIABILITIES IN RESPECT OF CONTRIBUTIONS TO THE BANK GUARANTEE FUND (BGF)**

ASSETS PLEDGED AS COLLATERAL FOR LIABILITIES - Funds securing liabilities in respect of contributions to the Bank Guarantee Fund (BGF)	31.12.2022	31.12.2021
Value of the contribution made in the form of payables	847	724
Nominal value of the assets in which funds corresponding to payables were invested	1 062	885
Type of collateral	Treasury bonds	Treasury bonds
Maturity of collateral	2024-2031	2024-2031
Carrying amount of the collateral	1 029	876

Starting from 2017, the value of contributions in the form of payment obligations represents 30% of the contributions to the Bank Guarantee Fund ("the BGF") for the Deposit Guarantee Fund or the Bank Resolution Fund. Assets securing payment commitments include Treasury bonds pledged for BGF in an amount which ensures maintaining the ratio of the value of property rights securing payment commitments to the amount of payment commitments of no less than 110%. To establish the minimum ratio of assets to the amount of payment commitment, the value of property rights securing payment commitments is determined at the amount specified based on the last fixing rate of the day in the electronic market for Treasury securities organized by the minister responsible for budgetary matters, plus interest due as at the valuation date, unless interest has already been included in the fixing rate.

Such assets funds are treated as assets pledged as collateral for own liabilities, they cannot be pledged or encumbered in any way, are excluded from judicial or administrative enforcement proceedings and do not form part of the estate in bankruptcy. The amount of funds securing payment commitments relating to contributions to the BGF will be increased on payment dates of contributions to the Deposit Guarantee Fund (quarterly) and the Bank Resolution Fund (in the third quarter of a given year) representing not more than 30% of the contribution established by the BGF.

The amount of these funds may decrease if the Group is called by the BGF to transfer in cash the amount corresponding to the value of payment commitments.

- **LEGAL LIMITATIONS RELATING TO THE GROUP'S TITLE**

In the years ended 31 December 2022 and 31 December 2021, respectively, there were no intangible assets or property, plant and equipment items to which the Group's legal title would be limited and pledged as collateral for the Bank's liabilities

(IN PLN MILLION)

66.3. CURRENT AND NON-CURRENT ASSETS AND LIABILITIES

FINANCIAL ASSETS	Current	Non-current	Total carrying amount
31.12.2022			
Cash and balances with Central Bank	15 917	-	15 917
Amounts due from banks	16 093	8	16 101
Hedging derivatives	439	603	1 042
Other derivative instruments	4 543	8 619	13 162
Securities	**11 462**	**124 170**	**135 632**
- held for trading	65	128	193
- not held for trading, mandatorily measured at fair value through profit or loss	1 198	504	1 702
- measured at fair value through other comprehensive income	7 229	57 982	65 211
- measured at amortized cost	2 970	65 556	68 526
Reverse repo transactions	7	-	7
Loans and advances to customers	**57 894**	**173 827**	**231 721**
- not held for trading, mandatorily measured at fair value through profit or loss	2 916	649	3 565
- measured at amortized cost	54 978	173 178	228 156
Other financial assets	1 863	4	1 867
Total financial assets	108 218	307 231	415 449

FINANCIAL ASSETS	Current	Non-current	Total carrying amount
31.12.2021			
Cash and balances with Central Bank	11 587	-	11 587
Amounts due from banks	9 005	5	9 010
Hedging derivatives	486	447	933
Other derivative instruments	5 024	5 879	10 903
Securities	**9 386**	**126 054**	**135 440**
- held for trading	113	135	248
- not held for trading, mandatorily measured at fair value through profit or loss	1 326	723	2 049
- measured at fair value through other comprehensive income	2 912	58 951	61 863
- measured at amortized cost	5 035	66 245	71 280
Loans and advances to customers	**56 525**	**177 775**	**234 300**
- not held for trading, mandatorily measured at fair value through profit or loss	3 458	1 101	4 559
- measured at fair value through other comprehensive income	-	2	2
- measured at amortized cost	53 067	176 672	229 739
Other financial assets	1 895	-	1 895
Total financial assets	93 908	310 160	404 068

(IN PLN MILLION)

FINANCIAL LIABILITIES	Current	Non-current	Total carrying amount
31.12.2022			
Amounts due to Central bank	9	-	9
Amounts due to banks	3 011	-	3 011
- measured at fair value through profit or loss	2	-	2
- measured at amortized cost	3 009	-	3 009
Hedging derivatives	1 762	5 707	7 469
Other derivative instruments	4 760	8 218	12 978
Amounts due to customers	**311 936**	**27 646**	**339 582**
- measured at fair value through profit or loss	5	778	783
- measured at amortized cost	311 931	26 868	338 799
Loans and advances received	1 118	1 176	2 294
Securities in issue	6 311	9 199	15 510
Subordinated liabilities	-	2 781	2 781
Other financial liabilities	3 655	732	4 387
Provisions for financial liabilities and guarantees granted	688	145	833
Total financial liabilities	**333 250**	**55 604**	**388 854**

FINANCIAL LIABILITIES	Current	Non-current	Total carrying amount
31.12.2021			
Amounts due to Central bank	8	-	8
Amounts due to banks	3 821	-	3 821
- measured at amortized cost	3 821	-	3 821
Hedging derivatives	749	4 057	4 806
Other derivative instruments	5 013	5 995	11 008
Amounts due to customers	**309 788**	**12 508**	**322 296**
- measured at fair value through profit or loss	-	1 067	1 067
- measured at amortized cost	309 788	11 441	321 229
Loans and advances received	300	2 161	2 461
Securities in issue	12 865	11 007	23 872
Subordinated liabilities	-	2 716	2 716
Other financial liabilities	2 518	817	3 335
Provisions for financial liabilities and guarantees granted	571	104	675
Total financial liabilities	**335 633**	**39 365**	**374 998**

67. Operational risk management

- **Definition**

Operational risk is defined as the risk of losses being incurred due to a mismatch or unreliability of the internal processes, people and systems may or due to external events. Operational risk includes legal risk and cyber security risk:

- legal risk – the risk of incurring a loss due to ignorance, misunderstanding and non-application of legal norms and accounting standards, the inability to enforce contractual provisions, unfavourable interpretations or decisions of courts or public administration bodies;
- cyber security risk – the degree of exposure by potential negative cyber security risk factors, related to information and communication technologies, which may cause financial damage to the organization by compromising the availability, integrity, confidentiality or accountability of information processed in the Bank's IT system resources (SIB).

Operational risk excludes reputation risk and business risk.

- **Risk management objective**

The objective of operational risk management is to ensure operational and cost efficiency and business security by limiting the occurrence of operational events and their negative consequences.

- **Risk identification and measurement**

There are two levels of operational risk management at the Group:

- systemic operational risk management - which consists of creating solutions for the Group to control the level of operational risk that enables the Group to achieve its objectives;
- on-going operational risk management - aimed at preventing operational events and responding to operational events that occur, for which each Group employee is responsible within the scope of his/her tasks and responsibilities.

The process of operational risk management is carried out at the level of the Group and at the levels of individual areas of systemic operational risk management.

Operational risk management comprises the identification of operational risk in particular through collecting data about the operational risk and the self-assessment of operational risk.

In order to manage operational risk, the Group gathers internal and external data about operational events and the causes and effects of their occurrence, data on the factors of the business environment, results of operational risk self-assessment, data on the operational risk indicators and data related to the quality of the internal control system.

The operational risk self-assessment comprises the identification and assessment of operational risk for the Group's products, processes and applications as well as organizational changes and it is conducted cyclically and before implementing new or changed Group products, processes and applications, using the data gathered on operational events and information obtained during the measurement, monitoring, cooperation with the Bank Group's entities and operational risk reporting, including internal audits and security audits.

The measurement of operational risk comprises:

- calculating operational risk indicators: KRI (Key Risk Indicators) and RI (Risk Indicators);
- calculating the requirement for own funds to cover operational risk under the AMA approach (the Bank, including the German and Czech Branches and excluding the Branch in Slovakia) and BIA (the Branch in Slovakia and the prudential Group entities);
- stress-tests;
- calculating the Group's internal capital.

- **Control**

Control of operational risk includes determining risk control mechanisms tailored to the scale and complexity of the Bank's and the Group's activities, in the form of operational risk limits, in particular the strategic limits of tolerance of operational risk, loss limits, operational risk indicators with thresholds and critical values.

- **RISK FORECASTING AND MONITORING**

The following measures are monitored by the Group on a regular basis:

- utilization of the strategic tolerance limits for the Group and operational risk losses limits for the Bank;
- operational events and their consequences;
- results of the operational risk self-assessment;
- the requirement in respect of own funds to cover operational risk, in accordance with the BIA approach in the case of the Slovak Branch and in accordance with the AMA approach in the case of the remaining activity of the Bank, and in the case of the Group entities covered by prudential consolidation – in accordance with the BIA approach;
- the results of stress tests, including reverse stress tests;
- operational risk indicator values in relation to thresholds and critical values;
- the level of risk for the Bank and the Group, areas and tools for managing operational risk in the Bank such as self-assessment, operational risk indicators, loss limits;
- the effectiveness and timeliness of actions undertaken to reduce or transfer operational risk;
- management actions relating to the presence of elevated or high levels of operational risk and their effectiveness in reducing the level of operational risk.

In 2022 and 2021, the following entities had a decisive impact on the operational risk profile of the Group: PKO Bank Polski and the PKO Leasing SA Group.

- **REPORTING**

Information relating to operational risk is reported for the purpose of senior management, the Operational Risk Committee, the Risk Committee, the Management Board and the Supervisory Board in monthly and quarterly cycles. Each month, information about operational risk is prepared and forwarded to the ORC, senior management staff, the organizational units of the Bank responsible for systemic operational risk management. The reports are addressed to the ORC, the RC, the Management Board and the Supervisory Board. The scope of the information is diversified and tailored to the scope of responsibilities of individual recipients of information.

- **MANAGEMENT ACTIONS**

Management actions are taken in the following cases:

- on an initiative of ORC or the Management Board;
- on the initiative of the Bank's organizational units managing operational risk;
- when operational risk has exceeded the levels determined by Management Board or ORC.

In particular, when the risk level is elevated or high, the Group uses
the following approaches and instruments to manage the operational risk:

- risk reduction – mitigating the impact of risk factors or the consequences of their occurrence by introducing or strengthening various types of instruments for managing operational risk such as:
    - control instruments (including approval, internal control, segregation of duties);
    - human resources management instruments (selection of staff, increasing the qualifications of employees, incentive systems);
    - determination or verification of threshold values and critical operational risk indicators;
    - determination or verification of operational risk limits;
    - contingency plans;
- risk transfer – transfer of responsibility for covering potential losses on a third-party:
    - insurance;
    - outsourcing;
- risk avoidance - resignation from the risk-generating activity or eliminating the probability of the risk factor's occurrence.

68. ESG RISK MANAGEMENT

The ESG risk (ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE) has been defined by the Group as a risk of negative financial consequences to the Group resulting from the current or future impact of ESG risk factors on customers and counterparties or the Group's balance sheet items. ESG risks include environmental, social and corporate governance risks.

The objective of ESG risk management is to support the sustainable development and long-term value creation of the Group in line with the Bank's Strategy by managing the impact of ESG factors in an integrated way.

The Group manages ESG risk as part of its management of other risks as, due to the nature of ESG risk, it is not a separate risk but a cross-cutting risk affecting the Bank's individual risks, in particular credit risk. Management of the individual risks is the responsibility of the organizational units nominated by the Bank's Management Board. The committees functioning in the Bank within the scope of their tasks and competences take decisions, issue recommendations and opinions on activities related to ESG risk. The Bank applies the principle of "double materiality" by taking into account the following perspective

- the impact of ESG factors on the Group's operations, financial results and development;
- and the impact of the Group's activities on society and the environment.

Financial, capital and strategic plans are reviewed and evaluated in terms of the level of risk generated and compliance with sustainable development taking into account ESG risks in the short, medium and long term.

The Group implements a plan to integrate ESG risks into the Group's risk management system and, in accordance with the plan, defines ESG risk management processes in a comprehensive manner incorporating them into the existing risk management framework. The integration consists of adapting the existing methods of identification, measurement and control of individual risks, taking into account the cause and effect relationships between these risks and ESG factors.

One component of environmental risk management is a strategic ESG risk tolerance limit. A measure of the tolerance of this risk is the value of loans to customers in carbon-intensive industries divided by the value of the gross business loan portfolio. In 2022, the share of loans to customers in carbon-intensive industries was 0.38% with a tolerance limit for the Bank and the Group set at≤0.8%. This limit is monitored on a quarterly basis and reported to the Bank's Management Board. The Group decided to increase its financing in the district heating sector and to selectively finance energy security transactions (coal purchases) on a transitional basis, in view of the war in Ukraine and the increase in energy commodity prices and the need to secure coal supplies from alternative sources other than Russia, thus pursuing its social responsibility dimension.

The Group develops standards for defining green loans to non-financial enterprises with environmental objectives beyond the adaptation/mitigation of climate change.

