



FULL-YEAR CONSOLIDATED FINANCIAL STATEMENTS OF THE BANK OCHRONY ŚRODOWISKA GROUP

FOR THE YEAR ENDED DECEMBER 31ST 2022

Warsaw, March 22nd 2023

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Full-year consolidated statement of profit or loss of the BOŚ Group

Continuing operations	for the year ended		
	Note	December 31st 2022	December 31st 2021 restated
Interest and similar income, including:		1,205,878	430,640
<i>financial assets measured at amortised cost</i>		880,997	380,611
<i>assets measured at fair value through other comprehensive income</i>		307,489	45,971
<i>financial assets measured at fair value through profit or loss</i>		17,392	4,058
Interest expense and similar charges, including:		- 447,538	- 56,145
<i>financial liabilities measured at amortised cost</i>		- 447,538	- 49,712
<i>financial liabilities measured at fair value through profit or loss</i>		-	- 6,433
Net interest income	7	758,340	374,495
Fee and commission income		167,992	181,742
Fee and commission expense		- 40,424	- 39,888
Net fee and commission income	8	127,568	141,854
Dividend income	9	7,188	6,730
Gain (loss) on financial instruments measured at fair value through profit or loss (including amounts due from clients)	10	22,878	67,633
Gain (loss) on investment securities	11	-	197
Gain (loss) on hedge accounting	12	119	764
Gain (loss) on foreign exchange transactions	13	36,890	25,300
Gain (loss) on derecognition of financial instruments		2,070	1,590
Other income	14	41,148	35,083
Other expenses	15	- 55,697	- 43,798
Effect of legal risk of mortgage loans denominated in foreign currencies	16/39	- 144,306	- 20,783
Net impairment losses	17	- 105,995	- 114,094
Administrative expenses	18	- 496,068	- 395,702
Profit (loss) before tax		194,135	79,269
Income tax expense	19	- 65,891	- 31,813
Net profit (loss)		128,244	47,456
<i>of which attributable to owners of parent</i>		128,244	47,456
Earnings (loss) per share attributable to owners of parent during period (PLN)	20		
<i>basic</i>		1.38	0.51
<i>diluted</i>		1.38	0.51

There were no discontinued operations in 2022 and 2021.

The notes presented on the following pages are an integral part of these financial statements.

Full-year consolidated statement of comprehensive income of the BOŚ Group

Continuing operations	for the year ended	
	December 31st 2022	December 31st 2021
Net profit (loss)	128,244	47,456
Items that may be reclassified to profit or loss:	- 29,414	- 94,581
Fair value of financial assets measured at fair value through other comprehensive income, gross	- 36,314	- 116,767
Deferred tax	6,900	22,186
Items that will not be reclassified to profit or loss:	- 487	- 250
Fair value of equity instruments carried at fair value through other comprehensive income, gross	- 23	1
Deferred tax	4	-
Remeasurement of employee benefit obligations	- 578	- 310
Deferred tax	110	59
Other comprehensive income	- 29,901	- 94,831
Total comprehensive income:	98,343	- 47,375
<i>of which attributable to owners of parent</i>	98,343	- 47,375

The notes presented on the following pages are an integral part of these financial statements.

Full-year consolidated statement of financial position of the BOŚ Group

Assets	Note	December 31st 2022	December 31st 2021 restated data	January 1st 2021 restated data
Cash and balances at central bank	21	575,875	361,581	266,552
Amounts due from banks	22	242,831	400,747	155,616
Financial assets held for trading, including:	23	263,259	155,705	113,134
<i>equity securities</i>		16,602	13,308	14,032
<i>debt securities</i>		20,643	5,321	805
<i>derivative instruments</i>		226,014	137,076	98,297
Derivative hedging instruments	44	30,562	9,121	-
Investment securities:	24	9,008,118	7,108,931	7,371,414
<i>equity securities measured at fair value through other comprehensive income</i>		85,465	85,483	85,480
<i>debt securities measured at fair value through other comprehensive income</i>		6,915,813	5,311,853	5,597,061
<i>debt securities measured at amortised cost</i>		1,900,215	1,582,366	1,535,239
<i>debt securities measured at fair value through profit or loss</i>		106,625	129,229	153,634
Amounts due from clients, including:	25	11,125,827	11,499,466	11,536,959
<i>measured at amortised cost</i>		11,122,777	11,485,355	11,511,445
<i>measured at fair value through profit or loss</i>		3,050	14,111	25,514
Intangible assets	27	132,983	112,861	110,902
Property, plant and equipment	28	91,670	84,082	84,651
Right of use – leases	29	65,839	78,538	67,796
Tax assets:		175,900	151,072	129,136
<i>current</i>		2,445	-	8,433
<i>deferred</i>	35	173,455	151,072	120,703
Other assets	30	293,317	267,455	319,331
Total assets		22,006,181	20,229,559	20,155,491

The notes presented on the following pages are an integral part of these financial statements.

Liabilities	Note	December 31st 2022	December 31st 2021 restated data	January 1st 2021 restated data
Amounts due to central bank and other banks	31	141,143	420,389	732,743
Financial liabilities held for trading, including:	23	152,977	99,659	103,316
<i>equity securities</i>		907	-	575
<i>derivative instruments</i>		152,070	99,659	102,741
Derivative hedging instruments		-	-	24,497
Amounts due to clients	32	18,820,809	17,007,863	16,560,715
Subordinated liabilities	33	345,035	369,107	368,996
Provisions	34	165,458	94,622	68,196
Tax liabilities:		449	8,810	1,103
<i>current</i>		449	8,335	856
<i>deferred</i>	35	-	475	247
Lease liabilities	36	67,928	81,170	71,229
Other liabilities	37	348,244	282,144	311,526
Total liabilities		20,042,043	18,363,764	18,242,321

Equity	Note	December 31st 2022	December 31st 2021	January 1st 2021
EQUITY ATTRIBUTABLE TO OWNERS OF PARENT				
Common equity:	41	1,461,036	1,461,036	1,461,036
<i>Share capital</i>		929,477	929,477	929,477
<i>Treasury shares</i>		-1,292	-1,292	-1,292
<i>Share premium</i>		532,851	532,851	532,851
Revaluation reserve	42	-56,863	-26,962	67,869
Retained earnings	43	559,965	431,721	384,265
Total equity		1,964,138	1,865,795	1,913,170
Total equity and liabilities		22,006,181	20,229,559	20,155,491

The notes presented on the following pages are an integral part of these financial statements.

Full-year consolidated statement of changes in equity of the BOŚ Group

Item	Equity attributable to owners of the Bank								Total equity
	Common equity			Revaluation reserve	Retained earnings				
	Share capital	Treasur y shares	Share premium		Other statutory reserve funds	Other capital reserves	General risk fund	Undistributed profit (loss)	
As at January 1st 2022	929,477	- 1,292	532,851	- 26,962	398,628	23,605	48,302	- 38,814	1,865,795
Net profit (loss)	-	-	-	-	-	-	-	128,244	128,244
Other comprehensive income	-	-	-	- 29,901	-	-	-		- 29,901
Total comprehensive income	-	-	-	- 29,901	-	-	-	128,244	98,343
Profit distribution, including:	-	-	-	-	58,851	-	-	- 58,851	-
Transfer of net profit to reserves	-	-	-	-	58,851	-	-	- 58,851	-
As at December 31st 2022	929,477	- 1,292	532,851	- 56,863	457,479	23,605	48,302	30,579	1,964,138

Full-year consolidated financial statements of the BOŚ S.A. Group
for the year ended December 31st 2022
in PLN thousand)

(amounts

Item	Equity attributable to owners of the Bank								Total equity
	Common equity			Revaluation reserve	Retained earnings				
	Share capital	Treasur y shares	Share premium		Other statutory reserve funds	Other capital reserves	General risk fund	Undistributed profit (loss)	
As at January 1st 2021	929,477	- 1,292	532,851	67,869	776,085	23,605	48,302	- 463,727	1,913,170
Net profit (loss)	-	-	-	-	-	-	-	47,456	47,456
Other comprehensive income	-	-	-	- 94,831	-	-	-	-	- 94,831
Total comprehensive income	-	-	-	- 94,831	-	-	-	47,456	- 47,375
Profit distribution, including:	-	-	-	-	- 377,457	-	-	377,457	-
Offset of losses from prior years	-	-	-	-	- 374,421	-	-	374,421	-
Offset of 2018 issue costs against capital reserve	-	-	-	-	- 3,036	-	-	3,036	-
As at December 31st 2021	929,477	- 1,292	532,851	- 26,962	398,628	23,605	48,302	- 38,814	1,865,795

There were no non-controlling interests in 2021 and 2022.

The notes presented on the following pages are an integral part of these financial statements.

**Full-year consolidated financial statements of the BOŚ S.A. Group
for the year ended December 31st 2022
in PLN thousand)**

(amounts

Full-year consolidated statement of cash flows of the BOŚ Group

Indirect method	for the year ended	
	December 31st 2022	December 31st 2021 restated
CASH FLOWS FROM (USED IN) OPERATING ACTIVITIES		
Profit (loss) before tax	194,135	79,269
Total adjustments:	1,804,930	1,118,636
Amortisation/depreciation	62,733	55,843
Interest income on investing activities	-109,969	-49,988
Gain (loss) on investing activities	-54	3
Interest income on financing activities	27,330	16,270
Dividends received:	-7,188	-6,730
<i>on securities held for trading</i>	264	203
<i>on investment securities</i>	6,924	6,527
Change in:		
<i>amounts due from banks</i>	26,944	66,303
<i>assets on securities held for trading</i>	-18,616	-3,792
<i>assets and liabilities from measurement of derivative and hedging financial instruments</i>	-57,968	-75,479
<i>investment securities</i>	-52,132	912,476
<i>amounts due from clients</i>	373,639	37,493
<i>other assets and income tax</i>	- 27,845	60,556
<i>amounts due to central bank and other banks</i>	-279,246	-312,354
<i>amounts due to clients</i>	1,812,946	447,148
<i>liabilities arising from securities held for trading</i>	907	-575
<i>provisions</i>	70,258	26,116
<i>other liabilities and income tax</i>	64,564	-29,669
Income tax paid	-88,561	-31,715
Net cash flows from (used in) operating activities	1,999,065	1,197,905

CASH FLOWS FROM (USED IN) INVESTING ACTIVITIES		
Inflows	268,123	73,473
Cash receipts from sale of property, plant, and equipment	65	17
Cash receipts from redemption of securities measured at amortised cost	204,225	28,287
Interest income on securities measured at amortised cost	63,833	45,169
Outflows	-549,726	-113,251
Payments for acquisition of securities measured at amortised cost	-475,938	-70,595
Payments for acquisition of intangible assets	-50,564	-29,433
Payments for acquisition of property, plant and equipment	-23,224	-13,223
Net cash flows from (used in) investing activities	-281,603	-39,778
CASH FLOWS FROM (USED IN) FINANCING ACTIVITIES		
Outflows	-68,597	-32,032
Redemption of bonds issued by the Group	-32,500	-
Interest paid on bonds issued by the Group, including:	-14,901	-12,036
<i>subordinated bonds</i>	-14,901	-12,036
Lease payments, IFRS 16	-19,396	-18,514
Lease interest paid	-1,800	-1,482
Net cash flows from (used in) financing activities	-68,597	-32,032
TOTAL NET CASH FLOWS	1,648,865	1,126,095
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	3,605,927	2,479,832
CASH AND CASH EQUIVALENTS AT END OF PERIOD	5,254,792	3,605,927
Restricted cash and cash equivalents	618,966	295,202

The notes presented on the following pages are an integral part of these financial statements.

Notes to the full-year consolidated financial statements

1. General information – Bank Ochrony Środowiska S.A. and the Bank Ochrony Środowiska S.A. Group

1.1. Bank Ochrony Środowiska S.A.

Name of the reporting entity or other identification data	Bank Ochrony Środowiska S.A. Group
Explanation of changes to the name of the reporting entity or other identification data since the end of the previous reporting period	-
Registered office	ul. Żelazna 32, 00-832 Warsaw
Legal form	Joint Stock Company (<i>spółka akcyjna</i>)
Country of registration	Poland
Address	00-832 Warsaw, ul. Żelazna 32
Principal place of business	Poland
Principal business activity	<p>The Bank's primary objective is to effectively manage the shareholders' equity and clients' funds, ensuring the profitability of its business and the security of the funds entrusted.</p> <p>The Bank's business consists in banking activities, including accumulating funds, granting credits, effecting cash settlements, performing other banking services as well as providing financial consulting and advisory services.</p>
Name of the parent	Bank Ochrony Środowiska S.A.
Name of the ultimate parent of the group	Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej (National Fund for Environmental Protection and Water Management)

Bank Ochrony Środowiska S.A. (the "Bank", "BOŚ S.A.", the "Company"), with its registered office at ul. Żelazna 32, 00-832 Warsaw, was established by Decision No. 42 of the Governor of the National Bank of Poland of September 15th 1990, and a notarial deed of incorporation of September 28th 1990.

The Bank is entered in the National Court Register of the District Court for the Capital City of Warsaw, 13th Commercial Division, under No. KRS 0000015525, and has Industry Identification Number (REGON) 006239498.

According to the Polish Classification of Business Activities (PKD), the Bank's activities are classified as PKD 6419Z.

The Bank was established for an indefinite period.

The Bank's mission: We support green transition in an innovative and effective manner.

The Bank pursues its mission mainly by:

- providing banking services to retail and institutional clients, in particular those implementing environmentally-friendly projects or operating in the environmental protection and water management sectors, and to people who value eco-friendly lifestyles,
- participating in distribution of funds for environmental protection projects and sustainable development in Poland.

Since January 24th 1997 the Bank shares have been traded on the Warsaw Stock Exchange and listed in the finance/banking segment of the market.

On March 21st 2023, these full-year consolidated financial statements of the Group were authorised by the Management Board of the parent for issue on the Warsaw Stock Exchange on March 22nd 2023.

1.2. The Group – consolidated entities

Consolidated subsidiaries of the Group and the consolidation method in 2022:

No.	Subordinated entities	Registered office	% equity interest as at	% voting interest as at	Consolidation method
Direct subsidiaries					
1.	Dom Maklerski BOŚ S.A.	Warszawa	100%	100%	Full consolidation
2.	BOŚ Leasing - EKO Profit S.A.	Warszawa	100%	100%	Full consolidation
Indirect subsidiary (subsidiary of BOŚ Leasing - Eko Profit S.A.)					
1.	MS Wind sp. z o.o.	Warszawa	100%	100%	Full consolidation

Dom Maklerski BOŚ S.A. – a direct subsidiary operating on the capital market, provides mainly brokerage services.

BOŚ Leasing - EKO Profit S.A. – a direct subsidiary engaged in lease activities involving financing of environmental protection projects, also provider of financial and advisory services complementary to the Bank's service offering.

MS Wind Sp. z o.o. – an indirect subsidiary (a direct subsidiary of BOŚ Leasing - EKO Profit S.A.) engaged in execution of a wind farm project.

Additional information on the Group companies as at December 31st 2022:

Subordinated entities	Income*\	Number of employees		Profit or loss before tax	Income tax	Financial support received**\
		full-time	employees			
Direct subsidiaries						
Dom Maklerski Banku Ochrony Środowiska S.A.	168,620	261.34	267	40,271	7,020	-
BOŚ Leasing - EKO Profit S.A.	13,929	54.825	57	- 2,689	- 794	-
Indirect subsidiary (subsidiary of BOŚ Leasing - Eko Profit S.A.)						
MS Wind sp. z o. o.	10,111	-	-	6,432	1,361	-

*\ Income defined as net interest income, net commission income, net result on financial instruments, other income, in PLN thousand.

** Financial support from public funds, in particular under the Act of February 12th 2009 on granting by the State Treasury support to financial institutions (Dz. U. of 2014, item 158).

1.3. Composition of the Management Board and the Supervisory Board of the Bank

Management Board

As at December 31st 2022, the composition of the Management Board was as follows:

- Emil Ślęzak – Member of the Supervisory Board delegated to temporarily perform the duties of President of the Management Board
- Arkadiusz Garbarczyk, Vice President of the Management Board, First Deputy President of the Management Board
- Robert Kasprzak, Vice President of the Management Board
- Jerzy Zań, Vice President of the Management Board.

As at December 31st 2021, the composition of the Management Board was as follows:

- Wojciech Hann, Vice President of the Management Board, responsible for activities of the Management Board
- Arkadiusz Garbarczyk, Vice President of the Management Board, First Deputy President of the Management Board
- Robert Kasprzak, Vice President of the Management Board
- Marzena Kocut, Vice President of the Management Board
- Jerzy Zań, Vice President of the Management Board.

During the year, the following changes took place in the composition of the Management Board:

1. Marzena Kocut resigned as Vice President of the Management Board, effective as of 6.00 pm on May 23rd 2022;
2. Effective November 23rd 2022, the Supervisory Board dismissed Wojciech Hann from his position as President of the Bank's Management Board;
3. Effective November 23rd 2022, the Supervisory Board delegated Emil Ślęzak to temporarily perform the duties of President of the Management Board, no longer than until February 23rd 2023;
4. On February 8th 2023, the Supervisory Board appointed Emil Ślęzak as Vice President of the Bank's Management Board and entrusted him with the responsibility to lead the work of the Management Board. On February 8th 2023, Emil Ślęzak, Member of the Supervisory Board, resigned from his position on the Supervisory Board.

As at the date of these financial statements, the composition of the Management Board was as follows:

**Full-year consolidated financial statements of the BOŚ S.A. Group
for the year ended December 31st 2022
PLN thousand)**

(amounts in

- Emil Ślęzak, Vice President of the Management Board, responsible for the work of the Management Board
- Arkadiusz Garbarczyk, Vice President of the Management Board, First Deputy President of the Management Board
- Robert Kasprzak, Vice President of the Management Board
- Jerzy Zań, Vice President of the Management Board.

Supervisory Board

As at December 31st 2022, the composition of the Supervisory Board was as follows:

- Piotr Sadownik, Chairman of the Supervisory Board
- Iwona Marciniak, Deputy Chairwoman of the Supervisory Board
- Andrzej Matysiak, Secretary of the Supervisory Board
- Piotr Bielarczyk, Member of the Supervisory Board
- Paweł Sałek, Member of the Supervisory Board
- Emil Ślązak, delegated to temporarily perform the duties of President of the Management Board
- Aleksandra Świdorska, Member of the Supervisory Board
- Tadeusz Wyrzykowski, Member of the Supervisory Board

As at December 31st 2021, the composition of the Supervisory Board was as follows:

- Emil Ślązak, Chairman of the Supervisory Board
- Ireneusz Purgacz, Deputy Chairman of the Supervisory Board
- Paweł Sałek, Secretary of the Supervisory Board
- Leszek Banaszak, Member of the Supervisory Board
- Robert Czarnecki, Member of the Supervisory Board
- Zbigniew Dynak, Member of the Supervisory Board
- Janina Goss, Member of the Supervisory Board
- Marcin Jastrzębski, Member of the Supervisory Board
- Andrzej Matysiak, Member of the Supervisory Board
- Piotr Wróbel, Member of the Supervisory Board

In 2022, the following changes took place in the composition of the Supervisory Board:

1. On June 30th 2022, the Supervisory Board elected from among its members:
 - Emil Ślązak as Chairman of the Supervisory Board,
 - Iwona Marciniak as Deputy Chairwoman of the Supervisory Board,
 - Andrzej Matysiak as Secretary of the Supervisory Board;
2. On November 23rd 2022, the Supervisory Board:
 - delegated Emil Ślązak to temporarily perform the duties of President of the Bank's Management Board, not longer than until February 23rd 2023,
 - elected Piotr Sadownik as Chairman of the Supervisory Board;
3. On December 8th 2022, Janina Goss resigned from her position on the Supervisory Board with effect as of December 10th 2022.

Until the date of preparation of these financial statements, the composition of the Supervisory Board has not changed.

2. Climate change

The mission of Bank Ochrony Środowiska S.A., as set out in the Bank's Articles of Association, is to provide innovative and effective support for green transition by financing pro-environmental projects that generate both business results and environmental benefits. In line with the energy policy and other relevant government documents related to environmental policy and strategy, the Bank co-financed various projects aimed at improving the environment, particularly those that promote environmentally friendly initiatives. The Bank supports efforts to implement a low-carbon economy and facilitate the transition towards renewable energy sources. The Bank's business model is based on the pursuit of maximising green assets by achieving environmental goals in line with the EU taxonomy principles, such as climate change mitigation, climate change adaptation, sustainable use and conservation of water and marine resources, transition to a circular economy, prevention and control of pollution, as well as protection and restoration of biodiversity and ecosystems. In financing pro-environmental undertakings, the Bank cooperates with public and state entities and institutions whose mission is to support such undertakings, including the National Fund for Environmental Protection and Water Management, the Provincial Funds for Environmental Protection and Water Management, Bank Gospodarstwa Krajowego, and European banks that finance sustainable development.

The Bank has adapted its structures and resources to include qualified professionals, such as Engineers-Ecologists, to support the development of environmental activities.

The Bank has implemented the process of identifying ESG risks as a new factor to be assessed in the credit risk assessment process. Credit risk assessment involves assessment as to whether the client has ESG risks. Any such risks identified are measured. Depending on the level of ESG risk posed by a client seeking financing, financing may be granted subject to the client taking actions to mitigate those risks, or financing may be declined based on an unacceptable level of ESG risk – regardless of the client's creditworthiness or the level of collateral provided to support the debt.

3. Statement of accounting policies

3.1. Basis of preparation and statement of compliance

The full-year consolidated financial statements of the Group include:

- Consolidated statement of profit or loss for the 12 months ended December 31st 2022 and comparative data for the 12 months ended December 31st 2021,
- Consolidated statement of comprehensive income for the 12 months ended December 31st 2022 and comparative data for the 12 months ended December 31st 2021,
- Consolidated statement of financial position as at December 31st 2022 and comparative data as at December 31st 2021,
- Consolidated statement of changes in equity for the 12 months ended December 31st 2022 and comparative data for the 12 months ended December 31st 2021,
- Consolidated statement of cash flows for the 12 months ended December 31st 2022 and comparative figures for the 12 months ended December 31st 2021,
- Notes to the financial statements.

These full-year consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU), effective as at the reporting date, i.e., December 31st 2022, using the same accounting policies for each period, and on a historical cost basis, except for the following items measured at fair value:

Recognition of changes in fair value through:

Financial instruments held for trading	profit or loss
Fair value hedging derivatives	profit or loss
Amounts due from clients whose cash flows fail to meet the SPPI (solely payment of principal and interest) test	profit or loss
Investment debt securities held within a business model whose objective is achieved by collecting contractual cash flows or selling financial assets	other comprehensive income
Investment equity securities	other comprehensive income

IFRSs comprise the standards and interpretations adopted by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC).

Dom Maklerski BOŚ S.A., BOŚ Leasing - EKO Profit S.A. and MS Wind Sp. z o.o. prepare their financial statements in accordance with the International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU).

These consolidated financial statements of the Group follow the same accounting policies as those used in the preparation of the full-year financial statements for the year ended December 31st 2021 except for the presentation of provisions (estimates of the effect of legal risk related to mortgage loans) in foreign currencies, the effect of which is presented in Note 5.6 below.

These full-year consolidated financial statements have been prepared in the Polish złoty (PLN), rounded to PLN thousand (PLN' 000).

3.2. Comparability with prior period data

Restated full-year consolidated statement of profit or loss of the Group

In these financial statements, the BOŚ Group has changed its presentation policy by separately presenting the line item 'Gain (loss) on derecognition of financial instruments' in the statement of profit or loss. In the previous full-year financial statements for 2021, the Group accounted for any gain or loss on the derecognition of financial instruments as part of interest income. Following the change in presentation, the Group restated the comparative data as at December 31st 2021.

The changes did not affect the Group's equity and the statement of financial position in the comparative periods presented in these financial statements. Data on capital adequacy ratios for comparative periods were not restated.

Continuing operations	Data in the issued financial statements for the 12 months ended December 31st 2021	Adjustment due to presentation change	Adjusted data in these financial statements for the 12 months ended December 31st 2021
Interest and similar income, including:	432,230	- 1,590	430,640
<i>financial assets measured at amortised cost</i>	382,201	- 1,590	380,611
<i>assets measured at fair value through other comprehensive income</i>	45,971	-	45,971
<i>financial assets measured at fair value through profit or loss</i>	4,058	-	4,058
Gain (loss) on derecognition of financial instruments	-	1,590	1,590

Restated full-year statement of financial position of the Group

In these financial statements, the Group also changed its accounting policy to recognise the impact of legal risk associated with litigation related to foreign currency mortgages. In the previous financial statements prepared for 2021, the Group recognised provisions for litigation in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* for both active (active) and repaid loans. In light of evolving circumstances, including an increasing number of lawsuits and predominantly unfavourable court rulings that declare the contract invalid either entirely or certain provisions within it, the Bank foresees that it may not recover all contractual flows associated with these loans. Accordingly, for active loans, the Group updated its cash flow estimates and adjusted the gross carrying amount of these loans in accordance with paragraph B5.4.6 of IFRS 9 *Financial Instruments*. Since the change in expected cash flows is not related to credit risk it is not recognised as expected credit losses. Comparative data as of January 1st 2021 and December 31st 2021 and for the period from January 1st 2021 to December 31st 2021 have been restated accordingly. The recognition of the impact of legal risk associated with repaid loans did change. The provision covers costs associated with the assumed scenarios of resolution of the issue of mortgage loans tied to foreign exchange rates, i.e.: reaching out-of-court settlements with clients or unfavourable court rulings. In the Bank's opinion, such presentation better reflects the risk related to foreign currency mortgage loans and enables users of the financial statements to better assess the balance sheet of the Group.

Following the change in presentation, the Group restated the comparative data as at December 31st 2021 and January 1st 2021. The changes did not affect the Group's equity and the statement of profit or loss in the comparative

periods presented in these financial statements. Data on capital adequacy ratios for comparative periods were not restated.

The change affected total assets and total liabilities, which are detailed below:

Assets	Data in the issued financial statements for the year ended December 31st 2021	Adjustment for change in accounting policies	Adjusted data in these financial statements for the year ended December 31st 2021
Amounts due from clients, including:	11,855,647	-356,181	11,499,466
measured at amortised cost	11,841,536	-356,181	11,485,355
measured at fair value through profit or loss	14,111	-	14,111
Total assets	20,585,740	-356,181	20,229,559
Liabilities	Data in the issued financial statements for the year ended December 31st 2021	Adjustment for change in accounting policies	Adjusted data in these financial statements for the year ended December 31st 2021
Provisions	450,803	-356,181	94,622
Total liabilities	18,719,945	-356,181	18,363,764

Assets	Data in the issued financial statements as at December 31st 2020	Adjustment for change in accounting policies	Adjusted data in these financial statements as at January 1st 2021
Amounts due from clients, including:	11,887,297	-350,338	11,536,959
measured at amortised cost	11,861,783	-350,338	11,511,445
measured at fair value through profit or loss	25,514	-	25,514
Total assets	20,505,829	-350,338	20,155,491

Liabilities	Data in the issued financial statements as at December 31st 2020	Adjustment for change in accounting policies	Adjusted data in these financial statements as at January 1st 2021
Provisions	418,534	-350,338	68,196
Total liabilities	18,592,659	-350,338	18,242,321

Restated full-year statement of cash flows of the Group

The change in accounting policy regarding the recognition of the impact of legal risk associated with litigation related to foreign currency mortgage loans also affected the presentation of certain items in the statement of cash flows. In addition, the presentation of lease expenses was modified to separately disclose lease interest payments.

Indirect method	Data in the issued financial statements for the 12 months ended December 31st 2021	Adjustment for change in accounting policies	Adjusted data in these financial statements for the 12 months ended December 31st 2021
CASH FLOWS FROM (USED IN) OPERATING ACTIVITIES			
Profit before tax	79,269	-	79,269
Total adjustments:	1,118,636	-	1,118,636
<i>amounts due from clients</i>	31,650	5,843	37,493
<i>provisions</i>	31,959	-5,843	26,116
Net cash flows from (used in) operating activities	1,197,905	-	1,197,905
CASH FLOWS FROM (USED IN) FINANCING ACTIVITIES			
Outflows	- 32,032	-	- 32,032
Lease payments	- 19,996	1,482	- 18,514
Lease interest paid	-	- 1,482	- 1,482
Net cash flows from (used in) financing activities	- 32,032	-	- 32,032

3.3. Going concern

As a result of accounting losses incurred in 2015, the Bank implemented a Recovery Programme pursuant to Article 142(1) of the Banking Law in the wording effective until October 8th 2016, in accordance with Article 381(4) of the Act of June 10th 2016 on the Bank Guarantee Fund, deposit guarantee scheme and forced restructuring.

On July 17th 2020, the Bank received a decision of the Polish Financial Supervision Authority in connection with the administrative proceedings initiated ex officio by the PFSA on May 12th 2020, whereby the Bank was ordered to prepare a group recovery plan for Bank Ochrony Środowiska S.A., pursuant to Article 141n.1 of the Banking Law Act of August 29th 1997. On July 20th 2020, the Bank received the second decision of the Polish Financial Supervision Authority in connection with the administrative proceedings initiated ex officio by the PFSA on May 12th 2020 to limit the scope of the group recovery plan to entities of the BOŚ Group (i.e., Bank Ochrony Środowiska S.A., Dom Maklerski S.A., BOŚ Leasing EKO-Profit S.A. and MS Wind sp. z o.o.).

The Bank prepared the Group Recovery Plan and submitted it to the PFSA in October 2020. In a letter dated January 21st 2021, in connection with the administrative proceedings to approve the Group Recovery Plan, the Polish Financial Supervision Authority instructed the Bank to supplement and amend the Group Recovery Plan, with the audited financial data as at December 31st 2020 to be used as the point of reference. In accordance with the PFSA's request, BOŚ corrected the Group Recovery Plan and submitted it to the authority. On December 17th 2021, the PFSA approved the Group Recovery Plan.

The approval of the plan by the PFSA marks the discharge of the reorganisation obligations under the Recovery Programme.

In 2021, the Bank prepared a Framework Strategy for BOŚ S.A. for 2021–2023 (the “Strategy”), whose assumptions, directions and objectives are consistent with those of the Group Recovery Plan.

On November 3rd 2022, the Supervisory Board passed a resolution approving an update of the Strategy. The Strategy update was prompted by changes in the Bank’s external environment in terms of regulatory factors (loan repayment holidays, the Borrowers Support Fund) and macroeconomic conditions (interest rate volatility). The Bank’s existing business model and strategic development directions remain unchanged. At the same time, the Group Recovery Plan of Bank Ochrony Środowiska S.A. was updated, which, after approval by the Supervisory Board, was sent to the Financial Supervision Commission in November 2022.

On December 31st 2021, the Bank decided to launch the Group Recovery Plan approved by the PFSA. The corrective actions taken under the Group Recovery Plan are designed to achieve sustainable profitability of the Bank. At year-end 2022, all key and supplementary indicators included in the Group Recovery Plan, both in standalone and consolidated terms, reached safe levels. The Bank noted isolated instances of breaching some of the plan’s complementary profitability indicators due to monthly negative financial results primarily attributed to the negative impact of non-recurring events. In addition, isolated instances of exceeding the complementary indicators of the recovery plan were observed in relation to macroeconomic indicators, reflecting significant fluctuations associated with the geopolitical situation.

In June 2022, in accordance with the provisions of Article 141 m (4) of the Banking Law of August 29th 1997, the Bank submitted an updated Group Recovery Plan to the PFSA. In September 2022, the Bank received a notification from the Financial Supervisory Commission to supplement the document with respect to certain specific areas. In November 2022, the Bank submitted an updated Group Recovery Plan to the Financial Supervisory Commission, incorporating both the changes specified in the notification and changes related to aligning the document with the updated Strategy. These changes include considering the impact of regulatory changes that introduce support programmes for borrowers.

July 29th 2022 was the date of entry into force of the Business Crowdfunding and Borrowers Assistance Act of July 7th 2022, introducing, among other things:

- a possibility for borrowers to suspend repayment of mortgage loans granted in the Polish currency for up to eight months in 2022–2023 (“loan payment holidays”); and
- an obligation for the banking sector to make additional contributions to the Borrowers Support Fund totalling PLN 1.4 billion.

On March 3rd 2023, the Bank received the decision dated February 24th 2023 on the approval of the Group Recovery Plan by the Financial Supervision Commission.

The COVID-19 pandemic period and the armed conflict in Ukraine did not have a significant impact on the liquidity position and capital adequacy of the Bank. The Bank maintained its full operational capacity.

The Bank maintains its capital adequacy ratios above the levels recommended by the Polish Financial Supervision Authority (see Note 6.3 for details). The Bank’s liquidity is adequate and exceeds the regulatory requirements (see Note 6.2.1 for details).

Taking into consideration the factors described above, as at the date of authorisation of these financial statements for issue, there are no circumstances that would indicate a threat to the Bank’s ability to continue as a going concern for at least 12 months after the reporting date as a result of deliberate or compulsory discontinuation or limitation of its current operations.

3.4. Consolidation

These consolidated financial statements include financial data of Bank Ochrony Środowiska S.A. and financial data of the subsidiaries, prepared for the year ended December 31st 2022. The financial statements of the subsidiaries have been prepared on the basis of uniform accounting policies applied to transactions and economic events of similar nature and for the same reporting period as the financial statements of the parent.

All significant balances and transactions between the Group companies, including unrealized gains arising from transactions within the BOŚ Group, have been fully eliminated. Unrealized losses are eliminated unless they present evidence of impairment.

Subsidiaries are consolidated from the date when the Group obtains control of them and cease to be consolidated when the control is lost. Control by the parent is exercised over an entity when the parent:

1. exercises power over the investee,
2. is exposed to or has rights to variable returns from its exposure to the entity,
3. has the ability to use its power over the investee to affect the amount of its returns.

The Group reviews its control of other entities if there is an indication of change in one or more of the conditions of control referred to above.

If the Group holds less than a majority of voting rights in an investee, but the voting rights it holds are sufficient to enable it to unilaterally direct the material activities of that investee, it means that it exercises power over that investee. When assessing whether the voting rights in an entity are sufficient as a source of power, the Group considers all relevant circumstances, including:

1. the size of its holding of voting rights relative to the size and dispersion of other voting rights holdings;
2. the potential voting rights held by the Company, other shareholders or other parties,
3. the rights based on other contractual arrangements, as well as
4. additional circumstances, which may prove that the Company either does or does not have the possibility of directing significant activities at the time of decision making, including the voting patterns observed during the previous meetings of shareholders.

As at December 31st 2022, there were no entities in which the Bank holds fewer than a majority of the voting rights and also exercises control.

Changes in share ownership by the parent which do not result in loss of control over the subsidiary are recognized as equity transactions. In such cases, the Group adjusts the carrying amount of controlling and non- controlling interests in order to reflect the changes in the relative share of the Group in the subsidiary. Any differences between the amount of the adjustment to non-controlling interests and the fair value of the consideration paid or received are charged to equity and attributed to owners of the parent.

If the Group loses control of a subsidiary, a gain or loss is recognised in the statement of profit or loss, calculated as the difference between the aggregate amount of consideration received and the fair value of the retained interest, and the original carrying amount of the assets (including goodwill) and liabilities of the subsidiary and non-controlling interests. All amounts related to that subsidiary, initially recognised in other comprehensive income, are accounted for as if the BOŚ Group directly disposed of the corresponding assets or liabilities of the subsidiary (i.e., they are transferred to profit or loss or to another component of equity provisions, as prescribed by provisions of the relevant IFRS). The fair value of investment held in a former subsidiary at the date when control is lost is treated as the fair value at initial recognition in accordance with IFRS 9.

3.5. Segment reporting

An operating segment is a component of the Bank:

1. that engages in business activities from which it may earn revenues and incur expenses,
2. whose operating results are regularly reviewed by the entity's chief operating decision maker,
3. for which discrete financial information is available.

Segment reporting is prepared on the same basis as internal reporting.

In accordance with IFRS 8, the Group identified the following operating segments:

1. institutional clients,
2. retail clients,
3. treasury and investments,
4. brokerage business,
5. other (not allocated to the segments).

The Group's activities are not geographically diversified. For detailed information on segment reporting by the Group, see Note 50.

3.6. Measurement of items denominated in foreign currencies

Functional currency

Items of the financial statements are measured in the functional currency, which is the currency of the primary economic environment in which the Group operates.

The Polish złoty is the functional currency of the Group.

Transactions and balances

Transactions denominated in foreign currencies are translated into the functional currency at the exchange rate effective on the transaction date, and the result of such translation is recognised in profit or loss.

On-balance sheet assets and liabilities and off-balance-sheet liabilities in foreign currencies are translated at the exchange rate effective at the end of the reporting period.

Non-monetary assets and liabilities measured at fair value are translated at the exchange rate effective as at the measurement date.

Non-monetary assets and liabilities measured at cost are translated at the exchange rate effective on the date these items arise.

3.7. Interest income and expense

All interest income on financial instruments measured at amortised cost using the effective interest rate method and interest income on interest-bearing financial assets measured at fair value through other comprehensive income or through profit or loss is recognised in the statement of profit or loss.

The effective interest rate method is a method of calculating the amortised initial amount of financial assets or liabilities and of allocating interest income or interest expense over the relevant period. An effective interest rate is the rate at which the discounted future payments or cash inflows are equal to the current net carrying amount of the asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows taking into account all contractual terms of a given financial instrument (e.g. early repayment options that are not separated from the host contract), without taking into account possible future losses on outstanding facilities. This calculation includes all fees paid or received between the parties to the contract that are an integral part of the effective interest rate, as well as transaction costs and all other premiums or discounts.

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income on the net carrying amount of those assets is recognised at the interest rate used to discount the future cash flows for the purpose of measuring the impairment loss.

3.8. Fee and commission income and expense

Fee and commission income and expenses on amounts due from clients are recognised as interest income using the effective interest rate method. Fees and commissions for the grant of a credit product, collected prior to its disbursement, are deferred until funds are disbursed to the client. Fees for the provision of syndicated loans are recognised as revenue once the syndicate is formed, if the Group has retained no part of the credit risk for itself or has retained a part at the same effective interest rate as other members of the syndicate.

Other fee and commission income is recognised in principle when the promised goods or services are transferred to the client. In the case of fees and commissions for credit limits, income is recognised at the end of the availability period.

Fee and commission expenses are recognised on an accrual basis, i.e., when the services are received from the service provider, with costs of mandatory legal fees being recognised at the moment the obligation to pay arises.

3.9. Recognition of banc assurance income and expense

The Group recognises and accounts for income and expenses from insurance products in accordance with economic substance of the products. Due to the economic substance, the Group distinguishes between the following types of fees:

1. fees which are an integral part of the consideration for the financial instrument additionally offered,
2. fees which are consideration for performing additional activities after the sale of the insurance product,
3. fees received for the provision of insurance intermediation services.

Consideration received or receivable by the Group from sale of an insurance product with a financial instrument where the insurance product is directly linked to the financial instrument is an integral part of the consideration for the financial instrument and is accounted for over time as an integral part of interest rate and recognised as interest income in the statement of profit or loss.

A direct link exists in particular when at least one of the following two conditions is met:

1. a financial instrument is always offered by the Group with an insurance product, i.e., both transactions are concluded at the same time or are concluded in a sequence in which each subsequent transaction follows from the previous one,
2. an insurance product is offered by the Group exclusively with a financial instrument, i.e., the client cannot purchase from the Group an insurance product identical in terms of its legal form, terms and economic content without buying a combined financial product.

If one of the conditions is not met, a detailed analysis of the economic content of the insurance product is carried out in order to determine whether the criteria for independence of insurance contracts from the financial instruments offered are met. The analysis of a direct link between an insurance product and a financial instrument may result in unbundling of the composite product, i.e., separating the fair value of the financial instrument from the fair value of the insurance product sold together with the instrument. In such a case, the consideration due to the Group for the sale of the insurance product is divided between the part constituting an element of the amortised cost of the financial instrument and the part constituting consideration for the distribution of the insurance product.

The consideration is allocated in proportion to the fair value of the financial instrument and the fair value of the distribution service relative to the total of the fair values. The fair value of the financial instrument is calculated using the income approach, based on the calculation of the present value of the future amounts, taking into account the product's current profitability and cost. The fair value of the consideration for the intermediation (distribution) service is calculated using the market method by applying prices and other relevant information generated by identical or comparable market transactions.

The Group recognizes the consideration as fee and commission income at the time of sale or renewal of the insurance product. The revenue from sale of insurance products is reduced by a provision for the Group-estimated percentage of refunds made in periods after the sale of the insurance product (e.g. due to cancellation of the insurance by the client). If during the term of the insurance contract the Group receives consideration for performing activities/services resulting from the sold insurance product or if performance of such activities/services is probable, the Group accounts for the consideration during the contract term, in accordance with the principle of matching revenues with costs. The consideration is recognized as fee and commission income, based on progress towards complete satisfaction of the performance obligation. Where it is not possible to accurately determine the number of activities performed by the Group over a specified period of time, the Group accounts for the consideration on a straight-line basis over the life of the insurance product unless there is evidence that another method of accounting would better illustrate the degree of progress of the work.

The amount of anticipated returns and the proportion of revenue distribution based on the economic content of the revenue are reviewed each time relevant information on significant changes in this respect becomes available, but not less frequently than at the reporting date.

Costs directly related to the sale of an insurance product with a financial instrument are accounted for in accordance with the principle of matching revenues with costs:

1. as a component of the amortised cost of a financial instrument if all revenue from the sale of the insurance product is accounted for using the effective interest rate method,
2. if the consideration has been split – in the proportion applied to split the revenue into revenue recognised under the amortised cost calculation and revenue recognised on a one-off basis or settled over time.

Fixed costs or costs not related directly to the sale of insurance products or financial instruments are recognised in profit or loss when incurred.

3.10. Hedge accounting

Hedge accounting is used to offset changes in the fair value of hedged items and hedging items.

Under the transitional provisions of IFRS 9, the Group decided to continue to apply IAS 39 to hedge accounting.

The Group may decide to apply the hedge-accounting requirements of IFRS 9 at a later date. In accordance with the hedge accounting principles contained in IFRS 9, it is necessary to apply the requirements of IFRS 9 in the event of implementation of subsequent fair value or cash flow hedge accounting at the Group.

The Group applies hedge accounting provided that all of the following criteria specified in IAS 39 are met:

1. at the inception of the hedge there is formal designation and documentation of the hedging relationship and the Group's risk management objective and strategy for undertaking the hedge; the documentation identifies the hedging instrument, the hedged item, the nature of the hedged risk and the manner in which the Group will assess the effectiveness of the hedging instrument in offsetting the threat of changes in the fair value of the hedged item;
2. the hedge is expected to be highly effective in offsetting changes in fair value, consistent with the risk management strategy originally documented for that particular hedging relationship;
3. the effectiveness of the hedge can be reliably measured, i.e., the fair value of the hedged item and the fair value of the hedging instrument can be reliably measured;
4. the hedge is assessed on an ongoing basis and determined actually to have been highly effective throughout the financial reporting periods for which the hedge was designated.

Hedge accounting is an integral part of the financial risk management process at the BOŚ Group.

Financial risk is managed as part of the risk management process in place at the Group.

The Group uses hedge accounting to hedge the fair value of financial instruments. Fair value hedge is a hedge against changes in the fair value of a recognized asset, liability or probable future liability or an identified portion of this recognized asset, liability or probable future liability, which can be attributed to a particular risk and can affect the profit or loss.

A fair value hedge that meets the conditions for hedge accounting in a given period is recognised by the Group as follows:

1. changes in fair value of a hedging instrument (i.e., derivative instrument designed and qualified as fair value hedge) is recognized in profit or loss,
2. the gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is recognised in profit or loss,
3. interest on hedging derivatives is presented in the same line of the statement of profit or loss in which interest on the hedged instruments is presented, i.e., as interest income,
4. measurement of a hedged financial asset classified as measured at fair value through other comprehensive income arising from factors other than the hedged risks is recognised in revaluation reserve until the asset is disposed of or has matured.

The Group discontinues to apply hedge accounting in the event of expiry, sale, termination or execution of the hedging instrument/hedged item, or when the hedging relationship no longer meets the criteria for hedge accounting. When hedge accounting ceases to be applied, the measurement of hedged items that are measured at amortised cost (without applying hedge accounting policies) attributable to the hedged risk recognised in the periods when the hedge was effective is taken to profit or loss.

The Group does not apply cash flow hedge accounting.

3.11. Financial assets and liabilities

Initial recognition

The Group recognises a financial asset and a financial liability in its statement of financial position when it becomes party to the contractual provisions for that financial instrument. Financial assets are recognised when the Group acquires the right to receive cash flows, and financial liabilities – when it is required to pay cash. At initial recognition, financial assets and liabilities are classified in the appropriate measurement category.

At initial recognition, financial assets and liabilities are measured at fair value, which, in the case of items not measured at fair value in subsequent periods, is increased or reduced by direct transaction costs.

Measurement of financial assets after initial recognition

After initial recognition, the Group measures financial assets in accordance with the classification rules, at amortised cost or at fair value.

Amortised cost is the amount at which a financial asset or a financial liability is measured on initial recognition, minus principal repayments, plus or minus the cumulative amortisation of any difference between the initial amount and the amount at maturity, calculated using the effective interest rate method, and minus any impairment losses. Penalty interest is recognised at amortised cost.

Fair value measurement involves determining the value that would be received to dispose of an asset or paid to transfer a liability in an arm's length transaction in the principal (or most advantageous) market at the measurement date in current market conditions (i.e., the exit price) regardless of whether that price is directly observable or estimated using another valuation technique.

Classification and measurement of financial assets

Under IFRS 9, financial assets are classified to the appropriate measurement model at initial recognition. Financial assets of the Group are classified into the following measurement categories:

1. Financial assets measured at amortised cost,
2. Financial assets measured at fair value through other comprehensive income,
3. Financial assets measured at fair value through profit or loss,
4. Financial assets measured at fair value through profit or loss.

Classification into the measurement categories is based on:

1. the business model within which the financial assets are managed, and
2. The test of characteristics of contractual cash flows (the SPPI test – solely payments of principal and interest).

Business models

The business models are defined by the Group's key management. The business models identified by the Bank reflect its operating activity, i.e., the method of managing a specific group of assets and the purpose for which these assets were recognised or acquired. Individual identified business models are groups of assets that are jointly managed, assessed and reported.

When identifying business models for each group of financial assets, the Group considers their qualitative aspects and quantitative criteria.

Qualitative aspects

The qualitative aspects include analysis and assessment of:

1. the business objective for which the assets were recognised or acquired,
2. how performance of assets within a particular business model is evaluated and reported to the Group's key management and presented in external reporting,
3. the reasons for decisions to sell financial assets,
4. solutions and organizational structures within which specific groups of assets are recognised or acquired,
5. the type of risk affecting performance of individual asset groups,
6. the manner in which the managers of particular groups of assets are remunerated, in particular whether the remuneration is based in part or in whole on the fair value of the managed assets.

Quantitative criteria

The quantitative criteria used in the identification and periodic review of business models relate to the assessment of materiality and frequency of sale of assets held within particular models. It is assumed that in the HtC business model, the sale of financial assets is allowed in particular in the following cases:

1. if the assessment of cash flow recoverability deteriorates, in order to limit the effects of credit risk,
2. close to the contractual maturity,
3. occasional sale (even if the amount of assets sold is significant),
4. insignificant value of the assets sold.

If the quantitative criteria, such as significant and frequent sale of financial assets with no deteriorated credit risk assessment, are not met, it is necessary to reassign the entire portfolio of financial assets, from which the sale was effected, and thus to change the classification of this portfolio to the value category.

Following analyses, the Group's financial assets were allocated to the following business models:

1. the Held to Collect (HtC) model,
a model whose objective is achieved by collecting contractual cash flows. Assets held within the HtC model are credit facilities and loans, receivables purchased as part of the factoring business, and debt securities acquired for investment purposes.
2. the HtCS (Held to Collect or Sell) model,
a model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Assets held within the HtCS model are debt securities acquired to secure current liquidity needs and the yield profile.
3. Other business models
Assets acquired within other business models are assets acquired trading purposes to generated profit from changes in their market value or to earn remuneration in the form of trading spread. These business models apply mainly to derivative financial instruments and securities.

SPPI test

As required by IFRS 9, financial assets held within the HtC and HtCS models are subject to the SPPI test. The SPPI test should be performed for each financial asset in the HtC and HtCS models at initial recognition and when the asset is materially modified.

The objective of the SPPI test is to confirm that contractual cash flows resulting from these financial assets are solely payments of principal and interest on the principal amount outstanding, where:

- 1.** the principal is the fair value of the financial asset at initial recognition.
- 2.** the interest consists of consideration for the time value of money, for the credit risk, for the liquidity risk, administrative costs, as well as a profit margin.

The SPPI test includes, in particular, an analysis of the cash flow characteristics in relation to early repayment and rollover terms, changes in the currency of the financial asset, terms that increase the volatility of cash flows beyond the volatility resulting from changes in market interest rates (e.g., leverage), terms that limit the possibility of financial redress against specific assets of the debtor.

Classification of financial assets to measurement categories based on business models and the SPPI test

Business models	SPPI test	
	Cash flows are solely payments of the principal and interest	Cash flows are not solely payments of the principal and interest
HtC Model	measured at amortised cost	measurement at fair value through profit or loss
HtCS Model	measurement at fair value through other comprehensive income	measurement at fair value through profit or loss
Other business models	The SPPI test is not performed; obligatory measurement at fair value through profit or loss	

Financial assets by measurement category

1. financial assets measured at amortised cost
This measurement category primarily includes amounts due from retail and institutional clients. It also includes receivables purchased as part of the factoring business, debt securities in the investment portfolio held to collect contractual cash flows, and amounts due from banks, including buy-sell back transactions.
2. Financial assets measured at fair value through other comprehensive income
This measurement category includes debt securities acquired to secure current liquidity needs and the yield profile, held to collect contractual cash flows and for sale, as well as investment equity securities.
3. Financial assets measured at fair value through profit or loss
This measurement category includes derivative financial instruments and debt securities purchased for trading purposes.
Credit facilities with interest rates structured as a multiplier of a benchmark rate, disclosed as amounts due from clients, constitute a separate item in this measurement category. This item includes preferential loans granted with support from the public sector.

Due to on-going discussions on the classification and measurement of financial instruments that include a multiplier, the above approach may change in the future.

Change of measurement category of a financial instrument

A change of the financial assets measurement category can occur only as a result of a change of the business model. A change of business objectives related to a financial assets or a change in assignment of the asset to a given business line are not considered a change of the business model.

Change of a measurement category due to the business model change is recognized prospectively, i.e., as of its date.

Financial liabilities are not reclassified.

Modification of financial assets

The Group identifies a modification of a financial asset when there is a change in the contract under which the financial asset arose, affecting the amount and timing of cash flows. Cash flow changes resulting from the initial contract with the client are not recognised as modifications. A change in the contractual terms of repayment may be made for both credit risk management and commercial reasons.

The Group distinguishes between significant and non-significant modifications of financial assets.

Quantitative criterion

A significant modification consists of a change in contractual terms of payment for a given financial asset and gives rise to a difference of more than 10% between the amount of future cash flows resulting from the modified financial asset discounted with the original effective interest rate and the amount of future cash flows resulting from the financial asset before the modification discounted with the same interest rate. If difference is less than 10%, the modification is non-significant.

Qualitative criterion

A modification of financial assets under the circumstances presented below is recognised as a significant modification:

- addition of a feature that affects results of the SPPI test,
- a change in the currency of a facility not provided for in the initial contract terms,
- a change of the counterparty, which is considered a significant modification.

Significant modification

A significant modification results in derecognition of the original asset from the statement of financial position, recognition in the statement of profit or loss of unsettled costs and commissions, and initial recognition of a financial asset resulting from the modification. A new effective interest rate is established for the modified asset.

Non-significant modification

A non-significant modification does not result in derecognition of the existing financial assets in the statement of financial condition. Gain (loss) on a non-significant modification is recognised in profit or loss.

Impairment of financial assets

IFRS 9 introduced a new approach to estimating losses on financial assets measured at amortised cost and at fair value through other comprehensive income. This approach is usually based on determination of expected losses.

Recognition of expected losses depends on the change in the level of risk since the initial recognition of a financial asset. The Group identifies three key buckets of financial assets in the context of changes in the level of risk:

- Bucket 1 – includes exposures for which there has been no significant increase in credit risk since initial recognition, understood as an increase in the probability of insolvency. For such exposures, expected losses are recognised for the next 12 months or until the maturity date of the exposure if it falls in less than 12 months.
- Bucket 2 – includes exposures for which there has been a significant increase in the level of risk since initial recognition, but the event of default has not yet become probable. For such exposures, expected losses are recognised for the remaining life of the exposure.
- Bucket 3 – includes exposures for which events of default have materialised (there is an indication of impairment). For such exposures, expected losses are recognised over the remaining life of the exposure.

The Group also identifies POCI (Purchased or Originated Credit Impaired) assets, i.e., financial assets that were credit-impaired at the date of initial recognition. For POCI exposures, expected losses are recognised over the remaining life of the exposure.

For the purposes of estimating loss allowances, the Group uses its own estimates of risk parameters based on internal models consistent with IFRS 9. Expected credit losses are the product of individual estimated values of PD, LGD and EAD parameters for each exposure, and the final amount of expected losses is the sum of expected losses in individual periods (depending on the bucket – over the next 12 months or over the remaining life), discounted using the effective interest rate. The parameters estimated in accordance with IFRS 9 are subject to adjustment on account of macroeconomic scenarios.

Measurement of allowances for expected credit losses, provisions for financial guarantees and financial commitments in the Polish and in foreign currencies (including currency exchange differences) is recognised as the Group's expense or income arising from the allowances and provisions.

Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount is disclosed in the statement of financial position only when the Group has a legally enforceable right to offset the recognised amounts and intends to settle on a net basis, or the realize the asset and the settle the liability simultaneously.

Financial liabilities

Financial liabilities after initial recognition are measured at amortised cost using the effective interest rate method. The Group derecognises a financial liability when it is extinguished, that is when the obligation specified in the contract is either discharged or cancelled or expires.

Liabilities arising from derivative financial instruments are measured at fair value through profit or loss.

Equity investments

Equity investments are classified as measured at fair value through other comprehensive income. Classification of equity investments into this measurement category is irrevocable. Gains or losses resulting from the difference between the selling price and the purchase price or from a change in the fair value of these investments are not recognised in the statement of profit or loss even if an investment is sold. Only dividend income is recognised in the statement of profit or loss.

Equity investments were classified as measured at fair value through other comprehensive income because of their investment nature and the way economic benefits are achieved through dividends received.

Equity instruments classified as measured at fair value through other comprehensive income are measured using the capital asset pricing model. The model uses financial forecasts of individual companies and market parameters such as cost of capital and beta coefficient calculated based on data from comparable companies as well as discount, liquidity premium and control premium.

Sell and buy-back transactions

Securities sold under repurchase agreements (repo transactions, sell-buy-back transactions) are disclosed in the financial statements as securities if the entity retains substantially all risk and rewards incidental to ownership of such securities. A liability to a counterparty is recognised in amounts due to other banks or amounts due to clients, as appropriate.

Securities purchased under agreements to resell (reverse repo transactions, buy-sell-back transactions) are recognised as amounts due from banks or amounts due from clients, as appropriate. The difference between the selling price and the repurchase price is treated as interest and accounted for on a straight-line basis over the term of the agreement.

Securities lent to counterparties are not derecognised from the Group's balance sheet.

Securities borrowed by the Group are not recognised in the financial statements unless they are sold to third parties. In such a case, the purchase and sale transactions are recognised in the financial statements and the relevant gains and losses are taken to profit or loss on trading activities.

The obligation to return borrowed securities is recorded at fair value as amounts due to clients. The risk and rewards incidental to ownership of the securities are retained by the counterparty.

Trade receivables and contract assets

In the case of trade receivables and contract assets, the Group measures expected credit losses over the entire life of those assets.

3.12. Non-current assets held for sale

Non-current assets are classified as "held for sale" and carried at the lower of carrying amount and fair value less costs to sell if their carrying amount is recovered principally through a sale transaction rather than through continuing use.

The Group does not carry assets held for sale.

3.13. Intangible assets

Goodwill

Following initial recognition goodwill is carried at cost less cumulative impairment losses. Impairment testing is performed every year. In addition, an assessment is made at each reporting date to determine whether there is any indication that goodwill may be impaired.

The Group assesses whether on the reporting date there are no premises that would cause the carrying amount of goodwill to be higher than its recoverable amount. To this end, the Group prepares an impairment test for goodwill every year, irrespective of whether there is any indication of impairment. The test is prepared in accordance with IAS 36.

The recoverable amount is estimated based on the value in use of cash-generating units (CGUs) that have been allocated to goodwill.

Value in use is the present value of the future cash flows expected to be derived from CGUs. The value in use takes into account the residual value of CGUs. The residual value of a CGU is calculated by extrapolating cash flow projections beyond the forecast period using a specified growth rate.

Projections of future cash flows cover a period of 5 years and are based on:

1. historical data reflecting the CGU's potential to generate cash flows,
2. forecasts of the statement of financial position and statement of profit or loss for the period covered by the forecast,
3. assumptions included in the budget of the Group,
4. analysis of the reasons for the discrepancy between past cash flow projections and actual cash flows.

The present value of future flows is calculated using an appropriate discount rate, taking into account the risk-free rate, the risk premium, the low capitalisation premium and the specific risk premium.

The present value of future flows is compared to the carrying amount (as at the date of the test) for the sum of: goodwill and the carrying amount of the CGU's assets, excluding the deferred tax portion.

Licenses and software

Purchased licenses and internally developed computer software are capitalized at the amount of the costs incurred to purchase and prepare the software for use. Capitalised costs are amortised over the estimated useful life of the software on a straight-line basis.

Expenses related to maintenance of computer programs are recognised as costs when incurred or as deferred costs.

Useful lives of intangible assets range from 1 to 15 years.

Expenditure on intangible assets

The Group recognises expenditure on intangible assets incurred in the development phase of projects carried out internally only if the Group has the appropriate technical and financial means to complete the development and use of the asset, and has the possibility to reliably determine the expenditure incurred that can be directly attributed to the creation, production and adaptation of the asset for use in the manner intended by the management.

Capitalised costs are amortised on a straight-line basis upon completion of development work. Estimated useful lives of such assets are determined on a case-by-case basis.

Impairment testing

Intangible assets are tested for impairment whenever there are events or circumstances indicating that the carrying amount may not be recoverable. The carrying amount is immediately reduced to the recoverable amount if the carrying amount exceeds the estimated recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and its value in use.

3.14. Property, plant and equipment

Property, plant and equipment are carried at historical cost less accumulated depreciation. Historical cost includes expenditure directly related to the acquisition of the assets.

Subsequent expenditure is included in the carrying amount of an item of property, plant and equipment or recognised as a separate item of property, plant and equipment (where appropriate) only when it is probable that future economic benefits associated with the item will flow to the Group and its cost can be measured reliably. All other repair and maintenance expenses are charged to profit or loss in the accounting period in which they are incurred. Land is not depreciated.

Property, plant and equipment are depreciated on a straight-line basis over their useful lives, which for each class of property, plant and equipment are:

1. Buildings – 40 years,
2. Leasehold improvements – 2-12 years or less if the contract so requires,
3. Equipment and vehicles – 3-20 years.

The residual value and useful lives of property, plant and equipment are also reviewed as at each reporting date.

Depreciable items of property, plant and equipment are tested for impairment whenever there are events or circumstances indicating that the carrying amount may not be recoverable. The carrying amount is immediately reduced to the recoverable amount if the carrying amount exceeds the estimated recoverable amount. The recoverable amount is the higher of the fair value of an item of property, plant and equipment less costs to sell and value in use.

Gains and losses on disposal of property, plant and equipment are determined by comparing proceeds from sale with the respective carrying amounts and recognised in profit or loss.

Property, plant and equipment under construction include assets in the course of construction or assembly, and are measured at cost less any impairment losses. An item of property, plant and equipment under construction is not depreciated until the construction or assembly work is completed and the item is placed in use.

3.15. Leases

The Group classifies as leases all contracts under which it uses or leases out non-current assets for a specified period in exchange for consideration.

The Bank as the lessor

As the lessor, the Group classifies lease contracts as finance leases or operating leases.

The Group classifies contracts that transfer substantially all risks and rewards incidental to ownership of the leased assets as finance leases. Other lease contracts are classified as operating leases.

The Bank as the lessee

At the inception of the lease, the Group, as the lessee, recognises a right-of-use asset and a lease liability.

The liability arises from the present value of future cash flows (lease payments under the lease contract) discounted using the interest rate of the lease.

The Group applies exemptions from the requirements of IFRS 16 concerning

1. use of low-value assets – the value of the asset does not exceed PLN 20 thousand,
2. short-term leases of up to 12 months.

For exempt contracts, the Group does not recognise right-of-use assets asset and lease liabilities. Lease payments related to such contracts are recognised as expenses in the statement of profit or loss on a straight-line basis during the lease term.

When determining the lease term, the Group determines the non-cancellable lease term, taking into account the period covered by the extension option, if the Group assumes the option will be exercised, and by the termination option if the Group assumes that it will not be exercised.

The Group revises the lease term if there is a change in the non-cancellable period of the lease.

After the commencement date of the lease, the Group measures the right-of-use asset at cost:

1. less any accumulated depreciation and impairment losses; and
2. adjusted for remeasurement of the lease liability.

After the commencement date, the Group measures the lease liability by:

1. increasing the carrying amount to reflect interest expense on the lease liability;
2. reducing the carrying amount to reflect the lease payments made;
3. remeasuring the carrying amount to reflect any reassessment or lease modifications, or to reflect revised fixed lease payments.

The Group accounts for a lease modification as a separate lease if both:

1. the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
2. the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the liability by discounting the updated lease payments using an updated discount rate and recognises the remeasurement by:

1. reducing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease for modifications that decrease the scope of the lease;
2. making a corresponding adjustment to the right-of-use asset for other lease modifications.

3.16. Deferred income tax

For the purposes of these financial statements, deferred tax is calculated using the balance-sheet liability method. The Group recognises deferred tax liabilities and assets for temporary differences arising from different recognition of revenue and costs in accordance with the applicable accounting principles and corporate income tax rules.

Main temporary differences arise from remeasurement of financial assets and liabilities, including derivative contracts, provisions for retirement and other post-employment benefits, as well as deductible tax losses.

Deferred tax provisions are recognized in full amount, with the exception of:

1. where the deferred tax liability arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit or loss, and
2. in the case of taxable temporary differences arising from investments in subsidiaries or associates and interests in joint ventures – except where the timing of the reversal of the temporary difference is controlled by the investor and where it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised when it is probable that future taxable profit will be available against which the temporary differences can be utilised, except where a deferred tax asset arises from the initial recognition of an asset or liability arising from a transaction that:

1. is not a business combination; and
2. at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

Income tax on items recognised in other comprehensive income is also recognised in other comprehensive income.

Deferred income tax is determined using the tax rates (and tax laws) that are expected to be effective when the related deferred tax assets are realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or whose future effect is certain as at the reporting date.

The Group offsets deferred tax assets against deferred income 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.

3.17. Foreclosed assets

Foreclosed assets are initially recognized at their fair value. If the fair value of a foreclosed asset is higher than the amount of the debt, the difference constitutes an amount due to the borrower and is reimbursed to the account of the owner of the foreclosed asset, after deducting costs of the foreclosure, storage and valuation of the asset.

If the fair value of a foreclosed asset is lower than the amount of the debt, the difference constitutes an amount due from the borrower which may be subject to restructuring or collection.

There are no foreclosed assets in the Group.

3.18. Prepayments, accruals and deferred income

Prepayments are costs incurred in the current financial year and relating to future periods. They are disclosed in the statement of financial position as other assets.

Accrued expenses are costs pertaining to the current period that will be incurred by the Group in future periods. Accrued expenses and deferred income are disclosed in the statement of financial position as other liabilities.

3.19. Provisions for employee benefits

The Group recognises provisions for retirement benefit obligations based on estimates of such obligations calculated using an actuarial model. The actuarial model applied by the entity to determine the present value of its

defined benefit obligations and the related current service cost and, where applicable, past service cost, uses the projected unit credit method.

The projected unit credit method (sometimes known as the accrued benefit method pro-rated on service or as the benefit/years of service method) sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation.

The entire amount of actuarial gains and losses is recognised in other comprehensive income.

3.20. Provisions

Provisions are recognised when all of the following conditions are met:

1. as at the reporting date, the Group has a present, legal or constructive obligation to spend funds resulting from past events, and legal opinions are used to determine the existence of this obligation,
2. when the probability of there being an expense to settle the claim is greater than the probability of there not being such an expense, and
3. when the amount of that expenditure can be reliably estimated.

Provisions are measured at the present value of the expenditure expected to be required to settle the obligation, taking into account the time value of money (if material) and the risks associated with the liability.

When the amount of the expected expenditure is discounted, the increase in the provision due to the passage of time is recognised as interest expense.

3.21. Equity

Equity is composed of capital and reserves created in accordance with the legal regulations, i.e., the respective acts and the Bank's Articles of Association.

Common equity

Common equity comprises registered share capital and share premium.

The share capital is stated at par, in accordance with the Articles of Association and the entry in the National Court Register.

The share premium account is created from the excess proceeds from the issue of shares above par value remaining after covering the issue costs.

Treasury shares

Amounts paid for repurchases of treasury shares are charged to equity and disclosed in the separate line item 'Treasury shares' in the statement of financial position.

Revaluation reserve

The revaluation reserve comprises the change in the amount value of financial assets classified as measured at fair value through other comprehensive income resulting from their measurement and deferred tax on items recognised in the revaluation reserve, gains or losses on a hedging instrument (cash flow hedge accounting) due to the effective portion of the hedge and gains and losses on a hedged item measured at fair value through other comprehensive income (fair value hedge accounting) due to factors other than the hedged item, as well as actuarial gains and losses on a defined benefit plan.

Retained earnings

Retained earnings include undistributed profit or loss and other components of equity, i.e., other statutory reserve funds, other capital reserves and general risk fund.

Other components of equity are recognised in profit or loss and are used for the purposes specified in the Articles of Association or the applicable laws.

3.22. Cash and cash equivalents

For the purpose of the statement of cash flows, cash and cash equivalents comprise items maturing within three months of the acquisition date, including: cash in hand, unrestricted balances with central banks, Treasury bills and other eligible bills, amounts due from banks and short-term Treasury securities.

3.23. Brokerage business

Dom Maklerski BOŚ S.A. acts as a custodian for clients' securities accounts. These assets have not been recognised in the consolidated financial statements, because the Group does not control them, does not benefit from them and does not incur any risk due to these assets.

3.24. New standards, interpretations and amendments thereto published and approved by the European Union but not yet effective and not yet applied by the Group.

IFRS	Amendment	Date of entry into force in the EU / approval by the EU	Impact on the Group
IFRS 17 <i>Insurance Contracts</i> , with subsequent amendments to IFRS 17	IFRS 17 defines a new approach to the recognition, measurement, presentation and disclosure of insurance contracts. The main objective of IFRS 17 is to ensure guarantee transparency and comparability of insurers' financial statements. To this end, the entity will disclose a range of quantitative and qualitative information to enable users of the financial statements to assess the impact of insurance contracts on the entity's financial position, financial performance and cash flows. IFRS 17 introduces a number of significant changes to the existing requirements of IFRS 4, including with respect to: the levels of aggregation on which calculations are made, the method of valuation of insurance liabilities, recognition of profit or loss over time, recognition of reinsurance, separation of the investment component, the presentation of individual items of the statement of financial position and the statement of profit or loss of reporting entities, including separate presentation of insurance income, costs of insurance services, and finance income or costs.	January 1st 2016 / November 19th 2021	The amendment will have no material effect on the financial statements.
Amendments to IFRS 17 <i>Insurance Contracts</i> – Application of IFRS 17 and IFRS 9	The amendments apply to comparative data when applying IFRS 17 and IFRS 9 for the first time.	January 1st 2023 / September 8th 2022	The amendment will have no material effect on the financial statements.
Amendments to IAS 1 <i>Presentation of Financial Statements</i> – Disclosures of Material Accounting Policies	The amendments clarify the scope of disclosure of material accounting policies. According to the amendments, only accounting policies that have a material impact on the information in the financial statements should be disclosed.	January 1st 2023 / March 2nd 2022	The amendment will have no material effect on the financial statements.
Amendments to IAS 8 <i>Accounting Policies, Changes in Accounting Estimates and Errors</i>	The amendments clarified the definition of accounting estimates as monetary amounts recognised in the financial statements that are subject to measurement uncertainty. The introduction of the definition of accounting estimates and other amendments to IAS 8 were intended to help entities distinguish between changes in accounting policies and changes in accounting estimates.	January 1st 2023 / March 2nd 2022	The amendment will have no material effect on the financial statements.

<p>Amendments to IAS 12 <i>Income Taxes – Deferred Tax on Assets and Liabilities from a Single Transaction</i></p>	<p>The amendments clarify the accounting for deferred taxes on transactions in which companies recognise both an asset and a liability, possibly resulting in taxable and deductible temporary differences simultaneously. This includes transactions such as leases or decommissioning liabilities.</p> <p>Entities are required to recognize deferred tax related to such transactions (the exclusion from recognizing deferred tax is not applicable).</p>	<p>January 1st 2023 / August 11th 2022</p>	<p>The amendment will have no material effect on the financial statements.</p>
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3.25. New standards, interpretations and amendments thereto, which have been published and are not endorsed by the European Union

IFRS	Amendment	Date of entry into force in the EU / approval by the EU	Impact on the Group
Amendments to IAS 1 <i>Presentation of Financial Statements – Classification of Liabilities as Current or Non-current</i>	The amendments relate to classification of liabilities in the statement of financial position as current or non-current. They specify that when classifying liabilities as current or non-current, the existence of a rollover of the liability should be considered as of the date of classification, regardless of the entity's intention to utilise it for more than 12 months. Additionally, they state that the classification should also consider the fulfilment, as of the date of assessment, of the conditions for such rollover if it is contingent.	January 1st 2023 / Not specified	The amendment will have no material effect on the financial statements.
Amendments to IAS 1 <i>Presentation of Financial Statements – Non-current Liabilities with Covenants</i>	Change in the presentation of non-current liabilities with covenants.	January 1st 2024 / Not specified	The amendment will have no material effect on the financial statements.
Amendments to IFRS 16 <i>Leases – Lease Liability in a Sale and Leaseback</i>	Change in the calculation of the lease liability in sale and leaseback transactions.	January 1st 2024 / Not specified	The amendment will have no material effect on the financial statements.
Amendments to IAS 12 <i>Deferred Tax related to Assets and Liabilities arising from a Single Transaction</i>	The amendments are intended to clarify how companies should account for deferred taxes on leases and extinguished liabilities.	January 1st 2023 / Not specified	The amendment will have no material effect on the financial statements.
Amendments to IFRS 10 <i>Consolidated Financial Statements</i> and IAS 28 <i>Investments in Associates and Joint Ventures</i> :	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i> , and subsequent amendments	Not specified	The amendment will have no material effect on the financial statements.

4. Corrections of prior period errors

In the twelve months ended December 31st 2022, there were no corrections to prior period errors.

5. Significant estimates and judgments

The preparation of the Group's financial statements requires judgments, estimates and assumptions that affect the reported income, expenses, assets, and liabilities and related notes, as well as disclosure of contingent liabilities. Uncertainties related to these assumptions and estimates may result in changes to carrying amounts of assets and liabilities in the future. They also require exercising professional judgment in the process of applying the adopted accounting policies.