Within the Group, a "green credit product" means financing renewable energy sources, measures to improve energy efficiency, reduce pollution of the environment and over-use of natural resources, to combat climate change, and support the on-going activity of entities pursuing the objectives of sustainable development.

In the Risk Management Area, the Group performs tasks to ensure compliance with the following external regulations:

- Taxonomy (Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 including delegated regulations) – the Bank and Bank's Group are engaged in a project to operationalize the technical criteria of the EU Taxonomy;
- Implementing Technical Standards – Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks in accordance with Article 449a of Regulation (EU) No 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms amending Regulation (EU) No 648/2012.

As part of these tasks, the Group is working to expand its IT systems for collecting, aggregating and managing sustainability data.

With regard to the insurance business in 2022, the Group's insurance companies have adapted their internal regulations on ESG to the new legal requirements, in particular with respect to Commission Delegated Regulation (EU) 2021/1257 amending Delegated Regulations (EU) 2017/2358 and (EU) 2017/2359 as regards the integration of sustainability factors, risks and preferences into the product oversight and governance requirements for insurance undertakings and insurance distributors and into the rules on conduct of business and investment advice for insurance-based investment products and Commission Delegated Regulation (EU) 2021/1256 of 21 April 2021 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings (Implementing Regulation for Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009)

CAPITAL MANAGEMENT AT THE GROUP

69. CAPITAL ADEQUACY

- ### CAPITAL ADEQUACY

Capital adequacy is the state in which the level of risk incurred by the Bank's Group in connection with its business development can be covered by its capital whose level and structure are adequate to the applicable supervisory requirements, specific risk tolerance level and adopted time horizon. The process of managing capital adequacy comprises, in particular, compliance with the applicable regulations of the supervisory and control authorities, as well as the risk tolerance level determined within the Bank and the Bank's Group and the capital planning process, including the policy concerning the sources of acquisition of capital.

The objective of capital adequacy management is to ensure an appropriate level and structure of own funds which is adequate to the scale of the Bank's activities, supervisory requirements and exposure to risk.

The process of managing the Group's capital adequacy comprises:

- specifying and pursuing the Group's capital targets;
- identifying and monitoring significant types of risk;
- measuring or estimating internal capital to cover individual risk types of risk and total internal capital;
- determining threshold values for capital adequacy measures;
- forecasting, monitoring and reporting the level and structure of own funds;
- managing the structure of the balance sheet to optimize the quality of the Group's own funds;
- emergency measures with regard to capital;
- stress-tests;
- forecasting requirements for own funds;
- assessing the profitability of individual business areas and customer segments.

Capital adequacy measures include:

- total capital ratio (TCR);
- the ratio of own funds to internal capital;
- Tier 1 core capital ratio (CET1);
- Tier 1 capital ratio (T1);
- leverage ratio;
- MREL ratio - TREA;
- MREL ratio - TEM.

The objective of monitoring the level of capital adequacy measures is to determine the degree of compliance with supervisory requirements and to identify cases which require emergency measures to be implemented or the preparation of a capital protection plan.

(IN PLN MILLION)

Major regulations applicable in the capital adequacy assessment process include:

- the Polish Banking Law;
- the CRR Regulation;
- the Act of 5 August 2015 on macroprudential supervision over the financial system and crisis management in the financial system (as amended), (the Act on macroprudential supervision);
- the Regulation of the Minister of finance, funds and regional policy of 8 June 2021 on the risk management and internal control systems and remuneration policy in banks (effective from 11 June 2021);
- the Regulation of the Minister of finance, funds and regional policy of 27 July 2021 on the detailed method of estimating internal capital and conducting reviews of estimation strategies and procedures and maintaining a permanent level of internal capital by banks (effective from 4 August 2021);
- the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution (as amended).

Minimum levels of the capital ratios maintained by the Group in accordance with Article 92 of the CRR are as follows:	
• total capital ratio (TCR)	8.0%
• Tier 1 capital ratio (T1)	6.0%
• Tier 1 core capital ratio (CET1)	4.5%

Obligation to maintain a combined buffer above the minimum amounts specified in Art. 92 of the CRR, representing the sum of the applicable buffers	**31.12.2022**	**31.12.2021**
Total:	**4.52%**	**3.51%**
• conservation buffer	2.5%	2.5%
• countercyclical buffer	0.02%	0.01%
• systemic risk buffer[1]	0%	0%[1]
• due to identifying the Bank as another systemically important institution ("O-SII")	2%[2]	1%

[1] On 19 March 2020, in connection with the COVID-19, the Regulation of the Minister of Finance cancelling the systemic risk buffer came into effect. Nevertheless, the previously applicable buffer of 3% is taken into account in the calculation of the required level of ratios to meet dividend payment conditions.

[2] The buffer represents a share of total exposure to the risks calculated in accordance with the CRR. On 20 December 2022, PKO Bank Polski received the PFSA's decision dated 16 December 2022, regarding a change of the other systemically important institution buffer imposed on the Bank.

Discretionary capital requirement ("domiar kapitałowy") (an additional capital requirement in order to hedge the risk resulting from mortgage secured loans and advances to households)	**31.12.20221**	**31.12.2021**
• for the total capital ratio:	0.00 p.p.	0.11 p.p.
• for the Tier 1 capital ratio	0.00 p.p.	0.08 p.p.
• for the Tier 1 core capital ratio	0.00 p.p.	0.06 p.p.

[1] On 7 November 2022, the Bank received a decision from PFSA in which the PFSA declared the expiration of the decision on the recommendation to the Bank to comply with the additional capital requirement, i.e. in addition to the amount calculated in accordance with the appropriate legal provisions.

On 2 December 2022, PKO Bank Polski S.A. received a letter from the Bank Guarantee Fund (BGF) on the minimum requirement for own funds and eligible liabilities (MREL). The BGF set the target MREL requirement for the Bank based on the consolidated data at the total risk exposure amount (TREA) and the total exposure measure (TEM), which must be fulfilled at the end of 2023, and set interim targets.

The assumed TREA and TEM levels have been adjusted to exclude PKO Bank Hipoteczny S.A. from consolidation.

At the same time, the BGF exempted PKO Bank Hipoteczny S.A. from the obligation to maintain a minimum level of own funds and eligible liabilities.

(IN PLN MILLION)

The required levels are specified in the table below:

in %	31.12.2022	31.12.2023
MREL (TREA)	11.68	15.36
MREL (TEM)	4.46	5.91

The impact of IFRS 9 on own funds and capital adequacy measures is governed by Regulation 2017/2395 of the European Parliament and of the Council of 12 December 2017 amending Regulation (EU) No 575/2013 as regards transitional arrangements for mitigating the impact of the introduction of IFRS 9 on own funds and for the large exposures treatment of certain public sector exposures denominated in the domestic currency of any Member State. According to this regulation, banks are allowed to apply transitional provisions in respect of own funds and increase the common equity capital Tier 1 connected with the implementation of a new impairment model over the subsequent 5 years from 1 January 2018, whereas the adjustment ratio decreases gradually.

Moreover, on 27 June 2020, Regulation 2020/873 of the European Parliament and of the Council of 24 June 2020 amending Regulation (UE) No. 575/2013 and (UE) 2019/876 as regards certain adjustments in response to the COVID-19 pandemic (hereinafter Regulation 2020/873) came into effect. This provision allows to mitigate the impact on the write-offs recorded as of 1 January 2020 on Tier 1 capital.

Such a solution can be applied up to 2024, inclusive, whereas the adjustment ratio allocated to this value decreases gradually. The Bank decided that in the light of Art. 473a (7a) of the CRR implemented by the aforesaid Regulation, it would apply an option according to which the adjustment mitigating the impact of the introduction of IFRS 9 on own funds would receive a risk weight equal to 100% and the resulting value would be added to the total exposure.

According to Article 468 of the CRR (as amended by the aforementioned Regulation 2020/873), banks may apply the provisional treatment of unrealized gains and losses measured at fair value through other comprehensive income in connection with the COVID-19 pandemic. This approach enables excluding from the calculation of the Bank's common equity position the portion of the unrealized gains and losses accumulated from 31 December 2019 included in the balance sheet under "changes in fair value of debt instruments measured at fair value through OCI", corresponding to exposures to central governments, regional governments or local authorities, and to public sector entities, excluding those financial assets that are impaired due to credit risk. The Bank's Group has decided to apply the above provisional treatment from December 2021 data onwards and has notified the Polish Financial Supervision Authority about its decision.

In addition, from the November 2021 data onwards, the Group has decided to avail itself of the option indicated in the European Banking Authority's guidance set out in the Single Rulebook Q&A No. 2015_1887. According to the EBA's response, deferred tax assets related to gains or losses on cash flow hedges (which are not included in own funds according to Article 33 of the CRR) do not have to be included either in deferred tax assets included in deductions from own funds according to Articles 36 and 48 of the CRR.

- **Own funds for capital adequacy purposes**

In 2022 and 2021, the Group's capital adequacy level remained at a safe level, well above the supervisory limits. The minimum capital requirements were satisfied over the entire period.

- **REQUIREMENTS RELATING TO OWN FUNDS (PILLAR I)**

The Group calculates own funds requirements for the following types of risk:

CREDIT RISK	under the standard approach, using the following formulas with regard to: BALANCE SHEET EXPOSURES – the product of a carrying amount (accounting for adjustments for specific credit risk), the risk weight of the exposure calculated according to the standardized approach in calculating the own funds requirement with regard to credit risk and 8% (accounting for the recognizable collateral), OFF-BALANCE SHEET LIABILITIES GRANTED – the product of the amount of a liability (accounting for adjustments for specific credit risk), the risk weight of the product, the risk weight of off-balance sheet exposure calculated according to the standardized approach in calculating the own funds requirement with regard to credit risk and 8% (accounting for the recognizable collateral), OFF-BALANCE SHEET TRANSACTIONS (DERIVATIVE INSTRUMENTS) – the product of the risk weight of an off-balance sheet transaction calculated according to the standardized approach in calculating the own funds requirement with regard to credit risk and 8%.
OPERATIONAL RISK	• in accordance with the AMA approach – with respect to the Bank's activities, taking into account the branch in Germany and the branch in the Czech Republic and excluding the branch in Slovakia; • in accordance with the BIA approach – with respect to the activities of the branch in the Slovakia and entities of the Group subject to the prudential consolidation.
MARKET RISK	• currency risk - calculated under the core approach; • commodity risk – calculated under the simplified approach; • equity instruments risk – calculated under the simplified approach; • specific risk of debt instruments – calculated under the core approach; • general risk of debt instruments – calculated under the duration-based approach; • other types of risk other than delta risk (non-delta risk) calculated under the scenario approach in the case of options for which the Bank uses its own valuation models and under the delta plus approach for other options.
OTHER RISKS	• settlement risk and delivery risk – calculated under the approach specified in Title V, "Own funds requirements for settlement risk" of the CRR Regulation; • counterparty credit risk – calculated under the approach set out in Chapter 6, "Counterparty credit risk" of Title II, "Capital requirements for credit risk" of the CRR Regulation; • credit valuation adjustment risk – calculated under the approach specified in Title VI, "Own funds requirements for credit valuation adjustment risk" of the CRR Regulation; • exceeding the large exposures limit – calculated under the approach set out in paragraphs 395-401 of the CRR Regulation;

(IN PLN MILLION)

	31.12.2022	31.12.2021 restated	31.12.2021 published
Equity	**35 435**	**37 693**	**37 693**
capital: share capital, supplementary capital, other reserves, and general risk reserve	32 496	32 291	32 291
retained earnings	8 651	6 270	6 270
net profit or loss for the year	3 333	4 874	4 874
other comprehensive income and non-controlling interests	(9 045)	(5 742)	(5 742)
Exclusions from equity:	**(2 154)**	**895**	**895**
deconsolidation - adjustments due to prudential consolidation	(224)	(268)	(268)
net profit or loss for the year	3 290	4 862	4 862
cash flow hedges	(5 220)	(3 699)	(3 699)
Other fund reductions:	**3 404**	**2 962**	**2 966**
goodwill	961	961	961
other intangible assets	1 508	1 461	1 461
securitization items	12	54	54
additional asset adjustments (AVA, DVA, NPE)	923	486	490
Provisional treatment of unrealized gains and losses on securities measured at fair value through OCI according to Art. 468 of the CRR	**1 357**	**1 238**	**1 235**
Temporary reversal of IFRS 9 impact	**1 651**	**1 763**	**1 482**
Profit/(loss) for the current year	**946**	**2 575**	**1 975**
Tier 1 capital	**38 139**	**39 412**	**38 524**
Tier 2 capital (subordinated debt)	**2 584**	**2 700**	**2 700**
Own funds	**40 723**	**42 112**	**41 224**
Requirements for own funds	**18 328**	**17 990**	**18 093**
Credit risk	15 594	15 973	16 076
Operational risk[1]	2 358	1 793	1 793
Market risk[2]	339	183	183
Credit valuation adjustment risk	37	41	41
Total capital ratio	**17.78%**	**18.73%**	**18.23%**
Tier 1 capital ratio	**16.65%**	**17.53%**	**17.03%**

[1] In 2022, there was an increase in the own funds requirement for operational risk of PLN 565, mainly due to the growing costs of legal risk related to the portfolio of mortgage loans in CHF.