The Group made the assumptions and estimates concerning the future based on historical data and its knowledge as at the time of preparation of these financial statements. The estimates and assumptions are reviewed on an ongoing basis. The assumptions and estimates may change in the future due to market developments or other events beyond the Group's control. Changes in assumptions and estimates are recognised in the period of the change or in the period of the change and future periods if the change in estimates and assumptions relate to the current period and future periods.

5.1. Financial assets

Impairment of amounts due from clients

The Group reviews all credit exposures on a monthly basis to identify credit exposures threatened with impairment and measures the impairment of credit exposures. The measurement of impairment is based mainly on estimating the probability of impairment based on historical analysis, estimating potential losses (LGD parameter) and assessing the macroeconomic environment in which the Group operates.

The models used to estimate allowances for expected credit losses constructed in accordance with IFRS 9 consist of elements for which the Group uses all available historical information and forecasts. When using these models, the Group estimates the level of credit risk with the highest possible accuracy.

Expected credit losses are calculated using the survival model with monthly granularity, as well as the PG, LGD and EAD parameters determined individually for each exposure, taking into account the exposure's expected duration.

The resulting amount of expected credit losses is the sum total of expected losses in each period (over the 12-month horizon for Bucket 1 or the remaining lifetime for Buckets 2 and 3 and the POCI assets) discounted using the effective interest rate.

The structure of the models used to estimate expected credit losses includes modelling for the following parameters:

- PD (probability of default) – estimated probability of default over a given time horizon (12-month or lifetime),
- LGD (loss given default) – part of the exposure that would not be recovered in case of default,
- EAD (exposure at default) – expected amount of exposure at the time of default.

The model also contains a component comprising macroeconomic forecasts. Due to the significant share of unique credit exposures in the Group's portfolio, whose characteristics and structure indicate little connection between their risk and the macroeconomic environment, the historically observed impact of forecasts was not material to the valuation. Accordingly, the sensitivity of the estimated loss to changes in macroeconomic forecasts is very limited.

As a result of the revision of the credit exposure pricing model in the second half of 2022, there was a PLN 29 million increase in the estimated credit loss.

In 2022, the Group continued to apply adjustments to the PD (Probability of Default) parameter in estimating provisions. These adjustments reflect the vulnerability of individual industries to the crisis resulting from COVID-19, categorised by severity group:

1. clients whose business has not been affected by the pandemic;
2. clients whose industries/sectors have been affected by the pandemic to a limited extent;
3. clients from industries/sectors severely affected by the credit/default risk.

The impact of the PD parameter adjustment resulting from COVID-19 on the level of credit risk allowances was PLN 1.3 million as of December 31st 2022, and PLN 6.6 million as of December 31st 2021.

Theoretical reallocation as at December 31st 2021 of 1% of Bucket 1 exposures with the highest risk level to Bucket 2 for each type of exposure would result in a PLN 34.3 million increase in the amount of allowances.

In December 2022, a sensitivity analysis of write-downs to changes in the portfolio parameter LGD (Loss Given Default) was conducted using the group method. If recovery rates changed by +/- 10 percentage points, the estimated amount of loss allowances for clients would decrease by PLN 22.2 million or increase by PLN 22.2 million, respectively.

SPPI test

The SPPI test is an assessment of whether the cash flows arising from financial assets held in the HtC and HtCS models constitute only payments of principal and interest on the principal. This assessment (in addition to the business model) determines the classification of financial assets into the category of measurement at amortised cost or fair value through other comprehensive income. Therefore, this assessment is crucial for the adoption of a correct measurement principle for loan agreements and other financial contracts that are the core business of the Group.

Under IFRS 9, the amount of principal amount is the fair value the financial assets at initial recognition. Interest represents consideration for the time value of money, a margin for the credit risk and other risks incurred in holding the principal, and a profit margin.

The SPPI test includes an analysis of concluded contracts/agreements to determine cash flow characteristics resulting from these contracts/agreements. The SPPI test is considered to permit classification into the amortized cost or fair value through other comprehensive income measurement categories if there are no identified characteristics of cash flows whose timing or formula for determining their value depends on factors other than those that meet the definition of principal and interest on principal. The characteristics that do not meet this definition include:

- leverage,
- making the consideration contingent on conditions unrelated to the time value of money or the risk incurred,
- early repayment options, but early repayment in an amount equal to the unpaid portion of principal and interest including reasonable early repayment consideration is deemed to satisfy the SPPI test.

The Group conducts the SPPI test for all financial assets subject to this assessment, with the SPPI test being conducted at the product group level for assets originated under standard documentation, while for negotiated assets it is conducted on a contract-by-contract basis. The SPPI test resulted in the identification of a portion of loan agreements where the interest rate is based on a multiplier formula (leverage). These are some of the preferential loans provided with support from the National Fund for Environmental Protection and Water Management. Accordingly, the loans were classified as measured at fair value through profit or loss.

Business model

Assessment of the business model is an important estimation due to the fact that, under IFRS 9, it is one of the elements determining the classification of financial assets to an appropriate measurement category. The Group establishes business models within which financial assets are managed, based primarily on their business objectives and the manner in which financial results are achieved. Changes in the business model may occur only in case of material internal or external changes in the activities of the Group, and will be determined by the management.

Business models are expected to be changed rarely. Specifically, a change in business objective for a particular financial asset does not constitute a change in the business model.

5.2. Fair value of financial instruments

The value of financial instruments not listed in active markets is determined using valuation models accepted by the market. They take into account, among other things, the present value of future cash flows (discounted using a zero coupon curve with a margin), comparable transaction prices (if any), as well as reference to similar instruments quoted in active markets. In the rare cases where it is not possible to use such models and fair value cannot be determined reliably, financial instruments are carried at cost. For information on the sensitivity of financial instruments, see Note 48.

5.3. Provision for retirement benefits

Any employee who reaches retirement age is entitled to a retirement benefit.

Retirement benefits related to pre-retirement benefits or allowances and retirements as part of collective redundancies are not included in the calculation and if they occur in the future, the provision should be separately recalculated.

An employee who has acquired disability pension entitlements under social security due to permanent incapacity to work has a right to a disability benefit.

Both the retirement benefit and the disability benefit are calculated on the basis of the employee's remuneration, calculated as holiday pay, at the time when the benefit entitlement has been accrued.

Depending on the length of service at Bank Ochrony Środowiska S.A., the amount of retirement benefit is as follows:

- up to 10 years of service 100%,
- more than 10 years of service 200%,
- more than 15 years of service 250%.

The calculation was based on employees' salaries and wages as at December 31st 2022.

5.4. Scope of consolidation

The preparation of the consolidated financial statements requires judgment as to the nature of the involvement in other entities in which the Bank invested. In particular, exercising of control over another economic entity is subject to such judgment.

As disclosed in Note 1.2. the consolidated entities are Dom Maklerski BOŚ S.A., BOŚ Leasing-EKO Profit S.A., and MS Wind sp. z o.o. These are entities in which the Bank holds, directly or indirectly, 100% of equity interests, and the conditions for exercising control are met.

The Bank holds a 29.48% ownership interest in Wodkan S.A. The members of the management board of Wodkan S.A. were not recommended to their respective positions by the Bank. According to its judgement, the Bank does not exercise control over Wodkan S.A., and the company is not consolidated in the Group's consolidated financial statements. Also, the Bank has no significant influence on the activities of Wodkan S.A. There are no material transactions between the Bank and Wodkan S.A., in particular the Bank does not finance its operations, does not actively participate in the development of its strategy and day-to-day operations, and the Bank's employees do not hold any management positions at Wodkan S.A. under the authority of the Bank.

5.5. Taxation

The Polish law on corporate income tax, personal income tax, value added tax or social security contributions is subject to frequent changes, resulting in the lack of well-established practice, ambiguity and inconsistency. This situation gives rise to differences in the interpretation of tax legislation by public authorities and taxpayers. Tax settlements and other settlements (e.g., settlement of customs duties) may be subject to inspection by competent authorities for up to six years. The competent authorities have the power to impose significant penalties with interest. There is a risk that the authorities bodies will take a different stance from that of the Company with respect to the interpretation of the regulations, which could affect the amount of public charges disclosed in the financial statements.

The Group recognises a deferred tax asset based on the assumption that taxable profit will be earned in the future to allow the asset to be utilised. If taxable profit deteriorates in the future, this assumption may prove unwarranted.

5.6. Estimates of the impact of legal risk associated with foreign currency-linked mortgages

Estimating the impact of legal risk of foreign currency-linked mortgages is uncertain due to the continuously evolving case law and the level of acceptance of the dedicated settlement programme by clients. Therefore, this estimate is uncertain, and the amount may change in the future. The estimate is subject to periodic monitoring and updating.

The Bank accounts for the impact of legal risks associated with litigation concerning indexation clauses in CHF mortgage and housing loans, as well as the voluntary settlement programme offered to CHF borrowers, in accordance with:

- IFRS 9 *Financial Instruments* for active loans, including active loans covered by class action lawsuits and the voluntary settlement programme, and
- IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* for repaid loans.

Mortgage and housing loans that are subject to litigation fall within the scope of IFRS 9. Under IFRS 9, these loans are measured at amortised cost using the effective interest rate.

Legal claims raised by borrowers, including claims of contract invalidity, impact the Bank's estimation of the expected loan term and the anticipated cash flows. In particular, the Bank considers the risk that, in the event of a court ruling declaring the contract invalid, it may be obligated to reimburse borrowers for any undue benefits received. Furthermore, potential settlements offered by the Bank to borrowers (including those who have not previously filed legal claims) may also impact the amount and timing of expected cash flows arising from these loans.

Therefore, according to the Bank's viewpoint, the appropriate approach to reflect the impact of legal risk on active loans and the expected impact of the voluntary settlement programme offered to borrowers is to update the cash flow estimates associated with the loans and reduce the gross carrying amount of these loans in accordance with IFRS 9 paragraph B5.4.6.

For repaid loans and loans for which the calculated cash flow adjustment is higher than the carrying amount, the Bank recognises provisions for litigation in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

The Bank conducted a sensitivity analysis of the estimated impact of legal risk, considering changes in key parameters associated with the number of lawsuits and signed settlements with clients.

MODEL SENSITIVITY	PARAMETER CHANGE		
	-25 p.p.	BASE-CASE SCENARIO	+25 p.p.
INCREASE IN THE NUMBER OF LAWSUITS	-48	515	48
INCREASE IN THE NUMBER OF SETTLEMENTS UNDER THE SETTLEMENT PROGRAMME	-4	515	4
PROBABILITY OF SETTLEMENT*	13	515	-47

*In the -25% scenario, the minimum possible value of the parameter was assumed, i.e. 0%.

Note 39, titled "Legal risk of residential mortgage-backed loans linked to foreign exchange rates," provides an overview of the factors and circumstances that could significantly affect the provision for legal risk associated with the portfolio of mortgages tied to foreign currency exchange rates.

5.7. Provision for refund of loan costs in case of early repayment

The provision for reimbursement of loans in case of early repayment was recognised in accordance with IAS 37, taking into account assumptions regarding early repayment of consumer loans based on the loan portfolio as of December 31st 2022.

As of December 31st 2022, there were seven court proceedings pending against the Bank regarding the reimbursement of consumer credit costs due to early repayment. The provisions for refunds of commissions on early repayment of consumer loans made until 2019 amount to PLN 0.3 million.

In addition, the Bank recognises a provision for active loans. The provision relates to the difference between the estimated amount of commission reimbursement and the value of commissions received and accounted for using the effective interest rate method. The estimated amount of commission reimbursement is determined using the straight-line amortisation method, starting from the date of the loan and to the reporting date. As at December 31st 2022, the amount of the provision was PLN 2.6m.

5.8. Loan repayment holidays

The Business Crowdfunding and Borrowers Assistance Act of July 7th 2022 grants borrowers the right to temporarily suspend repayment of up to eight installments of a mortgage loan granted in the Polish currency for their own housing needs between 2022 and 2023. This temporary suspension is commonly referred to as loan repayment holidays. Due to the likelihood of borrowers exercising this right, the Bank recognizes, at the reporting date, an adjustment to the gross carrying amount of the loan relating to installments that may be suspended in future periods, in accordance with paragraph B5.4.6 of IFRS 9 *Financial Instruments*. In estimating the adjustment to the gross carrying value, it was assumed, based on actual observations, that 58% of eligible installments would be suspended. The suspension of installments by clients in 2022 was accounted for as a non-material modification to the loan agreements.

The recognition of the credit holidays adjustment led to a decrease in the Bank's interest income by PLN 20.4 million in 2022.

Change in installment value assumption based on client requests	Impact on the amount of adjustment to gross carrying amount – loan repayment holidays
+ 5 pp.	PLN 1.76 million.
-5 pp.	PLN 1.76 million;

6. Risk management

6.1. Credit risk

Risk management functions are concentrated directly at the Bank, as the Bank's assets represented the predominant part of the assets of the BOŚ Group as at December 31st 2022.

Definition of credit risk

Credit risk is defined as the risk of potential loss due to default by a client or counterparty at a contractual date.

In 2022, the BOŚ Group gradually lifted the restrictions implemented in 2020 to mitigate the adverse effects of the economic consequences of the COVID-19 pandemic. As part of the changes, the Bank started to offer financing to industries that were previously excluded from lending during the pandemic. Furthermore, the Bank lifted internal restrictions on credit assessments that were implemented during the pandemic.

Credit risk management methods

The Group pursued its credit risk management policy on an individual basis (credit transaction) and on a portfolio basis taking into account the level of risk appetite.

The risk appetite was determined within the limits set by prudent and stable risk management practices and is assumed to be moderate.

The credit risk management process at the Group included in particular:

1. procedures for assessing the risk of a single transaction, establishing collateral and making credit decisions,
2. monitoring the level of risk, setting exposure limits, and stress-testing,
3. rating and scoring models applied to assess the risk of retail and institutional clients,
4. principles of responsibility in the credit risk assessment process,
5. portfolio-based assessment of credit risk,
6. rules for management of retail and mortgage-backed exposures,
7. rules for identifying impaired exposures and determining impairment losses,
8. rules of reporting to the Bank's management staff,
9. IT systems supporting the implementation of these tasks.

Credit risk at the transaction level was managed in accordance with the following rules:

1. each credit transaction required a comprehensive assessment of credit risk, reflected in an internal rating or scoring,
2. credit decisions were based on client's creditworthiness,
3. credit risk of potential and concluded credit transactions was measured at origination and was subsequently monitored,
4. the credit process ensured independence of the credit risk assessment functions from the sales function,
5. credit decisions were made by persons authorized to do so,
6. terms of credit transactions offered to clients depended on the level of credit risk associated with a given client and/or transaction.

The financing of a single transaction was conditional on:

1. the borrower's ability to repay the requested facility in accordance with the schedule agreed upon with the Bank,
2. provision of collateral in the form and in the amount acceptable to the Bank in so far as internal regulations required,
3. fulfilment by the borrower of other criteria, such as, in particular, results of the client's relationship with the Bank to date and assessment of the client's credit history in the banking sector.

The Bank restricted financing to entities whose activities do not align with sustainable business practices that benefit the environment, the local community, consumers, and employees.

The portfolio credit risk was managed using various methods of credit risk measurement and assessment, including:

1. assessment of the likelihood of insolvency,
2. assessment of the expected credit loss,
3. the matrix of migration between delinquency periods and classes of risk,
4. credit generation analysis (analysis of loans provided over a given period of time),
5. the share and structure of impaired exposures and exposures that are not impaired but for which impairment indicators have been identified.

The Group had a Credit Risk Management Committee whose purpose was to shape the principles of credit risk management and monitoring, within the framework defined by the relevant strategy, policy or rules adopted by the Management Board or the Supervisory Board of the Bank.

The Committee operated in the following core areas:

1. credit risk management and credit process,
2. valuation of assets,
3. credit risk assessment models and methodologies.

In addition, the Supervisory Board was supported in its risk oversight functions by the Risk Committee. The Committee consisted of members of the Supervisory Board. The Committee's responsibilities included giving opinion on the Bank's comprehensive current and future risk appetite, reviewing the risk management strategy in the Bank's operations, supporting the Supervisory Board in implementing this strategy, and verifying the pricing of assets and liabilities offered to clients in line with the Bank's business model and risk strategy.

Processes established for risk management

In 2022, the Group continued efforts to improve the efficiency of its risk assessment processes, including optimisation of the credit monitoring, credit decision, and credit application processes, and took steps to reduce the credit portfolio concentration level.

As part of its risk monitoring process, the Group performed risk assessments prior to the origination and throughout the life of loan transactions. For risk assessment principles, see 'Risk assessment techniques'.

The frequency and scope of risk monitoring depended on the level of the identified risk. The monitoring was carried out by a separate organisational unit within the credit risk assessment and management functions; the units responsibilities include monitoring of the loan portfolio and valuation of individually significant exposures.

The risk of untimely debt service or default as well as the risk of loss or decrease in the value of collateral were mitigated using an early warning system, managed by the risk monitoring unit.

If the Group identified a situation that could jeopardize timely debt repayment, the Group used reminders and carried out restructuring procedures using appropriate IT tools.

The Group had in place a Policy for Management of Non-Performing Exposures, which defines steps to be taken to achieve reduction, within a prescribed time limit, of non-performing exposures and an action plan that supports the implementation of this policy.

In the process of risk assessment and monitoring, the Group used information from internal databases and external sources, including from Biuro Informacji Kredytowej S.A. (credit bureau), Krajowy Rejestr Długów (debt register) and Centralna Bazy Danych – Bankowy Rejestr (bank register).

The Group assessed credit risk using rating and scoring models. The models were built, developed, monitored and supervised by the Risk Area, taking into account internal and external requirements. Significant models were subject to periodical validation at least annually, performed by an independent validation unit.

The Group operated a multi-level credit decision-making system based on the principle that the higher the risk of a transaction resulting due to its complexity, the amount of exposure or the client's economic and financial standing, the higher the decision-making level at which the credit decision must be made. The decision-making levels with the highest authority were the Head Office Credit Committee and the Management Board of the Bank. Credit

decisions were made upon prior verification of risk made by a risk assessment and management specialist, i.e., a risk expert from a separate organizational unit in the Bank's Head Office, independent from the sales functions.

In credit decisions on transactions concluded with members of the Bank's bodies or persons holding managerial positions at the Bank, or entities affiliated with them through equity or organisational links, the Bank was guided by the requirements of the Banking Law Act.

The Group preferred collateralised transactions, with the proviso that in the retail segment the maximum amount of unsecured transactions was determined taking into account features of credit products, the impact of such transactions on the Bank's performance and the amount of potential losses.

The level of collateral depended on the level of risk generated by the transaction particular the type of transaction and its duration.

In determining the amount of the required collateral, the Group was guided by the principle of prudent valuation.

When selecting the form of security, the Group took into account:

1. adequate protection of the Group's interests,
2. the amount of costs related to establishing the security,
3. the ability to quickly liquidate collateral.

In assessing, monitoring, verifying and updating the value of collateral, the Group used external databases, including AMRON and Cenatorium Sp. z o.o.

Risk assessment techniques

Clients and transactions were subject to a comprehensive credit risk assessment process incorporating the relevant supervisory requirements .

The Group applied various risk assessment models, depending on the type of client and credit transaction.

The credit risk assessment model for retail clients (natural persons) seeking financing for non-business purposes included quantitative analysis (determination of the amount and stability of sources of funds for debt repayment) and qualitative analysis (assessment of characteristics of the client that had a material bearing on the client's willingness to repay the credit obligation in accordance with the agreed schedule, including scoring and assessment of the client's behaviour based on information from Biuro Informacji Kredytowej S.A.).

The credit risk assessment model for retail clients seeking financing for business purposes or for statutory activity (municipal borrowers) focused on two areas: assessment of the client and assessment of the transaction.

Client assessment involved quantitative and qualitative elements. The quantitative assessment focused on the key areas of the client's business activity with a bearing on profit generation capacity and financial liquidity. Depending on the type of client, the qualitative assessment included analysis of development plans, experience and skills of the managing personnel, and quality of relations with external stakeholders, including the Group.

To the extent specified in the Bank's internal regulations, client assessment was made against the background of the economic situation in the client's industry, on the local market and in the country. In addition, for selected transactions, the assessment took into account the scale of the client's exposure to negative effects of movements in interest rates and foreign exchange rates as well as the client's policy of hedging against foreign exchange and interest rate risks.

The model for assessing the risk of local government units included analysis of the client based on assessment of key budget indicators, debt ratios as well as analysis of the credit transaction, including assessment of the projected debt ratios, the quality of collateral and the duration of the transaction.

Where financing was sought by an entity operating within a group of related parties, the Group assessed the credit risk taking into account the economic and financial standing of the group.

Assessment of credit risk related to financing sought by institutional clients included an ESG risk analysis.

The transaction was assessed in particular on the basis of an assessment of the purpose of the financing, the length of the facility term and the value of the collateral. The Group proposed financing structures that ensured risk sharing between borrowers and the Group, mainly through involvement of the borrowers' own funds adequate to the scale of the risk.

Credit risk assessment tools

In order to measure credit risk, the Group uses various tools/applications in which the applicable rating/scoring models and creditworthiness assessment methodology have been implemented.

The diversity of applications used is related to client segmentation and/or types of credit transactions.

Description of individual concentration risks, methods of their assessment and monitoring

The Bank managed concentration risk in accordance with the rules set out in the Concentration Risk Management Policy.

The Group identified, measured, monitored and reported the concentration risk on the following levels:

1. an individual client/transaction, and
2. the loan portfolio.

At the client and transaction level, the concentration risk was managed in compliance with the supervisory exposure limits, in particular those under Regulation (EU) No 575/2013 of the European Parliament and of the Council of June 26th 2013 or the Banking Law, as well as by applying the principle that the risk assessment and monitoring process depends on the amount of credit exposure.

At the loan portfolio level, the concentration of exposures was managed by adhering to external limits, internal limits, or warning values, as well as an acceptable level of credit risk appetite determined by a set of indicators that also considered ESG risk. The levels of internal limits were approved by the Bank's Management Board, and the risk appetite – also by the Supervisory Board.

In particular, the Group applied the following limits:

- geographical limits – limit of exposure to other countries;
- product-specific limits – e.g., maximum LTV;
- limits for the portfolio of mortgage loans and loans financing real property – in compliance with the PFSA Recommendations,
- limits for selected sectors of the economy,
- limits concerning the share of foreign currency loans in the Bank's portfolio,
- limits for the aggregate exposure to related entities/groups of related entities with respect to which the Bank's exposure exceeds 10% of Tier 1,
- limits for the aggregate exposure to related entities/groups of related entities, depending on the rating of the related entity/group of related entities,
- sector limits;
- limits for credit exposures towards the Bank's subsidiaries.
- limit for exposures under credit transactions to which special funding rules were applied in connection with the COVID-19 pandemic,
- limit for transactions with derogation from the credit rules set out in internal procedures that result in increased credit risk.

In the concentration risk management process, the Group used an early warning system for internal limits. The system was based on distinguishing three levels of limit utilisation and gradual implementation of measures mitigating the risk of exceeding the limit.

The utilisation of the limits was monitored and reported to the Bank's governing bodies on a regular basis, in accordance with the Bank's internal regulations.

6.1.1. Methodology for recognising impairment of credit exposures

At each reporting date, the Group reviews credit exposures, which consists in identification of credit exposures threatened with impairment and exposures with regard to which a significant increase in credit risk has been reported since their initial recognition – taking into account reasonable and supportable information, including forward-looking information. Subsequently, it designates an allowance for expected credit losses based on the allocation of the exposure to three Buckets depending on changes in credit quality. As a general rule, all new exposures other than POCI assets and clients on the watch list are allocated to Bucket 1 exposures.

Based on the amount and the risk profile, the Group classifies credit exposures into exposures measured individually and exposures measured using the group method, and assesses them for any indications of impairment.

Apart from POCI assets, the Group recognises as impaired those exposures for which there has been indications of impairment due to one or more events occurring after the initial recognition and the event giving rise to a loss affects the exposures expected cash flows which can be reliably estimated.

The Group considers a past due credit receivable to be material when both materiality thresholds are exceeded: 1) the sum of all past due liabilities of the obligor exceeds PLN 400 for retail exposures or PLN 2,000 for non-retail exposures and 2) the share of the past due liabilities in the obligor's balance sheet is greater than 1%. The calculation of the number of days past due is performed at the obligor level and begins when a material past due situation occurs, i.e., when both the absolute and relative materiality thresholds are exceeded.

In particular, the Group considers the following as evidence of impairment:

1. material delay in principal or interest payments exceeding 90 days,
2. deterioration of the economic and financial standing of the debtor during the facility term which causes reclassification of the debtor to rating class 14 or worse, reflecting a threat to the repayment of the debt,
3. granting by the Group to the client, for economic or legal reasons arising from the client's economic and financial distress, of a concession in the terms of financing (conclusion of a restructuring agreement),
4. deterioration of financial metrics, including liquidity and debt service capacity of the client,
5. granting credit holidays under public moratoria (on the basis of the Tarcza 4.0 government aid scheme),
6. disputing the receivables by the debtor through legal proceedings, except exposures to loans denominated in or indexed to foreign currencies for which the Bank has recognised a legal-risk provision,
7. declaration of bankruptcy, high probability of bankruptcy or other reorganisation affecting the debtor's financial condition and solvency,
8. delay of more than 30 days on a transaction restructured during the contingency period previously classified as impaired,
9. observed financial distress of the client,
10. other circumstances defined in the EBA Guidelines and occurrence of other events that are equivalent to the client's becoming insolvent, resulting in the client's inability to repay the debt on time.

Additionally, credit exposures related to the financing of wind farm projects are also considered to be impaired if there is a cash deficit during the term of the facility and if the company's valuation turns negative in the scenario of potential debt restructuring modelled by the Bank until the end of the financing period.

Measurement of impairment of credit exposures using the case-by-case approach is based on the calculation of the present value of expected future cash flows discounted at the original effective interest rate. For loans with collateral, the present value of expected future cash flows includes the cash flows that may be obtained from enforcement of the collateral, less the costs of enforcement and sale of the collateral. For credit exposures related to financing of wind farm projects, the present value of expected future cash flows is estimated on the basis of a valuation model which simulates individual cash flows that are likely to be generated by a given project based on specified, modifiable valuation parameters. If the present value of realisable cash flows declines, an allowance is recognised in the amount corresponding to the expected credit loss due to the debtor's failure to meet its obligations to the Group.

The individual (case-by-case) approach to impairment assessment is applied to:

1. individually significant credit exposures:

- a. which meet the criteria for recognition of individual impairment or which are quarantined; or
- b. which are an exposure to a client to which the Group has other credit exposures for which an indication of impairment has been identified (propagation of impairment); or
2. individually non-significant credit exposures for which an indication of impairment has been identified or exposures are quarantined, provided that at the time of recognition of impairment they were individually significant and met additional conditions specified by the Group,
3. individual non-significant credit exposures with unique credit risk characteristics.

Impairment losses on receivables which are considered individually non-significant and for which evidence of impairment has been identified are calculated based on impairment measurement parameters estimated using statistical methods based on historical data for separate portfolios grouped for combined measurement of impairment according to similar credit risk characteristics. Historical loss trends are adjusted for non-recurring events.

As part of the group approach, the Group applies a breakdown into the following seven homogeneous risk portfolios within the two client segments (retail and institutional):

1. retail mortgage loans (the portfolio is further segmented by level of LTV and loan currency),
2. retail cash loans,
3. retail mortgage-backed cash loans,
4. retail credit exposures to micro retail businesses (excluding mortgage loans),
5. other retail clients,
6. corporate clients, including financial institutions,
7. public finance clients.

Reversal of a loss, i.e., reclassification of a loan to unimpaired exposures is possible after the evidence of impairment ceases to exist and after the lapse of a quarantine period in which no impairment evidence is identified.

For the exposures for which no evidence of impairment has been identified, the Group recognises loss allowance the group approach.

For the purposes of assessing whether there has been a significant increase in credit risk since initial recognition, the Group compares the risk of default over the expected period of funding as at the reporting date and as at the date of initial recognition. The Group considers that a significant increase in credit risk has been identified for an asset if the quantitative or qualitative criterion is met or if the time past due exceeds 30 days; the criteria are reviewed at the level of exposures.

Quantitative criteria

The reference underlying the allocation of retail exposures to Bucket 2 is determined by the Group as the difference between:

1. the current credit risk assessment defined as a lifetime PD in the time horizon from the reporting date to the maturity date, determined on the basis of risk characteristics applicable at the reporting date,
2. the initial credit risk assessment defined as a lifetime PD in the time horizon from the reporting date to the maturity date, determined on the basis of risk characteristics applicable at the date of initial recognition.

The Group determines a significant deterioration in credit risk by comparing the observed value of a relative change in risk assessment with its theoretical value, which is the threshold above which the Group considers a significant deterioration in credit risk to have occurred.

The allocation threshold at the level of a single exposure is determined using a statistical model based, among other things, on information about credit risk assessment as at the date of initial recognition and the time since the date of initial recognition.

For corporate exposures, allocation to Bucket 2 is based on the assumption that the rating of the exposure remains stable over time (the Group did not expect the rating to improve over time) and occurs as a result of a deterioration in the debtor's economic and financial standing during the facility term, which is reflected in rating grade 12 or 13, or allocation to a rating grade 9-11 if the rating assigned at initial recognition was lower than 6.

Qualitative criteria

The Group allocates exposures to Bucket 2 in the following cases:

1. there is a delay in repayment (beyond a specified material threshold) of more than 30 days as at the reporting date or such delay has been reported at least once on the last three reporting dates,
2. forbore exposure for which the evidence of impairment has ceased to exist and the quarantine period, during which the evidence was not identified, has expired,
3. an exposure become a forbore exposure.

In addition to the above criteria, the Group defined other specific qualitative criteria, such as criteria specific to clients in a given sector, criteria identified in the course of monitoring of institutional clients (exposures with higher risk, exposures on watch list), or exposures identified through multi-factor and holistic credit risk analysis.

In accordance with IFRS 9 5.5.10, the Group distinguishes exposures with low credit risk. A credit exposure has a low risk of default if the borrower has a strong short-term capacity to meet its contractual obligations and adverse changes in economic and business conditions over the longer term may – but not necessarily will – reduce the borrower's ability to meet its contractual cash flow obligations.

The Group applies the Low Credit Risk criterion for exposures to the State Treasury, National Bank of Poland, Bank Gospodarstwa Krajowego, central government institutions, clearing houses, the European Investment Bank and local government units that do not meet the qualitative criteria for classification to Bucket 2 and for which no evidence of impairment has been identified.

For the purposes of estimating impairment losses (expected credit losses), the Group continues to use its own estimates of risk parameters based on internal models consistent with the requirements of IFRS 9 requirements (such as exposure lifetime estimates or forecasts of future macroeconomic conditions). The Group has developed a parametrisation methodology and built models consistent with IFRS 9. Expected credit losses are the product of individual estimated values of PD, LGD, EAD and CCF parameters for each exposure, and the final amount of expected losses is the sum of expected losses in individual periods (depending on the Bucket – over the next 12 months or over the remaining life), discounted using the effective interest rate. The parameters estimated in accordance with IFRS 9 are subsequently adjusted to reflect expectations regarding the macroeconomic situation. The Group adjusts risk parameters to take account of future macroeconomic information (such as GDP, unemployment rate, WIBOR, FX rates, inflation) for portfolios for which it has identified relevant relationships with such information. Internally developed scenarios are used. Forecasts prepared by the Group's economic analysts are the source of macroeconomic inputs.

The amount of allowances for expected credit losses, provisions for financial guarantees and financing commitments in the Polish and in foreign currencies (including currency exchange differences) is recognised as the Group's expense or income arising from the allowances and provisions.

The methodology and assumptions adopted by the Group to estimate impairment are reviewed on a regular basis in order to reduce the difference between estimated and actual losses. Back-testing is performed to assess the adequacy of impairment losses determined using the group method and the case-by-case approach; results of back-testing are used to determine process improvement measures.

6.1.2. Amounts due from banks

Below are presented gross amounts due from banks by rating groups:

Item	December 31st 2022	December 31st 2021
AA+	-	-
AA	171,056	284,621
AA-	2,430	10,062
A+	9,353	68,423
A	31,722	11,671
A-	3,427	280
BBB+	9,382	10,212
BBB-	-	969
unrated		
	15,461	14,509
Total	242,831	400,747

Internal rating	Corresponding unified class according to external rating agencies	December 31st 2022	Corresponding unified class according to external rating agencies	December 31st 2021
A	AAA, AA+, AA, AA-		AAA, AA+, AA, AA-	
B	A+, A, A-		A+, A, A-	
C	BBB+, BBB, BBB-		BBB+, BBB, BBB-	
D	BB+, BB, BB-, B+, B, B-		BB+, BB, BB-, B+, B, B-	
E		14,667		14,509
F		794		-
Total		15,461		14,509

6.1.3. Amounts due from clients

Item	December 31st 2022	December 31st 2021
AMOUNTS DUE FROM CLIENTS MEASURED AT AMORTISED COST		
Amounts due from clients without indications of impairment, including:	10,375,799	10,873,199
<i>exposures without significant credit risk increase since initial recognition (Bucket 1)</i>	9,301,183	9,630,276
<i>exposures with significant increase in risk since initial recognition (Bucket 2)</i>	1,074,616	1,242,923
Amounts due from clients with indication of impairment (Bucket 3) but with no impairment identified given the estimated cash flows	-	22,382
Amounts due from clients with indications of impairment, impaired (Bucket 3)	1,813,402	1,674,882
Total amounts due from clients measured at amortised cost (gross)	12,189,201	12,570,463
Impairment losses on:		
<i>amounts due from clients – (Bucket 1)</i>	- 97,079	- 88,097
<i>amounts due from clients – (Bucket 2)</i>	- 57,275	- 80,534
<i>amounts due from clients – (Bucket 3) with no indication of impairment</i>	-	- 588
<i>amounts due from clients – (Bucket 3) with indication of impairment</i>	- 954,890	- 953,407
Total impairment losses	- 1,109,244	- 1,122,626
Total amounts due from clients measured at amortised cost (net)	11,079,957	11,447,837
AMOUNTS DUE FROM CLIENTS MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS		
Fair value	3,050	14,111
Total amounts due from clients measured at fair value through profit or loss	3,050	14,111
Security deposits	36,251	32,768
Other amounts due from clients	6,569	4,750
Total amounts due from clients	11,125,827	11,499,466

Classification of amounts due from clients by measurement category, by segment:

December 31st 2022	Institutional clients	Retail clients	Retail clients – housing loans	Retail clients – other loans	Total
Amounts due from clients measured at amortised cost					
Amounts due from clients without indications of impairment, including:	7,889,746	2,486,053	2,051,794	434,259	10,375,799
<i>exposures without significant credit risk increase since initial recognition (Bucket 1)</i>	6,942,185	2,358,998	1,948,733	410,265	9,301,183
<i>exposures with significant increase in risk since initial recognition (Bucket 2)</i>	947,561	127,055	103,061	23,994	1,074,616
Amounts due from clients with indication of impairment (Bucket 3) but with no impairment identified given the estimated cash flows	-	-	-	-	-
Amounts due from clients with indications of impairment, impaired (Bucket 3), including:	1,435,947	377,455	214,550	162,905	1,813,402
individually assessed	1,412,004	96,691	78,795	17,896	1,508,695
Total amounts due from clients measured at amortised cost (gross)	9,325,693	2,863,508	2,266,344	597,164	12,189,201

December 31st 2022	Institutional clients	Retail clients	Retail clients – housing loans	Retail clients – other loans	Total
Impairment losses on:					
<i>amounts due from clients – (Bucket 1)</i>	-86,712	-10,367	-4,516	-5,851	-97,079
<i>amounts due from clients – (Bucket 2)</i>	-50,924	-6,351	-3,609	-2,742	-57,275
<i>amounts due from clients – (Bucket 3) with no indication of impairment</i>	-	-	-	-	-
<i>amounts due from clients – (Bucket 3) with indications of impairment,</i>	-697,136	-257,754	-126,114	-131,640	-954,890
<i>individually assessed</i>	-681,320	-52,177	-43,344	-8,833	-733,497
Total impairment losses	-834,772	-274,472	-134,239	-140,233	-1,109,244
Total amounts due from clients measured at amortised cost (net)	8,490,921	2,589,036	2,132,105	456,931	11,079,957
Amounts due from clients measured at fair value through profit or loss					
Fair value	2,780	270	99	171	3,050
Total amounts due from clients measured at fair value through profit or loss	2,780	270	99	171	3,050
Security deposits	36,251	-	-	-	36,251
Other amounts due from clients	3,669	2,900	-	2,900	6,569
Total amounts due from clients	8,533,621	2,592,206	2,132,204	460,002	11,125,827

December 31st 2021	Institutional clients	Retail clients	Retail client – housing loans	Retail clients – other loans	Total
Amounts due from clients measured at amortised cost					
Amounts due from clients without indications of impairment, including:	8,041,552	2,831,647	2,575,685	529,195	10,873,199
<i>exposures without significant credit risk increase since initial recognition (Bucket 1)</i>	6,957,132	2,673,144	2,423,287	503,276	9,630,276
<i>exposures with significant increase in risk since initial recognition (Bucket 2)</i>	1,084,420	158,503	152,398	25,919	1,242,923
Amounts due from clients with indication of impairment (Bucket 3) but with no impairment identified given the estimated cash flows	18,393	3,989	2,732	1,257	22,382
Amounts due from clients with indications of impairment, impaired (Bucket 3), including:	1,275,958	398,924	356,593	125,279	1,674,882
individually assessed	1,241,155	105,197	90,382	14,815	1,346,352
Total amounts due from clients measured at amortised cost (gross)	9,335,903	3,234,560	2,935,010	655,731	12,570,463

December 31st 2021	Institutional clients	Retail clients	Retail client – housing loans	Retail clients – other loans	Total
Impairment losses on:					
<i>amounts due from clients – (Bucket 1)</i>	-69,694	-18,403	-9,357	-9,046	-88,097
<i>amounts due from clients – (Bucket 2)</i>	-64,860	-15,674	-10,831	-4,843	-80,534
<i>amounts due from clients – (Bucket 3) with no indication of impairment</i>	-569	-19	-11	-8	-588
<i>amounts due from clients – (Bucket 3) with indications of impairment, including:</i>					
<i>individually assessed</i>	-671,404	-282,003	-186,718	-95,285	-953,407
	-646,537	-54,331	-48,396	-5,935	-700,868
Total impairment losses	-806,527	-316,099	-206,917	-109,182	-1,122,626
Total amounts due from clients measured at amortised cost (net)	8,529,376	2,918,461	2,728,093	546,549	11,447,837
Amounts due from clients measured at fair value through profit or loss					
Fair value	13,460	651	257	394	14,111
Total amounts due from clients measured at fair value through profit or loss	13,460	651	257	394	14,111
Security deposits	32,768	-	-	-	32,768
Other amounts due from clients	2,879	1,871	-	1,871	4,750
Total amounts due from clients	8,578,483	2,920,983	2,728,350	548,814	11,499,466

Amounts due from clients measured at amortised cost (gross) that are not past due and are not impaired

Amounts due from clients measured at amortized cost which are not past due (for even one day) are considered as not impaired if there is no other evidence of impairment. These are amounts due from clients with good economic and financial standing, with regular repayments for which there has been no indication of impairment, and impairment has been recognised for incurred but unidentified losses.

General characteristics of the rating classes are presented below:

Rating 1	Highest credit quality
Rating 2	Very high credit quality
Rating 3	High credit quality
Ratings 4-5	Very good credit quality
Ratings 6-7	Good credit quality
Ratings 8-9	Satisfactory credit quality
Ratings 10-11	Average and poor credit quality
Ratings 12-13	Very weak credit quality
Ratings 14-16	No creditworthiness (credit quality does not exist).

Below are presented gross amounts due from clients measured at amortised cost that were not past due and for which no impairment was recognised, by client classes:

Item	Rating*	December 31st 2022	December 31st 2021
Amounts due from institutional clients	(1-3)	8,187	7,508
	(4-5)	214,885	94,338
	(6-7)	1,249,606	1,040,463
	(8-9)	2,807,760	3,074,179
	(10-11)	3,049,495	3,120,734
	(12-13)	373,631	448,750
	(14-16)	-	7,613
	unrated	181,618	235,450
Total amounts due from institutional clients		7,885,182	8,029,035
Amounts due from retail clients	unrated	2,385,037	2,746,599
Total amounts due from retail clients		2,385,037	2,746,599
Total		10,270,219	10,775,634

The ratings are presented as at the reporting date.

*\ The ratings are consistent with the Bank's internal classification, where "1" is the best rating and "16" is the worst rating.

Amounts due from clients measured at amortised cost (gross) that are past due at the reporting date but not impaired, by client categories and days past due, with general description

Past-due exposure is the total of amounts due from clients in arrears for one or more days. For the purpose of recognising impairment, days past due are calculated at the level of the debtor and the calculation starts at the time when a material past due event occurs, i.e. when both materiality thresholds specified below have been exceeded: 1) the sum of all past due liabilities of the obligor exceeds PLN 400 for retail exposures or PLN 2,000 for non-retail exposures and 2) the share of the past due liabilities in the obligor's balance sheet is greater than 1%.

No impairment is recognised for amounts due from clients past due less than 90 days, unless other available information provides evidence of impairment.

Gross amounts due from clients measured at amortised cost, excluding any material amounts past due by more than 90 days, and for which no impairment was recognised, are presented below by class of clients and the number of days past due:

December 31st 2022 Days past due	Institutional clients	Retail clients	Total
from 1 to 30 days	4,564	74,842	79,406
from 31 to 60 days	-	15,701	15,701
from 61 to 90 days	-	8,782	8,782
over 90 days	-	1,691	1,691
Total	4,564	101,016	105,580

December 31st 2021 Days past due	Institutional clients	Retail clients	Total
from 1 to 30 days	4,497	69,514	74,011
from 31 to 60 days	7,489	13,014	20,503
from 61 to 90 days	100	2,390	2,490
over 90 days	1,059	-	1,059
Total	13,145	84,918	98,063

Amounts due from clients measured at amortised cost (gross) with recognised impairment, by client categories, with general description

Below are presented impaired amounts due from clients measured at amortised cost, by segment:

Item	December 31st 2022	December 31st 2021
Amounts due from institutional clients	1,435,947	1,275,958
Amounts due from retail clients	377,455	398,924
Total	1,813,402	1,674,882

IFRS 9 model parameters

The following tables show the values of the input parameters of the IFRS 9 models used by the Group in the process of calculating expected credit losses, for homogeneous portfolios, as required by Recommendation R of the Polish Financial Supervision Authority.

Homogeneous portfolio of exposures – Retail clients – MORTGAGES

	PD scale	Gross initial on-balance sheet exposures	Off-balance sheet exposures	EAD after credit risk mitigation and application of credit conversion factor	Average PD as % – acceptable range (0% to 100%)	Number of exposures	Average LGD as %	Average maturity	Expected credit loss (ECL)
PHASE 1	0.00 to <0.15%	194	267	323	0.04%	83	20.18%	20	-
	0.15% to <0.25%	104	-	103	0.19%	28	20.03%	9	-
	0.25% to <0.50%	714,319	-	702,098	0.25%	5,356	21.23%	152	369
	0.5% to <0.75%	281	-	280	0.66%	22	20.03%	10	-
	0.75% to <2.50%	1,030,690	4,891	1,025,705	0.86%	5,851	21.29%	191	1,837
	2.50% to <10.00%	203,103	2,031	200,813	5.30%	851	21.74%	223	2,235
	10.00% to <45.00%	945	-	935	26.52%	11	21.74%	123	50
	45.00% to <100.00%	-	-	-	0.00%	-	0.00%	-	-
PHASE 2	0.00 to <0.15%	179	809	573	0.00%	31	26.12%	159	-
	0.15% to <0.25%	4	-	4	0.19%	1	20.03%	5	-
	0.25% to <0.50%	-	-	-	0.00%	-	0.00%	-	-
	0.5% to <0.75%	-	-	-	0.00%	-	0.00%	-	-
	0.75% to <2.50%	243	-	238	2.00%	8	20.03%	40	-
	2.50% to <10.00%	7,291	-	6,337	8.02%	72	21.75%	120	61
	10.00% to <45.00%	86,224	-	83,068	21.90%	495	21.30%	187	2,447

	45.00% to <100.00%	9,294	-	9,058	65.16%	53	21.82%	195	1,099
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	Time in default	EAD after credit risk mitigation and application of credit conversion factor	Number of exposures	Average LGD as %	Expected credit loss (ECL)
PHASE 3	up to 12 months	52,149	289	75.04%	17,115
	13 to 24 months	24,583	170	61.53%	9,117
	25 to 36 months	8,845	43	54.02%	4,927
	37 to 48 months	10,435	47	40.57%	5,967
	49 to 60 months	14,017	49	23.49%	9,999
	61 to 84 months	27,559	92	2.42%	19,765
	over 84 months	79,657	288	0.00%	62,170
POCI	up to 12 months	-	-	0.00%	-
	13 to 24 months	-	-	0.00%	-
	25 to 36 months	-	-	0.00%	-
	37 to 48 months	-	-	0.00%	-
	49 to 60 months	-	-	0.00%	-
	61 to 84 months	-	-	0.00%	-
	over 84 months	1,025	2	0.00%	681

Homogeneous portfolio of exposures – Retail clients – OTHER (NO MORTGAGES)

	PD scale	Gross initial on-balance sheet exposures	Off-balance sheet exposures	EAD after credit risk mitigation and application of credit conversion factor	Average PD as % – acceptable range (from 0% to 100%)	Number of exposures	Average LGD as %	Average maturity	Expected credit loss (ECL)
PHASE 1	0.00 to <0.15%	10,283	54,367	33,228	0.03%	8,262	47.33%	28	4
	0.15% to <0.25%	1,817	3,117	2,858	0.19%	492	47.64%	4	2
	0.25% to <0.50%	12,003	3,958	13,370	0.30%	1,082	41.09%	25	14
	0.5% to <0.75%	5,927	1,828	6,693	0.66%	765	47.49%	7	18
	0.75% to <2.50%	310,920	11,008	311,436	1.91%	14,683	45.93%	48	2,647
	2.50% to <10.00%	50,330	548	49,422	5.86%	1,922	43.73%	63	1,215
	10.00% to <45.00%	21,132	100	20,303	20.20%	737	53.26%	63	1,977
	45.00% to <100.00%	9	-	8	52.19%	1	47.29%	142	2
PHASE 2	0.00 to <0.15%	208	1,298	677	0.01%	163	45.96%	62	-
	0.15% to <0.25%	29	8	31	0.19%	13	32.04%	3	-
	0.25% to <0.50%	50	14	32	0.38%	23	48.05%	7	-
	0.5% to <0.75%	24	1	13	0.66%	16	50.18%	4	-
	0.75% to <2.50%	200	7	170	1.46%	44	42.80%	12	1
	2.50% to <10.00%	1,432	101	1,371	7.19%	265	43.74%	65	28
	10.00% to <45.00%	10,668	72	10,256	27.17%	641	38.07%	76	740

	45.00% to <100.00%	6,006	4	5,644	74.62%	160	49.11%	71	1,772
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	Time in default	EAD after credit risk mitigation and application of credit conversion factor	Number of exposures	Average LGD as %	Expected credit loss (ECL)
PHASE 3	up to 12 months	26,952	1,160	45.28%	17,316
	13 to 24 months	36,425	1,869	27.74%	29,860
	25 to 36 months	36,148	1,290	23.35%	31,045
	37 to 48 months	13,743	655	21.17%	11,778
	49 to 60 months	6,111	201	15.60%	4,814
	61 to 84 months	17,410	539	4.37%	16,795
	over 84 months	31,130	469	0.00%	25,131
POCI	up to 12 months	-	-	0.00%	-
	13 to 24 months	-	-	0.00%	-
	25 to 36 months	-	-	0.00%	-
	37 to 48 months	-	-	0.00%	-
	49 to 60 months	-	-	0.00%	-
	61 to 84 months	-	-	0.00%	-
	Over 84 months	73	1	0.00%	73

Homogeneous portfolio of exposures – Institutional clients

	PD scale	Gross initial on-balance sheet exposures	Off-balance sheet exposures	EAD after credit risk mitigation and application of credit conversion factor	Average PD as % – acceptable range (from 0% to 100%)	Number of exposures	Average LGD as %	Average maturity	Expected credit loss (ECL)
PHASE 1	0.00 to <0.15%	1,665	3,500	2,513	0.07%	25	19.12%	1	-
	0.15% to <0.25%	2,890	88	2,921	0.20%	5	19.12%	2	-
	0.25% to <0.50%	6,089	2,791	6,886	0.36%	37	19.12%	4	4
	0.5% to <0.75%	371,468	36,889	401,031	0.72%	323	19.12%	35	462
	0.75% to <2.50%	204,672	236,706	276,129	1.76%	173	19.12%	11	694
	2.50% to <10.00%	5,181,462	2,192,347	6,168,043	6.29%	1,290	19.12%	40	58,118
	10.00% to <45.00%	1,057,209	422,215	1,243,326	12.11%	179	19.12%	90	22,229
	45.00% to <100.00%	-	435	90	74.34%	4	19.12%	11	-
PHASE 2	0.00 to <0.15%	-	-	-	0.00%	-	0.00%	-	-
	0.15% to <0.25%	-	-	-	0.00%	-	0.00%	-	-
	0.25% to <0.50%	1,996	721	2,341	0.43%	2	19.12%	2	2
	0.5% to <0.75%	-	-	-	0.00%	-	0.00%	-	-
	0.75% to <2.50%	11,709	30,902	22,302	1.89%	14	19.12%	4	46
	2.50% to <10.00%	122,047	80,107	177,092	5.89%	33	19.12%	11	1,314
	10.00% to <45.00%	556,806	126,957	594,284	23.34%	78	19.12%	28	8,931

	45.00% to <100.00%	458,892	17,217	447,201	63.05%	51	19.12%	97	29,922
	Time in default	EAD after credit risk mitigation and application of credit conversion factor	Number of exposures	Average LGD as %	Expected credit loss (ECL)				
PHASE 3	up to 12 months	472,162	133	70.78%	162,359				
	13 to 24 months	157,474	63	51.33%	52,491				
	25 to 36 months	59,135	53	46.05%	35,232				
	37 to 48 months	78,489	55	43.77%	62,578				
	49 to 60 months	113,834	69	41.56%	84,440				
	61 to 84 months	217,833	68	20.40%	171,321				
	over 84 months	208,859	63	0.00%	119,517				
POCI	up to 12 months	116,592	7	70.06%	34,323				
	13 to 24 months	175	1	54.27%	79				
	25 to 36 months	1,246	4	44.68%	1,238				
	37 to 48 months	-	-	0.00%	-				
	49 to 60 months	-	-	0.00%	-				
	61 to 84 months	21,547	2	28.99%	14,333				
	over 84 months	-	-	0.00%	-				

Rating/scoring groups of amounts due from Group clients (gross), by client segment

Item	Rating*	December 31st 2022	December 31st 2021
Amounts due from institutional clients	(1-3)	8,187	7,508
	(4-5)	217,888	107,909
	(6-7)	1,252,170	1,047,769
	(8-9)	2,832,136	3,128,574
	(10-11)	3,168,672	3,261,097
	(12-13)	786,105	672,555
	(14-16)	834,676	837,231
	unrated	228,639	286,720
Total amounts due from institutional clients		9,328,473	9,349,363
Amounts due from retail clients	unrated	2,863,778	3,235,211
Total amounts due from retail clients		2,863,778	3,235,211
Total		12,192,251	12,584,574

The ratings are presented as at the reporting date.

*\ The ratings are consistent with the Bank's internal classification, where "1" is the best rating and "16" is the worst rating.

Description of collateral pledged for loans

The Group accepted both physical assets as well as personal guarantees as collateral. The rules for establishing collateral provide that collateral must adequate to the level of risk generated by a transaction.

The Group preferred loan collateral:

1. that would enable the Bank to reduce the amount of allowances,
2. that would be readily marketable, with proceeds from sale potentially enabling the Bank to recover the entire amount of the claim.

When selecting the form of security, the Group reviews the key criteria determining its effectiveness, including:

1. marketability of the collateral, i.e., the ability to sell the collateral without a significant decrease in its price and with reasonable promptness, i.e., in the period of time which does not expose the Bank to a change in the value of the collateral due to price movements typical for a given assets,
2. amount that reasonably recoverable in debt collection proceedings, taking into account legal, economic and other constraints which may affect the actual ability of the Bank to satisfy its claims,
3. access and ability to control the collateral during the term of the exposure.

The principle applied in the Group was to establish a legal collateral, if required, before facility disbursement.

The Group adjusted the value of the collateral using adjustment rates determined on a case-by-case basis for each type of collateral. As a general rule, the value of the collateral was monitored over the entire lending period.

In the case of mortgage-backed exposures, the Group followed Recommendation S regarding the maximum LTV and required that borrowers provide equity contribution.

In the process of monitoring the value of real property, the Group would carry out portfolio revaluation on a regular basis, using statistical methods.

In the case of real estate collateral, the valuation of collateral was prepared by an expert with the necessary qualifications and experience in property appraisal. The Bank verified valuations using data from such sources as the AMRON System (system of analysis and monitoring of real estate transactions) and the Cenatorium Database.

Foreclosed assets

The Group classifies repossessed collateral as 'foreclosed assets' and measures them in accordance with the accounting policies specified in the Note 3.17 to the consolidated financial statements.

Prior to foreclosure, it is mandatory that the Group has a plan how to use/dispose of the collateral assets once repossessed. A document specifying how the foreclosed asset is to be used/disposed of contains all the information that is relevant to make the foreclosure decision, and in particular:

- 1.** information on costs expected to be incurred for possible caretaking, storage, insurance, taxes, etc.
- 2.** information on the potential buyer, the negotiated price and the terms of payment – if the foreclosed asset is planned to be sold,
- 3.** profitability of the transaction.

In most cases, buyers for such assets were already identified at the time of foreclosure and the transactions were profitable for the Group. Upon sale, the amount of the debt was reduced by the amount of proceeds rather than by the amount estimated by the appraiser (usually prices obtained in transactions to sell foreclosed assets are lower than the assets' value determined by the appraiser).

One of the forms of recovering debts is their sale. Selling price of debt claims depend, among other things, on property collateral. Where sale of loans (with debt collateralised by property assets) is more profitable than foreclosure and subsequent sale, the Bank sells the debt claims together with the underlying collateral.

As at December 31st 2022 and December 31st 2021, the Bank did not hold any foreclosed assets.

6.1.4. Debt securities

Securities by rating assigned to issuers

December 31st 2022	State Treasury	NBP	Banks	Public finance	Other financial institutions	Corporate	Total
1	-	-	-	-	49,927	-	49,927
6	3,538,951	-	-	-	-	-	3,538,951
7	-	-	488,940	-	-	-	488,940
8	-	-	-	-	-	-	-
none	-	4,465,127	-	65,878	334,055	418	4,865,478
Total	3,538,951	4,465,127	488,940	65,878	383,982	418	8,943,296

December 31st 2021	State Treasury	NBP	Banks	Public finance	Other financial institutions	Corporate	Total
1	-	-	-	-	49,787	-	49,787
6	2,840,160	-	142,882	-	-	-	2,983,042
7	-	-	522,753	-	-	-	522,753
8	-	-	-	-	135,233	-	135,233
none	-	2,899,014	-	91,056	346,763	1,121	3,337,954
Total	2,840,160	2,899,014	665,635	91,056	531,783	1,121	7,028,769

The tables present a unified rating scale, as specified below. If an issuer is rated by more than one agency, the highest rating is presented.

For municipal bonds for which there is no active market, internal ratings are assigned, in one of the following categories:

5	Very good credit quality
6-7	Good credit quality
8-9	Satisfactory credit quality
10	Average and poor credit quality

Risk classes for issuers of municipal bonds serviced by the Bank are assigned in accordance with the credit rating methodology for local government units applied by the Bank .

Public finance		
Internal rating	December 31st 2022	December 31st 2021
5	-	9,642
6	3,397	3,450
7	56,173	68,848
8	6,308	9,116
Total	65,878	91,056

6.1.5. Concentration of exposures to industries and geographical markets, with assessment of the concentration risk

As at the 31st of December 2022, the 'Generation and supply of electricity, gas, steam, hot water and air for air conditioning systems' and 'Real estate activities' sectors had significant shares in the lending portfolio of the Group of 12.7% and 11.1%, respectively.

Exposure by industry

Industry	Credit risk exposure	December 31st 2022 % share in total
Generation and supply of electricity, gas, steam, hot water and air for air conditioning systems	1,547,934	12.7%
Real estate activities	1,348,488	11.1%
Wholesale trade, except trade in motor vehicles	1,117,905	9.2%
Construction of buildings	520,401	4.3%
Hospitality	504,505	4.1%
Activities of head offices; management consultancy	357,064	2.9%
Public administration and defence, compulsory social security	343,896	2.8%
Manufacture of food products	343,886	2.8%
Sports, entertainment and recreational activities	307,245	2.5%
Financial services, except insurance and pension funds	223,047	1.8%
Manufacture of chemicals and chemical products	200,593	1.6%
Manufacture of fabricated metal products, except machinery and equipment	169,461	1.4%
Manufacture of wood products and cork, excluding furniture; manufacture of products from straw and plaiting materials	149,743	1.2%
Crop and animal production, hunting and related service activities	149,357	1.2%
Manufacture of other non-metallic mineral products	134,567	1.1%
Other sectors, including:	4,774,159	39.2%
<i>retail clients</i>	2,863,778	23.5%
Total gross amounts due from clients	12,192,251	100.0%
Impairment losses	- 1,109,244	
Security deposits	36,251	
Other amounts due from clients	6,569	
Total net amounts due from clients	11,125,827	

Industry	Credit risk exposure	December 31st 2021 % share in total
Real estate activities	1,542,030	11.9%
Generation and supply of electricity, gas, steam, hot water and air for air conditioning systems	1,396,393	10.8%
Wholesale trade, except trade in motor vehicles	1,273,899	9.8%
Hospitality	574,772	4.4%
Public administration and defence, compulsory social security	480,915	3.7%
Construction of buildings	439,025	3.4%
Sports, entertainment and recreational activities	347,042	2.7%
Manufacture of food products	237,262	1.8%
Activities of head offices; management consultancy	235,909	1.8%
Financial services, except insurance and pension funds	228,854	1.8%
Manufacture of chemicals and chemical products	201,939	1.6%
Crop and animal production, hunting and related service activities	177,240	1.4%
Retail trade, except retail trade in motor vehicles	164,648	1.3%
Manufacture of fabricated metal products, except machinery and equipment	160,067	1.2%
Other sectors, including:	5,124,579	42.4%
<i>retail clients</i>	3,235,211	27.8%
Total gross amounts due from clients	12,584,574	100.0%
Impairment losses	- 1,122,626	
Security deposits	32,768	
Other amounts due from clients	4,750	
Total net amounts due from clients	11,499,466	

6.1.6. Concentration of exposure to particular entities and groups

As at December 31st 2022, the Bank had four individual exposures equal to or exceeding 10% of common equity where the borrower was a single entity or a group of entities linked through equity or otherwise, with the total amount of such exposures at PLN 909,481 thousand, or 52.6% of the Bank's eligible capital.

The largest exposures to a single entity or a group of entities linked through equity or otherwise are presented below.

No.	Exposure*\December 31st 2022
1	245,786
2	224,651
3	224,235
4	214,809
Total	909,481

No.	Exposure*\December 31st 2021
1	321,947
2	253,182
3	238,160
4	211,514
5	211,398
6	209,537
7	184,763
8	180,082
9	175,208
Total	1,985,791

*\ Exposure to an entity includes: gross credit exposures, contingent liabilities (i.e., open credit lines and guarantees), debt securities issued by the entity and FX Spot, FX Forward and FX Swap transactions.

Ten largest client exposures, with risks assessment

December 31st 2022						
No.	Exposure	On-balance-sheet exposures*\	Credit facilities – principal	Securities	Off-balance sheet exposures**\	Balance-sheet equivalent of derivative transactions
1	224,651	80,289	88,805	-	137,595	6,767
2	220,293	220,293	227,471	-	-	-
3	203,098	161,378	160,888	-	41,720	-
4	169,427	53,121	52,695	-	116,305	-
5	166,381	166,381	164,708	-	-	-
6	138,964	138,964	139,010	-	-	-
7	137,865	134,801	134,703	-	-	3,064
8	134,030	134,030	135,071	-	-	-
9	132,066	66,240	66,404	-	65,826	-
10	130,479	128,060	127,930	-	2,419	-

December 31st 2021						
No.	Exposure	On-balance-sheet exposures*\	Credit facilities – principal	Securities	Off-balance sheet exposures**\	Balance-sheet equivalent of derivative transactions
1	238,160	238,160	241,256	-	-	-
2	226,066	160,954	161,629	-	65,112	-
3	223,822	7,120	13,966	-	200,084	16,617
4	211,398	162,574	164,400	-	48,824	-
5	168,187	146,443	147,255	-	21,745	-
6	167,011	130,090	130,276	-	35,160	1,761
7	156,044	155,952	157,028	-	92	-
8	150,371	150,371	151,581	-	-	-
9	145,217	139,221	139,491	-	-	5,995
10	142,882	-	-	142,882	-	-

* On-balance-sheet credit exposures include principal, interest, outstanding fees, discount and other amounts due.

** Off-balance-sheet exposures include credit lines, guarantees, open import letters of credit, accepted bills of exchange, confirmed letters of credit and other commitments.

6.1.7. Maximum exposure to credit risk

The credit risk exposure under particular categories of financial assets is presented below.

Item	December 31st 2022		
	Gross carrying amount	Impairment losses	Maximum credit risk exposure
Amounts due from banks	243,326	- 495	242,831
Financial assets held for trading	263,259	-	263,259
<i>equity securities</i>	16,602	-	16,602
<i>debt securities</i>	20,643	-	20,643
<i>derivative instruments</i>	226,014	-	226,014
Investment securities	9,008,300	- 182	9,008,118
<i>equity securities measured at fair value through other comprehensive income</i>	85,465	-	85,465
<i>debt securities measured at fair value through other comprehensive income</i>	6,915,813	-	6,915,813
<i>debt securities measured at fair value through profit or loss</i>	106,625	-	106,625
<i>debt securities measured at amortised cost</i>	1,900,397	- 182	1,900,215
Amounts due from clients	12,235,116	- 1,109,289	11,125,827
Measured at amortised cost	12,189,201	- 1,109,244	11,079,957
<i>from institutional clients</i>	9,325,693	- 834,772	8,490,921
<i>from retail clients</i>	2,863,508	- 274,472	2,589,036
Measured at fair value through profit or loss	3,050	-	3,050
<i>from institutional clients</i>	2,780	-	2,780
<i>from retail clients</i>	270	-	270
Other amounts due from clients	42,865	- 45	42,820
Other financial assets*\\	298,541	- 30,043	268,498

*\\ Includes mainly cash surplus and amounts due from transactions in financial instruments.

Item	December 31st 2021		
	Gross carrying amount	Impairment losses	Maximum credit risk exposure
Amounts due from banks	401,316	- 569	400,747
Financial assets held for trading	155,705	-	155,705
<i>equity securities</i>	13,308	-	13,308
<i>debt securities</i>	5,321	-	5,321
<i>derivative instruments</i>	137,076	-	137,076
Investment securities	7,109,095	- 164	7,108,931
<i>equity securities measured at fair value through other comprehensive income</i>	85,483	-	85,483
<i>debt securities measured at fair value through other comprehensive income</i>	5,311,853	-	5,311,853
<i>debt securities measured at fair value through profit or loss</i>	129,229	-	129,229
<i>debt securities measured at amortised cost</i>	1,582,530	- 164	1,582,366
Amounts due from clients	12,622,135	- 1,122,669	11,499,466
Measured at amortised cost	12,570,463	- 1,122,626	11,447,837
<i>from institutional clients</i>	9,335,903	- 806,527	8,529,376
<i>from retail clients</i>	3,234,560	- 316,099	2,918,461
Measured at fair value through profit or loss	14,111	-	14,111
<i>from institutional clients</i>	13,460		13,460
<i>from retail clients</i>	651		651
Other amounts due from clients	37,561	- 43	37,518
Other financial assets*\	262,068	- 10,281	251,787

*\ Includes mainly cash surplus and amounts due from transactions in financial instruments.

Credit risk exposures by category of contingent liabilities

Item	Maximum credit risk exposure	
	December 31st 2022	December 31st 2021
Contingent financial liabilities, including:	2,672,372	2,814,089
open lines of credit, including:	2,657,528	2,793,138
<i>revocable</i>	2,195,331	2,337,580
<i>irrevocable</i>	462,197	455,558
<i>open import letters of credit</i>	14,844	20,951
Guarantees and sureties	466,518	450,033
Foreign exchange and interest rate transactions*	4,345,119	4,913,107

*\ In 2022, the items included:

- foreign exchange and currency derivative transactions of PLN 1,122,098 thousand
- interest rate derivative transactions of PLN 2,965,021 thousand
- interest rate swap transactions of PLN 258,000 thousand

*\ In 2021, the items included:

- foreign exchange and currency derivative transactions of PLN 940,707 thousand
- interest rate derivative transactions of PLN 3,714,400 thousand
- interest rate swap transactions of PLN 258,000 thousand

In accordance with the procedures in place at the Bank, contingent liabilities are subject to the same collateral and monitoring requirements as on-balance-sheet transactions.

The frequency of monitoring institutional clients (corporates) depends mainly on the size of credit exposure and the economic and financial standing of the client (rating).

Monitoring of institutional clients includes verification of:

1. rating of the client (including verification against selected external databases),
2. rating of the client's group,
3. assessment of the transaction (monitoring of collateral, contract terms (covenants) and project financed/co-financed by the Bank).

The frequency and scope of monitoring of institutional clients (micro-enterprises, housing communities) are dependent on the amount of exposure to the particular client.

Monitoring of micro-enterprises, housing communities includes:

1. monitoring of events subject to monitoring,
2. monitoring the economic and financial standing.

In the case of micro-enterprises, client verification against selected external databases is also performed.

6.1.8. Forbearance practices

The forbearance status is assigned to exposures where there has been a change in the contractual terms of the loan agreement, amounts due or investment measured at amortised cost if:

1. it results from the debtor's or the issuer's financial distress, or
2. where failure to amend the contractual terms would result in the exposure becoming non-performing, which would not have occurred had the debtor or the issuer not been in financial distress.

In particular, the following are considered forbearance facilities provided to clients:

1. payment holidays,
2. partial reduction of principal and / or partial waiver of incidental dues,
3. extension of the facility term,
4. reduced interest rate,
5. acceptance of non-performance of the contractual terms by the borrower the while the borrower fails to deliver financial projections,
6. the Bank's consent to sale or repossession of the collateral to repay the liability,
7. capitalisation of interest,
8. change of the debtor or the debt being taken over or acceded to by third parties.

If a forbearance agreement is properly performed, the debt becomes a performing exposure.

Restructuring is an indication of impairment.

For individually significant exposures the conclusion of a forbearance agreement due the debtor being in financial distress, the exposure must be tested for impairment to determine whether an impairment loss should be recognised.

For individually non-significant exposures the conclusion of a forbearance agreement due the debtor being in financial distress, an impairment loss must be recognised for the exposure.

Reversal of an impairment loss (i.e., reclassification to a healthy portfolio) is possible after the indicator of impairment ceased to exist and a 12-month quarantine period has elapsed. Restructured transactions for which the evidence of impairment ceased to exist, the quarantine period in which the evidence of impairment was not identified has passed, and in relation to which no impairment is recognised are allocated to Bucket 2. For such exposures, expected losses are recognised for the remaining life of the exposure.

Restructuring agreements are monitored on an ongoing basis for compliance with the contractual terms.

An exposure ceases to be classified as forborne (the forbearance status is removed) when all of the following conditions are met:

1. a loan agreement is considered a non-risk where the exposure was reclassified from the at-risk category, after assessment of the debtor's financial standing, which has confirmed sustainable improvement of the debtor's financial condition,
2. at least 24 months (trial period) have elapsed from the date when the exposure was considered as not being at risk, and during at least half of the trial period the debtor made regular payments of principal and interest, with delays not exceeding 30 days,
3. at the end of the trial period, none of the exposures to the debtor is past due for more than 30 days.

The accounting policies for forborne financial assets do not differ from those applied to other assets of the Group. The Group measures forborne facilities and amounts due at amortised cost, using the effective interest rate method. Where the terms of a loan, an amount due or investment measured at amortised cost are renegotiated due to financial distress of the debtor or the issuer, such exposure is measured using the original effective interest rate determined prior to the provision of any forbearance facilities.

Below is presented the credit risk exposure to of individual forborne transactions (with respect to which forbearance facilities have been provided):

December 31st 2022	Impaired receivables			Unimpaired receivables		
	Gross carrying amounts	Allowances for expected credit losses	Maximum credit risk exposure	Gross carrying amounts	Allowances for expected credit losses	Maximum credit risk exposure
Total amounts due	927,849	- 437,375	490,474	15,639	- 462	15,177
Amounts due from retail clients, including:	122,609	- 87,386	35,223	2,073	- 106	1,967
<i>individually measured*</i>	56,149	- 32,064	24,085	-	-	-
Amounts due from institutional clients, including:	805,240	- 349,989	455,251	13,566	- 356	13,210
<i>individually measured*</i>	797,967	- 344,400	453,567	-	-	-

December 31st 2021	Impaired receivables			Unimpaired receivables		
	Gross carrying amounts	Allowances for expected credit losses	Maximum credit risk exposure	Gross carrying amounts	Allowances for expected credit losses	Maximum credit risk exposure
Total amounts due	865,288	- 470,856	394,432	55,312	- 2,218	53,094
Amounts due from retail clients, including:	136,625	- 92,043	44,582	15,252	- 1,060	14,192
<i>individually measured*</i>	66,991	- 34,487	32,504	-	-	-
Amounts due from institutional clients, including:	728,663	- 378,813	349,850	40,060	- 1,158	38,902
<i>individually measured*</i>	720,557	- 372,168	348,389	-	-	-

*\ Amounts due from clients with indication of impairment but with no impairment identified given the estimated cash flows are measured using the group method.

6.2. Financial risk in the bank book and the trading book, and risk limits

The financial risk in the Group is concentrated mainly at the Bank and at Dom Maklerski BOŚ S.A. (DM BOŚ S.A.) and includes:

1. liquidity risk,
2. market risk, including:
 - a. interest rate risk (in the banking book and the trading book),
 - b. currency risk (mainly in the trading book; currency risk from the banking book is transferred to the trading book),
 - c. other risks (general and specific risk of equity instruments, commodities risk and position risk in collective investment undertakings).

Liquidity risk and interest rate risk occur mainly at the Bank, and currency risk – at DM BOŚ S.A. (in the trading book and the non-trading book) and at the Bank (in the trading book; currency risk from the banking book is transferred to the trading book). DM BOŚ S.A. is also exposed to equity risk, commodity price risk and position risk at collective investment undertakings.

The key principles of financial risk management at Bank Ochrony Środowiska S.A. and at the Group are set out in the Banking Risk Management Strategy. This strategy is an integral part of the Bank's Strategy.

The risk management system at the Group includes examination of individual risks related to both the Bank's and the Group's operations. The Bank, as the parent, oversees the risk management system at the Group. The risk management process is subject to periodic reviews aimed at adapting the process to changes in the environment and taking into account changes occurring within the Bank and the Group.