[2] Increase in the value of the market risk-related requirement at the end of 2022 comprised mainly the currency risk-related requirement of PLN 135 million.

Pursuant to Art. 26 (2) of CRR, an institution may include interim or year-end profits in CET1 after a formal decision was taken confirming the final profit or loss of the institution for the year, or before it has taken the formal decision, only with the competent authority's prior permission. In line with the European Banking Authority's (EBA) guidance in the single rulebook Q&A setting out the EBA's position on when to recognise annual and interim profits in capital adequacy data (Q&A 2018_3822, Q&A 2018_4085 and Q&A 2013_208), from the point at which the institution formally meets the criteria to include the profit for the period in Tier 1 capital, it is considered that the profit should be included on a retrospective date (the date of the profit rather than the date the criterion is met) and an adjustment to own funds should be made to the date to which the profit relates.

As the Bank's Annual General Meeting approved the distribution of the Bank's profit on 12 May 2022 and the formal distribution of profits of some of the other prudentially consolidated entities of the Bank Group was completed by the end of June 2022, the above guidelines apply to the Group's own funds for the figures as at 31 December 2021.

If the transitional arrangements for the partial reversal of the impact of IFRS 9 under Article 473a of the CRR had not been applied, the Group's Tier 1 capital would have amounted to PLN 36 414 million, the total capital would have amounted to PLN 38 998 million, the Tier 1 capital ratio would have been 16.04%, the total capital ratio would have been 17.18% and the leverage ratio 8.05%.

\D \dIf the provisional treatment of unrealized gains and losses measured at fair value through other comprehensive income under Article 468 of the CRR had not been applied, the Group's Tier 1 capital would have amounted to PLN 36 661 million, the total capital would have amounted to PLN 39 245 million, the Tier 1 capital ratio would have been 16.03%, the total capital ratio would have been 17.16% and the leverage ratio 8.07%.

According to CRR Regulation, prudential consolidation is used for capital adequacy purposes, which unlike consolidation in accordance with IFRS, covers only subsidiaries that meet the definition of an institution, financial institution or any ancillary services enterprise. In addition, pursuant to Article 19 (1) of the CRR, prudential consolidation may exclude entities whose total value of assets and off-balance sheet items is less than EUR 10 million.

Other subsidiaries, not consolidated under the acquisition accounting method for the purposes of prudential consolidation are measured using the equity method.

For the purposes of prudential consolidation, the Group consists of following entities:

- PKO Bank Polski S.A.
- PKO Leasing S.A. Group;
- PKO BP BANKOWY PTE S.A.
- PKO Towarzystwo Funduszy Inwestycyjnych S.A.
- KREDOBANK S.A. Group;
- PKO Finance AB
- PKO BP Finat sp. z o.o.
- PKO Bank Hipoteczny S.A.
- Bankowe Towarzystwo Kapitałowe S.A. Group.

Non-financial and insurance entities are excluded from the prudential consolidation.

(IN PLN MILLION)

CONSOLIDATED INCOME STATEMENT IN ACCORDANCE WITH THE CRR (PRUDENTIAL CONSOLIDATION)

CONSOLIDATED INCOME STATEMENT in accordance with the CCR	31.12.2022	31.12.2021
Net interest income	**11 725**	**9 861**
Interest income	20 065	10 554
Interest expense	(8 340)	(693)
Net fee and commission income	**4 689**	**4 278**
Fee and commission income	6 254	5 445
Fee and commission expense	(1 565)	(1 167)
Other net income	**427**	**729**
Dividend income	12	12
Gains/(losses) on financial transactions	360	63
Foreign exchange gains/ (losses)	(66)	437
Gains/(losses) on derecognition of financial instruments	(10)	205
Net other operating income and expense	131	12
Result on business activities	**16 841**	**14 868**
Net allowances for expected credit losses	(1 476)	(1 329)
Net impairment losses on non-financial assets	(63)	(46)
Cost of legal risk of mortgage loans in convertible currencies	(1 914)	-
Administrative expenses	(7 675)	(6 038)
Tax on certain financial institutions	(1 259)	(1 071)
Share in profits and losses of subsidiaries, associates and joint ventures	247	97
Profit/(loss) before tax	4 701	6 481
Income tax expense	(1 411)	(1 619)
Net profit/(loss) (including non-controlling interest)	3 290	4 862
Profit (loss) attributable to non-controlling shareholders	-	-
Net profit attributable to equity holders of the parent company	3 290	4 862

- ## INTERNAL CAPITAL (PILLAR II)

In 2022, the Group calculated internal capital in accordance with the commonly binding legal regulations:

- the CRR Regulation;
- the Polish Banking Law;
- the Regulation of the Minister of finance, funds and regional policy of 8 June 2021 on the risk management and internal control systems and remuneration policy in banks (effective from 11 June 2021);
- the Regulation of the Minister of finance, funds and regional policy of 27 July 2021 on the detailed method of estimating internal capital and conducting reviews of estimation strategies and procedures and maintaining a permanent level of internal capital by banks (effective from 4 August 2021);
- the Act on macro-prudential supervision;

and the internal regulations of the Bank and the Group.

Internal capital constitutes an estimated amount of capital necessary to cover all material types of risk arising from the Group's operations. The purpose of estimating the internal capital is to determine own funds at a level ensuring operational safety, taking into account changes in the profile and scale of the activities conducted and adverse stress conditions, and enabling more effective management of the Group aimed at improving the profitability of operations and profitability of the capital invested.

The internal capital for covering significant risk types is determined using the methods specified in the internal regulations.

(IN PLN MILLION)

The ratio of the Group's own funds to its internal capital remained at a level exceeding both the statutory limit and the Group's internal limit.

- **DISCLOSURES (PILLAR III)**

The Group publishes quarterly information in particular concerning risk management and capital adequacy in accordance with: the CRR Regulation and the executive acts to the CRR, guidelines of the European Banking Authority, including guidelines concerning disclosure requirements pursuant to section eight of the CRR Regulation ("EBA guidelines"), the Act on macro-prudential supervision, the Polish Banking Law Act, Recommendations H, M and P issued by the Polish Financial Supervision Authority as part of the Report, "Capital adequacy and other information to be published by the Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna Group. The last report was prepared as at 31 December 2021.

Details of the scope of information disclosed, the method of its verification and publication are presented in PKO Bank Polski SA Capital Adequacy Information Policies and other information to be published, which are available on the Bank's website (www.pkobp.pl).

70. Leverage ratio

The Group calculates the leverage ratio as one of its capital adequacy measures.

The objective of excessive leverage risk management is to ensure an appropriate relationship between the amount of the Tier 1 capital and the total of balance sheet assets and off-balance sheet liabilities granted by the Group.

For the purpose of measuring the risk of excessive financial leverage, a leverage ratio is calculated by the Group as a measure of Tier 1 capital divided by the measure of total exposure and is expressed as a percentage rate. The leverage ratio as at 31 December 2022 and 31 December 2021 was above the internal and external limits, as well as above the minimum levels as recommended by the PFSA.

To maintain the leverage ratio at an acceptable level, the Group set up a strategic tolerance limit and a threshold for the ratio and they are regularly monitored and verified periodically.

	Leverage ratio exposures specified in CRR related to capital requirements		
	31.12.2022	31.12.2021 restated	31.12.2021 published
Total capital and exposure measure			
Tier 1 capital	38 139	39 412	38 524
Total exposure measure for leverage ratio calculation	454 490	436 860	439 933
Leverage ratio			
Leverage ratio	8.39	9.02	8.76

71. Dividends and distribution of retained earnings

Pursuant to the Dividend Policy adopted in 2021, the Bank's intention is to ensure stable dividend distributions to the shareholders in the long term, taking into account the principle of prudent management of the Bank and the Bank's Group, in compliance with the law and the PFSA position on the dividend policy assumptions of commercial banks.

On 15 of December 2022, the Bank adopted a dividend policy for the Bank and the Group ("Dividend policy"). The Dividend policy takes into account the Bank's intention to provide stable dividend payments in the long term, in accordance with the principle of prudent management of the Bank and the Group, in compliance with the law and the PFSA position on the dividend policy assumptions of commercial banks. The objective of the Dividend policy is to optimize the capital structure of the Bank and the Group, while considering the return on equity, the cost of capital and the capital needs for development, and maintaining an appropriate level of the capital adequacy ratios and meeting the minimum requirement for own funds and eligible liabilities (MREL). The repurchase of treasury shares for cancellation is an additional tool for capital redistribution. The General Meeting gives its consent to the acquisition of treasury shares by the Bank, after prior approval of the Supervisory Board, specifying the terms of the acquisition, including the maximum number of shares to be acquired, the period of authorization to acquire shares, which may not exceed five years and the maximum and minimum amount of consideration for the acquired shares, if the acquisition takes place for consideration. Purchase of treasury shares for cancellation in each case requires the Bank to obtain the prior consent of the Polish Financial Supervision Authority.

On 12 May 2022, the Annual General Meeting of PKO Bank Polski S.A. (AGM) passed a resolution on distribution of profit of PKO Bank Polski S.A. for 2021, in accordance with which:

- the amount of PLN 2,287,500,000 (i.e. 49.77% of the Bank's net profit) was earmarked for the payment of dividend;
- the remaining net profit of PLN 2,308,836,372 was transferred to retained earnings.

The gross dividend is PLN 1.83 per share. The AGM set the dividend (record) date as 4 August 2022 and the dividend payment date as 23 August 2022. All 1,250 million shares are eligible for the dividend.

At the same time, the AGM passed a resolution to leave PKO Bank Polski S.A.'s retained earnings, in the amount of PLN 5,500,000,000, undistributed.

The aforementioned resolutions are consistent with the individual recommendation of the Polish Financial Supervision Authority dated 23 February 2022, in which the PFSA recommended that the Bank should mitigate the risk of its operations by:

- refraining from payment of a dividend in excess of 50% of the profit earned in the 2021;
- refraining from any other actions taken without consultation with the supervisory authority, in particular not included in the scope of the current business and operating activities, which could result in a decrease in own funds, including any payment of dividend from retained earnings or redemption of treasury shares.

At the same time, the PFSA confirmed that the Bank met the requirements for payment of dividend at a level of up to 50% of the net profit for 2021, as defined in December 2021 in the PFSA position on dividend policies of supervised institutions for 2022.

- **THE PFSA'S RECOMMENDATIONS REGARDING DIVIDEND PAYMENTS IN 2023**

On 6 December 2022, the PFSA adopted a position on the 2023 dividend policy of commercial banks, cooperative and associating banks, insurance companies, reinsurance companies, insurance and reinsurance companies, investment fund companies, universal pension companies and brokerage houses.

The dividend payment criteria for commercial banks indicated in the PFSA's positions are as follows:

1. an amount of up to 50% of the profit for 2022 may only be paid out by banks that fulfil all of the following criteria:

- not implementing a recovery programme;
- positively assessed in the supervisory review and assessment process (BION) – final BION score not worse than 2.5;
- having a leverage ratio (LR) of more than 5%;
- having a Tier 1 core capital ratio (CET1) of not less than the required minimum: 4.5% +56%* P2R requirement + combined buffer requirement (including 3% systemic risk buffer);
- having a Tier 1 capital ratio (T1) not lower than the required minimum: 6% +75%* P2R requirement + combined buffer requirement (including 3% systemic risk buffer);
- having a total capital ratio (TCR) not lower than the required minimum: 8% + P2R requirement + combined buffer requirement (including 3% systemic risk buffer);

2. An amount of up to 75% of the profit for 2022 may be paid only by banks meeting at the same time the criteria for payment of 50% taking into account, as part of the capital criteria, the bank's sensitivity to an adverse macroeconomic scenario (P2G recommendation).
3. An amount of up to 100% of the profit for 2022 may be paid only by banks meeting at the same time the criteria for payment of 75% and whose portfolio of receivables from the non-financial sector is characterised by good credit quality (share of NPLs, including debt instruments, not exceeding 5%).

The criteria set out in points 1-3 should be met by the bank both at the individual and consolidated level.

Additionally, the PFSA indicated that the banks which have considerable portfolios of foreign currency housing loans should adjust the rate of dividend distribution based on two additional criteria:

- Criterion 1 – based on the share of foreign currency housing loans for households in the total portfolio of amounts due from the non-financial sector;
- Criterion 2 – based on the share of foreign currency housing loans granted in 2007 and 2008 in the foreign currency housing loans for households' portfolio.

The PFSA recommended that appropriate adjustments be applied, depending on the size of the Bank's portfolio:

- Criterion 1:

– banks with a share exceeding 5% – adjustment of the dividend rate by 20 p.p.;

– banks with a share exceeding 10% – adjustment of the dividend rate by 40 p.p.;

– banks with a share exceeding 20% – adjustment of the dividend rate by 60 p.p.;

– banks with a share exceeding 30% – adjustment of the dividend rate by 100 p.p.;

- Criterion 2:

– banks with a share exceeding 20% – adjustment of the dividend rate by 30 p.p.;

– banks with a share exceeding 50% – adjustment of the dividend rate by 50 p.p.;

whereas the total value of the adjustment (maximum 100%) is the sum of adjustments resulting from both criteria.