The Bank manages risks on the basis of the risk appetite and tolerance determined by the Supervisory Board using a set of internal limits. The Group has in place policies to manage liquidity risk, interest rate risk in the banking book and market risk in the trading book, which define, among other things, maximum levels of financial risk, consistent with the risk appetite adopted by the Supervisory Board of the Bank. Based on these, an early warning system has been established which focuses on identifying, measuring, monitoring, controlling and reporting the risks.

Transactions in the banking book represent the core business of the Bank, which means that they result from commercial operations, including raising financing and efficient management of financial liquidity. The banking book includes positions which are not included in the trading book, in particular:

1. granted credit facilities and guarantees, as well as accepted deposits, including term deposits,
2. liquidity- and interest-rate hedges of transactions carried in the banking book,
3. purchase of securities for non-trading purposes.

In line with the Group's strategy, the trading book business is complementary to the banking book business. The trading book contains transactions that were entered into by the Bank on its own account for trading purposes, i.e., to gain financial profits in short-term periods due to actual or expected differences between bid and offer prices in the market, as well as other movements of prices or price parities, including in particular interest rates and foreign exchange rates. Transactions held in the trading book are not sold for liquidity purposes. The purpose of the trading book is to ensure the highest quality of services for clients. To this end, the Bank and Dom Maklerski BOŚ S.A. maintain open positions within the applicable risk limits.

The purpose of risk management by the Group is to maintain individual risks at the level consistent with the approved risk appetite and tolerance in order to protect the value of shareholders' capital, maintain the safety of client deposits and achieve adequate efficiency of the Group's operations, including ensuring the Group's ability to adapt its operations to changing market conditions, competence and commitment of managers and employees, and the quality of management information systems.

In 2022, the Group monitored the economic and market situation associated with the geopolitical crisis and analysed its impact on financial risks, including the market and liquidity risks. Although the levels of individual risks have increased compared to the pre-crisis period, they have generally remained within the limits adopted by the Group.

In 2022, the main objectives, principles and organisation of the financial risk management process at the Group did not change. The level and profile of financial risk is monitored on a regular basis by the Financial Risk Department (2nd line of defence) of the Bank and by the Risk Management Department of DM BOŚ S.A. and reported to the Supervisory Board of the Bank, the Supervisory Board of DM BOŚ S.A., the Risk Committee (at the Supervisory Board of the Bank), the Management Board of the Bank, the Management Board of DM BOŚ S.A., the Committee of Assets and Liabilities Management (ALCO) and the ALCO Liquidity and Market Risk Committee (ALCO LMRC).

6.2.1. Liquidity risk

The purpose of liquidity management by the Group is to maintain the ability to finance assets and pay liabilities in a timely manner and to maintain a sustainable structure of assets and liabilities, which ensures a safe liquidity profile in specific time bands, split into liquidity in PLN and the main foreign currencies, but mostly – for the total liquidity position.

The liquidity risk management strategy and processes are tailored to the Bank's business profile and scale. The liquidity risk management strategy is set out in the Liquidity Strategy of BOŚ S.A. approved by the Supervisory Board. The strategy defines the Bank's risk appetite, designates key directions and quantitative targets for selected volumes, and is an integral part of the Bank's Strategy. The liquidity risk tolerance, adjusted to the Bank's risk appetite through a system of internal limits and warning values, is set out in the Liquidity Management Policy approved by the Supervisory Board.

The structure and organization of the liquidity risk management function includes all levels of the Bank's organizational structure and operates within the three lines of defence. A particular role in the liquidity risk management process is played by the Management Board of the Bank and the ALCO Committee (supported by the ALCO LMRC Committee).

The Bank's liquidity is analysed over the following time horizons:

1. intra-day liquidity – during the day;
2. current liquidity – in the period up to 7 days;
3. short-term liquidity – in the period up to 1 month;
4. medium-term liquidity – in the period of above 1 month to 12 months;
5. long-term-term liquidity – in the period of more than 12 months.

To measure the liquidity and intra-day, current and short-term liquidity risk, the Bank uses the following measures and tools:

1. the level of intraday liquidity – reflects the level of funds required to be maintained in the Bank's account with the National Bank of Poland to enable the Bank to pay its liabilities during the day, in both normal and stress situations,
2. liquid assets (excess liquidity) – a buffer for expected and unexpected outflows over a period of 30 days,
3. liquidity reserve – which measures the level of liquid assets less expected and unexpected outflows, determined for a period of 30 days,
4. net liquidity coverage ratio (%)
5. assessment of the stability of the deposit base,
6. short-term liquidity gap (for PLN, EUR, CHF and USD) – showing the level of mismatch in foreign currency funding structures; the gap consists primarily of flows from wholesale and derivatives transactions,
7. stress tests (which enable the Bank to, among other things, verify its ability to maintain liquidity in a defined time horizon under particular scenarios).

For the purpose of measuring liquidity as well as the medium- and long-term liquidity risk, the Bank sets and monitors:

1. the contractual and actual liquidity gap (which is supplemented by regular analyses of the stability of the deposit base, the concentration of the deposit base, the amount of loan prepayments and the level of deposit breakage),
2. the non-current assets to non-current liabilities ratio;
3. the coverage of loans used by clients to finance long-term needs with the most stable sources of funding (LKD);
4. the net stable funding ratio (NSFR),
5. the forecast of LCR, NSFR and liquid assets.

In order to assess the effectiveness of the liquidity risk management process, for most of the above measures, alert limits or values are set within a set of internal liquidity risk limits whose structure is hierarchical (i.e., they are set at the level of the Supervisory Board, the Management Board and the ALCO Committee). The limits and warning values in place are reviewed regularly so that liquidity can be monitored effectively. The limits and warning values define the framework for the Bank's liquidity tolerance and are consistent with the Bank's risk appetite. The shaping of an appropriate liquidity risk profile is supported by taking into account the cost of liquidity under the Bank's transfer pricing system.

The measures and tools used by the Bank are reviewed on a regular basis and are regularly updated to better map the liquidity profile. The process of monitoring liquidity and liquidity risk in the Bank is supported by a dedicated IT system (used in particular to generate reports on contractual and actual liquidity gaps, on regulatory liquidity measures and on internal limits, and to prepare mandatory reports). At least once a year, the Bank prepares a review of the Internal Liquidity Adequacy Assessment Process (ILAAP), in compliance with the EBA/GL/2016/10 Guidelines on ICAAP and ILAAP information collected for SREP (Supervisory Review and Evaluation Process) purposes.

Liquidity risk reports are presented to all the Bank's units involved in the liquidity risk management process. Results of the risk analysis, the degree of utilization of regulatory standards and internal limits, as well as results of stress tests are presented in reports prepared for the ALCO Committee (on a weekly basis), for the Management Board and the ALCO Committee (on a monthly basis), and for the Supervisory Board and its Risk Committee (on a quarterly basis). The reports are part of the Management Information System the purpose of which is to support the Bank's management, streamline the performance of its tasks and ensure the safety and stability of its operations.

Overall liquidity risk profile

The main source of funding for the Bank continues to be a systematically built and diversified deposit base with a share of stable retail deposits (and deposits from corporate clients and the public sector), followed by loans from international financial institutions (which, together with long-term bilateral interest rate swap agreements secured by debt papers and FX swap transactions, constitute a source of liquidity funding in foreign currencies). The Bank monitors the risk of concentration of the deposit base on an ongoing basis. The internal liquidity measures take into account an additional concentration surcharge on stable funds, calculated on the basis of deposit balances for large deposits and deposits of large clients (classified in accordance with the definitions applied at the Bank).

The Bank's liquid assets (excess liquidity) are primarily held in the form of highly liquid NBP bills (as at December 31st 2022, representing 57% of the liquid portfolio of unsecured securities) and Treasury bonds (December 31st 2022: 41%), posing a low specific risk. The portfolio of these securities is supplemented with cash and funds held with the National Bank of Poland (above the declared obligatory reserves) and in nostro accounts with other banks. As at 31 December 2022, the amount of liquid assets was PLN 7,888 million. Liquid assets constitute a buffer to secure liquidity in potential crisis situations, i.e., they can be pledged, liquidated under repo transactions or sold at any time without significant loss of value. The Bank's ability to sell liquid assets (product liquidity risk) is monitored on a regular basis. The primary considerations in these analyses are issue size, market turnover, and bid/ask price volatility.

In accordance with the recommendations of the Polish Financial Supervision Authority and the National Bank of Poland, the Bank may use additional sources of funding in the form of a technical loan and a lombard loan from the NBP and, exceptionally, it may apply for a refinancing facility from the NBP.

The Bank determines internal capital for liquidity risk, which is considered a significant constant risk, in accordance with the applicable internal capital estimation process. This capital is estimated on the basis of the cost of restoring regulatory and internal measures and liquidity limits under the conditions of stress test scenarios.

Measures of liquidity risk

The Bank determines regulatory measures of liquidity in accordance with the following regulations: the CRR Regulation and Regulation 2019/876 on prudential requirements for credit institutions and investment undertakings (amending Regulation 575/2013 Regulation) and related delegated and implementing regulations as regards liquidity.

The currently applicable norms regarding short-term liquidity include the liquidity coverage requirement – LCR (the ratio of liquid assets to net outflows (i.e., the difference between net outflows and net inflows) for a 30-day period of extreme conditions). The LCR is calculated on an aggregated basis for all currencies (translated into PLN) and separately for significant currencies, i.e., for PLN and EUR. For the ratio in EUR, the Bank identifies a currency mismatch related to the method of financing long-term loans granted in this currency.

The Bank is required to satisfy a stable funding requirement, which as of June 2021 is referred to as the net stable funding ratio (NSFR) requirement. It is calculated as the ratio of the institution's available stable funding to the amount of the stable funding required. The NSFR ratio, as the LCR ratio, should be maintained at a minimum of 100%.

The Bank, in accordance with Commission Implementing Regulation (EU) 2021/451 of December 17th 2020 regarding the reporting of additional liquidity monitoring metrics, prepares and submits ALMM reports to the NBP.

In accordance with EBA/GL/2017/01 Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 of Regulation (EU) No 575/2013, the Bank presents quantitative and qualitative data on the net liquidity coverage ratio, the net stable funding ratio and the liquidity risk in the Information on BOŚ Group. Such disclosures comply with the instructions given by the European Banking Authority.

The Bank also performs an in-depth analysis of its long-term liquidity. Results of these analyses are used to manage the Bank's liquidity. At the same time, the process of preparing short- and long-term financial plans of the Bank includes assessment of liquidity, to ensure an adequate financing structure and compliance with the supervisory liquidity measures.

In 2022, the supervisory liquidity measures, i.e., LCR and NSFR, were calculated daily (i.e., every working day), and remained at a safe level, significantly above the regulatory requirements. As at 31 December 2022, these measures were as follows:

Metric*	December 31st 2022	December 31st 2021
LCR	185%	141%
NSFR	157%	133%

*/LCR and NSFR for the Group.

The Bank has in place an Emergency Liquidity Action Plan approved by the Management Board, which sets out potential sources of deterioration/loss of liquidity, rules of conduct and contingency powers. It is intended to estimate the survival horizon as well as the ability and costs of restoring stable liquidity. This plan, in addition to a scenario analysis of liquidity in contingencies (the assumptions of which are consistent with the stress tests performed), also includes measurable and non-measurable symptoms ahead of contingencies, allowing for systematic monitoring of the sources of liquidity crises.

The contingency liquidity scenario analyses and stress tests include three types of scenarios:

1. internal crisis – its source is the loss of confidence in the Bank by market participants ("bank run"), reduced availability of financing, materialisation of concentration risk and downgrading of the Bank's rating,
2. external crisis – assumes materialization of currency risk, rising interest rates, crisis in financial markets and possible second round effects,
3. mixed crisis – a combination of elements of both internal and external crises.

The purpose of stress tests is to allow the Bank to identify potential factors that could lead to liquidity risk and to develop necessary measures to be implemented in the event of a crisis situation. This includes scenarios such as the COVID-19 pandemic or geopolitical developments like the situation in Ukraine.

As part of its analysis, the Bank also carries out a sensitivity analysis for individual factors generating liquidity risk, as well as reverse tests. The contingency liquidity plan shall be regularly reviewed and updated so as to ensure that the Bank is operationally prepared to activate potential measures that can be taken in the event of a liquidity risk. The contingency liquidity scenario analysis is carried out a semi-annual basis and stress tests – on a monthly basis. The assumptions adopted for stress tests are regularly reviewed to account for conclusions of the scenario-based analysis contingency liquidity analysis. Conclusions from the tests are used in managing liquidity and liquidity risk and are the basis for building the structure of assets and liabilities.

In its analyses, the Bank also takes into account the possibility of unfavourable changes in foreign exchange rates, in particular CHF and EUR, potentially triggering increased liquidity needs.

In accordance with the annexes to the credit support master agreements with counterparties, specifically the Credit Support Annex (CSA) and Credit Support Annex for Variation Margin (CSA VM), the Bank is obligated to provide additional variation margin based on position measurement in the event of adverse market changes, such as unfavourable movements in exchange rates. In case of favourable market movements, the Bank receives variation margin from the counterparties. The master agreements and annexes executed by the Bank do not contain any clauses which would trigger changes in margin amounts due to a change in the Bank's credit rating. This means that any rating downgrade would not affect the amount and method of calculating the variation margins.

Internal stress tests performed in 2022, as in 2021, demonstrated that the Bank had a stable liquidity position and its liquid assets (excess liquidity) allowed it to survive the stress test scenarios in which the Bank assumed survival over a certain period of time.

In 2022, as in 2021, the Bank's liquidity position was monitored on a regular basis and remained safe.

The tables below present the adjusted liquidity gap (carrying amounts):

December 31st 2022	1M	1-3M	3-6M	6-12M	1-5Y	Over 5Y	Total
Liquidity gap ratio	2.38	1.38	1.06	0.90	1.03	1.00	
Total assets	6,795,394	498,745	436,407	980,217	7,998,310	5,297,109	22,006,181
<i>of which amounts due from clients</i>	77,136	322,798	434,057	923,782	5,733,857	3,634,197	11,125,827
Total equity and liabilities	2,858,371	2,434,531	2,027,765	2,388,492	6,474,665	5,822,357	22,006,181
<i>of which amounts due to clients</i>	2,390,766	2,433,144	2,025,406	2,288,228	5,907,102	3,776,163	18,820,809
Gap	3,937,023	-1,935,786	-1,591,358	-1,408,275	1,523,645	-525,248	-
Accumulated gap	3,937,023	2,001,237	409,879	-998,396	525,249	-	-

December 31st 2021	1M	1-3M	3-6M	6-12M	1-5Y	Over 5Y	Total
Liquidity gap ratio	2.70	1.61	1.22	1.02	0.99	1.00	
Total assets	5,672,794	478,383	787,264	1,324,919	6,056,890	5,909,310	20,229,559
<i>of which amounts due from clients</i>	122,110	325,285	608,460	1,267,123	4,654,215	4,522,273	11,499,466
Total equity and liabilities	2,101,812	1,717,094	1,850,119	2,462,523	6,366,661	5,731,350	20,229,559
<i>of which amounts due to clients</i>	1,590,766	1,633,144	1,757,680	2,288,228	5,907,102	3,830,943	17,007,863
Gap	3,570,982	-1,238,711	-1,062,855	-1,137,604	-309,771	177,960	-
Accumulated gap	3,570,982	2,332,271	1,269,416	131,812	-177,959	-	-

Derivative instrument cash flows (gross settlements)

The table below presents the maturities of derivative instruments by contractual terms as at December 31st 2022 and December 31st 2021 (undiscounted amounts):

December 31st 2022	1M	1-3M	3-6M	6-12M	Over 1Y	Total
Inflows, including:	1,023,115	84,389	49,255	61,138	283,037	1,500,934
FX forward	96,245	65,761	23,550	10,035	-	195,591
FX Spot	457,660	-	-	-	-	457,660
FX Swap	459,253	7,185	-	-	-	466,438
IRS	9,957	11,443	25,705	51,103	283,037	381,245
Outflows, including:	1,024,936	81,031	45,229	47,727	232,732	1,431,655
FX forward	95,013	64,628	22,115	8,663	-	190,419
FX Spot	458,072	-	-	-	-	458,072
FX Swap	460,006	7,323	-	-	-	467,329
IRS	11,845	9,080	23,114	39,064	232,732	315,835

December 31st 2021	1M	1-3M	3-6M	6-12M	Over 1Y	Total
Inflows, including:	375,771	330,891	167,460	119,354	214,252	1,207,728
FX forward	64,664	143,333	117,052	65,075	-	390,124
FX Spot	110,792	-	-	-	-	110,792
FX Swap	196,416	183,354	39,407	20,614	-	439,791
IRS	3,899	4,204	11,001	33,665	214,252	267,021
Outflows, including:	378,732	342,619	166,304	114,084	181,899	1,183,638
FX forward	64,099	142,444	113,231	64,101	-	383,875
FX Spot	110,845	-	-	-	-	110,845
FX Swap	199,809	194,348	42,674	22,574	-	459,405
IRS	3,979	5,827	10,399	27,409	181,899	229,513

Derivative instrument cash flows (net settlements)

December 31st 2022	1M	1-3M	3-6M	6-12M	Over 1Y	Total
Inflows, including:	-	145	-	19,145	-	19,290
Forward contracts	-	145	-	-	-	145
CFD	-	-	-	19,145	-	19,145
Outflows, including:	-	117	346	1,876	-	2,339
Forward contracts	-	117	346	176	-	639
Forward contracts	-	-	-	-	-	-
CFD	-	-	-	1,700	-	1,700

December 31st 2021	1M	1-3M	3-6M	6-12M	Over 1Y	Total
Inflows, including:	78	1,583	-	20,566	-	22,227
Forward contracts	78	1,583	-	44	-	1,705
CFD	-	-	-	20,522	-	20,522
Outflows, including:	-	94	38	4,031	-	4,163
Forward contracts	-	94	38	-	-	132
Forward contracts	-	-	-	-	-	-
CFD	-	-	-	4,031	-	4,031

6.2.2. Interest rate risk

Interest rate risk refers to the present or potential risk of a decrease in both Bank's income and economic value due to unfavourable fluctuations in interest rates, impacting interest rate-sensitive instruments. This risk is associated with factors such as mismatch risk, basis risk, and option risk. The interest rate risk is primarily generated in the Bank, both in the banking book and the trading book.

Interest rate risk in the banking book

The main purpose of interest rate risk management in the banking book is to seek stabilization and optimization of net interest income ('NII') while limiting the negative effect of market interest rate movements on economic value of equity ('EVE').

To achieve this, the Bank uses two tools: the investment portfolio held and derivative transactions entered into as part of hedge accounting. The investment portfolio, built in the banking book, should help to, among others, secure net interest income generated by the Bank's equity and to secure core deposits in current accounts insensitive to interest rate movements. On the other hand, this portfolio is a source of volatility of the revaluation reserve.

The Bank applies fair value hedge accounting. Its purpose is to secure the fair value of the fixed-rate Treasury bonds, which are part of the HtC&S bond portfolio and also serve as the Bank's liquidity buffer. IRS hedging transactions reduce the extent of capital fluctuations caused by movements in interest rates.

Monitoring of interest rate risk in the banking book is supported by a dedicated IT system which the Bank uses in particular to determine/perform:

1. repricing gap, presenting the values of assets, liabilities and on-balance-sheet items sensitive to interest rate movements at maturity or repricing,
2. simulation of net interest income – a dynamic analysis reflecting the projection of net interest income over a given period of time, based on the Bank's growth scenarios, as well as assumptions regarding market factors,
3. net present value (NPV) simulation, presenting values of all cash flows discounted at given market parameters; results of the NPV analysis are used to calculate EVE,
4. price shocks for basis risk analysis, the purpose of which is to estimate the impact on the net interest income of varying changes in interest rates of products whose interest rates are based on different base rates,
5. unparallel mismatch risk analysis, which aims to estimate the impact on the economic value of equity of unparallel movements in the shape of the yield curve,
6. client option risk analysis, whose objective is to assess the impact of client options embedded in interest bearing products on the Bank's financial result,
7. stress tests, including reverse tests and the Supervisory Outlier Test – the objective is to determine how extreme changes in market factors affect the net interest income and the economic value of equity,
8. the level of internal capital for interest rate risk in the banking book.

Measures of interest rate risk in the banking book

In order to manage interest rate risk in the banking book, the Bank employs two measures: sensitivity of net interest income (NII) to a +/-200 basis points (bps) variation in interest rates (until December 19th 2022, a +/-100 bps shock was considered for management purposes), and sensitivity of the economic value of capital (EVE) to a +/-200 bps change in interest rates. Interest rate risk in the banking book is measured on the basis of product characteristics (capital flow schedules, interest rate re-pricing, embedded options), resulting from contracts with counterparties. For current products where the client may flexibly determine, among other things, the repayment schedule or use of funds, the Bank builds replicating portfolios that reflect the economic timing of capital flows. In the replicating portfolios, the average maturity of deposits with undetermined maturity is 6 months, and the maximum maturity is 12 months. The Bank also takes into consideration client behaviour patterns, such as: early credit repayment levels or deposit breakage levels, which are estimated in accordance with internal regulations of the Bank. The assumptions are consistent with the EBA/GL/2018/02 Guidelines on the management of interest rate risk arising from non-trading book activities.

The following table provides a comparison of the NII and EVE measures between December 31st 2022 and December 31st 2021:

Date	ΔNII				ΔEVE	
	-100 bps	+100 bps	-200 bps	+200 bps	-200 bps	+200 bps
December 31st 2022	-30,759	31,822	<u>-78,285</u>	<u>64,606</u>	118,472	-112,632
December 31st 2021	<u>-68,395</u>	<u>41,247</u>	-149,283	79,509	84,372	-102,232
Change¹	37,636	-9,425	70,998	-14,903	34,100	-10,400

¹ Due to the adjustment in the magnitude of the interest rate shock for the NII sensitivity measure on December 19th 2022, the relevant measures for each date are indicated in the table with an underline.

In 2022, both NII and EVE were within limit/at warning levels consistent with the risk appetite and risk tolerance approved by the Supervisory Board. Changes in the values of these measures have a certain cyclical nature, which is due to the regular approximation of the timing of the repricing of floating rate positions and the maturity of fixed rate positions. In 2022, the sensitivity of net interest income to a decline in market interest rates decreased significantly, due in part to the Monetary Policy Council's continued tightening of monetary policy and the Bank's decisions to increase interest rates on time deposits and savings accounts. The asymmetrical impact of interest rate movements on NII in the scenarios of falling and rising interest rates results from the characteristics of interest rates on specific items sensitive to interest rate movements, including reduction of interest rates on certain sources of financing to 0%, under the conditions of the analysed market interest rate movements (i.e., by -200 bps). Due to the increase in market rates in 2022, the impact of this effect began to diminish last year. The increase in the sensitivity of EVE to rising interest rates was influenced, among other factors, by the higher valuation of IRS transactions.

In accordance with the EBA/GL/2018/02 Guidelines on the management of interest rate risk arising from non-trading book activities the Bank is obliged to carry out a Supervisory Outlier Test (SOT).

Results of (SOT) for the six standard shock scenarios specified in the Guidelines are presented in the table below.

Date	ΔEVE in a given SOT scenario					
	parallel upward shift of the interest rate curve	parallel downward shift of the interest rate curve	steepener shock ¹	flattener shock ²	short rates shock up ³	short rates shock down ³
December 31st 2022	-98,900	51,697	21,499	-64,830	-94,513	37,161
December 31st 2021	-81,118	21,719	5,598	-64,604	-89,159	5,843
Change	-17,782	29,978	15,901	-226	-5,354	31,318

¹ sharper shock (decrease in short-term rates and increase in long-term rates),

² more moderate shock (increase in short-term rates and decrease in long-term rates),

³ interest rate shocks in the short run are extinguished in longer tenors.

The results of the SOT analysis indicate that, as of the end of 2022, the Bank was most exposed to a decline in EVE in the Parallel Up scenario for the interest rate curve. This is a change from the previous year – at year-end 2021, the most severe scenario was the short shock up (Short Up) scenario. The sensitivity of the economic value of the Bank's equity in the two most severe scenarios (i.e. Short Up and Parallel Up) increased relative to 2021. Across all scenarios, the sensitivity of the economic value of equity remains significantly below the supervisory warning levels and limits. This indicates a low level of exposure to interest rate risk.

Once a month, the Bank conducts stress testing analysis, examining the development of the interest rate risk in the banking and trading book in case of materialisation of extreme changes in risk factors. In the bank book, the Bank examines the impact of these scenarios on the following elements:

1. sensitivity of the net interest income (NII):
 - scenarios of parallel shifts of interest rate curves within the range of [-500 bps, +500 bps],
 - scenarios of exchange rate movements by ±5%, ±10% and ±25%,
 - scenarios of cumulative changes in the parallel shifts of interest rate curves by ±100/200 bps and ±500 bps, and foreign exchange rates by ±5%, ±10% and ±25%,
2. sensitivity of the economic value of equity (EVE):
 - scenarios of parallel shifts of interest rate curves within the range of [-500 bps, +500 bps],
 - scenarios of exchange rate movements by ±5%, ±10% and ±25%,
 - scenarios of cumulative changes in the parallel shifts of interest rate curves by ±200 bps and ±500 bps, and foreign exchange rates by ±5%, ±10% and ±25%,
3. sensitivity of revaluation reserve in scenarios of interest rates movements within the range [-500 bps, +500 bps],
4. sensitivity of the present value of the bond portfolio in scenarios of interest rate movements within the range of [-500 bps, +500 bps] – by issuer (SP&NBP (excluding FVH), corporations, local governments) and by portfolio (H2C&S (excluding FVH), H2C).

The Bank also conducts reverse tests:

1. for the EVE – tests of the impact of changes in market factors, the purpose of which is to show when the sensitivity of the EVE falls below 20% of equity,
2. for the NII:
 - tests to show when the NII sensitivity falls below the appetite level,
 - tests designed to identify areas of vulnerability to risks arising from collateral and risk management strategies and behavioural responses of clients.

The results of the stress test as at December 31st 2022 show that, in extremely adverse market conditions and the Bank's increased exposure to instruments sensitive to interest rate risk, the banking book risk remained at a safe level.

Given the nature of the Bank's business and the structure of its securities portfolio, the interest rate risk in the banking book is consistently significant. The Bank, as part of the ICAAP process, estimates internal capital for this risk. In accordance with supervisory and internal regulations, internal capital for interest rate risk in the banking book refers to both potential changes in the economic value of equity and net interest income due to adverse movements of interest rates and is adjusted to the structure and nature of the Bank's business.

In order to hedge the interest rate risk of 10-year fixed-rate PLN 150 million BGK bonds (issued to the COVID-19 Fund and guaranteed by the State Treasury) held within the HtC&S business model, as of July 2020 the Bank applies the option of measurement at fair value through profit or loss (the FVPL option). The related IRS hedging transactions enable the Bank to change interest on the bonds accrued at a fixed interest rate into interest accrued at WIBOR 6M plus margin, which hedges the Bank's position against adverse effects of potential increase in market interest rates.

Results of monitoring the banking book interest rate risk are presented in weekly reports prepared for the Liquidity and Market Risk ALCO Committee, in monthly reports prepared for the Assets and Liabilities Committee and the Management Board, and in quarterly reports prepared for the Risk Committee and the Supervisory Board (quarterly).

Interest rate risk in the trading book

The objective of interest rate risk management in the trading book is to achieve a financial result in this line of business in keeping with the financial plan, at an acceptable level of exposure of the Bank to the risk, and to minimise the adverse effects of holding interest rate-sensitive instruments in the trading book.

Measures of interest rate risk in the trading book

In order to monitor the interest rate risk, the Bank uses:

1. the value at risk (VaR) model determined for the 99% confidence level based on daily volatility of interest rates for 250 business days preceding the date of analysis,
2. the basis point value (BPV), i.e., sensitivity of securities and derivative instruments generating the interest rate risk to a 1 pp movement of interest rates,
3. a system of limits,
4. stress tests.

In 2022, there were no significant changes in the techniques applied to measure the interest rate risk of the Bank's trading book.

The value of interest rate VaR in the trading book and the impact of the stress test scenario – parallel movement of IRS and BOND yield curves by -200 bps – on the Bank's profit or loss in annual periods are presented below (maximum, minimum, mean and as at the reporting date).

Date	10-day VaR				Stress tests ± 200 bps
	mean	max	min	as at*	as at
December 31st 2022	551	1,093	128	574	-1,041
December 31st 2021	249	822	49	373	-1,018

*On December 30th 2022, a limit was set on the 1-day Value at Risk (VaR). To facilitate comparison, the 1-day VaR has been adjusted to the 10-day VaR scale.

In order to verify the value-at-risk model, the Bank performs a back-testing analysis on a monthly basis, calculated by comparing the maximum losses from the VaR model with actual gains and losses and theoretical changes in profit or loss resulting from revaluation of positions. Results of monthly back-testing are presented in management reports.

The system of interest rate risk limits in the trading book includes:

1. the 10-day VaR limit, as of December 30th 2022, the 1-day VaR limit applies;
2. the BPV limit for instruments generating interest rate risk in the trading book, both intra-day and end-of-day, separately for positions in debt securities and for IRS, and combined for these instruments,
3. maximum, two-day and monthly trailing loss limits for assets in the trading book.

The utilisation of each limit is calculated and monitored as at each business day, and for BPV limits – also during the day, and reported to the management on a regular basis.

Once a month, the Bank conducts stress testing analysis, examining the development of the interest rate risk in the banking and trading book in case of materialisation of extreme changes in risk factors.

In the trading book, the Bank examines the impact of extreme adverse movements of market interest rates on the Bank's profit or loss as well as the volatility of interest rates over 250 business days and the correlation between the interest rate volatility and VaR using both the historical and parametric methods. The historical method considered the volatility of interest rates, taking into account various factors such as geopolitical crises that contribute to fluctuations in interest rates.

The Bank uses the following scenarios to analyse the impact of stress:

1. historical:
 - parallel movements of the yield curves (including fat tails and spread),
 - curvature of the yield curves,
 - changes in the slope of yield curves,
2. parametric:
 - parallel movement of the yield curves,
 - increase in interest rate volatility,
 - extremely adverse changes in the correlation of interest rates.

Stress test scenarios are also run for market liquidity changes and for situations where positions cannot be closed.

Results of the analysis show that in the event of extremely adverse market conditions and the Bank's increased exposure to instruments sensitive to the interest rate risk both the Bank's banking and trading positions are maintained at a safe level.

Results of monitoring the interest rate risk in the banking book and the trading book are reported: weekly to the Liquidity and Market Risk ALCO Committee, monthly to the ALCO Committee and the Management Board, and quarterly to the Risk Committee and the Supervisory Board (with the results of the stress tests). Additionally, results of the analysis of interest rate risk in the trading book are communicated to members of the Management Board and the ALCO Committee as part of daily reports.

The Monetary Policy Council's eight rate increases by a total of 5 p.p. made in response to, among other factors, the geopolitical crisis, did not lead to any material increase in the interest rate risk in the trading book. The interest rate risk metrics in the trading book was monitored on an ongoing basis.

Derivative financial instruments

The following tables set out the decomposition of derivatives into underlying instruments in order to present their sensitivity to movements of rate movements (notional amounts).

December 31st 2022	1M	1-3M	3-6M	6-12M	Over 1Y	Total
Assets						
FX forward	96,245	65,761	23,550	10,035	-	195,591
FX Spot	457,660	-	-	-	-	457,660
FX Swap	459,253	7,185	-	-	-	466,438
IRS	655,348	618,430	556,774	188,467	1,204,003	3,223,022
Forward contracts	-	12,699	-	-	-	12,699
CFD	-	-	-	308,894	-	308,894
Total assets	1,668,506	704,075	580,324	507,396	1,204,003	4,664,304
Equity and liabilities						
FX forward	95,013	64,628	22,115	8,663	-	190,419
FX Spot	458,072	-	-	-	-	458,072
FX Swap	460,006	7,323	-	-	-	467,329
IRS	499,055	561,814	313,157	219,301	1,629,695	3,223,022
Forward contracts	-	21,270	3,579	7,732	-	32,581
CFD	-	-	-	349,633	-	349,633
Total equity and liabilities	1,512,146	655,035	338,851	585,329	1,629,695	4,721,056
Total	156,360	49,040	241,473	-77,933	-425,692	

December 31st 2021	1M	1-3M	3-6M	6-12M	Over 1Y	Total
Assets						
FX forward	64,664	143,333	117,052	65,075	-	390,124
FX Spot	110,792	-	-	-	-	110,792
FX Swap	196,416	183,354	39,407	20,614	-	439,791
IRS	663,001	993,175	733,633	268,278	1,314,314	3,972,401
Forward contracts	1,230	24,954	10	1,511	-	27,705
CFD	-	-	-	360,994	-	360,994
Total assets	1,036,103	1,344,816	890,102	716,472	1,314,314	5,301,807
Equity and liabilities						
FX forward	64,099	142,444	113,231	64,101	-	383,875
FX Spot	110,845	-	-	-	-	110,845
FX Swap	199,809	194,348	42,674	22,574	-	459,405
IRS	410,000	833,619	755,570	215,329	1,757,882	3,972,400
Forward contracts	916	38,482	4,082	50	-	43,530
CFD	-	-	-	449,781	-	449,781
Total equity and liabilities	785,669	1,208,893	915,557	751,835	1,757,882	5,419,836
Total	250,434	135,923	-25,455	-35,363	-443,568	

6.2.3. Currency risks

Currency risk is understood as the risk of loss to the Group due to changes in exchange rates. This risk is generated by DM BOŚ S.A. (in the trading and non-trading book) and in the Bank (mainly in the trading book).

The objective of the Bank's currency risk management policy for the banking book is to not maintain open individual positions. Foreign currency exposures arising in the banking book are transferred systematically to the trading book on the same day or on the following business day at the latest.

The Bank's main currency positions are denominated in PLN, USD, EUR and CHF.

The currency risk in DM BOŚ S.A.'s non-trading book is attributable to deposits of foreign currency cash in the accounts of foreign brokers who buy and sell financial instruments on foreign exchanges on behalf of DM BOŚ clients. DM BOŚ S.A. has open currency positions in USD and EUR in the non-trading book, and the portfolio's currency risk is managed within the limit of the total currency position for the trading book and the non-trading book.

A currency position resulting from transactions in the banking book which has not been transferred on a given day to the trading book is controlled with end-of-day limits of open currency positions in the banking book.

Currency risk in the trading book is generated by both the Bank and DM BOŚ S.A. The currency risk in the trading book was primarily attributable to DM BOŚ S.A., and to a lesser extent to the Bank. Open currency positions in DM BOŚ S.A.'s trading book result from the provision of services to clients in the derivatives trading market and from the provision of services on a regulated market.

The BOŚ Group has a consistent currency risk management system, with the risk calculated separately for the Bank and DM BOŚ S.A.

Measures of currency risk

In order to monitor the currency risk of open foreign exchange positions (on- and off-balance-sheet) in the trading book of the Bank, the following measures are used:

1. the value at risk (VaR) model determined for the 99% confidence level based on daily volatility of foreign exchange rates for 250 business days preceding the date of analysis,
2. a system of limits,
3. stress testing.

The value of foreign exchange VaR in the trading book of the Bank and of the Group and the impact of the stress test scenario – a 30% decline in the exchange rates of all currencies in relation to PLN – on the Group's profit or loss in annual periods are presented below (maximum, minimum, mean and as at the reporting date).

Date	10-day VaR						Stress tests of the Group – increase/decrease of foreign exchange
	Bank		DM BOŚ		BOŚ Group		
	mean	max	min	as at*	as at	as at	as at
December 31st 2022	341	1,357	12	655	5,697	6,201	-1,569
December 31st 2021	276	1,700	16	560	2,049	1,843	-1,937

*On December 30th 2022, a limit was set on the 1-day Value at Risk (VaR). To facilitate comparison, the 1-day VaR has been adjusted to the 10-day VaR scale.