The Bank's intention is to pay dividend in 2023 from the net profit for 2022.

Pursuant to Article 395 § 2(2) of the Commercial Companies Code, the decision on profit distribution remains within the competences of the Bank's Annual General Meeting.

(IN PLN MILLION)

OTHER NOTES

72. NOTES TO THE CONSOLIDATED CASH FLOW STATEMENT

- CASH AND CASH EQUIVALENTS

ACCOUNTING POLICIES:

Cash and cash equivalents consist of cash in hand, cash on nostro accounts and a deposit with the National Bank of Poland, as well as amounts due from banks in the current account, and cash equivalents with maturities up to 3 months from the date of acquisition.

FINANCIAL INFORMATION

CASH AND CASH EQUIVALENTS	2022	2021
Cash, current account with the Central Bank	11 966	11 587
Deposits with the Central Bank	3 951	-
Current amounts due from banks	15 589	8 935
Restricted cash and cash equivalents of which	489	253
- amounts due from banks	454	228
- loans and advances to customers	35	25
Total	31 995	20 775

- RESTRICTED CASH AND CASH EQUIVALENTS

Cash and cash equivalents of PLN 489 million (as at 31 December 2021: PLN 253 million), including:

- PLN 35 million (as at 31 December 2021: PLN 25 million) pledged as collateral for securities' transactions conducted by Biuro Maklerskie PKO BP are deposited in the National Depository for Securities (KDPW_CCP), as part of the Guarantee Fund for the Settlement of Stock Exchange Transactions. Each direct participant who holds the status of settlement-making participant is obliged to make payments to the settlement fund which guarantees a proper settlement of the stock exchange transactions covered by that fund. The amount of the payments depends on the value of transactions made by each participant and is updated by KDPW_CCP on a daily basis.
- in the amount of PLN 4 million (as at 31 December 2021: PLN 4 million) representing funds deposited by participants in IKE, IKZE, PPE and PSO that had not been converted into investment fund units by 31 December 2022 and 31 December 2021 respectively by the transfer agent, in the amount of PLN 450 million (as at 31 December 2021: PLN 224 million) representing collateral for securitisation transactions.

- CASH FLOWS FROM INTEREST AND DIVIDENDS, BOTH RECEIVED AND PAID

INTEREST INCOME ON:	2022	2021
loans to and other receivables from banks	1 443	261
hedging derivatives	-	419
debt securities	3 745	2 290
loans and advances to customers	14 554	6 823
Total	19 742	9 793

(IN PLN MILLION)

The above amounts of interest received do not include the amounts of commission recognized using the effective interest rate as interest income.

INTEREST EXPENSES – PAID:	2022	2021
amounts due to banks	(127)	(26)
amounts due to customers	(2 863)	(265)
loans and advances received	(35)	(28)
leases	(19)	(12)
debt securities	(89)	(293)
issues of securities	(447)	(341)
subordinated liabilities	(99)	(48)
Total	**(3 679)**	**(1 013)**

DIVIDEND INCOME RECEIVED	2022	2021
from financial assets held for trading	1	1
financial instruments not held for trading, measured at fair value through profit or loss	50	11
Total	**51**	**12**

- **CASH FLOWS FROM OPERATING ACTIVITIES – OTHER ADJUSTMENTS**

OTHER ADJUSTMENTS	2022	2021
Cash flow hedges and hedges of a net investment in a foreign operation	(1 901)	(5 008)
Actuarial gains and losses	(9)	9
Currency translation differences on foreign operations	(87)	51
Remeasurement of shares in subordinated entities and other changes	(18)	5
Scrapping of property, plant and equipment and intangible assets	(11)	(205)
Other changes	114	11
Total	**(1 912)**	**(5 137)**

- **EXPLANATION OF DIFFERENCES BETWEEN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION AND CHANGES IN THESE ITEMS PRESENTED UNDER OPERATING ACTIVITIES IN THE CONSOLIDATED CASH FLOW STATEMENT**

(GAINS)/LOSSES ON INVESTING ACTIVITIES	2022	2021
Gains on sale and scrapping of property, plant and equipment, intangible assets and assets held for sale	(108)	(101)
Losses on sale and scrapping of property, plant and equipment, intangible assets and assets held for sale	11	33
Total	**(97)**	**(68)**

(IN PLN MILLION)

Analytics for "Interest and dividends received" and "Interest paid" in cash flow from operating activities	2022	2021
Reported under investing activities:	(3 758)	(2 280)
from financial assets held for trading	(1)	(1)
dividends received from securities not held for trading, measured at fair value through profit or loss	(50)	(11)
interest received on securities measured at fair value through other comprehensive income	(1 987)	(1 304)
interest received on securities measured at amortized cost	(1 720)	(964)
Reported under financing activities:	581	417
interest paid on debt securities in issue	447	341
interest paid on subordinated liabilities	99	48
interest paid on loans and advances received	35	28
Total	(3 177)	(1 863)

CHANGES IN AMOUNTS DUE FROM BANKS	2022	2021
Change resulting from the balance sheet items	(7 091)	(6 453)
Changes in allowances for expected credit losses	(2)	-
Exclusion of the change in cash and cash equivalents	6 880	6 965
Total	(213)	512

CHANGE IN SECURITIES	2022	2021
Change resulting from the balance sheet items	(192)	(11 758)
Changes in allowances for expected credit losses	40	(57)
Fair value of financial assets measured at fair value through other comprehensive income	(2 072)	(3 802)
Recognition of acquisition / disposal of securities measured at fair value through other comprehensive income in investing activities	3 258	(8 969)
Recognition of acquisition / disposal of securities measured at amortized cost in investing activities	(5 312)	23 836
Other inflows from investing activities	(10)	(138)
Total	(4 288)	(888)

CHANGE IN LOANS AND ADVANCES TO CUSTOMERS	2022	2021
Change resulting from the balance sheet items	2 579	(11 697)
Changes in allowances for expected credit losses	(1 060)	136
Exclusion of the change in cash and cash equivalents	10	(4)
Total	1 529	(11 565)

CHANGE IN NON-CURRENT ASSETS HELD FOR SALE	2022	2021
Change resulting from the balance sheet items	8	108
Changes in impairment losses on non-current assets held for sale	-	2
Total	8	110

(IN PLN MILLION)

CHANGE IN OTHER ASSETS	2022	2021
Change resulting from the balance sheet items	(199)	198
Changes in impairment losses on other assets and inventory write-downs	(17)	(61)
Total	**(216)**	**137**

CHANGE IN LIABILITIES IN RESPECT OF LOANS AND ADVANCES RECEIVED	2022	2021
Change resulting from the balance sheet items	(167)	195
Recognition of drawing/repayment of long-term loans and advances under financing activities, including interest	132	(229)
Total	**(35)**	**(34)**

CHANGE IN LIABILITIES IN RESPECT OF SECURITIES IN ISSUE	2022	2021
Change resulting from the balance sheet items	(8 362)	(8 226)
Recognition of drawing/repayment of liabilities in respect of debt securities in issue under financing activities	9 104	8 000
Total	**742**	**(226)**

CHANGE IN ACCUMULATED ALLOWANCES FOR EXPECTED CREDIT LOSSES AND IMPAIRMENT LOSSES ON NON-FINANCIAL AND OTHER ASSETS	2022	2021
Change in accumulated allowances and provisions for expected credit losses	1 191	(36)
for amounts due from banks	2	-
for loans and advances to customers	1 059	(137)
for securities	(39)	57
for other financial assets	11	(2)
provisions for financial liabilities and guarantees granted	158	46
Change in accumulated impairment losses on non-financial assets and other provisions	270	139
on non-current assets held for sale	-	(2)
on property, plant and equipment	2	1
on intangible assets	(13)	(20)
on investments in subordinated entities	-	(12)
on other non-financial assets	7	62
other provisions	274	110
Total	**1 461**	**103**

CHANGE IN OTHER LIABILITIES	2022	2021
Change resulting from the balance sheet items	1 648	663
Recognition of lease payments in financing activities	255	233
Total	**1 903**	**896**

(IN PLN MILLION)

CHANGE IN LEASING LIABILITIES	2022	2021
Opening balance	959	1 090
Changes recorded in operating activities:	192	102
- new agreements	49	33
- closing of agreements	(11)	(8)
- modifications	136	67
- interest	16	10
- foreign exchange differences	2	-
Recognition of lease payments in financing activities	(255)	(233)
Closing balance	896	959

- **Reconciliation of items presented in the consolidated statements of financial position with financing activities in the consolidated cash flow statement**

2022	As at the beginning of the period	Recognized in financing activities in the cash flow statement		Recognized in operating activities in the cash flow statement	As at the end of the period
		Incurred	Repaid	Other changes (interest, foreign exchange differences and other)	
Loans and advances received	2 461	620	(753)	(34)	2 294
from banks	740	151	(516)	(66)	309
from customers	1 721	469	(237)	32	1 985
Securities in issue	23 872	8 421	(17 525)	742	15 510
Subordinated liabilities - subordinated bonds	2 716	-	-	65	2 781
Payment of lease liabilities	959	-	(255)	192	896
Total	30 008	9 041	(18 533)	965	21 481

(IN PLN MILLION)

2021	As at the beginning of the period	Recognized in financing activities in the cash flow statement		Recognized in operating activities in the cash flow statement	As at the end of the period
		Incurred	Repaid	Other changes (interest, foreign exchange differences and other)	
Loans and advances received	2 267	1 331	(1 103)	(34)	2 461
from banks	875	627	(802)	40	740
from customers	1 392	704	(301)	(74)	1 721
Securities in issue	32 098	10 403	(18 403)	(226)	23 872
Subordinated liabilities - subordinated bonds	2 716	-	-	-	2 716
Payment of lease liabilities	1 090	-	(233)	102	959
Total	**38 171**	**11 734**	**(19 739)**	**(158)**	**30 008**

Other investment inflows include dividend proceeds and proceeds from the sale of equity securities. Other investment expenditure includes purchases of equity securities.

In 2022, in the item "other investment expenditure", the Group presents the effect of the purchase of PKN ORLEN shares in the amount of PLN 707 million and in the item "other investment inflows" the effect of the sale of these shares in the amount of PLN 715 million. On 29 September 2022, the Group acquired 14,161,080 PKN ORLEN S.A. bearer shares from the State Treasury – Minister of State Assets for a price equal to the result of the multiplication of the number of shares and the price of one share in accordance with the closing price of PKN ORLEN S.A. shares on the main market of the Warsaw Stock Exchange on the date of conclusion of the agreement decreased by the discount determined on market terms. On 30 September 2022, the Group concluded a total return swap with PKN ORLEN S.A. for a period of 1 month, where the underlying instrument were acquired shares. PKN ORLEN S.A. made a cash deposit to the Group as collateral for the receivables, which was subject to interest at market conditions. On 18 October 2022, the Group disposed of all shares in PKO ORLEN S.A. The sale took place under the accelerated bookbuilding (ABB) formula.

Dividends received are also included in other investment income.

73. Transactions with the State Treasury and related parties

- ### Transactions with the State Treasury

The State Treasury holds a 29.43% interest in the Bank's share capital.

Pursuant to the Act of 30 November 1995 on the state support in repayment of certain housing loans, reimbursement of guarantee bonuses paid, and amendments to certain Acts, PKO Bank Polski S.A. receives payments from the State budget as the repurchase of interest receivable on housing loans.

TRANSACTIONS WITH THE STATE TREASURY	2022	2021
Income recognized on an accruals basis	65	73
Income recognized on a cash basis	12	19
Income from temporary redemption by the State Treasury of interest on housing loans in the "old portfolio"	53	54

(IN PLN MILLION)

As of 1 January 2018 based on the provisions of the Act of 30 November 1995 on state support in the repayment of certain housing loans, granting guarantee bonuses and reimbursement of guarantee bonuses paid, the borrowers acquired the right to be forgiven the remaining debt by the State Treasury, which will result in gradual (until 2026) full settlement of the housing loan indebtedness from the so-called "old" portfolio. The Bank conducts settlements in respect of repurchase of interest on housing loans by the State Budget and on this account the Bank received commission in 2022 and 2021 amounting to under PLN 1 million.

As of 1 January 1996, the Bank became the general distributor of value marks. The Bank receives commissions in this respect from the State Treasury – in 2022 and in 2021, the Bank received commission on this account of under PLN 1 million.

Biuro Maklerskie PKO BP plays the role of an agent for the issue of retail Treasury bonds under the agreement signed with the Ministry of Finance on 11 February 2003. Under this agreement, Biuro Maklerskie PKO BP receives a fee for providing the services of an agent for the issue of bonds – in 2022 in the amount of PLN 254 million, and in 2021 in the amount of PLN 144 million.

- **SIGNIFICANT TRANSACTIONS WITH THE STATE TREASURY'S RELATED PARTIES**

The Group's exposure and the value of the Group's liabilities to 10 entities related to the State Treasury with the highest total exposure are presented below.

SIGNIFICANT TRANSACTIONS WITH THE STATE TREASURY'S RELATED PARTIES	BALANCE SHEET EXPOSURE, INCLUDING EXPOSURE TO LOANS AND DEBT INSTRUMENTS		OFF-BALANCE SHEET EXPOSURE		LIABILITIES IN RESPECT OF DEPOSITS	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Counterparty 1	-	-	2 453	2 453	2 820	2 870
Counterparty 2	16 097	16 337	31	30	87	1 068
Counterparty 3	245	887	1 081	662	5	145
Counterparty 4	422	277	3 807	2 111	2 087	86
Counterparty 5	833	697	2 096	1 976	6	54
Counterparty 6	118	118	1 500	-	275	3 225
Counterparty 7	1 643	247	4 610	1 598	1 088	453
Counterparty 8	751	575	557	1 410	-	-
Counterparty 9	608	717	1 320	820	59	874
Counterparty 10	841	896	816	444	-	-

	2022	2021
Interest and commission income	420	119
Interest and commission expense	(497)	(7)

As at 31 December 2022, the allowance for expected credit losses on an individualized basis for the above exposures amounted to PLN 1 million (as at 31 December 2021 it amounted to PLN 0 million).

In the opinion of the Group, all transactions with entities related to the State Treasury are concluded on an arm's-length basis.

- **RELATED-PARTY TRANSACTIONS – CAPITAL LINKS**

Transactions of the Bank as the parent company with associates and joint ventures are presented in the table below. All transactions with joint ventures and associates presented below were arm's length transactions. Repayment terms are within a range of from one month to seventeen years.

(IN PLN MILLION)

31.12.2022 Company name	Receivables	of which loans	Liabilities	Off-balance sheet liabilities granted
Centrum Elektronicznych Usług Płatniczych eService sp. z o.o.	64	-	206	63
"Centrum Obsługi Biznesu" sp. z o.o.	11	10	2	-
Bank Pocztowy S.A.	-	-	-	1
Operator Chmury Krajowej sp. z o.o.	-	-	31	917
Total joint ventures and associates	75	10	239	981

For the period ended 31.12.2022 Company name	Total income	of which interest and commission income	Total expense	of which interest and commission income
Centrum Elektronicznych Usług Płatniczych eService sp. z o.o.	850	783	198	198
"Centrum Obsługi Biznesu" sp. z o.o.	1	1	1	1
Operator Chmury Krajowej sp. z o.o.	-	-	29	-
System Ochrony Banków Komercyjnych S.A.[1]	-	-	956	-
Total joint ventures and associates	851	784	1 184	199

[1] for more details, see note "Operating expenses"

31.12.2021 Company name	Receivables	of which loans	Liabilities	Off-balance sheet liabilities granted
Centrum Elektronicznych Usług Płatniczych eService sp. z o.o.	83	28	133	33
"Centrum Obsługi Biznesu" sp. z o.o.	17	17	5	-
Bank Pocztowy S.A.	-	-	-	1
"Poznański Fundusz Poręczeń Kredytowych" sp. z o.o.	-	-	1	-
Operator Chmury Krajowej sp. z o.o.	-	-	12	852
Total joint ventures and associates	100	45	151	886

For the period ended 31.12.2021 Company name	Total income	of which interest and commission income	Total expense	of which interest and commission income
Centrum Elektronicznych Usług Płatniczych eService sp. z o.o.	698	588	106	105
"Centrum Obsługi Biznesu" sp. z o.o.	-	-	24	-
Total joint ventures and associates	698	588	130	105

- **Related-party transactions – personal links**

As at 31 December 2022, ten entities were related to the Group through the key management personnel of PKO Bank Polski S.A. or close family members of the key management personnel. As at 31 December 2021, it was thirteen entities. In 2022 and in 2021, no transactions were conducted between the Group and those entities.

74. Benefits for the PKO Bank Polski SA key management

Accounting policies:

Short-term employee benefits include, apart from the basic salary, also the part of the variable remuneration component paid in cash which is not deferred.

The deferred part of the variable remuneration component paid in cash was recognized as other long-term benefits.

Non-deferred and deferred remuneration components granted in the form of financial instruments i.e. Phantom shares (for which conversion into cash is carried out after an additional period of retention) are recognized as share-based payments settled in cash in accordance with the principles described below.

- **VARIABLE REMUNERATION COMPONENTS OF KEY MANAGEMENT PERSONNEL IN THE GROUP**

Variable remuneration components are granted in the form of: non-deferred remuneration (in the first year after the calendar year constituting an appraisal period), and deferred remuneration (for the next three years after the first year of the appraisal period), whereas both the non-deferred and deferred remuneration is awarded in equal parts in cash and in the form of financial instruments, i.e. phantom shares (for which conversion into cash is carried out after an additional period of retention).

The component of remuneration in the form of the financial instrument is converted into phantom shares after granting a particular component – taking into consideration the median of the daily average prices of the Bank's shares (Volume Weighted Average Price) on the Warsaw Stock Exchange, published in the Thomson Reuters or Bloomberg information systems – from the fourth quarter of the appraisal period. Next, after a period of retention and deferral period, the shares are converted into cash – taking into consideration the median of the daily average prices of the Bank's shares (Volume Weighted Average Price) on the Warsaw Stock Exchange from the third quarter of the calendar year preceding the payment (the Management Board) and the third quarter of the calendar year in which the payment is made (other persons in management positions), published in the Thomson Reuters or Bloomberg information systems.

The deferred remuneration may be reduced in the event of deterioration in the financial performance of the Bank or a Group Company, respectively, a loss incurred by the Bank / Company or deterioration of other variables related to the performance in the period of appraisal of key management personnel and results of the organizational units/cells supervised or managed by these people, which were revealed after the appraisal period.

In 2022, variable remuneration components were also granted in selected PKO Bank Polski S.A. Group companies. Regulations on variable remuneration components for members of the Management Board applied in: PKO Bank Hipoteczny SA, PKO BP BANKOWY PTE SA, PKO TFI SA, PKO Leasing SA, PKO Towarzystwo Ubezpieczeń SA, PKO Życie Towarzystwo Ubezpieczeń SA, Kredobank SA and PKO Faktoring SA. Simultaneously, employees in certain managerial positions at PKO Bank Hipoteczny S.A., PKO Towarzystwo Ubezpieczeń S.A., PKO Życie Towarzystwo Ubezpieczeń S.A. and PKO Leasing S.A. having a significant impact on the company's risk profile, and certain employees at PKO TFI S.A., whose jobs include activities that materially affect the risk profile of the company or the fund management company, were also covered by variable remuneration policies – a more detailed description in chapter "Variable remuneration components of the Bank's Management Board members and key managers with a high impact on the Bank's risk profile" of the Directors' Report of the PKO Bank Polski S.A. Group for 2021 drawn up together with the Directors' Report of PKO Bank Polski S.A.

FINANCIAL INFORMATION

COST OF REMUNERATION OF THE BANK'S MANAGEMENT AND SUPERVISORY BOARDS (in PLN thousand)	2022	2021
Management Board of the Bank		
Short-term employee benefits	12 975	9 644
Long-term employee benefits	1 988	957
Share-based payments settled in cash[1]	438	11 040
Benefits to the Bank's Management Board members who ceased to perform their functions	1 244	2 654
Total	16 645	24 295
Supervisory Board of the Bank		
Short-term employee benefits	2 165	1 532
Total	2 165	1 532

[1] The decrease in the cost of variable remuneration of the Bank's Management Board in the item "Share-based payments settled in cash" in 2022 compared to the comparable period is due to the revaluation of provisions for variable remuneration components based on the current price of the Bank's shares.

COSTS OF REMUNERATION OF THE SUBSIDIARIES' MANAGEMENT AND SUPERVISORY BOARDS (in PLN thousand)	2022	2021
Management Boards of the Companies		
Short-term employee benefits	24 343	22 336
Long-term employee benefits	3 388	6 881
Financial instruments-based payments settled in cash	2 930	3 093
Benefits to members of the Companies' Management Boards who ceased to perform their functions	2 033	1 121
Total	32 694	33 431
Supervisory Boards of the Companies		
Short-term employee benefits	1 369	1 025
Total	1 369	1 025

LOANS AND ADVANCES GRANTED BY THE BANK TO THE MEMBERS OF THE MANAGEMENT AND SUPERVISORY BOARDS AS AT THE REPORTING DATES (in PLN thousand)	31.12.2022	31.12.2021
Supervisory Board of the Bank	-	2 214
Management Board of the Bank	101	89
Total	101	2 303

The interest rates and repayment terms do not differ from the arm's-length conditions and repayment terms for similar banking products.

In 2022, the members of the Bank's Management Board as at 31 December 2022 did not receive any remuneration from the Bank's related entities. As at 31 December 2021, members of the Management Board of the Bank received remuneration from the Bank's related entities in the amount of PLN 33 thousand.

The Bank provides the key management personnel, members of the Supervisory Board and their families with standard financial services which comprise, among other things, operating bank accounts, accepting deposits, granting loans and providing other financial services. All these transactions are concluded on an arm's length basis.

- VARIABLE REMUNERATION COMPONENTS

PROVISION FOR VARIABLE REMUNERATION COMPONENTS	31.12.2022 (for 2018-2022)	31.12.2021 (for 2017-2021)
Management Board (including members who ceased to perform their functions)	20	26
Other Risk Takers (persons holding managerial positions other than members of the Bank's Management Board)	60	74
Group companies	30	27
Total provision	110	127
Remuneration paid during the year	**2022 (for 2017-2021)**	**2021 (for 2016-2020)**
- granted in cash	**27**	**23**
Management Board (including members who ceased to perform their functions)	4	3
Other Risk Takers (persons holding managerial positions other than members of the Bank's Management Board)	14	13
Group companies	9	7
- granted in the form of financial instruments	**24**	**30**
Management Board (including members who ceased to perform their functions)	5	5
Other Risk Takers (persons holding managerial positions other than members of the Bank's Management Board)	14	21
Group companies	5	4
Total remuneration paid	51	53

75. Leases

Accounting policies:

75.1. Leases - Lessor

The Group acts as a lessor in lease agreements relating to vehicles, buildings, including office space, and machinery and equipment. The Group conducts lease activities through the entities from the PKO Leasing SA Group and KREDOBANK SA.

The Group as a lessor classifies leases as operating or finance leases.

A lease agreement is classified as an operating lease if substantially all risks and benefits from owning the underlying assets are not transferred. In such an instance the Group records lease payments as income on a straight-line basis.

Property, plant and equipment leased under operating leases are recognised in a separate line in the statement of financial position in accordance with the accounting policy applicable to property, plant and equipment (note concerning accounting policies: "Property, plant and equipment", "Amortization and depreciation", "Impairment losses").

Net income from operating leases is presented under "Fee and commission income", line: "Operating leases and fleet management". Such income comprises mainly fees for using leased assets, income on short-term rentals and net income or expense on fleet management services (including service, tyre replacement, provision of replacement vehicles). Expenses in respect of operating lease and fleet management comprise: mechanical repairs, tyre repairs, cost of fuel and cost of replacement vehicles. Income on operating leases was included together with the cost of depreciation of property, plant and equipment under operating leases.

A lease agreement is classified as a finance lease if substantially all risks and benefits from owning the underlying assets are transferred. The Group classifies agreements as finance leases where at least one or all of the following conditions have been met:

- the lease transfers ownership of the underlying asset to the lessee by the end of the lease term;
- the lessee has the option to purchase the underlying asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception date, that the option will be exercised;
- the lease term is for the major part of the economic life of the underlying asset even if title is not transferred;
- at the inception date, the present value of the lease payments amounts to at least substantially all of the fair value of the underlying asset (in a sublease it is the value of the right-of-use asset arising from the master lease agreement); and
- the underlying asset is of such a specialised nature that only the lessee can use it without major modifications.

After the lease commencement date, the Group measures the lease liability by:

- increasing the carrying value to reflect interest on the lease liability;
- reducing the carrying value to reflect the lease payments made; and
- remeasuring the carrying value to reflect any reassessment or lease modifications, or to reflect revised fixed lease payments.

Gross investment in the lease is the sum of:

- lease payments receivable by a lessor under a finance lease; and
- any unguaranteed residual value accruing to the lessor.

Interest rate implicit in the lease applied by the Group is the rate of interest that causes the present value of the lease payments and the unguaranteed residual value to equal the sum of the fair value of the underlying asset and any initial direct costs of the Group.

Finance lease agreements are recognised as receivables in the amount equal to the current contractual value of the lease payments plus the potential not guaranteed residual value attributed to the lessor, determined as at the date of inception of the lease. Lease payments on finance leases are divided between interest income and a reduction in the balance of receivables in a manner enabling achieving a fixed interest rate on the remaining receivables.

Finance lease agreements are recognised under the heading "Loans and advances to customers".