In order to verify the value-at-risk model, the Group performs a back-testing analysis on a monthly basis, calculated by comparing the maximum losses from the VaR model with actual gains and losses and theoretical changes in

profit or loss resulting from revaluation of positions. Results of monthly back-testing are presented in management reports. The system of foreign exchange risk limits in the trading book includes:

1. the 10-day VaR limit, as of December 30th 2022, the 1-day VaR limit applies;
2. limits on the amount per total position and per individual position for the main currencies, both intra-day and end-of-day,
3. daily and monthly trailing loss limits for currency exchange transactions.

Utilisation of the limits is monitored every business day, and for total position and individual limits in the Bank's main currencies – also during the day. During the day, the Bank also monitors additional limits for client transactions, within the amount limits for foreign exchange positions. Formation on the utilisation of individual limits is regularly reported to the Bank's management.

Analyses show that the Group's foreign exchange risk during the reporting period remained moderate.

Once a month, the Bank conducts stress testing analysis, examining the development of the currency risk in the banking book and the trading book in case of materialisation of extreme changes in risk factors. The Bank tests mainly the impact of extremely unfavourable movements in the exchange rates against PLN and cross currency pairs EUR/USD and EUR/CHF on gain (loss) on foreign exchange transactions and changes in volatility of exchange rates during the 250-business-day period and correlation between the volatility and the level of VaR, using both the historical and parametric methods. The historical method took into account the volatility of foreign exchange rates caused by such factors as the geopolitical crisis.

The Bank uses the following scenarios to analyse the impact of stress:

1. historical:
 - historical increase/decrease in foreign exchange rates against PLN (including fat tails),
 - Increase/decrease in cross currency EUR/CHF and EUR/USD rates,
2. parametric:
 - a 30% increase/decrease in foreign exchange rates against PLN,
 - increase in volatility of foreign exchange rates,
 - extremely adverse changes in the correlation of foreign exchange rates.

Stress test scenarios are also run for market liquidity changes and for situations where positions cannot be closed.

Results of the stress test analysis show that under extremely unfavourable market conditions and increased exposures, the Bank's foreign exchange risk remains at a safe level.

Results of monitoring the currency risk in the trading book are reported: daily to members of the Management Board and the ALCO Committee, weekly to the Liquidity and Market Risk ALCO Committee, monthly to the ALCO Committee and the Management Board, and quarterly to the Risk Committee and the Supervisory Board.

Despite the presence of geopolitical crises and other factors that contribute to exchange rate volatility, the level of currency risk did not experience a significant increase. The measures of currency risk were monitored on an ongoing basis, and although their levels generally increased they remained within the limits applied by the Bank.

Open foreign exchange positions as at December 31st 2022 and December 31st 2021 are presented below.

Currency risk (net carrying amounts)

December 31st 2022	PLN	EUR	USD	CHF	Other currenc	Total
Assets						
Cash and balances at central bank	483,793	91,241	519	218	104	575,875
Amounts due from banks	14,722	11,639	209,664	1,296	5,510	242,831
Financial assets held for trading, including:	244,060	2,397	16,199	-	603	263,259
<i>equity securities</i>	16,602	-	-	-	-	16,602
<i>debt securities</i>	20,643	-	-	-	-	20,643
<i>derivative instruments</i>	206,815	2,397	16,199	-	603	226,014
Derivative hedging instruments	30,562	-	-	-	-	30,562
Investment securities, including:	9,007,943	148	27	0	0	9,008,118
<i>equity securities measured at fair value through other comprehensive income</i>	85,290	148	27	-	-	85,465
<i>debt securities measured at fair value through other comprehensive</i>	6,915,813	-	-	-	-	6,915,813
<i>debt securities measured at amortised cost</i>	1,900,215	-	-	-	-	1,900,215
<i>debt securities measured at fair value through profit or loss</i>	106,625	-	-	-	-	106,625
Amounts due from clients	8,684,003	1,874,356	195,264	372,203	1	11,125,827
Other assets*\\	747,752	4,448	4,488	1,812	1,209	759,709
Total assets	19,212,834	1,984,229	426,161	375,529	7,427	22,006,181
Off-balance sheet items constituting foreign currency item		309,593	418,202	37,586	89,496	

*\\ The item includes: intangible assets, property, plant and equipment, income tax assets and other assets

Liabilities						
Amounts due to central bank and other banks	42,646	1,902	-	96,595	-	141,143
Financial liabilities held for trading	150,976	475	1,444	-	82	152,977
Amounts due to clients	16,243,977	1,865,720	611,453	51,681	47,978	18,820,809
Subordinated liabilities	345,035	-	-	-	-	345,035
Provisions	46,994	2,151	7,632	18,681	-	165,458
Other liabilities	405,370	8,971	2,072	5	203	416,621
Total liabilities	17,234,998	1,879,219	622,601	256,962	48,263	20,042,043
Off-balance sheet items constituting foreign currency item		319,208	394,653	177,436	55,372	
On-balance sheet item		105,010	-196,440	118,567	-40,836	
Off-balance sheet item		-9,615	23,549	-139,760	34,124	

Groups's open currency position		95,395	-172,890	-21,193	-6,712	
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December 31st 2021	PLN	EUR	USD	CHF	Other currenc	Total
Assets						
Cash and balances at central bank	322,966	36,976	1,176	267	196	361,581
Amounts due from banks	14,571	29,204	295,736	6,248	54,988	400,747
Financial assets held for trading, including:	134,772	2,701	17,700	-	532	155,705
<i>equity securities</i>	13,308	-	-	-	-	13,308
<i>debt securities</i>	5,321	-	-	-	-	5,321
<i>derivative instruments</i>	116,143	2,701	17,700	-	532	137,076
Derivative hedging instruments	9,121	-	-	-	-	9,121
Investment securities, including:	7,108,759	146	26	-	-	7,108,931
<i>equity securities measured at fair value through other comprehensive income</i>	85,311	146	26	-	-	85,483
<i>debt securities measured at fair value through other comprehensive income</i>	5,311,853	-	-	-	-	5,311,853
<i>debt securities measured at amortised cost</i>	1,582,366	-	-	-	-	1,582,366
<i>debt securities measured at fair value through profit or loss</i>	129,229	-	-	-	-	129,229
Amounts due from clients	9,353,758	1,589,247	138,307	418,151	3	11,499,466
Other assets*\\	670,788	2,001	18,724	837	1,658	694,008
Total assets	17,614,735	1,660,275	471,669	425,503	57,377	20,229,559
Off-balance sheet items constituting foreign currency item		271,594	178,455	65,566	8,344	
*\\ The item includes: intangible assets, property, plant and equipment, income tax assets and other assets						
Liabilities						
Amounts due to central bank and other banks	11,388	275,826	-	133,175	-	420,389
Financial liabilities held for trading	94,135	398	4,882	-	244	99,659
Amounts due to clients	15,019,892	1,322,977	560,508	53,132	51,354	17,007,863
Subordinated liabilities	369,107	-	-	-	-	369,107
Provisions	40,232	36,613	5,172	12,605	-	94,622
Other liabilities	347,218	21,485	3,111	-	310	372,124
Total liabilities	15,881,972	1,657,299	573,673	198,912	51,908	18,363,764
Off-balance sheet items constituting foreign currency item		274,185	86,264	293,594	49,324	
On-balance sheet item		2,976	-102,004	226,591	5,469	
Off-balance sheet item		-2,591	92,191	-228,028	-40,980	
Groups's open currency position		385	-9,813	-1,437	-35,511	

The off-balance-sheet foreign exchange position primarily arises from FX swap transactions that the Bank utilizes to address liquidity mismatches in foreign currencies.

6.2.4. Other market risks

In addition to currency risk, other market risks include the general and specific risk associated with equity instruments, commodities risk, and position risk linked to collective investment undertakings. These risks stem from the impact of price movements in equity and commodities, as well as investment certificates, on the potential impairment of assets, changes in liabilities, or fluctuations in profit or loss.

These risks primarily pertain to DM BOŚ S.A.'s trading book.

Transactions in equity instruments carried out by DM BOŚ S.A. for its own account are related to its role as a market maker, and in most instances, these positions are closed by the end of the day. DM BOŚ S.A. maintains a significant exposure to equity instruments only through hedged (arbitrage) transactions, including short selling activities. Hedged (arbitrage) transactions involve taking advantage of temporary price imbalances between two markets (e.g. between the prices of derivative financial instruments and the prices of the underlying instruments). This risk is limited by total exposure limits for hedged (arbitrage) and unhedged transactions. These limits are monitored on a daily basis. DM BOŚ S.A. also executed transactions (in its capacity as a market maker) in investment certificates. As a result, DM BOŚ S.A. recorded the risk of positions in collective investment undertakings, and the risk of profit or loss resulting from holding those positions was mitigated by taking opposite positions on stock exchange index futures contracts.

Commodity price risk occurs mainly as part of transactions on the OTC market, transactions with clients of DM BOŚ S.A., and hedging transactions with Saxo Bank A/S, X-Trade Brokers Dom Maklerski S.A. or Interactive Brokers Central Europe Zrt.

The volatility of equity, commodity, and investment certificate prices resulting from the geopolitical crisis did not have a significant adverse impact on the level of other market risks. The measures of these risks were monitored on an ongoing basis, and although their levels generally increased they remained within the limits applied by DM BOŚ S.A.

6.3. Capital management

For capital adequacy purposes, the Group applies transitional arrangements to mitigate the impact of the first-time application of IFRS 9 on own funds, pursuant to Article 1(9) of Regulation (EU) 2017/2395 of the European Parliament and the Council dated December 12th 2017 (Regulation) amending Regulation (EU) No 575/2013. The Bank also made a decision not to apply the provisions of Art.1.4 of Regulation (EU) 2017/2395.

Taking into account the impact of IFRS 9 both with and without the transitional arrangements, the Group met the applicable capital standards as at December 31st 2022.

Following the decision to apply the transitional provisions, as of February 1st 2018 the Group discloses its own funds, capital ratios and leverage ratio, both with and without applying the transitional arrangements under Article 473a of Regulation (EU) No 575/2013.

The Group's capital, risk-weighted assets, capital ratios, leverage ratio and internal capital were as follows:

Item	December 31st 2022	December 31st 2021
Available capital		
Common equity Tier 1 capital	1,845,216	1,796,302
Common equity Tier 1 capital – without IFRS 9 transitional provisions	1,816,634	1,739,139
Tier 1 capital	1,845,216	1,796,302
Tier 1 capital – without IFRS 9 transitional provisions	1,816,634	1,739,139
Own funds	1,954,769	1,978,861
Own funds – without IFRS 9 transitional provisions	1,926,188	1,921,698
Risk-weighted assets		
Total amount of risk-weighted assets	13,074,111	13,544,071
<i>Credit risk and counterparty credit risk</i>	11,226,342	11,998,340
<i>Operational risk</i>	1,354,911	1,060,015
<i>Market risk</i>	455,711	463,378
<i>CVA risk</i>	37,147	22,338
Total amount of risk-weighted assets – without IFRS 9 transitional provisions	13,053,187	13,491,884
Capital ratios		
Common equity Tier 1 capital ratio	14.11	13.26
Common equity Tier 1 capital ratio – without IFRS 9 transitional provisions	13.92	12.89
Tier 1 capital ratio	14.11	13.26
Tier 1 capital ratio – without IFRS 9 transitional provisions	13.92	12.89
Total capital ratio	14.95	14.61
Total capital ratio – without IFRS 9 transitional provisions	14.76	14.24
Leverage ratio		
Exposure value	24,062,778	22,821,635
Leverage ratio	7.7	7.9
Leverage Ratio – without IFRS 9 transitional provisions	7.6	7.6
Internal capital		
Internal capital	1,497,729	1,519,695

The amount of own funds and capital requirements were determined in accordance with Regulation (EU) No 575/2013 of June 26th 2013 on prudential requirements for credit institutions and investment firms, hereinafter referred to as CRR.

In order to mitigate the risk of a decrease in capital ratios, the Group monitors the scale and structure of the Group's business and factors that may adversely affect the level of the Group's equity.

On a quarterly basis, the Group estimates internal capital to cover:

1. Pillar 1 risks:

- for credit risk and counterparty credit risk – on the basis of the regulatory requirement taking into account an additional mark up for non-performing exposures (NPE) / non-performing loans (NPL),
- for specific types of risk within the market risk, including CVA risk and operational risk – based on the regulatory requirements,

2. Pillar 2 risks:

- for other permanently significant risks and risks for which assessment of significance is performed periodically, internal capital is determined using methodologies specified in the internal regulations of the Group. These regulations were the basis for monitoring, assessment of significance and determination of internal capital for particular risks incurred by the Bank and Dom Maklerski BOŚ S.A.

In accordance with Article 92 of the CRR, the Group is required to maintain the total capital ratio at a minimum of 8%. The Tier 1 capital ratio and Common equity Tier 1 capital ratio should amount at least to 6% and 4.5%, respectively.

According to the CRR Resolution, and the Act of August 5th 2015 on macro-prudential oversight of the financial system and crisis management in the financial system, financial institutions are required to maintain additional capital buffers for capital ratios. As of January 1st 2019, the capital conservation buffer is 2.5 bps, and the countercyclical buffer is 0 bps. The Bank is not required to maintain the buffer defined for other systemically important institution. The systemic risk buffer was released by decision of the Minister of Finance dated March 18th 2020.

On December 5th 2022, the Bank received a decision from the Financial Supervision Commission to exempt it from the additional capital requirement for hedging risks associated with mortgage-backed foreign currency loans to households at both the separate and consolidated levels.

On December 27th 2022, the Polish Financial Supervision Authority recommended that own funds should be maintained, on a separate basis, to cover the additional capital add-on to absorb potential losses resulting from the occurrence of stress conditions, at the level of 1.34 percentage point above the total capital ratio referred to in Article 92(1)(c) of the CRR Regulation, increased by the additional own funds requirement referred to in Art. 138.2.2 of the Banking Law and by the combined buffer requirement referred to in Art. 55.4 of the Macroprudential Supervision Act. The additional add-on should consist entirely of Common Equity Tier 1 capital.

As a result, as at December 31st 2022 the minimum capital ratios recommended by the Polish Financial Supervision Authority for the Group are 9.84% for Tier 1 capital ratio and 11.84% for the TCR ratio.

The capital adequacy ratio of the Group as at December 31st 2022 was above the levels recommended by the Polish Financial Supervision Authority, both with and without the application of IFRS 9 transitional provisions.

6.4. Operational risk

Operational risk management at the Group focuses on the Bank and those companies which, in accordance with internal procedures, have been identified as those generating significant operational risk. As at December 31st 2022, operational risk was identified at the Bank, at Dom Maklerski BOŚ S.A. and at BOŚ Leasing - EKO Profit S.A.

The Bank seeks to develop a Group-wide uniform operational risk management system, covering identification, measurement, monitoring, reporting and control of operational risk. The unified approach is aimed, among other things, at defining and implementing instruments to organise operational risk management in the Group, modelled on the instruments applied by the Bank. The Bank analyses information on operational risk within the Group, with particular focus on losses incurred due to the risk, provides opinions on the risk-relevant internal regulations observed by the subsidiaries and presents recommendations for actions in the area of operational risk management.

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk, taking into account operational risk events characterised by low frequency of occurrence but high losses; reputational and strategic risks are not part of operational risk.

The objective of operational risk management is to ensure safe and sustainable operations and development of the Bank, by, among other things, mitigating and maintaining operational risk at an acceptable level within the operational risk limits adopted by the Bank, and by undertaking adequate actions in response to operational risk events.

The Group has implemented an operational risk management system in which all employees of the Bank share responsibility for the day-to-day management of operational risk.

The Bank maintains an organizational unit dedicated to operational risk management, which serves as the second level of operational risk oversight. This unit is responsible for various tasks, including organizing the operational risk management system within the Bank and monitoring the risk level across the Group's companies.

Information on significant operational risk events is collected at the Bank and at the subsidiaries that are significant in terms of the operational risk generated. The information is collected by the Bank in a dedicated IT application and used to:

1. monitor the level of operational risk on an ongoing basis,
2. monitor the action taken in response to operational risk incidents,
3. measure or estimate losses arising from operational risk,
4. generate reports on operational risk events, including reports for external institutions.

The Bank sets basic limits for operational risk, including in particular tolerance and appetite limits across the Bank, as well as a target operational risk profile. The degree of utilisation of the tolerance limits and appetite for operational risk is controlled by periodic monitoring of the amount of losses incurred due to operational risk events.

Operational risk is measured using quantitative, qualitative and mixed methods, including, but not limited to:

1. calculation of the capital requirement for operational risk in accordance with the standardised approach,
2. calculation and monitoring of key risk indicators (KRI),
3. reviews of operational risk (self-assessment of potential operational risk),
4. stress tests.

At the Bank, stress tests for operational risk are carried out using three methods: sensitivity analysis, reverse analysis, and scenario analysis. Stress tests are conducted once a year. As a result of the stress tests carried out so far, the amount of losses assumed in the scenarios, compared with the amount of available capital in the form of a tolerance limit and capital requirement for operational risk, confirmed – under most of the scenarios – the ability of the Bank to absorb operational risk losses through its operational risk capital requirement and through the operational risk tolerance limit. For scenarios where the hypothetical level of losses exceeds the level of capital maintained for operational risk, the Bank takes steps to mitigate the risks of such losses materialising.

As part of its systemic operational risk management, the Bank draws up internal regulations, with the division of powers embedded in these regulations, which prevents the assignment of responsibilities that could lead to conflicts of interest, and mechanisms to mitigate operational risk.

In order to reduce its exposure to operational risk, the Bank uses the following instruments (methods, techniques and tools):

1. organisation of work to mitigate the occurrence of operational risk by, among other things, separating executive and control functions, setting decision and transaction limits, and managing access rights to premises and systems to reduce the possibility of unauthorised actions,
2. the HR policy,
3. internal control functions,
4. strategic internal limits for operational risk, i.e., tolerance and appetite limits,
5. periodic reviews of operational risk based on the self-assessment process,
6. risk maps built to identify the sources of potential threats and assessment of related risk levels,
7. operational risk stress testing,
8. threshold values of key risk indicators (KRI),
9. clauses in contracts with third parties that mitigate operational risk,
10. insurance of bank property with specialized firms,
11. documenting the methodological, process, organisational and IT solutions applied by the Bank,

12. automation of activities with the use of IT solutions and increasing the quality of operations through the use of specialised software,
13. continuity and contingency plans developed for the critical business processes of the Bank,
14. analysis of the adequacy of the calculated capital requirements for operational risk to the actual operational risk incurred by the Bank,
15. internal training for the Bank's employees aimed at raising their awareness and understanding of the role, impact and ways of conduct with respect to operational risk.

The level and profile of operational risk, the utilisation of operational risk limits and the amount of losses arising from operational risk events are regularly monitored by a dedicated unit at the Bank's Head Office and reported to: the Supervisory Board, the Risk Committee of the Supervisory Board, the Management Board and the Operational Risk Committee.

In 2022, there was no significant increase in the number of operational risk incidents due to the COVID-19 pandemic. There were COVID-19-induced incidents related to interruptions in the provision of services to branch network clients. The operational risk incidents related to the COVID-19 pandemic did not result in any losses.

6.5. Compliance risk

Compliance risk is defined as a risk of effects of failure by the Group to comply with laws, internal regulations and market standards.

The Group ensures compliance with laws, internal regulations and market standards through the control function (application of control mechanisms and monitoring their observance) and the compliance risk management process, which includes identification, assessment, control and monitoring of compliance risk and reporting in this respect to the Management Board and the Supervisory Board.

The basic rules for ensuring compliance as part of the compliance risk management function and process are defined in the Compliance Policy of Bank Ochrony Środowiska S.A., prepared by the Management Board and approved by the Supervisory Board, and its implementing acts, including:

1. Principles of compliance risk management at Bank Ochrony Środowiska S.A.,
2. Principles of internal control at Bank Ochrony Środowiska S.A.

The Bank has a separate, independent compliance function reporting directly to the President of the Management Board and responsible for performing its duties within the control function and tasks related to compliance risk management.

The compliance risk management process, carried out by the compliance function assisted by other organizational units of the first and second line of defence, includes:

1. identification of compliance risks, particularly at the stage of developing new products and internal regulations,
2. assessment of compliance risk,
3. control and monitoring of compliance risk,
4. reporting risk of non-compliance of the Bank's operations with applicable laws, internal regulations and market standards.

The compliance unit is responsible for overseeing the anonymous reporting system for violations of laws, ethical procedures, and standards adhered to by Bank Ochrony Środowiska S.A.

The Group identifies the following key compliance areas:

1. implementing and monitoring compliance with laws and market standards,
2. implementing and monitoring compliance with ethical standards,
3. accepting/giving benefits or gifts,
4. advertising and marketing activities,
5. offering products, including in particular implementation of new products,

6. handling client complaints,
7. preventing and managing conflicts of interest,
8. preventing money laundering and terrorist financing (AML),
9. trading in financial instruments.

In 2022, no significant events occurred that would have had a material impact on the level of compliance risk. During this period, the Group primarily concentrated its efforts on proactively preventing the occurrence of compliance risk.

6.6. Model risk

Model risk in the Group is concentrated in the Bank. BOŚ Leasing – EKO Profit S.A. has only immaterial models for which the risk is not assessed. As at December 31st 2022, Dom Maklerski BOŚ S.A did not use models in its activities.

Model risk is defined by the Bank in accordance with regulatory requirements as the potential loss an institution may incur, as a consequence of decisions that could be principally based on the output of internal models, due to errors in the development, implementation or use of such models (Art. 3.1, Section 11, CRD IV).

The process of identifying, assessing and monitoring model risk includes areas related to:

1. the risk of using incorrect and incomplete data,
2. the risk of erroneous assumptions of models, which are inadequate to the estimated process,
3. the methodological risks resulting from the use of inappropriate estimation methodologies and techniques in the model construction process,
4. the risk of insufficient monitoring, validation and update of models, also the risk of applying an incorrectly implemented but correct model.

Due to the extensive use of models in its business, including in the credit process, the capital management processes, or the credit risk and market risk management processes, the Bank considers the model risk as consistently significant. Internal capital is estimated and established for model risk.

The Group manages model risk in accordance with internal regulations, including the internal capital estimation and allocation rules, the model risk management policy, the model risk management methodology and the significant model validation methodologies. The model risk management is coordinated by the operational risk management unit and an independent model validation unit, both at the Head Office of the Bank, which report directly to Vice President of the Management Board in charge of risk management functions.

In order to quickly and accurately identify model risk, the Bank has in place a standardized, comprehensive model risk management process, which includes:

1. identification of new models,
2. model life cycle,
3. the principles of assessing the materiality of the Bank's models,
4. the principles of operation of model logs, which contain information regarding the models, sets of their parameters, changes to the models, their updates and reviews. The logs provide a baseline of information on model materiality, model monitoring and model validation, and risk levels for material models,
5. the standards and principles of monitoring and reporting of model risk – material models are monitored on a quarterly basis, and non-material models – annually. In exceptional cases, due in particular to limited availability of the data or significant operational intensity of monitoring, models may be monitored less frequently (but not less frequently than once year for material models and not less frequently than once every three for non-material models). Model risk is reported on a quarterly basis. Implementation of the Policy is assessed on an annual basis and the assessment results are approved by the Supervisory Board,
6. the principles of model validation – models are validated by an independent Model Validation Office, at least once a year for material models. Certain types of material models may be validated less frequently than once year (but not less frequently than once every three years), if such frequency results directly from the nature of the model operation. Other models are validated on an ad-hoc basis when ordered by the Management Board or a relevant Committee, based on external or internal recommendations, or at the request of the model owner.

As at December 31st 2022, the Group operated a total of 25 models, including nine material models and 16 immaterial models. Material models are used only at the Bank. Risks of the Bank's material models are assessed on a regular basis, in accordance with the standards adopted in internal regulations, taking into account the calculation of internal capital related to hedging the Bank against the model risk. Reporting on the status of model management and validation includes model risk assessment, risk tolerance level and the associated level of capital allocated to the model risk. Reports on validation for material models are presented and approved during meetings of the relevant Committees appointed by the Management Board.

As at December 31st 2022, the aggregate risk of significant models was moderate. The aggregate model risk fell within the tolerance level determined and approved by the Supervisory Board.

7. Net interest income

Item	January 1st 2022 December 31st 2022				January 1st 2021 December 31st 2021			
	Interest income		Income similar to interest income	Total	Interest income		Income similar to interest income	Total
	Financial assets measured at amortised cost	Assets measured at fair value through other comprehensive income	Financial assets measured at fair value through profit or loss		Financial assets measured at amortised cost	Assets measured at fair value through other comprehensive income	Financial assets measured at fair value through profit or loss	
Amounts due from banks and the central	58,662	-	-	58,662	6,184	-	-	6,184
Amounts due from institutional clients	624,645	-	573	625,218	260,600	-	705	261,305
Amounts due from retail clients	124,357	-	70	124,427	88,602	-	-	88,602
Non-trading investment debt securities	73,333	307,489	-	380,822	25,225	45,971	-	71,196
Financial instruments held for trading	-	-	4,451	4,451	-	-	3,353	3,353
Hedging transactions	-	-	12,298	12,298	-	-	-	-
Total	880,997	307,489	17,392	1,205,878	380,611	45,971	4,058	430,640

Item	January 1st – December 31st 2022			January 1st – December 31st 2021		
Interest expense and similar charges on:	Financial liabilities measured at amortised cost	Financial liabilities measured at fair value through profit or loss	Total	Financial liabilities measured at amortised cost	Financial liabilities measured at fair value through profit or loss	Total
Bank accounts and deposits from banks	3,538	-	3,538	973	-	973
Bank accounts and deposits from institutional clients	171,285	-	171,285	4,698	-	4,698
Bank accounts and deposits from retail clients	236,793	-	236,793	27,583	-	27,583
Borrowings from clients	2,360	-	2,360	159	-	159
JESSICA lending support funds	885	-	885	64	-	64
Financial instruments – own debt securities	28,657	-	28,657	12,152	-	12,152
Hedging transactions	-	-	-	-	6,433	6,433
Lease liabilities	4,001	-	4,001	4,080	-	4,080
Litigation and claims related to foreign currency mortgage loans	-	-	-	-	-	-
Other	19	-	19	3	-	3
Total	447,538	-	447,538	49,712	6,433	56,145

The interest income from instruments measured at amortized cost for the year 2022 incorporates an adjustment for loan repayment holidays, resulting in a reduction of income by PLN 20,437 thousand. For more detailed information, please refer to Note 5.8 "Loan repayment holidays."

The interest income for 2022 includes interest accrued on impaired loans totaling PLN 87,243 thousand. In comparison, for 2021, the interest accrued on impaired loans amounted to PLN 44,243 thousand.

8. Net fee and commission income

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Fee and commission income		
Brokerage service fees	86,396	100,456
Fees for maintaining client accounts, other domestic and international settlement transactions	35,901	36,717
Commission fees on credit facilities	38,330	37,677
Commission fees on guarantees and letters of credit	6,865	6,355
Fees for portfolio management services and other management fees	494	532
Other fees	6	5
Total	167,992	181,742
Fee and commission expense		
Brokerage fees, including:	30,269	29,023
<i>for custody services</i>	662	651
Payment card fees	7,790	7,199
Current account fees	1,014	1,675
ATM service charges	513	1,225
Fees on amounts due from clients	96	138
Other fees	742	628
Total	40,424	39,888

9. Dividend income

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Securities held for trading at fair value through profit or loss	264	203
Securities measured at fair value through other comprehensive income	6,924	6,527
Total	7,188	6,730

The amount of 2022 dividend includes dividends from:

1. Kemipol Sp. z o.o. of PLN 6,743 thousand (2021: PLN 6,286 thousand),
2. WODKAN Przedsiębiorstwo Wodociągów i Kanalizacji S.A. of PLN 181 thousand (2021: PLN 241 thousand).

10. Gain (loss) on financial instruments measured at fair value through profit or loss (including amounts due from clients)

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Securities held for trading	- 6,250	- 3,770
Derivative financial instruments	34,750	69,010
Amounts due from clients	- 63	89
Securities measured at fair value through profit or loss and related derivative financial instruments	- 5,559	2,304
Total	22,878	67,633

11. Gain (loss) on investment securities

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Gain (loss) on sale of securities measured at fair value through other comprehensive income	-	197
Total	-	197

12. Gain (loss) on hedge accounting

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Gain (loss) on fair value measurement of fair value hedging transactions	13,495	33,669
Gain (loss) on measurement of hedged part of Treasury bonds covered by fair value hedge accounting	- 13,376	- 32,905
Total	119	764

13. Gain (loss) on foreign exchange transactions

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Realised gain (loss) on valuation transactions	63,654	17,207
Unrealised gain (loss) on valuation transactions	- 26,764	8,093
Total	36,890	25,300

14. Other income

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Reversal of provisions for liabilities, including:	6,238	5,818
<i>provisions for liabilities and claims</i>	2,724	466
<i>provision for refund of commission fees due to early loan repayment</i>	617	-
<i>other provisions</i>	2,897	5,352
Reversal of impairment losses on receivables	4,450	3,668
Recoveries of prescribed, cancelled or uncollectible receivables	4,404	2,132
Proceeds from sale or retirement of property, plant and equipment	64	45
Reimbursement of debt collection costs	1,222	1,867
Revenue from sale of goods and provision of services	19,123	17,682
Adjustment of interest on cancelled deposits from previous years	1,118	341
Income from damages, penalties and fines	140	123
Income from grant refinancing	324	-
Income from adjustment of input VAT	239	32
Other	3,826	3,375
Total	41,148	35,083

15. Other expenses

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Retirement of property, plant and equipment and intangible assets	209	692
Donations	2,443	1,376
Recognised provisions for liabilities and claims, including:	4,415	2,027
<i>provision for refund of commission fees due to early loan repayment</i>	10	184
<i>provision for other liabilities and claims</i>	1,675	445
<i>Provision for refunds of increased interest charged until court entry of mortgage security</i>	2,710	-
<i>other provisions</i>	20	1,398
Impairment losses on receivables	24,185	5,440
Costs of debt collection	2,923	2,537
Adjustment to interest and commission fees on loans earned in previous years	4,985	20,014
Lease payments	3,206	2,870
Costs of maintenance and administration of own leased premises	498	3,184
Costs damages, penalties and fines	2,121	139
Costs of erroneous brokerage transactions	220	236
Fees for handling payment of benefits on securities	620	422
Costs property appraisal reports	342	768
Non-deductible costs of adjudicated other receivables relating to foreign currency loans/mortgages	3,610	257
Other	5,920	3,836
Total	55,697	43,798

The provision for refunds of increased interest charged until court entry of mortgage security was established due to an amendment to the Law on Mortgage Credit and Supervision of Mortgage Brokers and Agents. This amendment pertains to the reimbursement of mortgage loan costs paid to the Bank for the period before the mortgage is officially recorded in the mortgage register.

16. Effect of legal risk of mortgage loans denominated in foreign currencies

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Change in legal-risk adjustment to gross carrying amount of loans	-44,075	-5,843
Change in legal-risk provision	-95,855	-14,940
Costs of voluntary settlements with clients or of contract cancellation in excess of the provision or adjustment to the gross carrying amount of loans	-4,376	-
Total	- 144,306	- 20,783

17. Net impairment losses

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Securities measured at fair value through other comprehensive income	2,091	2,194
Securities measured at amortized cost	- 18	- 17
Amounts due from banks	75	373
Amounts due from clients and off-balance-sheet liabilities, including:	- 108,143	- 116,644
on-balance-sheet receivables	- 103,250	- 116,950
<i>from retail clients</i>	65,760	- 83,615
<i>from institutional clients</i>	- 169,010	- 33,335
off-balance-sheet liabilities	- 4,893	306
<i>from retail clients</i>	402	- 265
<i>from institutional clients</i>	- 5,295	571
Total	- 105,995	-114,094

Net impairment losses on amounts due from clients:

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Individual assessment	- 189,265	- 106,836
Group assessment	86,015	- 10,114
Total	- 103,250	-116,950

18. Administrative expenses

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Employee benefits	228,735	191,142
Administrative expenses, including:	204,600	148,717
<i>material costs</i>	123,637	111,402
<i>taxes and charges</i>	9,176	7,254
<i>contribution and payments to BGF</i>	30,012	27,073
<i>contribution and payments to PFSA</i>	3,131	2,761
<i>contribution to Borrowers Support Fund*</i>	38,358	-
<i>contribution to cover operating expenses of Financial Ombudsman</i>	195	136
<i>contribution to Chamber of Brokerage Houses (Izba Domów Maklerskich, IDM)</i>	91	91
Amortization and depreciation, including:	62,733	55,843
<i>depreciation of property, plant and equipment</i>	15,561	13,503
<i>amortisation of intangible assets</i>	30,442	27,200
<i>depreciation of rights-of-use assets</i>	16,730	15,140
Total	496,068	395,702

*The Bank made an additional payment of PLN 38,358 thousand to the Borrower Support Fund, as mandated by the decision of the Borrower Support Fund Board issued under the Business Crowdfunding and Borrowers Assistance Act.

Employee benefits

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Salaries and wages, including:	192,999	161,811
<i>retirement benefits</i>	379	127
Social security contributions	35,736	29,331
Total	228,735	191,142

The Group does not fund retirement benefits based on defined benefit plans, except for retirement severance pay.

Depreciation of right-of-use assets

Item	December 31st 2022	December 31st 2021
Properties	16,218	14,848
Vehicles	512	292
Total	16,730	15,140

19. Income tax expense

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Current tax	- 81,736	- 39,709
Deferred tax	15,845	7,896
Total	- 65,891	- 31,813
Profit (loss) before tax	194,135	79,269
Income tax at 19% tax rate	- 36,886	- 15,061
Permanent differences between profit before tax and tax base	- 28,999	- 16,755
decreasing:	181,766	9,308
<i>reversed impairment losses</i>	1,304	1,442
<i>dividends received</i>	3,241	1,279
<i>valuation of equity-accounted subsidiaries</i>	14,151	-
<i>release of provisions, including provisions for court proceedings and claims for legal risk related to foreign currency mortgage loans</i>	162,185	6,222
<i>other</i>	885	365
increasing:	- 217,746	- 26,958
<i>recognised impairment losses</i>	- 4,780	- 9,419
<i>provisions recognised for other liabilities, including provisions for legal proceedings and claims related to foreign currency mortgage loans</i>	- 39,394	- 10,167
<i>contributions to BGF</i>	- 5,243	- 5,121
<i>other</i>	- 168,329	- 2,251
deductions from taxable income:	6,981	895
<i>tax loss deduction</i>	-	514
<i>R&D relief</i>	1,291	119
<i>donations</i>	464	262
<i>waiver of tax collection on cancelled amounts of loans indexed to foreign currencies</i>	5,226	-
Tax expense on profit or loss for current year	- 65,885	- 31,816

Tax expense on profit or loss for previous years	- 6	3
Total tax expense on profit or loss	- 65,891	- 31,813
Effective tax rate	34%	40%

For detailed information on deferred tax, see Note 35.

20. Earnings (loss) per share

Basic earnings (loss) per share are calculated as the quotient of profit attributable to shareholders of the Bank and the weighted average number of ordinary shares during the year.

Item	January 1st – December 31st 2022	January 1st – December 31st 2021
Net profit (loss)	128,244	47,456
Weighted average number of ordinary shares (thousand)	92,910	92,910
Basic earnings (loss) per share (PLN)	1.38	0.51

Diluted earnings (loss) per share are equal to basic earnings (loss) per share in the periods presented.

21. Cash and balances at central bank

Item	December 31st 2022	December 31st 2021
Cash in hand	18,101	23,442
Cash and balances at central bank	557,774	338,139
Total	575,875	361,581

22. Amounts due from banks

Item	December 31st 2022	December 31st 2021
Deposits with other banks, recognised as cash equivalents	213,790	343,543
Deposits with other banks up to 3 months	1,828	5,757
<i>including: deposits with other banks up to 3 months (funds of Dom Maklerski BOŚ clients)</i>	1,828	5,757
Derivative hedging receivables	12,546	36,938
Debt securities classified as amounts due from banks	15,162	15,078
Total gross	243,326	401,316
Impairment losses on debt securities classified as amounts due from banks	- 495	- 569
Total net	242,831	400,747

For information on amounts due from banks by maturity, see Note 26.