75.2. LEASES - LESSEE

Lease agreements or agreements containing a lease according to the Group's classification include agreements under which the Group:

- obtains the right of use of the identified asset and the supplier's ability to substitute an alternative asset is not significant; and
- has the right to obtain substantially all economic benefits from the right of use throughout the period of use; and
- has the right to direct the use of the identified asset over the period of use, when:
  - the Group has the right to direct how and for what purpose the asset is used throughout the period of use; or
  - the relevant decisions about how and for what purpose the asset is used are predetermined.

The Group applies exceptions and does not recognize right-of-use assets and liabilities with respect to:

- short-term leases, which include agreements without an option to buy an asset, concluded for a period not exceeding 12 months from the commencement of the agreement, in particular agreements concluded for an indefinite period with a short (up to 12 months) notice period, without significant penalties, which include in particular leasehold improvements incurred and relocation costs;
- low-value leases (an asset's value is lower than PLN 20,000, determined based on the value of a new asset, regardless of the age of the leased asset), excluding agreements for rental of space.

The Group initially measures lease liabilities at the present value of the lease payments outstanding as at that date.

The amount of the lease liability is affected by:

- fixed payments less any lease incentives payable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- any residual guarantees expected from the lessee;
- the exercise price of a purchase option if the probability that the Group would exercise that option is higher than 50%;
- payments of penalties for terminating the lease, if the lease agreement contains an option for the Group to terminate the lease as a lessee.

The Group does not classify variable fees that depend on external factors as lease payments.

After initial recognition the Group's lease liabilities are measured at amortized cost.

The Group records revaluation of lease liabilities as an adjustment to the right-of-use asset. If as a result of remeasurement the carrying amount of the right-of-use asset is reduced to zero and the lease liability is further reduced, the Group recognizes the remaining amount of the remeasurement as a profit or loss.

The Group's lease liability is presented under "Other liabilities", line item "Lease liabilities".

The Group initially measures the right-of-use assets, presented under "Property, plant and equipment" at cost, which comprises:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group.

The Group subsequently measures the right-of-use asset at cost less accumulated depreciation (depreciation calculated under the straight-line method) and accumulated impairment losses, adjusted for any remeasurement of the lease liability.

To discount future lease payments, the Group applies discount rates that:

- are calculated based on yield curves reflecting the cost of financing in a given currency;

- cover the tenor of the longest lease contract subject to measurement and reflecting - for a given currency - a fixed market interest rate and the Group's cost of financing (the tenors of the lease agreements are within the range from 1 to 99 years);
- have been read from the curve for maturity corresponding to one-half of the maturity of the lease agreement.

The Group performs quarterly updates of the incremental borrowing rate for lease agreements.

The Group applies the same discount rates for the portfolio of car leases and property leases, including rights to perpetual usufruct of land, taking into account the impact of the lease security on the discount rate applied.

The Group recognizes the lease payments relating to short-term and low-value leases as cost using the straight-line method, over the term of the lease. The differences between the amounts paid and those arising from the straight-line recognition of the costs are recorded as prepayments or accruals.

FINANCIAL INFORMATION

75.3. LESSEE

LESSEE - LEASE AMOUNTS RECOGNIZED IN THE INCOME STATEMENT	2022	2021
Costs related to short-term lease contracts	(7)	(6)
Costs related to lease contracts for low-value assets (other than short-term), non-deductible VAT expenses and service charges	(79)	(78)
Total	**(86)**	**(84)**

The interest expense on the lease liability is recognised under "Interest expense", line item "leases".

Depreciation charge for right-of-use assets is recognized under "Administrative expenses", line item "Amortization and depreciation" and the breakdown of those costs by class of underlying asset is presented in tables "Non-current right-of-use assets"

The lease liability is recognised under the line "Other liabilities" in the statement of financial position, line item "lease liability".

A maturity analysis of lease liabilities separate from the maturity analyses of other financial liabilities is presented in note "Contractual cash flows from the Group's financial liabilities, including derivative financial instruments", Section "Contractual cash flows from the financial liabilities, excluding derivative financial instruments".

The following tables present information on the non-current right-of-use assets, which are presented under "Property, plant and equipment" in the statement of financial position.

(IN PLN MILLION)

NON-CURRENT right-of-use assets	Land and buildings	Machinery and equipment, including computer hardware	Other, including vehicles	Total
2022				
Gross carrying amount at the beginning of the period	1 524	-	28	1 552
Increases	164	12	-	176
Scrapping and sale	(21)	-	-	(21)
Other	1	-	(2)	(1)
Gross carrying amount at the end of the period	1 668	12	26	1 706
Accumulated amortization as at the beginning of the period	(642)	-	(4)	(646)
Depreciation charge for the period	(230)	(2)	-	(232)
Other	19	-	2	21
Accumulated amortization as at the end of the period	(853)	(2)	(2)	(857)
Impairment losses as at the beginning of the period	(5)	-	-	(5)
Impairment losses as at the end of the period	(5)	-	-	(5)
Carrying amount as at the beginning of the period, net	877	-	24	901
Carrying amount as at the end of the period, net	810	10	24	844

NON-CURRENT right-of-use assets	Land and buildings	Machinery and equipment, including computer hardware	Other, including vehicles	Total
2021				
Gross carrying amount at the beginning of the period	1 434	-	26	1 460
Increases	106	-	2	108
Scrapping and sale	(25)	-	-	(25)
Other	9	-	-	9
Gross carrying amount at the end of the period	1 524	-	28	1 552
Accumulated amortization as at the beginning of the period	(431)	-	-	(431)
Amortization charge for the period	(232)	-	(2)	(234)
Scrapping and sale	19	-	(1)	18
Other	2	-	(1)	1
Accumulated amortization as at the end of the period	(642)	-	(4)	(646)
Impairment losses as at the beginning of the period	(5)	-	-	(5)
Impairment losses as at the end of the period	(5)	-	-	(5)
Carrying amount as at the beginning of the period, net	998	-	26	1 024
Carrying amount as at the end of the period, net	877	-	24	901

(IN PLN MILLION)

75.4. LESSOR – OPERATING LEASES

PROPERTY, PLANT AND EQUIPMENT UNDER OPERATING LEASES	Land and buildings	Machinery and equipment, including computer hardware	Other, including vehicles	Total
2022				
Gross carrying amount at the beginning of the period	13	1	1 782	1 796
Purchase	-	-	892	892
Scrapping and sale	-	-	(461)	(461)
Other	-	-	41	41
Gross carrying amount at the end of the period	13	1	2 254	2 268
Accumulated amortization as at the beginning of the period	(2)	(1)	(419)	(422)
Amortization charge for the period	-	-	(247)	(247)
Scrapping and sale	-	-	181	181
Other	-	-	(12)	(12)
Accumulated depreciation as at the end of the period	(2)	(1)	(497)	(500)
Impairment losses as at the beginning of the period	(2)	-	(1)	(3)
Other	(1)	-	-	(1)
Impairment losses as at the end of the period	(3)	-	(1)	(4)
Carrying amount as at the beginning of the period, net	9	-	1 362	1 371
Carrying amount as at the end of the period, net	8	-	1 756	1 764

(IN PLN MILLION)

PROPERTY, PLANT AND EQUIPMENT UNDER OPERATING LEASES	Land and buildings	Machinery and equipment, including computer hardware	Other, including vehicles	Total
2021				
Gross carrying amount at the beginning of the period	13	2	1 545	1 560
Purchase	-	-	687	687
Scrapping and sale	-	(1)	(490)	(491)
Other	-	-	40	40
Gross carrying amount at the end of the period	13	1	1 782	1 796
Accumulated amortization as at the beginning of the period	(2)	(1)	(388)	(391)
Amortization charge for the period	-	-	(212)	(212)
Scrapping and sale	-	-	190	190
Other	-	-	(9)	(9)
Accumulated amortization as at the end of the period	(2)	(1)	(419)	(422)
Impairment losses as at the beginning of the period	(1)	-	-	(1)
Recognized during the period	(1)	-	-	(1)
Other	-	-	(1)	(1)
Impairment losses as at the end of the period	(2)	-	(1)	(3)
Carrying amount as at the beginning of the period, net	10	1	1 157	1 168
Carrying amount as at the end of the period, net	9	-	1 362	1 371

TOTAL FUTURE LEASE PAYMENTS UNDER IRREVOCABLE OPERATING LEASES – LESSOR	31.12.2022	31.12.2021
For the period:		
up to 1 year	344	307
from 1 to 2 years	213	194
from 2 to 3 years	106	85
from 3 to 4 years	34	21
from 4 to 5 years	5	4
more than 5 years	-	1
Total	702	612

The average agreement period for operating lease agreements where the Group is a lessor is usually 38 months. The lessee bears service and insurance costs.

(IN PLN MILLION)

75.5. LESSOR – FINANCE LEASES

For more information on credit risk exposures, see note "CREDIT RISK – FINANCIAL INFORMATION".

GROSS INVESTMENT IN THE LEASE AND MINIMUM LEASE PAYMENTS RECEIVABLE	Gross investment in the lease	of which:		Unrealized income	Net investment in the lease
		Non-discounted lease payments	Non-discounted not guaranteed residual values attributable to the lessor		
31.12.2022					
Lease receivables, gross:					
up to 1 year	8 554	8 494	60	(1 339)	7 215
1 to 2 years	5 888	5 834	54	(816)	5 072
from 2 to 3 years	3 910	3 883	27	(421)	3 489
from 3 to 4 years	2 097	2 082	14	(185)	1 911
from 4 to 5 years	973	968	6	(61)	913
more than 5 years	341	341	-	(25)	316
Total gross	**21 763**	**21 602**	**161**	**(2 847)**	**18 916**
Allowances for expected credit losses	(797)	(797)	-	-	(797)
Total, net	**20 966**	**20 805**	**161**	**(2 847)**	**18 119**

GROSS INVESTMENT IN THE LEASE AND MINIMUM LEASE PAYMENTS RECEIVABLE	Gross investment in the lease	of which:		Unrealized income	Net investment in the lease
		Non-discounted lease payments	Non-discounted not guaranteed residual values attributable to the lessor		
31.12.2021					
Lease receivables, gross:					
up to 1 year	7 571	7 476	95	(737)	6 834
1 to 2 years	5 305	5 245	60	(452)	4 853
from 2 to 3 years	3 676	3 645	31	(235)	3 441
from 3 to 4 years	1 916	1 903	13	(108)	1 808
from 4 to 5 years	907	899	8	(37)	870
more than 5 years	423	421	2	(18)	405
Total gross	**19 798**	**19 589**	**209**	**(1 587)**	**18 211**
Allowances for expected credit losses	(660)	(660)	-	-	(660)
Total, net	**19 138**	**18 929**	**209**	**(1 587)**	**17 551**

76. GOVERNMENT GRANTS

ACCOUNTING POLICIES:

The Group recognises government grants received when there is reasonable assurance that the Group will meet the conditions associated with the government grants and the government grants will be received. The Group considers the receipt of grant funding on the basis of a payment application verified by the grantor institution to be sufficient assurance of receipt of the government grant.

The Group recognises government grants received for assets as a reduction in the carrying value of the tangible or intangible assets for which it received such grants and recognises them in profit or loss: over the useful life of the tangible or intangible assets subject to depreciation through reduced depreciation.

Grants received to income are recognized by the Group as a reduction of the costs for which it has received these grants:

- systematically in the periods in which it recognizes the costs for which the grant is received, from the accruals in which the grant was recognized when received,
- on a one-off basis in the period in which the grant is received and relates to expenditure already incurred.

FINANCIAL INFORMATION:

In 2022, the Group received grants for costs incurred in connection with publicly funded research and development projects through the National Research and Development Centre. The disbursement of funds was based on the financial assistance granted in connection with the agreements concluded between the Bank and the National Centre for Research and Development. In 2022, the amount of the grant was PLN 7 million (2021: PLN 6 million).

77. INFORMATION ON THE ENTITY AUTHORIZED TO AUDIT THE FINANCIAL STATEMENTS

On 23 September 2021, pursuant to § 15 clause 1 point 2 of the Bank's Articles of Association, the Supervisory Board selected PricewaterhouseCoopers Polska spółka z ograniczoną odpowiedzialnością Audyt sp. k. (hereinafter PWC) as the audit firm to audit and review the financial statements of the Bank and of the Bank's Group for the years 2022–2023. PricewaterhouseCoopers Polska spółka z ograniczoną odpowiedzialnością Audyt sp. k. with its registered office in Warsaw, ul. Polna 11, is entered in the list of audit firms maintained by the National Board of Registered Auditors under the number 144. On 31 January 2022, the Bank concluded an agreement with PwC for the audit and review of the financial statements of the Bank and the Bank' Group for the years 2022-2023. The financial statements of the Bank and the Bank's Group for 2020-2021 were also audited by PwC in accordance with the Supervisory Board's decision of 13 December 2018.

Based on the Supervisory Board's declaration, the Management Board states that the appointment of the PwC audit firm to audit the Group's consolidated financial statements for the year ended 31 December 2022 and the Bank's financial statements for the year ended 31 December 2022 (Audit) was made in accordance with the provisions of the law and the internal rules of the Bank accepted by the Supervisory Board on the appointment of the audit firm, which were in force as at the date on which the choice was made. At the same time, based on the Supervisory Board's declaration, the Management Board states that:

- the PwC audit firm and the members of the team conducting the Audit satisfied the conditions for preparing an impartial and independent Audit report, in accordance with the generally applicable provisions of the law, standards of practicing the profession and principles of professional ethics;
- the generally binding provisions of the law related to the rotation of audit firms and the key registered auditor auditing the Group's consolidated financial statements and the Bank's financial statements and the related mandatory waiting periods are observed at the Bank;
- the Bank has a policy on and a procedure for the selection of audit firms for auditing the Bank's and the Group's financial statements, as well as a policy on the provision of admissible non-audit services by the audit firm conducting the audit, affiliates of that audit firm and a member of the network of audit firms, to the Bank and companies from the Bank's Group, including services that are conditionally released from the prohibition of provision of services by the audit firm.

TOTAL AMOUNT OF NET REMUNERATION DUE TO THE AUDIT FIRM AUDITING THE FINANCIAL STATEMENTS IN RESPECT OF: (in PLN thousand)	2022	2021
audit of financial statements of the Bank and consolidated financial statements of the Group	1 549	1 529
assurance services, including reviews of the financial statements	1 010	798
Total	**2 559**	**2 327**

On 15 December 2022, the Supervisory Board selected KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k. as the audit firm to audit and review the financial statements of the Bank and of the Bank's Group for the years 2024–2026.

78. Impact of the geopolitical situation in Ukraine on the PKO Bank Polski S.A. Group

- ### Ukrainian companies in the PKO Bank Polski S.A. Group

The PKO Bank Polski S.A. Group conducts activities in Ukraine through the KREDOBANK S.A. Group, "Inter-Risk Ukraina" spółka z dodatkową odpowiedzialnością (company with additional liability), Finansowa Kompania "Prywatne Inwestycje" sp. z o.o. and Finansowa Kompania "Idea Kapitał" sp. z o.o. (hereinafter "the Ukrainian companies").

As at 31 December 2022, the Ukrainian companies are continuing to operate. As at 31 December 2022, the Group is continuing to exercise control over the Ukrainian companies and accounts for them using the acquisition accounting method in the financial statements.

- ### Impact of war on the operations and financial results of the Ukrainian companies

Armed aggression of the Russian Federation on Ukraine have serious negative consequences for the financial system and the banking sector of Ukraine. Ukraine's GDP fell by -15% in the first quarter of 2022, by -37%, and by -31% in the third quarter. Due to the shelling of energy infrastructure in October–December 2022, the rate of GDP decline is expected to accelerate to negative 35% in the fourth quarter. Many companies operating in the war zone have had to suspend their operations or move production to other parts of the country or abroad. Transport and logistics between regions have been hampered, infrastructure has been significantly damaged and many Ukrainian citizens have been affected by the hostilities and have left the country. All this will have long-term negative consequences for Ukraine's economy, including its banking sector.

The warfare has adversely affected the Ukrainian banking sector through:

- disruptions to the operations of Ukrainian branches and ATMs, significant damage to or destruction of the banking infrastructure in war zones;
- an increase in the share of on-demand funds at the expense of term deposits;
- a reduction in 2022 in the loan portfolio by 3% due to a significant reduction in new lending (with the exception of loans granted by state-owned banks to strategic sectors and companies). After 10 months of 2022, the sector's loan portfolio grew by only 1% mainly as a result of the revaluation of the foreign currency portfolio with the official UAH/USD exchange rate falling by 34% since the beginning of the year; only corporate loans in UAH increased by 2% (under the state programmes launched);
- decline in banks' commission income due to reduced customer demand for services;
- in 2022, the banking sector maintained a profit of UAH 24.7 billion, which is 3 times less than the profit for the corresponding period of the previous year, due to a significant increase in write-downs on the credit portfolio and losses as a result of war;
- inability of some borrowers to service their loans, deterioration of loan repayments due to the closure of many businesses, loss of sources of income for individuals, forced relocation of millions of Ukrainian citizens, which translates into an increase in the allowance for expected loan losses;
- restrictions on the foreign exchange market, including foreign exchange trading;
- reduction in the banks' equity as a result of lost revenue, material losses and impairment of a part of the loan portfolio.

Nevertheless, after a significant outflow of funds from banks at the beginning of the war, liquidity in the banking system is slowly increasing. In 2022, retail deposits increased by 28% (mainly in UAH) and corporate deposits by 18% (mainly in FX).

The National Bank of Ukraine (hereinafter: "NBU") has simplified the requirements for banks' day-to-day operations and is not introducing new regulatory requirements. In 2022, there was no regular assessment of the financial stability of banks. The NBU has also introduced a number of amendments to the legislation governing credit risk assessment. These amendments are aimed at ensuring the timely and adequate assessment of credit risk by banks, preventing banks from losing liquidity.

Starting from 25 February 2022, during the period of martial law and 30 calendar days after its cessation or revocation, when calculating credit risk requirements, Ukrainian banks did not apply requirements concerning overdue balances and thus did not accrue default interest or other charges (effective until 29 June 2022). As of the second quarter of 2022, with the gradual recovery of the Ukrainian economy from the shock of the first days of the war, Ukrainian supervisory authorities began to reinstate the previously applicable credit risk assessment regulations. This approach is aimed at the banks and the NBU estimating the level of losses incurred and the proper planning of the banks' capital renewal activities (the calculation of days past due for debt repayment has been reinstated, with the proviso that the number of days past due for debt repayment in the period from 25 February to 29 June inclusive will not be taken into account in the calculation). Requirements have been introduced to analyse all existing information on the status of collateral located in territories subject to warfare. If information is obtained on the loss or damage of collateral, the bank is required to take this into account in its credit risk assessment. In addition, collateral from regions under occupation or where military operations are taking place is not included in the calculation of allowances. In order to support the solvency of borrowers by encouraging banks to carry out loan restructuring, some credit risk assessment requirements have been relaxed.

The NBU has also reduced the risk weights (RWA) on unsecured consumer loans from 150% to 100%, in order to allow banks to use accumulated capital to partially cover their losses, and postponed the introduction of ICCAP regulation and higher operational capital requirements.

In addition, in order to support banks' liquidity, the NBU removed restrictions on carrying out foreign currency swap operations with the bank's affiliates.

High inflationary pressures in 2022 prompted the NBU to tighten monetary policy - since the beginning of martial law, the NBU had kept the discount rate at 10% per annum, but in June it sharply raised it by 15 p.p. to 25% p.p. and has kept it at that level ever since.

The share of Ukrainian companies in the results, assets and liabilities of the Group for the 12 months ended 31 December 2022 and as at 31 December 2022 (including comparatives) is presented in the note "Information on operating segments".

- **RISK MANAGEMENT IN CONNECTION WITH THE SITUATION IN UKRAINE**

The Group also monitors sanction regulations on an ongoing basis and implements them to the extent appropriate to its specific business.

The entire Group has introduced guidelines for the financing of and providing banking services to:

- customers conducting business whose business model is based on the benefits of active operation in the markets of Russia and Belarus or through significant links (e.g. economic, personal),
- customers on whom sanctions have been or can be imposed in connection with Russia's aggression in Ukraine.

Following the outbreak of the armed aggression of the Russian Federation against Ukraine, restrictions were imposed on the credit policy of Ukrainian companies of the Group (Kredobank S.A). Granting of new financing was mainly limited to existing customers and was implemented through the analysis of each individual transaction by the bank's analysts, incorporating additional criteria into the analysis process, such as:

- location of the place of business, ability to continue business during martial law and current restrictions; potential threat of hostile takeover, where the customer is registered and doing business
- credit operations are not carried out without tangible and/or intangible collateral (e.g. pledge of shares, pledge of real estate, pledge of vehicles, machinery and equipment, sureties and guarantees);
- priority is given to the financing of agricultural customers with a positive pre-war history;

In order to more precisely assess the potential impact of the war on the situation of customers and their ability to service their debts, Kredobank S.A.'s loan portfolio was divided into 4 zones according to the place of business or residence. The green zone covers regions with a low risk of conducting active war activities (47% of the loan portfolio). The yellow zone includes regions close to the occupied regions or areas where military activities were active (34% of the loan portfolio). Orange includes regions of which some of the communities are under occupation or have military activities carried out on their territory (16% of the loan portfolio). The red zone includes war or temporarily occupied areas (3% of the loan portfolio – 469 million UAH). Customers who were found to be out of business, materially reduced in business or whose assets were destroyed were deemed to meet the premise of default and were subject to additional allowances. In terms of restructuring at Kredobank S.A., several standardized programmes have been introduced for each business line since June 2022. The main part of the restructuring took place in July-September 2022. At the end of 2022, the NPL level is 14.5%.

The Ukrainian state treasury bonds in the amount of PLN 420 million, due to the increase in the country's downgrade, were moved to Stage 2 and covered by an additional allowance.

The Group also performed an analysis of the business loans portfolio from the perspective of the customers' exposure to the adverse effects of the military conflict in Ukraine. If we adopt a threshold of at least 5% of the turnover generated from transactions with business partners from Russia, Belarus or Ukraine, the risk-exposed portfolio in Poland amounts to approx. PLN 3.8 billion. For the purpose of the measurement of credit exposures, the Group considered the information on the scale of the Polish customers' business relations with partners from Ukraine, Belarus and Russia, and performed an assessment of various scenarios of development of the macroeconomic situation. The exposures of these customers were classified to Stage 2 and were subject to the valuation of expected credit losses throughout their lifetime. If the probability of a customer repaying its loan liabilities was assessed as low, the exposures were reclassified to Stage 3. Retail exposures granted to Russian, Belarusian or Ukrainian nationals, which as at 31 December 2022 amounted to PLN 234 million, were reclassified by the Bank into Stage 2 and their credit risk was measured over the life of these loans

As at 31 December 2022, the value of write-downs for expected credit losses on the above-mentioned portfolios amounted to PLN 434 million.

The Group has maintained a safe level of liquidity, allowing for a quick and effective response to potential threats. During 12 months ended 31 December 2022:

- PKO Bank Polski S.A. monitored the cash volumes in the Bank's branches and ATMs on an ongoing basis due to a temporarily increased interest in cash withdrawals (in response to the outbreak of the war in Ukraine) and used its best efforts to allow customers to withdraw cash.
- KREDOBANK S.A.'s liquidity position, despite the ongoing conflict in Ukraine, remained stable and secure; the company did not experience a decline in liquidity measures or significant deposit outflows; moreover, KREDOBANK S.A. was classified by the National Bank of Ukraine as a systemic bank of Ukraine (LCR of around 200%, NSFR of 150%, capital adequacy ratio of around 20%)

At the same time, in connection with the war in Ukraine, the Group formed a Support Group led by the Head of the Crisis Staff, whose tasks include preventing disruption to the critical processes of the PKO Bank Polski S.A. Group, exchange of information within the Group and coordination of the aid provided. The Bank takes actions to mitigate the threats associated with the war in Ukraine on an ongoing basis, in particular with respect to ensuring access to the Bank's systems, cyber security and the continuity of cash services and other processes.

79. Interest rate benchmarks reform

- ### Legal environment

A new standard has been developed in the European Union for designing, providing and applying interest rate benchmarks. The legal basis for the said standard is the Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (hereinafter: "BMR"). The BMR:

- sets the rules for development and application of transparent, reliable and fair benchmarks;
- provides extensive controls over the set-up of benchmarks;
- expects the benchmarks to be determined, generally, on the basis of the actual transactions executed on a given market.

In October 2020, ISDA, an international organization setting standards for trading in derivative instruments, published the ISDA Protocol describing the procedure for replacing IBORs used in the current and new derivative transactions with new risk-free benchmarks. The Bank joined the Protocol in November 2020.

On 10 February 2021, the European Union published an amendment to the BMR, granting the European Commission and the Member States competences to designate replacements for benchmarks in cessation, if such cessation could threaten the stability of the EU market or a Member State market. By law, such a replacement will replace all references to a benchmark which ceased to be published in all contracts and financial instruments which do not contain fallback provisions or whose fallback provisions do not address the permanent cessation of a benchmark.

In the case of EURIBOR, the process of adjustment to the BMR requirements was completed in June 2019 by extending the scope of transactions used to determine the ratio and implementing the waterfall model, which allows designating a transitional benchmark in the event of absence of transactions.

On 5 March 2021, the Financial Conduct Authority (FCA) announced that after 31 December 2021 it will no longer publish selected LIBORs due to the fact that they cannot be adapted to the BMR requirements. For the purposes of their continued use in contracts and financial instruments concluded by the end of 2021, the 1M, 3M and 6M LIBOR USD rates will be published until 30 June 2023 with a consultation on publishing these rates in synthetic form until the end of September 2024, the 1M and 6M LIBOR GBP rates in synthetic form will be published until the end of March 2023 and for the 3M term until the end of March 2024, the 1M, 3M and 6M LIBOR JPY rates in synthetic form were published until the end of 2022.