Change in gross carrying amount of amounts due from banks:

Item	Gross carrying amount of amounts due				Total
	Bucket 1	Bucket 2	Bucket 3	POCI	
At beginning of period January 1st 2022	386,238	15,078	-	-	401,316
Change in gross carrying amount due to derecognition	111,719	-	-	-	111,719
Change in gross carrying amount of existing portfolio	- 147,351	84	-	-	- 147,267
Decrease due to derecognition	- 122,442	-	-	-	- 122,442
At end of period December 31st 2022	228,164	15,162	-	-	243,326

Item	Gross carrying amount of amounts due				Total
	Bucket 1	Bucket 2	Bucket 3	POCI	
At beginning of period January 1st 2021	141,508	15,051	-	-	156,559
Increase due to origination and purchase	19,002	-	-	-	19,002
Change in gross carrying amount of existing portfolio	258,445	27	-	-	258,472
Decrease due to derecognition	- 32,717	-	-	-	- 32,717
At end of period December 31st 2021	386,238	15,078	-	-	401,316

Change in impairment losses on amounts due from banks:

Item	Impairment loss on amounts due from other				Total
	Bucket 1	Bucket 2	Bucket 3	POCI	
At beginning of period January 1st 2022	-	569	-	-	569
Changes due to change in credit risk	-	- 74	-	-	- 74
At end of period December 31st 2022	-	495	-	-	495

Item	Impairment loss on amounts due from other				Total
	Bucket 1	Bucket 2	Bucket 3	POCI	
At beginning of period January 1st 2021	-	943	-	-	943
Changes due to change in credit risk	-	- 374	-	-	- 374
At end of period December 31st 2021	-	569	-	-	569

23. Financial assets and liabilities held for trading

Assets	December 31st 2022	December 31st 2021
Derivative financial instruments, including:	226,014	137,076
<i>foreign exchange and currency derivative transactions</i>	13,569	13,475
<i>interest rate derivative transactions</i>	196,081	103,854
<i>forward contracts and options</i>	16,364	19,747
Securities held for trading	37,245	18,629
<i>debt securities</i>	20,643	5,321
<i>equity securities</i>	16,602	13,308
Total financial assets held for trading	263,259	155,705
Liabilities	December 31st 2022	December 31st 2021
Derivative financial instruments, including:	152,070	99,659
<i>foreign exchange and currency derivative transactions</i>	6,241	23,083
<i>interest rate derivative transactions</i>	144,107	71,620
<i>forward contracts and options</i>	1,722	4,956
Securities held for trading	907	-
<i>equity securities</i>	907	-
Total financial liabilities held for trading	152,977	99,659

24. Investment securities

Item	December 31st 2022				December 31st 2021			
	Measured at fair value through other comprehensive income	Measured at amortised cost	Measured at fair value through profit or loss	Total	Measured at fair value through other comprehensive income	Measured at amortised cost	Measured at fair value through profit or loss	Total
Debt securities:	6,915,813	1,900,215	106,625	8,922,653	5,311,853	1,582,366	129,229	7,023,448
<i>Treasury bonds</i>	1,827,141	1,691,585	-	3,518,726	1,462,432	1,373,528	-	2,835,960
<i>NBP money market bills – recognised as cash equivalents</i>	4,465,127	-	-	4,465,127	2,899,014	-	-	2,899,014
<i>municipal bonds</i>	65,878	-	-	65,878	91,056	-	-	91,056
<i>bonds of other banks</i>	294,800	87,515	106,625	488,940	448,695	87,711	129,229	665,635
<i>bonds of other financial institutions</i>	262,867	121,115	-	383,982	410,656	121,127	-	531,783
Equity securities	85,465	-	-	85,465	85,483	-	-	85,483
<i>listed</i>	18,543	-	-	18,543	18,543	-	-	18,543
<i>unlisted</i>	66,922	-	-	66,922	66,940	-	-	66,940
Total	7,001,278	1,900,215	106,625	9,008,118	5,397,336	1,582,366	129,229	7,108,931

For information on investment securities by maturity, see Note 26.

Change in gross carrying amount and impairment losses on investment securities:

Item	Debt securities measured at fair value through other comprehensive income	Debt securities measured at amortised cost	Debt securities measured at fair value through profit or loss	Equity securities measured at fair value through other comprehensive income	Total
At beginning of period January 1st 2022	5,311,853	1,582,530	129,229	85,483	7,109,095
Increase due to origination and purchase	198,072,199	475,938	-	-	198,548,137
Changes in gross carrying amount of existing portfolio	- 35,338	46,154	- 22,604	- 18	- 11,806
Decrease due to derecognition	- 196,432,901	- 204,225	-	-	- 196,637,126
At end of period December 31st 2022	6,915,813	1,900,397	106,625	85,465	9,008,300

Item	Debt securities measured at fair value through other comprehensive income	Debt securities measured at amortised cost	Debt securities measured at fair value through profit or loss	Equity securities measured at fair value through other comprehensive income	Total
At beginning of period January 1st 2021	5,597,061	1,535,385	153,634	85,480	7,371,560
Increase due to origination and purchase	125,080,439	70,596	-	-	125,151,035
Changes in gross carrying amount of existing portfolio	- 154,848	4,837	- 24,405	3	- 174,413
Decrease due to derecognition	- 125,210,799	- 28,288	-	-	- 125,239,087
At end of period December 31st 2021	5,311,853	1,582,530	129,229	85,483	7,109,095

Change in impairment losses on investment securities:

Item	Change in impairment losses on debt securities		
	Debt securities measured at fair value through other comprehensive income	Debt securities measured at amortised cost	Total
At beginning of period January 1st 2022	2,754	164	2,918
Increase due to origination and purchase	4,398	49	4,447
Changes due to change in credit risk	- 31	- 18	- 49
Decrease due to derecognition	- 6,486	- 13	- 6,499
At end of period December 31st 2022	635	182	817

Item	Change in impairment losses on debt securities		
	Debt securities measured at fair value through other comprehensive income	Debt securities measured at amortised cost	Total
At beginning of period January 1st 2021	4,948	146	5,094
Increase due to origination and purchase	5,886	9	5,895
Changes due to change in credit risk	-66	12	-54
Decrease due to derecognition	-8,014	-3	-8,017
At end of period December 31st 2021	2,754	164	2,918

Investment securities pledged as security (at gross carrying amount):

Item	December 31st 2022		December 31st 2021	
	measured at fair value through other comprehensive income	measured at amortised cost	measured at fair value through other comprehensive income	measured at amortised cost
Security for loans received from banks and International Financial Organisations	118,820	755,217	207,433	515,537
over 1 year	118,820	755,217	207,433	515,537
Security for Guaranteed Funds Protection Fund	-	46,843	-	56,705
over 1 year	-	46,843	-	56,705
Security for liabilities in the form of contributions to Guarantee Fund	6,517	22,990	6,960	20,293
over 1 year	6,517	22,990	6,960	20,293
Security for liabilities in the form of contributions to Forced Restructuring Fund	9,309	32,086	9,942	23,542
over 1 year	9,309	32,086	9,942	23,542
Collateral in REPO transactions	93,648	15,974	140,286	-
up to 1 year	93,648	15,974	-	-
over 1 year	-	-	140,286	-
Total	228,294	873,110	364,621	616,077

25. Amounts due from clients

Item	December 31st 2022			December 31st 2021		
	Gross amounts due from clients	Impairment losses	Net amounts due from clients	Gross amounts due from clients	Impairment losses	Net amounts due from clients
Measured at amortised cost	12,189,201	1,109,244	11,079,957	12,570,463	1,122,626	11,447,837
Amounts due from retail clients	2,863,508	274,472	2,589,036	3,234,560	316,099	2,918,461
overdraft facilities	4,342	3,597	745	1,605	1,381	224
cash loans	330,189	98,897	231,292	382,496	81,570	300,926
housing loans	2,266,344	134,239	2,132,105	2,584,140	206,917	2,377,223
other credit facilities	262,633	37,739	224,894	266,319	26,231	240,088
Amounts due from institutional clients	9,325,693	834,772	8,490,921	9,335,903	806,527	8,529,376
working capital facilities	859,701	63,439	796,262	727,367	78,626	648,741
term facilities	7,322,041	731,321	6,590,720	7,472,953	700,987	6,771,966
factoring receivables	558,555	6,356	552,199	606,900	6,934	599,966
lease receivables	217,246	20,297	196,949	151,194	14,552	136,642
purchased receivables	92,826	903	91,923	129,665	2,354	127,311
commercial paper	275,324	12,456	262,868	247,824	3,074	244,750
Measurement at fair value through profit or loss	-	-	3,050	-	-	14,111
Amounts due from retail clients	-	-	270	-	-	651
overdraft facilities	-	-	9	-	-	-
housing loans	-	-	99	-	-	257
other credit facilities	-	-	162	-	-	394
Amounts due from institutional clients	-	-	2,780	-	-	13,460
working capital facilities	-	-	-	-	-	19
term facilities	-	-	2,780	-	-	13,441
Total	-	-	11,083,007	-	-	11,461,948
Security deposits	36,296	45	36,251	32,811	43	32,768
Other amounts due from clients	6,569	-	6,569	4,750	-	4,750

Total amounts due from clients	-	-	11,125,827	-	-	11,499,466
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Amounts due from clients included preferential loans with subsidised interest from NFOŚiFW and WFOŚiGW; in the reporting period, the amounts were as follows (nominal values):

Item	December 31st 2022	December 31st 2021
Preferential loans with subsidies, including:	35,928	61,503
<i>measured at amortised cost</i>	33,126	48,120
<i>measured at fair value through profit or loss</i>	2,802	13,383

Effect of legal risk of foreign currency mortgage loans

Item	Gross carrying amount of receivables arising from foreign currency real estate loans before legal-risk costs	Effect of legal risk of foreign currency mortgage loans	Gross carrying amount of receivables arising from foreign currency real estate loans after legal-risk costs*
	December 31st 2022		
Receivables arising from foreign currency real estate loans – adjustment reducing the carrying amount of receivables	1,332,819.40	398,308	934,511.73
Provision for legal risk of foreign currency mortgage loans		116,456	
Total		514,764	

Item	Gross carrying amount of receivables arising from foreign currency real estate loans before legal-risk costs	Effect of legal risk of foreign currency mortgage loans	Gross carrying amount of receivables arising from foreign currency real estate loans after legal-risk costs*
	December 31st 2021		
Receivables arising from foreign currency real estate loans – adjustment reducing the carrying amount of receivables	1,478,249.96	356,181	1,122,068.65
Provision for legal risk of foreign currency mortgage loans		51,965	
Total		408,146	

*Includes changes in the gross carrying amount disclosed in Note 16 "Effect of legal risk of mortgage loans denominated in foreign currencies"

Change in gross carrying amount of and impairment losses on amounts due from clients:

Item	Gross carrying amount of amounts due from retail clients					Gross carrying amount of amounts due from institutional clients				
	Bucket 1	Bucket 2	Bucket 3	POCI	Total	Bucket 1	Bucket 2	Bucket 3	POCI	Total
At beginning of period January 1st 2022	2,673,144	158,503	401,253	1,660	3,234,560	6,957,132	1,084,420	1,284,768	9,583	9,335,903
Increase due to origination and purchase	112,349	11	-	262	112,622	1,648,233	35,174	2,991	73,504	1,759,902
Change in gross carrying amount of existing portfolio	- 232,364	- 5,166	12,748	- 99	- 224,881	- 37,557	- 16,143	- 110,466	- 339	- 164,505
Decrease due to derecognition	- 209,529	- 8,902	- 39,287	- 1,075	- 258,793	- 1,096,728	- 229,517	- 280,699	- 3	- 1,606,947
<i>including: change in gross carrying amount due to financial instruments that were written off in the statement of financial position</i>	-	- 5	- 4,767	-	- 4,772	-	-	- 154,270	-	- 154,270
Change in gross carrying amount due to reallocation of financial asset between Buckets	17,002	- 17,586	584	-	-	- 528,895	73,627	456,608	-	1,340
Reallocation to Bucket 1	129,739	- 57,105	- 72,634	-	-	208,510	- 206,514	- 1,326	-	670
Reallocation to Bucket 2	- 81,172	88,229	- 7,057	-	-	- 510,975	518,763	- 7,118	-	670
Reallocation to Bucket 3	- 31,565	- 48,710	80,275	-	-	- 226,430	- 238,622	465,052	-	-
Other changes	- 1,604	195	1,409	-	-	-	-	-	-	-
At end of period December 31st 2022	2,358,998	127,055	376,707	748	2,863,508	6,942,185	947,561	1,353,202	82,745	9,325,693

Item	Allowances for amounts due from retail clients					Allowances for amounts due from institutional clients				
	Bucket 1	Bucket 2	Bucket 3	POCI	Total	Bucket 1	Bucket 2	Bucket 3	POCI	Total
At beginning of period January 1st 2022	18,403	15,674	281,990	32	316,099	69,694	64,860	670,122	999	805,675
Increase due to origination and purchase	1,629	1	-	262	1,892	19,453	487	249	- 9,071	11,118
Changes due to change in credit risk	- 55,312	- 1,603	41,671	107	- 15,137	- 147	21,498	170,509	1,207	193,067
Decrease due to derecognition	- 1,554	- 610	- 26,220	2	- 28,382	- 6,812	- 13,699	- 155,452	22	- 175,941
<i>including: change in impairment losses on financial instruments written-off in the statement of financial position</i>	-	- 5	- 4,767	-	- 4,772	-	-	- 154,270	-	- 154,270
Change in impairment losses due to reallocations of financial assets between Buckets	47,204	- 7,101	- 40,103	-	-	4,530	- 22,226	18,549	-	853
Reallocation to Bucket 1	48,713	- 6,067	- 42,646	-	-	13,872	- 13,741	722	-	853
Reallocation to Bucket 2	- 720	5,039	- 4,319	-	-	- 6,905	6,950	- 45	-	-
Reallocation to Bucket 3	- 789	- 6,073	6,862	-	-	- 2,437	- 15,435	17,872	-	-
Other changes	- 3	- 10	13	-	-	- 6	4	2	-	-
At end of period December 31st 2022	10,367	6,351	257,351	403	274,472	86,712	50,924	703,979	- 6,843	834,772

Item	Gross carrying amount of amounts due from retail clients					Gross carrying amount of amounts due from institutional clients				
	Bucket 1	Bucket 2	Bucket 3	POCI	Total	Bucket 1	Bucket 2	Bucket 3	POCI	Total
At beginning of period January 1st 2021	2,834,246	182,856	432,853	-	3,449,955	5,481,028	2,198,405	1,550,407	356	9,230,196
Increase due to origination and purchase	249,419	785	-	1,658	251,862	1,598,268	46,671	3,394	9,387	1,657,720
Change in gross carrying amount of existing portfolio	- 145,600	- 10,259	- 25,943	2	- 181,800	- 39,829	- 97,687	- 39,358	- 160	- 177,034
Decrease due to derecognition	- 138,800	- 8,631	- 138,026	-	- 285,457	- 672,278	- 500,611	- 202,090	-	- 1,374,979
<i>including: change in gross carrying amount due to financial instruments that were written off in the statement of financial position</i>	-	-	- 105,393	-	- 105,393	-	-	- 105,866	-	- 105,866
Change in gross carrying amount due to reallocation of financial asset between Buckets	- 126,076	- 6,334	132,410	-	-	587,393	- 559,806	- 27,587	-	-
Reallocation to Bucket 1	41,690	- 41,034	- 656	-	-	1,331,664	- 1,158,983	- 172,681	-	-
Reallocation to Bucket 2	- 60,393	69,633	- 9,240	-	-	- 615,620	680,247	- 64,627	-	-
Reallocation to Bucket 3	- 107,373	- 34,933	142,306	-	-	- 128,651	- 81,070	209,721	-	-
Other changes	- 45	86	- 41	-	-	2,550	- 2,552	2	-	-
At end of period December 31st 2021	2,673,144	158,503	401,253	1,660	3,234,560	6,957,132	1,084,420	1,284,768	9,583	9,335,903

Item	Allowances for amounts due from retail clients					Allowances for amounts due from institutional clients				
	Bucket 1	Bucket 2	Bucket 3	POCI	Total	Bucket 1	Bucket 2	Bucket 3	POCI	Total
At beginning of period January 1st 2021	15,509	21,690	299,370	-	336,569	69,263	104,433	692,719	25	866,440
Increase due to origination and purchase	3,103	32	-	16	3,151	22,833	801	109	209	23,952
Changes due to change in credit risk	- 2,791	3,033	91,612	16	91,870	- 46,236	13,830	112,694	765	81,053
Change in impairment losses on derecognition	- 870	- 641	- 113,980	-	- 115,491	- 6,197	- 23,596	- 135,125	-	- 164,918
<i>including: change in impairment losses on financial instruments written-off in the statement of financial position</i>	-	-	- 105,394	-	- 105,394	-	-	- 105,866	-	- 105,866
Change in impairment losses due to reallocations of financial assets between Buckets	3,463	- 8,450	4,987	-	-	30,096	- 30,568	472	-	-
Reallocation to Bucket 1	5,268	- 4,995	- 273	-	-	46,073	- 39,298	- 6,775	-	-
Reallocation to Bucket 2	- 508	3,699	- 3,191	-	-	- 11,404	14,162	- 2,758	-	-
Reallocation to Bucket 3	- 1,297	- 7,154	8,451	-	-	- 4,573	- 5,432	10,005	-	-
Other changes	- 11	10	1	-	-	- 65	- 40	105	-	-
At end of period December 31st 2021	18,403	15,674	281,990	32	316,099	69,694	64,860	670,974	999	806,527

26. Financial assets by maturity

December 31st 2022	up to 1 month	over 1 month to 3 months	over 3 months to 6 months	over 6 months to 12 months	over 1 year to 5 years	over 5 years	undefined maturity date	Total
Amounts due from banks (Note 22)	227,666	-	165	-	15,000	-	-	242,831
Securities held for trading (Note 23)	15,802	-	-	1,218	20,225	-	-	37,245
Securities measured at fair value through other comprehensive income (Note 24)	4,507,029	513	1,118	263,778	2,143,375	-	85,465	7,001,278
Securities measured at amortised cost (Note 24)	-	-	-	50,873	1,766,992	82,350	-	1,900,215
Securities measured at fair value through profit or loss (Note 24)	-	-	-	-	-	106,625	-	106,625
Amounts due from clients (Note 25)	361,704	399,270	876,571	1,366,408	4,497,794	3,624,080	-	11,125,827
Total	5,112,201	399,783	877,854	1,682,277	8,443,386	3,813,055	85,465	20,414,021

December 31st 2021	up to 1 month	over 1 month to 3 months	over 3 months to 6 months	over 6 months to 12 months	over 1 year and up to 5 years	over 5 years	undefined maturity date	Total
Amounts due from banks (Note 22)	385,668	-	79	-	15,000	-	-	400,747
Securities held for trading (Note 23)	13,308	-	-	1,121	4,200	-	-	18,629
Securities measured at fair value through other comprehensive income (Note 24)	2,899,015	213,187	187,254	243,007	1,716,832	52,558	85,483	5,397,336
Securities measured at amortised cost (Note 24)	-	-	76,082	51,903	1,077,650	376,731	-	1,582,366
Securities measured at fair value through profit or loss (Note 24)	-	-	-	-	-	129,229	-	129,229
Amounts due from clients (Note 25)	223,074	286,733	587,625	1,340,488	5,166,588	3,894,958	-	11,499,466
Total	3,521,065	499,920	851,040	1,636,519	7,980,270	4,453,476	85,483	19,027,773

27. Intangible assets

Item	December 31st 2022	December 31st 2021
Goodwill	973	973
Licenses and software, including:	92,078	91,679
<i>internally produced software</i>	4,611	3,769
Intangible assets under development	39,876	20,150
Other	56	59
Total	132,983	112,861

Intangible assets fully amortised, in continuous use:

December 31st 2022	165,090
December 31st 2021	142,478

With respect to intangible assets that are not yet available for use, i.e., their development has not been completed, the Group monitors the assets for potential indications of impairment on an ongoing basis. Following the review of expenditure on intangible assets under development, no indicators of impairment were identified as at December 31st 2022 and December 31st 2021.

Change in intangible assets

Item	Goodwill	Licences and software	Other	Intangible assets under development	Total
As at January 1st 2022					
Gross carrying amount	973	394,822	86	20,150	416,031
Amortisation	-	-303,143	-27	-	-303,170
Net carrying amount	973	91,679	59	20,150	112,861
Period ending December 31st 2022					
Net carrying amount at beginning of year	973	91,679	59	20,150	112,861
Increase	-	30,838	-	34,413	65,251
<i>purchase</i>	-	16,151	-	34,413	50,564
<i>transfer from intangible assets under development</i>	-	14,687	-	-	14,687
Decrease	-	-	-	-14,687	-14,687
<i>retirement/sale</i>	-	-	-	-	-
<i>transfer to licences and software</i>	-	-	-	-14,687	-14,687
Amortisation charge	-	- 30,439	-3	-	-30,442
Net carrying amount as at December 31st 2022	973	92,078	56	39,876	132,983
As at December 31st 2022					
Gross carrying amount	973	425,660	86	39,876	466,595
Amortisation	-	-333,582	-30	-	-333,612
Net carrying amount as at December 31st 2022	973	92,078	56	39,876	132,983

Item	Goodwill	Licences and software	Other	Intangible assets under development	Total
As at January 1st 2021					
Gross carrying amount	973	373,872	86	11,941	386,872
Amortisation	-	-275,946	-24	-	-275,970
Net carrying amount	973	97,926	62	11,941	110,902
Period ending December 31st 2021					
Net carrying amount at beginning of year	973	97,926	62	11,941	110,902
Increase	-	20,950	-	16,751	37,701
<i>purchase</i>	-	12,942	-	16,751	29,693
<i>transfer from intangible assets under development</i>	-	8,008	-	-	8,008
Decrease	-	-	-	-8,542	-8,542
<i>retirement/sale</i>	-	-	-	-534	-534
<i>transfer to licences and software</i>	-	-	-	-8,008	-8,008
Amortisation charge	-	- 27,197	-3	-	-27,200
Net carrying amount as at December 31st 2021	973	91,679	59	20,150	112,861
As at December 31st 2021					
Gross carrying amount	973	394,822	86	20,150	416,031
Amortisation	-	-303,143	-27	-	-303,170
Net carrying amount as at December 31st 2021	973	91,679	59	20,150	112,861

28. Property, plant and equipment

Item	December 31st 2022	December 31st 2021
Property, plant and equipment, including:	86,982	81,520
<i>land</i>	696	719
<i>buildings and premises</i>	19,447	20,232
<i>leasehold improvements</i>	21,196	22,093
<i>computer hardware and technical equipment</i>	42,902	35,835
<i>vehicles</i>	300	381
<i>other property, plant and equipment</i>	2,441	2,260
Property, plant and equipment under construction	4,688	2,562
Total	91,670	84,082

As at December 31st 2022, and December 31st 2021, no assets were withdrawn from active use and classified as held for sale.

Change in property, plant and equipment

In the presented periods there were no temporarily unused assets with significant carrying amount.

Item	Land and buildings	Leasehold improvements	Technical equipment, vehicles and other equipment	Property, plant and equipment under construction	Advance payments	Total
As at January 1st 2022						
Gross carrying amount	32,908	67,728	110,750	2,562	-	213,948
Depreciation	- 11,957	- 45,635	- 72,274	-	-	- 129,866
Net carrying amount	20,951	22,093	38,476	2,562	-	84,082
Period ending December 31st 2022						
Net carrying amount at beginning of year	20,951	22,093	38,476	2,562	-	84,082
Increase:	-	2,231	18,867	10,368	-	31,466
<i>purchases</i>	-	2,231	10,625	10,368	-	23,224
<i>transfer from property, plant and equipment</i>	-	-	8,242	-	-	8,242
Decrease:	-	- 845	- 5,821	- 8,242	-	- 14,908
<i>retirement/sale</i>	-	- 845	- 5,821	-	-	- 6,666
<i>transfer to property, plant and equipment</i>	-	-	-	- 8,242	-	- 8,242
Depreciation charge	- 808	- 3,118	- 11,635	-	-	- 15,561
Reversal of depreciation charge due to retirement/sale	-	835	5,756	-	-	6,591
Other	-	-	-	-	-	-
Net carrying amount as at December 31st 2022	20,143	21,196	45,643	4,688	-	91,670
As at December 31st 2022						
Gross carrying amount	32,908	69,114	123,796	4,688	-	230,506
Depreciation	- 12,765	- 47,918	- 78,153	-	-	- 138,836
Net carrying amount	20,143	21,196	45,643	4,688	-	91,670

Item	Land and buildings	Leasehold improvements	Technical equipment, vehicles and other equipment	Property, plant and equipment under construction	Advance payments	Total
As at January 1st 2021						
Gross carrying amount	32,839	69,561	114,102	4,640	173	221,315
Depreciation	-11,152	-45,296	-80,216	-	-	-136,664
Net carrying amount	21,687	24,265	33,886	4,640	173	84,651
Period ending December 31st 2021						
Net carrying amount at beginning of year	21,741	27,247	24,928	3,827	-	84,651
Increase:	69	1,309	13,923	2,922	-	18,223
<i>purchases</i>	69	-	10,232	2,922	-	13,223
<i>transfer from property, plant and equipment</i>	-	1,309	3,691	-	-	5,000
Decrease:	-	-3,142	-17,275	-5,000	-173	-25,590
<i>retirement/sale</i>	-	-3,142	-17,275	-	-173	-20,590
<i>transfer to property, plant and equipment</i>	-	-	-	-5,000	-	-5,000
Depreciation charge	-805	-3,439	-9,259	-	-	-13,503
Reversal of depreciation charge due to retirement/sale	-	3,098	17,174	-	-	20,272
Other	-	2	27	-	-	29
Net carrying amount as at December 31st 2021	21,005	25,075	29,518	1,749	- 173	84,082
As at December 31st 2021						
Gross carrying amount	32,908	67,728	110,750	2,562	-	213,948
Depreciation	-11,957	-45,635	-72,274	-	-	-129,866
Net carrying amount	20,951	22,093	38,476	2,562	-	84,082

29. Right of use – leases

Item	December 31st 2022	December 31st 2021
Properties	61,693	77,305
Vehicles	3,270	305
Land	876	928
Total	65,839	78,538

Change in right-of-use assets – leases

Change in right-of-use asset	Real property and land	Vehicles	Total
As at January 1st 2022			
Gross carrying amount	120,259	1,177	121,436
Depreciation	- 42,026	- 872	- 42,898
Net carrying amount	78,233	305	78,538
Net carrying amount at beginning of year	78,233	305	78,538
Increase	1,097	3,477	4,574
Decrease	- 543	-	- 543
Depreciation charge	- 16,218	- 512	- 16,730
Reversal of depreciation charge			
Gross carrying amount as of December 31st 2022	62,569	3,270	65,839
As at December 31st 2022			
Gross carrying amount	120,813	4,654	125,467
Depreciation	- 58,244	- 1,384	- 59,628
Net carrying amount	62,569	3,270	65,839

Change in right-of-use asset	Real property and land	Vehicles	Total
As at January 1st 2021			
Gross carrying amount	98,672	964	99,636
Depreciation	- 31,261	- 580	- 31,841
Net carrying amount	67,411	384	67,795
Net carrying amount at beginning of year	67,411	384	67,795
Increase	26,135	213	26,348
Decrease	- 4,548	-	- 4,548
Depreciation charge	- 14,848	- 292	- 15,140
Reversal of depreciation charge	4,083	-	4,083
Gross carrying amount as of December 31st 2021	78,233	305	78,538
As at December 31st 2021			
Gross carrying amount	120,259	1,177	121,436
Depreciation	- 42,026	- 872	- 42,898
Net carrying amount	78,233	305	78,538

30. Other assets

Item	December 31st 2022	December 31st 2021
Up-front expenses	10,835	8,903
Cash surplus	4,981	2,151
Payment card settlements	7,642	4,949
Assorted debtors	4,574	12,799
Right of perpetual usufruct of land	817	1,451
Public charges	9,663	968
Accrued income	15,322	14,128
Receivables under cancelled foreign currency loan agreements	13,543	2,396
Assets held for sale	4,636	1,054
Receivables from settlement of transactions on regulated market	107,851	122,159
Receivables from KDPW_CCP	105,151	90,466
Other	8,302	6,031
Total	293,317	267,455

31. Amounts due to central bank and other banks

Item	December 31st 2022	December 31st 2021
Deposits from other banks	44,548	275,826
Repurchase transactions	96,595	144,563
Total	141,143	420,389

Amounts due to central bank and other banks, by maturity:

Item	December 31st 2022	December 31st 2021
up to 1 month	44,506	126,258
over 1 month to 3 months	-	68,951
over 3 months to 6 months	-	88,745
over 6 months to 12 months	96,637	136,435
Total	141,143	420,389

32. Amounts due to clients

Item	December 31st 2022	December 31st 2021
Retail clients	10,120,218	8,515,701
<i>current/checking accounts</i>	4,270,044	4,942,698
<i>term deposits</i>	5,850,174	3,573,003
Institutional clients	7,944,141	7,799,099
<i>current/checking accounts</i>	5,645,340	6,255,578
<i>term deposits</i>	2,298,801	1,543,521
Other clients	118,584	84,032
Borrowings from international financial institutions	589,675	510,954
Lending support funds	48,191	98,077
Total	18,820,809	17,007,863

In 2022 and 2021, the Group made all principal and interest payments on time, and did not breach any other contractual provisions regarding its payment obligations.

Amounts due to clients, by maturity:

Item	December 31st 2022	December 31st 2021
up to 1 month	12,319,411	12,620,948
over 1 month to 3 months	3,764,787	1,669,187
over 3 months to 6 months	1,166,365	1,176,370
over 6 months to 12 months	864,739	641,283
from 1 to 5 years	535,093	764,593
over 5 years	170,414	135,482
Total	18,820,809	17,007,863

33. Subordinated liabilities

Series	Currency	Interest rate	Maturity	Nominal value	Amount outstanding	Nominal value	Amount outstanding
				December 31st 2022		December 31st 2021	
AA1	PLN	6M WIBOR + margin (six-month)	7 years (with early repayment option after 5 years)	34,214	35,927	34,214	34,889
AA2	PLN	6M WIBOR + margin (six-month)	7 years (with early repayment option after 5 years)	65,786	67,077	65,786	66,347
P	PLN	6M WIBOR + margin (six-month)	10 years (with early repayment option after 5 years)	150,000	156,945	150,000	151,814
R1	PLN	6M WIBOR + margin (six-month)	10 years (with early repayment option after 5 years)	83,000	85,086	83,000	83,572
W	PLN	6M WIBOR + margin (six-month)	7 years (with early repayment option after 5 years)	-	-	32,500	32,485
Total				333,000	345,035	365,500	369,107

34. Provisions

Item	December 31st 2022	December 31st 2021
Provisions for contingent liabilities, including:	34,238	29,347
<i>open lines of credit</i>	20,804	15,914
<i>guarantees</i>	13,434	13,433
Provision for employee benefits – retirement and disability benefits	4,314	3,794
Provision for legal risk related to foreign currency mortgage loans	116,457	51,965
Provision for refund of commission fees due to early loan repayment	260	952
Provision for refunds of increased interest charged until court entry of mortgage security	2,710	-
Provision for other liabilities and claims	7,479	8,564
Total	165,458	94,622

Change in provisions

Item	December 31st 2022	December 31st 2021
Provisions for contingent liabilities		
At beginning of period	29,347	29,653
<i>recognition of provisions for impairment of off-balance-sheet liabilities</i>	82,726	81,145
<i>reversal of provisions for impairment of off-balance-sheet liabilities</i>	- 77,833	- 81,451
<i>other</i>	- 2	-
At end of period	34,238	29,347
Provisions for employee benefits		
At beginning of period	3,794	3,650
<i>recognition of provisions</i>	1,079	471
<i>use of provisions</i>	- 559	- 327
At end of period	4,314	3,794
Provision for legal risk related to foreign currency mortgage loans		
At beginning of period	51,965	26,072
<i>recognition of provisions</i>	95,855	14,940
<i>exchange differences on measurement of provisions</i>	26,520	14,396
<i>use of provisions</i>	- 57,883	-3,443
At end of period	116,457	51,965

Provision for refund of commission fees due to early loan repayment		
At beginning of period	952	1,534
<i>recognition of provisions</i>	10	184
<i>use of provisions</i>	- 85	- 267
<i>reversal of provisions</i>	- 617	- 499
At end of period	260	952
Provision for refunds of increased interest charged until court entry of mortgage security	-	-
At beginning of period	-	-
<i>recognition of provisions</i>	2,710	-
At end of period	2,710	-
Provision for other liabilities and claims		
At beginning of period	8,564	7,287
<i>recognition of provisions</i>	29,998	1,775
<i>use of provisions</i>	- 28,359	- 32
<i>reversal of provisions</i>	- 2,724	- 466
At end of period	7,479	8,564
Total provisions at end of period	165,458	94,622

Present value of future retirement and disability benefit obligations to employees in employment as at December 31st 2022:

Item	December 31st 2022	December 31st 2021
Wage growth rate	4.5%-11,50% (4.5% in 2022)	2,5%-5% (0% in 2021)
Interest rate for future obligations due to:		
<i>retirement and disability benefits</i>	6.8%	1.5%-3,9%
Amounts recognised in comprehensive income with respect to the defined benefit plans:		
Cost of benefits:		
Current service cost	990	893
Net interest expense	148	124
Components of defined benefit plan costs recognised in profit or loss	1,138	1,017
Increase (decrease) in net defined benefit obligation:		
Actuarial gains and losses due to changes in financial assumptions	578	128
Components of defined benefit plan costs recognised in other comprehensive income	578	128
Total	1,716	1,145

Defined benefit obligations

Item	December 31st 2022	December 31st 2021
Amounts recognised in comprehensive income with respect to the defined benefit plans:		
At beginning of period	3,794	3,650
Current service cost	405	307
Interest expense	96	36
(Gains) losses on revaluation:		
Actuarial gains and losses due to changes in financial assumptions	578	128
Benefits paid	- 559	-327
At end of period	4,314	3,794

The calculation of the present value of future retirement and disability benefit obligations relates to the current population of Bank employees and does not take account of any future employees of the Bank. It consists in determining the employees' entitlement to a specified part of the severance benefit in the year following the calculation date using the projected unit credit method of calculating the actuarial present value of future obligations. The present value of an employee's entitlement to a certain part of the future severance benefit was calculated on the assumption that the employee would continue to be employed by the Group until the benefit is paid, and was discounted at the moment of calculation.

The vested portion of the benefit entitlement is the quotient of the current length of service of the employee and the length of service required to receive the retirement or disability benefit.

Disability benefits are calculated as the sum of the products of the probabilities of becoming disabled in future years for a person of a certain age and the vested portion of the benefit in each year, over the entire projected period, and are discounted at the time of valuation. The vested portion of the disability benefit in each year is calculated by dividing the current length of service by the length of service in that future year.

The present value of the vested entitlements is calculated assuming an increase in the base amount of severance benefit until payment at the rate of salary increase.

As at December 31st 2022, the discount rate of 6.8% was used to estimate employee benefit obligations. Using the discount rate of 6.3%, employee benefit obligations would amount to PLN 3,577 thousand as at December 31st 2022, and at the discount rate of 7.3% the obligations would amount to PLN 3,393 thousand.

As at December 31st 2021, the discount rate of 3.9% was used to estimate employee benefit obligations. Using the discount rate of 3.65%, employee benefit obligations would amount to PLN 3,130 thousand as at December 31st 2021, and at the discount rate of 4.15% the obligations would amount to PLN 3,043 thousand.