The European Commission, in Implementing Regulation (EU) 2021/1847 of 14 October 2021 on the designation of a statutory replacement for certain settings of CHF LIBOR, which is in force by operation of law and directly applicable in all Member States of the European Union as of 1 January 2022, has determined substitutes for the CHF LIBOR rates. These substitutes are the 1-month or 3-month SARON compound rate with an indicated value of the adjustment spread, respectively. The SARON rate replaced the CHF LIBOR rate in every contract and financial instrument within the European Union, so this also applied to Polish borrowers.

The WIBOR reform and its adjustment to the BMR requirements were completed in 2020. It involved the same change in the benchmark calculation methodology as in the case of EURIBOR. On 16 December 2020, the PFSA granted GPW Benchmark S.A. permission to perform the function of administrator of the key benchmarks WIBID and WIBOR.

- **ANNOUNCEMENT ON THE USE OF A REPLACEMENT FOR WIBOR**

The Act of 7 July 2022 on the crowdfunding of business ventures and on assistance for borrowers initiated the reform of the WIBOR index. The WIBOR index will be discontinued and replaced by a replacement. The law contains a legal delegation to promulgate it by means of a regulation. The process of determining a replacement for WIBOR will be regulated by law. According to the regulation of the Minister of Finance, the replacement of the WIBOR rate will apply to contracts and financial instruments that meet the requirements of the BMR Regulation.

The regulation of the Minister of Finance will also specify the corrective margin and the date from which the conversion will be effective.

In July 2022, the National Working Group on Benchmark Reform (NWG) has been established to ensure the credibility, transparency and reliability of the development and application of the new benchmark interest rate.

The National Working Group comprises representatives of the Ministry of Finance, the National Bank of Poland, the Office of the Financial Supervision Authority, the Bank Guarantee Fund, the Polish Development Fund, the Warsaw Stock Exchange, the National Depository for Securities, Bank Gospodarstwa Krajowego, the WSE Benchmark, as well as representatives of banks, investment fund companies, insurance companies, factoring and leasing companies, entities that are issuers of bonds, including corporate and municipal bonds, and clearing houses.

The work of the National Working Group shall be coordinated and supervised by the Steering Committee, composed of representatives of key institutions: the Financial Supervision Authority, the National Bank of Poland, the Ministry of Finance, the Bank Guarantee Fund, the Polish Development Fund, as well as the WSE Benchmark – the administrator of reference rates – and the Association of Polish Banks.

NGR's activities are carried out in a project formula in which project streams have been identified and in which representatives of PKO Bank Polski S.A. actively participate.

On 1 September 2022, the Steering Committee of the National Working Group appointed in connection with the planned benchmark reform (NWG SC) decided to choose the WIRON® index as an alternative interest rate benchmark, calculated based on the actual overnight (ON) transactions concluded with large enterprises and financial institutions. The selection of the benchmark and the parameters to be taken into account in its development was preceded by public consultations with financial and non-financial market entities. The administrator of WIRON®, within the meaning of BMR, is GPW Benchmark, which is entered in the register maintained by the European Securities and Markets Authority (ESMA). WIRON® is intended to become a critical interest rate benchmark within the meaning of BMR, which will be applied in financial agreements and instruments.

On 27 September 2022, the NWG SC adopted a Road Map specifying a schedule of actions aimed at replacing WIBOR with WIRON® in accordance with the BMR. The Road Map indicates that the benchmark reform will be implemented by the end of 2024. At the same time, a new offer of financial products based on WIRON® will be implemented in 2023-2024 and the full readiness to discontinue the development and publication of the WIBOR and WIBID® benchmarks will be reached at the beginning of 2025.

- **ADAPTATION OF THE CAPITAL GROUP AND THE BANK**

Evolution of the legal environment and benchmark market migration in accordance with BMR affect the Group's operations through the agreements signed with the customers and business partners, changes in the valuation of financial instruments and the need to adjust IT processes and systems.

Since the third quarter of 2020, the Group has conducted an interdisciplinary project aimed at its adaptation to the requirements of the BMR, including the WIBOR reform, as well as the PFSA interpretations and guidelines, in particular in the area of:

- development of a contingency plan and its implementation in the Bank's contracts and rules and regulations;
- adjustment of the offer of products and services;
- adjustment of the Bank's transactional, accounting, analytical, risk and reporting systems;
- adjustment of the use of hedge accounting;
- annexing the contracts and implementing the standards adopted by the markets;
- cooperation with the banking sector aimed at developing a uniform interpretation of the regulations and standards of their implementation.

Representatives of many organisational units of the Bank, including in particular those responsible for product areas, as well as issues related to risk and financial management, participate in the project's works. On the part of the companies, representatives of PKO Leasing S.A and PKO Faktoring S.A participate. The structure of the project takes into account the division into streams covering products and processes where there is an element of applying the WIBOR reference index and the cyclical reporting of statuses with regard to individual streams. In the current phase of the project, intensive work is underway at the Bank to adapt the technological infrastructure, as well as involving the preparation of internal processes and documentation (including rules and regulations).

Since 1 January 2022, the Group continued servicing the loan portfolios and new loan agreements using WIBOR and EURIBOR without any changes.

The Group is working on analysing the risks and monitoring them on an ongoing basis; however, due to the early stage of the reform, more detailed information on the transition process will be provided as the WIBOR reform work progresses. Moreover, due to the lack of formal information on the potential regulatory event referred to in Article 23c(1) of the BMR, the lack of the Regulation of the Minister of Finance referred to in Article 61c of the Act of 5 August 2015 on macro-prudential oversight of the financial system and crisis management in the financial system concerning the replacement, or even for the draft of such a regulation, lack of information the amount of adjustment spread or the method of calculating this spread as well as the lack of the market for hedging instruments and taking into account the current stage of work of the National Working Group and implementation of the roadmap, currently, it is not possible to estimate the financial impact of the WIBOR rate reform.

(IN PLN MILLION)

The following tables present the Group's exposure to significant types of interest rates affected by the interest rate benchmark reform, which had not been replaced as at 31 December 2022.

Financial assets	Currency translated to PLN
31.12.2022	WIBOR PLN
Amounts due from banks	3 748
Securities	14 368
Loans and advances to customers	174 878
Total assets	192 994

Financial liabilities and off-balance sheet liabilities	Currency translated to PLN
31.12.2022	WIBOR PLN
Amounts due to customers	6 979
Subordinated liabilities	2 781
Provisions for financial liabilities and guarantees granted	412
Total liabilities	10 172
Financial and guarantee commitments granted	32 051

NOMINAL AMOUNT of derivative instruments	Currency translated to PLN
31.12.2022	WIBOR PLN
Hedging derivatives	**82 258**
- Purchase (floating leg)	2 457
- Sale (floating leg)	79 801
Other derivative instruments	**184 399**
- Purchase (floating leg)	93 143
- Sale (floating leg)	91 256

With respect to the loan agreements using LIBOR which were concluded before 1 January 2022, a replacement designated by the European Commission for CHF and the "bridge" rates available until 30 June 2023 for USD and until 31 December 2022 for GBP are used. The few agreements which used LIBOR EUR were annexed to EURIBOR. For new variable interest loans granted to corporate customers in foreign currencies, new benchmarks (referred to as risk-free rates) are used, such as SARON for CHF, SOFR for USD, SONIA for GBP. Depending on the nature of the product, interest is calculated daily or using compound interest rates – either "in advance" (based on historical rates) or "in arrears" (at the end of an interest period). As far as the financial market transactions are concerned, the Bank (as mentioned above) has joined the ISDA Protocol and executes and settles transactions in accordance with that standard, i.e. using compound risk-free rates.

The tables below show the Group's exposure to the material types of interest rates impacted by the reform of interest rate benchmarks with a transition to the revised benchmarks after 31 December 2021.

Financial assets	Currency translated to PLN			
31.12.2022	SARON CHF	SONIA GBP	SOFR USD	TOTAL
Loans and advances to customers	8 896	12	681	9 589
Total assets	8 896	12	681	9 589

Financial liabilities and off-balance sheet liabilities	Currency translated to PLN			
31.12.2022	SARON CHF	SONIA GBP	SOFR USD	TOTAL
Amounts due to customers	2	2	155	159
Provisions for financial liabilities and guarantees granted	3	-	5	8
Total liabilities	5	2	160	167
Financial and guarantee commitments granted	118	-	3 063	3 181

(IN PLN MILLION)

NOMINAL AMOUNT of derivative instruments	Currency translated to PLN			
31.12.2022	SARON CHF	SONIA GBP	SOFR USD	TOTAL
Hedging derivatives	**1 073**	-	**355**	**1 428**
- Purchase (floating leg)	-	-	355	355
- Sale (floating leg)	1 073	-	-	1 073
Other derivative instruments	**10 616**	-	**1 940**	**12 556**
- Purchase (floating leg)	5 300	-	1 244	6 544
- Sale (floating leg)	5 316	-	696	6 012

- HEDGE ACCOUNTING

The amendments to IFRS allow for the assumption that future cash flows – although subject to changes in the future as a result of the transition to alternative benchmark rates – are still highly probable and thus the existing hedging relationships can be maintained.

80. Subsequent events

1. On 1 February 2023, as part of the inaugural issue under the EMTN programme, the Bank issued 3-year Senior Preferred Notes with a total value of EUR 750 million, with the option of early redemption two years after issue. The coupon of the issue is fixed, at 5.625%, payable annually until the early redemption date, and variable thereafter, with quarterly payments. Moody's Investors Service has assigned a rating of A3 to the issue. The bonds were admitted to trading on a regulated market on the Luxembourg Stock Exchange.
2. On 9 February 2023, PKO Bank Hipoteczny S.A. (a subsidiary of PKO Bank Polski S.A.) issued, within the framework of the International Mortgage Covered Bond Issue Programme – mortgage bonds with a total nominal value of PLN 500 million maturing in February 2026.
3. On 16 February 2023, the Opinion of the Advocate General was published in Case C-520/21 concerning the possibility for consumers and banks to claim beyond the consideration provided under a loan agreement that has been declared invalid by the Court. The Advocate General concluded that:

   - as far as consumer claims are concerned – they do not conflict with the Directive, but the validity of such claims would have to result from national law, and it is for the national court to decide. The Advocate General emphasised that this does not mean that consumers' claims must be upheld, and that national courts may also exercise their jurisdiction to dismiss such an action where it constitutes an abuse of rights.
   - as regards claims by banks – provisions of the Directive preclude the Bank from bringing such claims against consumers.

   By contrast, the Advocate does not comment directly on other potential formulas for settling the time value of money, and in particular does not formulate a clear thesis on how to define the concept of 'principal', subject to reimbursement.

   In the Group's view, the opinion of the Advocate General of the CJEU constitutes a post-reporting date event that does not require adjustment under IAS 10 Events subsequent to the reporting period, due to the fact that:

   - the Advocate's opinion is non-binding,
   - the case in which the questions referred for a preliminary ruling in Case C-520/21 were raised does not concern the Bank's claims. The Bank's claims against the customer were raised in another case, which also raised preliminary questions of a similar content to Case C-520/21. This case is registered under reference C-756/22,
   - the inability to predict the final outcome of the CJEU's decision, in particular the uncertainty as to whether the CJEU's decision will contain explicit instructions or merely general guidelines leaving the national courts to assess and decide on the details,
   - uncertainty about the future practice of national courts in enforcing CJEU judgments.

In the Group's view, the Advocate's opinion cannot form the basis for recognising its effects in the cost of legal risk on mortgage loans in CHF in these financial statements.

However, in the opinion of the Group:

1) The level of additional legal risk costs recognised by the Group will depend primarily on customer behaviour, i.e. whether the number of lawsuits brought by customers is in line with current model assumptions or whether the opinion of the CJEU ombudsman will have a significant impact on increasing the number of lawsuits. The Ombudsman's opinion and the subsequent ruling of the CJEU may result in negative trends affecting the level of estimated risk, resulting from an increased propensity of customers to file lawsuits.
2) At the date of publication of these financial statements, the Group is unable to estimate the potential impact of these factors beyond the sensitivity analysis presented in note 26 Cost of legal risk of foreign currency mortgage loans.
3) As at the date of publication of these financial statements, the Group is not able to estimate the impact of potential customers' claims that exceed return of cash benefits.

In the opinion of the Bank's Management Board, the information available to it as at 31 December 2022 does not indicate any risk of a breach of the legally required minimum levels of capital adequacy or a threat to the going concern assumption adopted in the consolidated financial statements.

4. On 27 February 2023, after obtaining the necessary corporate approvals, the Group concluded with the counterparty a guarantee agreement providing unfunded credit protection in respect of a portfolio of selected corporate credit receivables of the Group, in accordance with the CRR.

   The total value of the Group's debt portfolio covered by this guarantee is over PLN 12 292 million, and the portfolio consists of the bond portfolio of PLN 1 515 million ("Portfolio A") and the portfolio of other receivables of PLN 10 777 million ("Portfolio B"). The coverage ratio is 100% for Portfolio A and 80% for Portfolio B, therefore the total Guarantee amount is PLN 10 137 million. The maximum duration of the guarantee is 60 months, provided that the Group is entitled to terminate it before the expiry of its term.

SIGNATURES OF ALL MEMBERS OF THE BANK'S MANAGEMENT BOARD

The original Polish document is signed with a qualified electronic signatures library