The Group estimates that the outflow of economic benefits resulting from the provision will occur in the presented periods:

Item	December 31st 2022	December 31st 2021
up to 1 year	937	818
from 1 to 5 years	1,036	795
from 5 to 10 years	1,165	1,118
from 10 to 20 years	1,035	905
over 20 years	141	158
Total	4,314	3,794

Provisions for court proceedings, legal risk related to foreign currency mortgage loans, claims and reimbursement of commission fees are recognised at the amount of expected outflows of economic benefits in the presented periods:

Item	January 1st – December 31st 2022		January 1st – December 31st 2021	
	Amount	Expected outflow of benefits	Amount	Expected outflow of benefits
Provision for amounts due to clients	6,200	up to 1 year	6,150	up to 1 year
Provision for negative balances in clients' accounts resulting from market settlement of transactions	-	-	50	up to 1 year
Provision for other liabilities and claims	1,279		2,364	
	494	up to 1 year	298	up to 1 year
	785	over 1 year	2,066	over 1 year
Provision for legal risk related to foreign currency mortgage loans	116,457		51,965	
	14,023	up to 1 year	7,013	up to 1 year
	102,434	over 1 year	44,952	over 1 year
Provision for refund of commission fees due to early loan repayment	260		952	
	87	up to 1 year	317	up to 1 year
	173	over 1 year	635	over 1 year
Provision for refunds of increased interest charged until court entry of mortgage security	2,710			
	903	up to 1 year		
	1,807	over 1 year		
Total	126,906		61,481	

Total amount of claims under pending proceedings in the periods presented:

Item	December 31st 2022	December 31st 2021
The Group as respondent	360,700	213,238
The Group as claimant	99,106	108,880

In the opinion of the Management Board, materialisation of the risks arising from the proceedings, except for those provisioned for, is probable but not likely. All risks arising from proceedings pending before a court or public administration authority are adequately provisioned for.

As at December 31st 2022, the Bank was not involved in any material proceedings pending before any court, arbitration body or public administration authority where the amount of the Bank's liabilities or claims would represent at least 10% of the Bank's equity.

Litigation against the Bank concerning loans denominated in or tied to foreign currencies

For information on litigation related to loans denominated in or tied to foreign currencies, see Note 39 "Legal risk of residential mortgage-backed loans linked to foreign exchange rates".

Litigation and other proceedings against the Bank concerning reimbursement of part of consumer credit costs on account of early repayment

On September 11th 2019, the ECJ issued a preliminary ruling in case C - 383/18 Lexitor v SKOK Stefczyka, Santander Consumer Bank and mBank, which contains an interpretation of the provisions of Directive 2008/48/EC of the European Parliament and of the Council of April 23rd 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC.

In response to the request for preliminary ruling put forward by the national court, the ECJ ruled that the consumer's right to reduce the total cost of credit on account early repayment of the credit covers all costs imposed on the consumer.

No proceedings are pending against Bank for reimbursement of part of consumer credit costs under the Act on enforcement of claims in class action proceedings of December 17th 2009.

As of December 31st 2022, there were seven court proceedings pending against the Bank regarding the reimbursement of consumer credit costs due to early repayment.

35. Deferred income tax

Deferred income tax is calculated on all temporary differences using an income tax rate of 19%.

Balance of deferred income tax

Item	January 1st –	January 1st –
At beginning of period	150,597	120,456
Change, including:	22,858	30,141
<i>impairment losses on receivables</i>	16,042	5,957
<i>valuation of assets</i>	14,855	18,493
<i>deferred expenses</i>	16,436	- 2,771
<i>interest received on securities previously purchased by the Bank</i>	16,604	3,120
<i>other differences, including difference arising from lease contracts</i>	2,609	- 1,211
<i>other differences</i>	- 3,777	-
<i>tax loss</i>	-	- 144
<i>commission fees accounted for using effective tax rate</i>	- 15,713	720
<i>non-depreciated property, plant and equipment covered by investment tax relief</i>	- 1,030	- 383
<i>provisions for material, labour and other costs</i>	2,366	1,077
<i>accrued income</i>	- 25,782	5,034
<i>IBNR recognised as tax-deductible</i>	248	249
At end of period	173,455	150,597

Deferred tax recognised in revaluation reserve:

Item	January 1st –	January 1st –
At beginning of period	6,325	- 15,920
Change due to measurement of assets	7,013	22,245
At end of period	13,338	6,325

Deferred tax liabilities and assets are allocated to the following items:

Item	January 1st –	January 1st –
Deferred tax liabilities arising from:		
<i>accrued income</i>	56,519	30,744
<i>increase on valuation of assets</i>	53,172	39,398
<i>non-depreciated property, plant and equipment covered by investment tax relief</i>	44,343	47,957
<i>paid commission fees to be accounted for using effective tax rate</i>	9,123	6,453
<i>IBNR recognised as tax-deductible in previous years</i>	497	746
<i>other differences</i>	171	-
Total	163,825	125,298

Item	January 1st –	January 1st –
Deferred tax assets due to:		
<i>non-deductible impairment losses</i>	147,797	134,014
<i>received commission fees to be accounted for using effective tax rate</i>	9,344	22,387
<i>provisions for material, labour and other costs</i>	11,205	6,580
<i>deferred expenses</i>	78,967	59,929
<i>interest received on securities previously purchased by the Bank</i>	23,027	6,423
<i>decrease on valuation of assets</i>	62,842	38,857
<i>other temporary differences</i>	4,098	7,705
Total	337,280	275,895

The Group performed a sensitivity analysis of recoverability of deferred tax assets. As at December 31st 2022, deferred tax assets were PLN 337,280 thousand, of which the most significant items were recognised impairment losses on non-performing credit exposures of PLN 147,797 thousand and valuation of non-current and current assets of PLN 62,842 thousand.

Change in deferred tax in the period

Item	January 1st –	January 1st –
At beginning of period	150,597	120,456
Change in deductible temporary differences	61,384	34,869
Change in taxable temporary differences	- 38,526	- 4,728
Total change, including:	22,858	30,141
change in revaluation reserve	7,013	22,245
change recognised in profit or loss	12,534	7,896
At end of period	173,455	150,597

36. Lease liabilities

As a lessee, the Group recognises a lease in the statement of financial position as a right-of-use asset and a corresponding liability on the date on which the leased asset is available for use. Each lease payment is allocated between the reduction of the liability and the finance cost. The finance cost is recognised in the statement of profit or loss over the lease term. The right-of-use asset is depreciated using the straight-line method. Lease liabilities were measured at the present value of future lease payments, discounted using the Company's incremental borrowing rate as at January 1st 2019 of 5.00%. For contracts concluded in September 2020 and later for up to five years, the rate is 5.25%, and for contracts concluded for terms of over five to nine years the rate is 5.75%.

As a lessee, the Group leases vehicles and real property.

Leases are typically for terms ranging from 1 to 10 years. Lease terms are negotiated individually.

The lease contracts do not impose any obligations, but the leased assets cannot be used as collateral for borrowings.

Maturity of lease liabilities

Item	December 31st 2022		
	Real property and land	Vehicles	Total
up to 1 year	2,823	121	2,944
from 1 to 5 years	13,447	3,358	16,805
over 5 years	48,179	-	48,179
Total	64,449	3,479	67,928

Item	December 31st 2021		
	Real property and land	Vehicles	Total
up to 1 year	2,485	202	2,687
from 1 to 5 years	22,412	177	22,589
over 5 years	55,894	-	55,894
Total	80,791	379	81,170

Liabilities arising from property lease contracts relate to commercial properties used by the Bank as part of its business activities.

For contracts denominated in the euro, the amount of monthly consideration is the PLN equivalent (calculated at the mid-rate quoted by the National Bank of Poland) of total fees and charges for the leased space, determined as the product of the net price, expressed in EUR per square metre, and the area actually leased, plus VAT.

For contracts denominated in the Polish zloty, the amount of monthly consideration is the total of fees and charges for the leased space, determined as the product of the net price per square metre, and the area actually leased, plus VAT.

Monthly consideration is value-adjusted by the rates and on the dates specified in the lease contracts. The contracts denominated in EUR are value-adjusted using the indices applicable in the European Union. The contracts denominated in PLN are value-adjusted using the consumer price index for the previous period announced by the President of Statistics Poland.

The contracts do not contain options to purchase the property.

Contracts are concluded for a definite period; some of the contracts are not terminable, but some stipulate early termination or expiry if a party to the contract is dissolved, in which case a period of notice of 6 or 12 months applies. Some of the contracts may be extended on their current terms and conditions based on a declaration of will of the lessor made in writing six months before the expiry of the contract.

The Group applied the exemptions allowed under IFRS 16 for:

1. leases of low-value assets,
2. short-term leases of up to 12 months.

Low-value lease contracts are contracts where the value of the underlying asset is low, i.e., does not exceed PLN 20 thousand.

Payments under the exempt contracts are recognised as an expense in the statement of profit or loss on a straight-line basis.

Future minimum lease payments under IFRS 16-exempt contracts:

As at December 31st 2022:

Item	Properties	Vehicles	Total
low-value leases	436	10	446
short-term leases	1,209	-	1,209
Total	1,645	10	1,655

As at December 31st 2021:

Item	Properties	Vehicles	Total
low-value leases	94	211	305
short-term leases	1,602	-	1,602
Total	1,696	211	1,907

37. Other liabilities

Item	December 31st 2022	December 31st 2021
Interbank settlements	73,651	47,301
Amounts due to DM BOŚ counterparties	63,789	72,887
Accrued expenses and deferred income	66,079	47,258
Public charges	31,510	19,354
Trade liabilities	95,044	71,782
Deferred commissions	7,567	7,749
Payment card settlements	829	1,135
Provision for refund of commission fees due to early loan repayment	2,648	3,310
Other	7,127	11,368
Total	348,244	282,144

38. Contingent assets and liabilities

Item	December 31st 2022	December 31st 2021
Contingent liabilities:	3,138,890	3,264,122
Financial, including:	2,672,372	2,814,089
open credit lines, including:	2,657,528	2,793,138
<i>revocable</i>	2,195,331	2,337,580
<i>irrevocable</i>	462,197	455,558
open import letters of credit	14,844	20,951
Guarantees, including:	466,518	450,033
<i>credit repayment sureties and guarantees</i>	12,739	12,739
<i>performance bonds</i>	453,779	437,294
Contingent assets:	2,167,513	2,143,824
Financial, including:	154,767	344,955
<i>open lines of credit</i>	154,767	344,955
Guarantees	2,010,194	1,781,345
Other	2,552	17,524
Total contingent assets and contingent liabilities	5,306,403	5,407,946

39. Legal risk of residential mortgage-backed loans linked to foreign exchange rates

On October 3rd 2019, the Court of Justice of the European Union ("CJEU") issued a preliminary ruling in Case C-260/18 Kamil Dziubak, Justyna Dziubak v Raiffeisen Bank International AG, Vienna, conducting business in Poland in the form of a branch under the name Raiffeisen Bank International AG Branch in Poland, formerly Raiffeisen Bank Polska S.A., with its registered office in Warsaw, which interprets the provisions of Council Directive 93/13/EEC of April 5th 1993 on unfair terms in consumer contracts, in response to questions referred for a preliminary ruling by the referring court after analysing the provisions of an agreement for the provision of a CHF-indexed loan.

According to the verdict, the CJEU did not address the issue of the prohibited nature of contractual clauses, indicating that it is for the national courts to examine the existence of all the indication of abusiveness and to assess contractual provisions in each individual case separately. At the same time, the CJEU did not rule out the possibility that the national court could recognise the possibility of the agreement's continued operation without the indexation mechanism (which would mean that the loan would be treated as a PLN loan bearing interest at LIBOR), however in the CJEU's opinion this solution was deemed to be uncertain. The CJEU ruled out the possibility of supplementing the content of a contract after eliminating abusive clauses with rules stemming from the general provisions of national law. However, the CJEU confirmed that it is possible to fill in gaps in the contract with rules resulting from an express dispositive provision or other rules agreed upon by the parties.

Since the CJEU verdict, there has been an increase in the number of court cases involving loan agreements tied to foreign exchange rates. The reasons for this phenomenon can be found in the intensified marketing campaign by entities representing borrowers in court proceedings, the constant presence of the subject matter in the media, as well as the evolving trends the national case law.

Most of the court judgments issued following the CJEU ruling of October 3rd 2019 are not favourable of banks, but the case law continues to be inconsistent in this respect. Some of the courts hearing cases involving foreign exchange-linked mortgages have made further requests to the CJEU for preliminary fullings. The position of the CJEU in this respect may have an impact on court rulings in the future.

The Bank monitors domestic case law on an ongoing basis when assessing the legal risks of foreign currency-indexed loans and takes into account in its analyses that the CJEU judgment of October 3rd 2019 and rulings by Polish courts in similar cases would increase the number of court proceedings and increase the value of claims sought.

On May 7th 2021, the Supreme Court, sitting in a panel of seven judges, adopted a resolution in response to questions posed by the Financial Ombudsman, and reiterated the position that if a credit agreement is found invalid, each party is entitled to a separate claim for reimbursement of the performance obligation rendered and indicated that the agreement may be deemed definitively ineffective only if the consumer is duly informed of the effects of the agreement's invalidity and does not agree to be bound by the provision deemed abusive. The questions put forward by the Financial Ombudsman overlapped only to some extent with the questions submitted to the Supreme Court by the First President of the Supreme Court. So far the full panel of judges of the Civil Chamber of the Supreme Court has not passed a resolution that would answer all the questions raised by the First President of the Supreme Court. The session of the Civil Chamber of the Supreme Court was set for May 11th 2021 (previously scheduled for March 25th 2021 and then April 13th 2021). However, the Supreme Court did not adopt the announced resolution by the specified dates, and requested the Ombudsman, the Children's Rights Ombudsman, the Office of the Banking Supervision Authority and the Governor of the National Bank of Poland to present their positions as to the directions of resolving the legal issues presented by the First President of the Supreme Court. The positions were presented to the Supreme Court. At the next meeting of the full bench of the Civil Chamber held on September 2nd 2021, no substantive resolutions were adopted. A decision was made to refer questions to the Court of Justice of the European Union concerning the rules governing the appointment and disciplinary responsibility of judges. Turning to the CJEU with request for preliminary rulings on constitutional issues means that the next session of the entire Chamber will probably take place not earlier than in over ten months. At the same time, by order of July 29th 2021, the three-judge panel of the Supreme Court submitted to the extended panel of the Supreme Court (seven judges) a legal question related to issues of compensation for the use of capital. The date of the hearing has not been set.

On February 16th 2023, the Advocate General of the CJEU in Case C-520/21 delivered an opinion stating that:

1. the provisions of Directive 93/13 (Articles 6(1) and 7(1)) must be interpreted as not precluding a judicial interpretation of national law according to which, if a credit agreement concluded by a consumer and a bank is declared void from the outset because it contains unfair contractual terms, the consumer, in addition to the return of the money paid under the agreement and the payment of statutory interest for late payment from the time of the demand for payment, may, following such a declaration, also claim additional benefits from the bank. It is up to the national court to determine, in light of national law, whether consumers have the right to assert such claims and, if so, to rule on their merits.
2. The provisions of Directive 93/13 preclude the judicial interpretation of national law, according to which, if a credit agreement is invalid, the bank, in addition to repayment of the principal and payment of statutory interest for delay from the time of the demand for payment, may also demand additional benefits from the consumer. However, the ombudsman believes that even if national law permitted such claims, Directive 93/13 precludes them.

The Ombudsman's opinion is unfavourable to the banking sector, while being non-binding on the CJEU. The next step in the case will be a ruling by the CJEU. The CJEU's ruling will have a significant impact on national jurisprudence and, depending on the wording of the judgment, could have negative consequences for the banking sector.

As at December 31st 2022, there were 919 court cases pending against the Bank, concerning loans tied to foreign currencies, mainly CHF, with the total value of claims of PLN 316.23 million. In general, the claimants demand that loan agreements tied to foreign currency exchange rates be recognised as invalid or, alternatively, that the denomination (currency translation) clauses be found/ruled abusive.

Compromise and Settlement Programme for residential mortgage-backed loans tied to foreign currency exchange rates

In January 2021, a group of banks, including Bank Ochrony Środowiska S.A., acting on the basis of assumptions of the proposal of the Chairman of the Polish Financial Supervision Authority (announced in December 2020), commenced cross-sectoral consultations to establish a catalogue of best practices to seek voluntary compromise and settlement with clients.

Based on these consultations and a proposal from the Chairman of the PFSA, the Bank prepared a Compromise and Settlement Programme (the "Programme") for clients who repay residential loans tied to foreign currency exchange rates. The Programme enables clients to avoid foreign exchange risk by converting the currency of the loan into PLN and repaying the remaining loan balance (i.e., after its reduction to the level resulting from the actual payments made to the Bank) in accordance with a repayment schedule defined in PLN as if the loan had been a PLN loan since its origination, with interest accruing at WIBOR plus an appropriate margin.

On December 8th 2021, the Extraordinary General Meeting of the Bank approved the Programme. On January 31st 2022, the Bank launched the Compromise and Settlement Programme for clients repaying foreign currency-linked mortgage loans under rules proposed by the Chairman of the Financial Supervision Commission.

The Programme is available to clients with outstanding loans taken out for the clients' own residential purposes, as well as clients who instituted court proceedings against the Bank for invalidation of a loan agreement if such proceedings have not yet concluded with a final judgment. For details of the Programme, see the Bank's website at <https://www.bosbank.pl/przewalutowanie-kredytu>

In estimating the provision for legal risk related to foreign currency mortgage loans as of December 31st 2022, the Management Board factored in a compromise and settlement scenario due to the expected willingness of clients to reach an agreement with the Bank. Until December 31st 2022, the Bank received 798 applications for settlement concerning foreign currency mortgage loans. The outstanding balance of those loans was PLN 81 million. 327 settlement agreements were signed.

Recognition of legal risk of residential mortgage-backed loans linked to foreign exchange rates

The cancellation of a foreign currency loan agreement results in mutual repayment of the benefits fulfilled by the parties to the agreement. Conclusion of a settlement with the client on the terms proposed by the Bank results in a reduction of the outstanding loan amount. In both cases, the Bank records a decrease in expected cash flows and on this basis, in accordance with paragraph B5.4.6 of IFRS 9 *Financial Instruments*, an adjustment to the gross carrying amount of the foreign currency loan is recognised. If the estimated liability to a client exceeds the gross carrying amount of the loan as at the reporting date, a provision is recognized in accordance with IAS 37. The Bank also recognises a provision in accordance with IAS 37 for loans repaid as at the reporting date.

The adjustment to the gross carrying amount of foreign currency loans in accordance with paragraph B5.4.6 of IFRS 9 *Financial Instruments* and the provision recognised in accordance with IAS 37 are estimated based on the assumed scenarios of settlement and cancellation of loan agreements.

The out-of-court settlements scenario is based on the assumption that existing loans denominated in or tied to a foreign currency would be converted into loans denominated in PLN. It is further proposed that any repaid instalments of loans tied to foreign currencies would be settled as if the loans had been PLN-denominated products since the outset, i.e., based on repayment schedules with interest accruing at WIBOR rates plus margin. As a result of such conversion, the value of the existing portfolio of loans denominated in or tied to foreign currencies will decrease, which is reflected in the amount of the provision.

In connection with court cases the Bank also estimates the value of the provision resulting from the filed lawsuits and lawsuits that are expected to be filed in the future. The amount of the provision is estimated based on the likelihood that an adverse court judgement will be made against the Bank and its expected financial impact. The scenarios of unfavourable outcomes are based on legal opinions and the Bank's experience to date. The adopted scenarios encompass declaration of invalidity of the agreement or conclusion of a court settlement.

The provision calculation model incorporates assumptions regarding the anticipated increase in the number of lawsuits filed by clients over a five-year period. The number of lawsuits remained stable during 2022. The opinion expressed by the Advocate General of the Court of Justice of the European Union (CJEU) on February 16th 2023, does not directly impact the level of adjustment to the gross carrying amount of foreign currency loans and the provision for legal risk. This is because the Bank did not include remuneration for the use of capital in the calculation of the effects of the legal risk. In the future, however, this opinion and the CJEU's ruling in Case C-520/21 may result in changes to the model parameters and forecasts. The Bank will continuously monitor statistics and assess their impact on the model.

The Settlement Programme, implemented since February 2022, has had a positive impact on the trend of new lawsuits over the life of the Programme. However, persistently high interest rates have hampered the momentum of new settlement with clients.

If a loan agreement is cancelled or a settlement is reached with the client, it results in derecognition of the corresponding receivable from the Bank's balance sheet. The costs incurred by the Bank, including the derecognition of the receivable balance and any payments made to the client, are offset against the adjustment to the gross carrying amount of the loan or the provision recognised in accordance with IAS 37. Costs in excess of the amount of the adjustment or the provision are recognised in the statement of profit or loss. As of the reporting date, the loan principal amount disbursed by the Bank but not yet repaid is recognized as a receivable under "Other assets." When a settlement agreement is reached with a client to convert the loan currency to PLN and determine the outstanding amount of the loan, the Bank recognizes the new loan agreement under amounts due from clients (housing loans).

Adjustment to gross carrying amount of loans and estimates of legal risk

Value of clients' debt on outstanding principal of loans tied to foreign currencies	December 31st 2022	December 31st 2021
CHF	773,402	877,489
EUR	508,081	552,439
USD	36,053	36,781
Total	1,317,536	1,466,709

Adjustment to gross carrying amount of foreign currency-linked mortgage loans and legal-risk provision	December 31st 2022	December 31st 2021
Provisions:		
CHF	108,681	46,955
EUR	1,279	4,440
USD	6,497	570
	116,457	51,965
WBB adjustment:		
CHF	381,502	321,828
EUR	11,637	30,773
USD	5,168	3,581
	398,308	356,181
Total	514,764	408,146

Changes in adjustment to gross carrying amount of loans and legal-risk provision

December 31st 2022	Total	Adjustment to gross carrying amount	Provision
At beginning of period	408,146	356,181	51,965
Use following conclusion of settlement agreements under Settlement Programme	-27,303	-	-27,303
Use following conclusion of lawsuits	-34,449	-3,869	-30,580
Costs of recognised provisions	139,930	44,075	95,855
Exchange differences	28,440	1,920	26,520
At end of period	514,764	398,307	116,457

December 31st 2021	Total	Adjustment to gross carrying amount	Provision
At beginning of period	376,410	350,338	26,072
Use following conclusion of settlement agreements under Settlement Programme	-	-	-
Use following conclusion of lawsuits	-3,443	-	-3,443
Costs of recognised provisions	20,783	5,843	14,940
Exchange differences	14,396		14,396
At end of period	408,146	356,181	51,965

Costs of legal risk recognised in the statement of profit or loss	January 1st – December 31st	January 1st – December 31st
Costs arising from conclusion of settlement agreements under Settlement Programme	478	-
Costs arising from conclusion of lawsuits	3,898	-
Total	4,376	-

40. Brokerage business

The brokerage business is conducted by Dom Maklerski BOŚ S.A.

Below is presented data on financial instruments held in clients' securities accounts, at fair value.

Item	December 31st 2022	December 31st 2021
Securities in book-entry form admitted to trading on a regulated market		
Listed shares and rights to listed shares recorded in securities accounts	10,682,956	10,306,169
Other securities recorded in clients' securities accounts	4,228,590	1,135,426
Clients' other financial instruments	186,447	274,510
Property rights listed on the Polish Power Exchange	610,862	597,508
Securities held in the form of registers	141,951	304,168
<i>shares</i>	-	-
<i>bonds</i>	141,951	304,168
Total clients' securities	15,850,806	12,617,781

41. Common equity

Registered share capital

As of December 31st 2022, the share capital was PLN 929,477 thousand and did not change relative to the amount as at December 31 2021.

Series/issue	Type of shares	Type of preference	Number of shares	Par value of series/issue, PLN thousand	Method of payment for shares	Date of registration	Dividend right as of:
A	O	ordinary	236,700	2,367	cash	09-01-91	Jan 1 1992
B	O	ordinary	1,263,300	12,633	cash	11-03-92	Jan 1 1993
C	O	ordinary	477,600	4,776	cash	30-12-92	Jan 1 1993
C	O	ordinary	22,400	224	in-kind contribution	30-12-92	Jan 1 1993
D	O	ordinary	1,300,000	13,000	cash	30-12-93	Jan 1 1994
E	O	ordinary	647,300	6,473	cash	30-06-94	Jan 1 1995
E	O	ordinary	15,500	155	in-kind contribution	30-06-94	Jan 1 1995
E	O	ordinary	37,200	372	in-kind contribution	30-06-94	Jan 1 1995
F	O	ordinary	1,500,000	15,000	cash	30-12-94	Jan 1 1995
G	O	ordinary	1,260,000	12,600	cash	30-06-95	Jan 1 1996
H	O	ordinary	670,000	6,700	cash	30-06-95	Jan 1 1996
I	O	ordinary	70,000	700	cash	30-06-95	Jan 1 1996
J	O	ordinary	1,055,000	10,550	cash	21-06-96	Jan 1 1996
K	O	ordinary	945,000	9,450	cash	21-06-96	Jan 1 1996
L	O	ordinary	1,200,000	12,000	cash	29-11-96	Jan 1 1996
M	O	ordinary	2,500,000	25,000	cash	07-05-98	Jan 1 1997
N	O	ordinary	1,853,000	18,530	cash	13-06-07	Jan 1 2007
O	O	ordinary	1,320,245	13,202	in-kind contribution	25-06-10	Jan 1 2010
P	O	ordinary	6,500,000	65,000	cash	15-06-12	Jan 1 2011
U	O	ordinary	40,000,000	400,000	cash	12-07-17	Jan 1 2016
V	O	ordinary	30,074,426	300,744	cash	04-07-18	Jan 1 2018
Total number of shares			92,947,671				
Total par value of share capital				929,477			
Total share capital				929,477			

Par value of share is PLN 10.

As at December 31st 2022, the total number of voting rights attached to all shares issued by the Bank was 92,947,671 and did not change relative to December 31st 2021.

Each share carries the right to one vote at the General Meeting.

Other shareholders hold in total 27.8% of shares in the Bank's share capital.

As at the date of these full-year consolidated financial statements, no changes in the ownership structure of major holdings were known.

Shareholders holding directly and indirectly 5% or more of total voting rights in the Bank.

Shareholder	December 31st 2022		December 31st 2021	
	Number of voting rights (shares)	% voting interest (ownership interest)	Number of voting rights (shares)	% voting interest (ownership interest)
Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej (National Fund for	53,951,960	58.05	53,951,960	58.05
Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych (Fund for Investments of	8,000,000	8.61	8,000,000	8.61
Dyrekcja Generalna Lasów Państwowych (Directorate General of State Forests)	5,148,000	5.54	5,148,000	5.54

Treasury shares

As at December 31st 2022, the Bank held 37,775 treasury shares, representing 0.04% of the share capital and 0.04% of total voting in the Bank, including:

In accordance with the Commercial Companies Code, the Bank may not exercise voting rights attached to its own shares.

Share premium

Share premium includes any premiums received on issue of share capital. Any transaction costs associated with the issuing of shares are deducted from share premium.

As at December 31st 2022 and December 31st 2021, the share premium was PLN 532,851 thousand.

42. Revaluation reserve

Item	December 31st 2022	December 31st 2021
Remeasurement of financial assets measured at fair value through other comprehensive income	- 72,867	-36,530
Remeasurement of employee benefit obligations	2,665	3,243
Deferred income tax	13,339	6,325
Total revaluation reserve	- 56,863	- 26,962

Change in revaluation reserve

Item	
As at January 1st 2022	-26,962
Increase due to:	856,987
<i>measurement of investment securities</i>	856,987
Decrease due to:	-893,902
<i>measurement of investment securities</i>	-893,324
<i>remeasurement of employee benefit obligations</i>	-578
Deferred income tax	7,014
As at December 31st 2022	-56,863
As at January 1st 2021	67,869
Increase due to:	249,345
<i>measurement of investment securities</i>	249,345
Decrease due to:	-366,421
<i>measurement of investment securities</i>	-366,111
<i>remeasurement of employee benefit obligations</i>	- 310
Deferred income tax	22,245
As at December 31st 2021	-26,962

43. Retained earnings

Retained earnings comprise: other statutory reserve funds, general risk fund and undistributed profit or loss.

Item	December 31st 2022	December 31st 2021
Other statutory reserve funds	457,479	398,628
<i>statutory</i>	44,000	44,000
<i>created pursuant to the Articles of Association above the statutory minimum</i>	409,154	350,303
<i>other</i>	4,325	4,325
Other capital reserves	23,605	23,605
<i>brokerage fund</i>	22,249	22,249
<i>other</i>	1,356	1,356
General risk fund	48,302	48,302
Undistributed profit (loss)	30,579	- 38,814
<i>retained earnings</i>	- 97,665	- 86,270
<i>net profit (loss) for current period</i>	128,244	47,456
Total retained earnings	559,965	431,721

Statutory reserve funds are created from annual profit appropriations of at least 8% of net profit, until such time as the balance of the funds equals at least one third of the share capital. A portion of the of the reserve funds, equal to one-third of the share capital, may be used exclusively for offsetting losses disclosed in the financial statements.

Other reserves are created by appropriating net profit for the year, irrespective of the statutory reserve funds, and are earmarked for offsetting specific losses and expenses.

The General Meeting makes decisions concerning the use of the statutory reserve funds and other reserves.

The general risk fund designated for unidentified risks in the Bank's business is created by appropriating net profit for the year, in accordance with the applicable provisions of the banking law.

44. Hedge accounting

Hedge accounting policies

In the Group, hedge accounting was applied by the Bank only.

Hedge accounting is an integral part of the financial risk management process. Financial risk is managed as part of the risk management process in place at the Group.

The Bank hedges the interest rate risk in the banking book. The Bank uses fair value hedges to hedge the fair value of fixed-rate Treasury bonds.

Cash flow hedge accounting

As at December 31st 2022, the Group did not apply cash flow hedge accounting.

Fair value hedge accounting

During the hedging period, the Bank hedges the volatility of fair value of fixed-rate bonds, resulting from movements of market interest rates. The hedged item is part of the Treasury bonds held in the HtCS business model. The hedging instrument is an Interest Rate Swap (IRS), under which the Bank makes a payment based on a fixed interest rate and receives a coupon based on a variable rate (6M WIBOR).

By establishing a hedging relationship, the netting effect of changes in the fair value of the hedging instrument and the hedged item is obtained in profit or loss. Only one type of risk (i.e., the risk of interest rate volatility) is hedged. The spread between quote prices of the Treasury bonds and the IRS transactions is not hedged.

The hedge is expected to be highly effective in offsetting fair value changes resulting from the hedged risk. The effectiveness of the hedge is verified by using prospective and retrospective hedge effectiveness tests. The prospective test is based on the analysis of BPV of the hedged item and the hedging instrument. The retrospective test is performed based on the direct offset method, which compares changes in the value of the hedging transaction and the hedged item resulting from changes in the hedged risk. The retrospective test is positive if the offset ratio is within the range $<0.8;1.25>$. The tests are performed on a quarterly basis. The Bank does not identify any significant sources of ineffectiveness the fair value hedging.

Changes in the fair value of the hedged item resulting from movements of market interest rates are recognised in the statement of profit or loss. Changes in the fair value of the bonds not attributable to changes in the hedged risk are recognised in revaluation reserve. Changes in the measurement of the hedging instrument are recognised in the statement of profit or loss.

As of December 31st 2022, the Bank had one fair value hedge relationship – a hedge established on October 20th 2015.

The hedged item within the hedging relationship established in 2015 includes PLN 240 million of State Treasury bonds DS0725, maturing in July 2025.

As at 31 December 2022, an amount of PLN 5,224 thousand resulting from changes in fair value of the bonds due to movements of interest rates and changes in the fair value of the IRS transactions was recognised in the statement of profit or loss. The amount of PLN -6,238 thousand was recognized in the revaluation reserve. It represented the sum of the impact of the bonds on equity as at the date the hedge relationship was established (PLN -11,345 thousand) and the change in the fair value of the bonds resulting from the unhedged part of the risk (spread between the quoted prices of the bonds and the IRS transactions).

Item	December 31st 2022			December 31st 2021		
	carrying amount	nominal value	fair value*\	carrying amount	nominal value	fair value*\
Hedging instruments						
Interest Rate Swap (IRS) – negative valuation	30,562	258,000	25,090	9,121	258,000	11,587
Hedged items						
Treasury bonds – positive valuation	223,428	240,000	-19,866	238,620	240,000	-6,490
Total effect on profit or loss			5,224			5,097

*\for the hedged bonds it is an adjustment to the fair value

45. Share-based payments

Executive Compensation Policy

In order to meet the requirements set out in the Regulation of the Minister Finance, Development Funds and Regional Policy of June 8th 2021 on banks' risk management and internal control systems, and on remuneration policy, and in accordance with Directive 2013/36/EU of the European Parliament and of the Council of June 26th 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, the Bank has implemented a Management Remuneration Policy, approved by the Supervisory Board of BOŚ S.A..

The Remuneration and Appointments Committee of the Supervisory Board plays several important roles, including providing its opinion on the Compensation Policy, drafting rules for the compensation of Management Board members, giving its opinion on the amount of variable remuneration for managers, and monitoring the variable remuneration for managers responsible for second-level risk management, compliance function management, and internal audit function management at the Bank.

In compliance with the disclosure obligation outlined in Recommendation No. 30.1 of the PFSA Recommendation Z and the Compensation Policy, the Bank hereby reports that the ratio of the average total gross remuneration of the Management Board members to the average total gross remuneration of other employees of the Bank in 2022 was 6.59. This ratio remained below the established threshold, as required.

The maximum amount of variable remuneration for each managing person may not exceed 100% of the person's fixed remuneration. The General Meeting of Bank Ochrony Środowiska S.A. has the authority to grant its consent to increase the maximum level of variable remuneration up to 200% of the fixed remuneration, in accordance with the procedure outlined in §25.3.4.b) and §25.3.4.c) of the Regulation of the Minister of Finance, Funds, and Regional Policy. The increase in the maximum amount of variable remuneration referred to in the preceding sentence does not apply to members of the Management Board.

In the reporting period, the Compensation Policy was not revised.

During the reporting period:

1. the third (out of three) portions of deferred variable remuneration for 2018 was settled; the total expected cost will amount to PLN 113.5 thousand gross, including payments in the form of phantom shares constituting a short-term benefit to be paid after the lapse of the retention period, i.e., after a period of six months from the date of award of the variable component of remuneration, at the value per phantom share equal to the arithmetic mean of the closing prices at the first five sessions following the lapse of the retention period – 7,785 shares, and the amount of PLN 56.8 thousand gross was paid in cash as a short-term benefit;
2. the second (of three) tranche of deferred variable remuneration for 2019 was settled; the total expected cost will amount to PLN 96.9 thousand gross, including payments in the form of phantom shares constituting a short-term benefit to be paid after the lapse of the retention period, i.e., after a period of six months from the date of award of the variable component of remuneration, at the value per phantom share equal to the arithmetic mean of the closing prices at the first five sessions following the lapse of the retention period – 7,071 shares, and the amount of PLN 48.4 thousand gross was paid in cash as a short-term benefit;
3. The members of the Management Board were granted variable remuneration for their performance in 2021, with a total amount of PLN 1,564.8 thousand being accrued. Of the accrued remuneration, 60% was settled in 2022. However, 40% of the accrued remuneration (amounting to PLN 625.9 thousand) was deferred and will be paid out over a period of five years. In 2022, 50% of the remuneration settled was paid in cash, amounting to a total of PLN 469.4 thousand. The remaining 50% of the settled remuneration was granted in the form of phantom shares, representing a short-term benefit. These phantom shares will be paid out in March 2023, after the expiration of the retention period. The payout will be based on the arithmetic average of the closing prices set over the first five sessions following the expiration of the retention period (52,601 shares).
4. A total of 32 individuals holding managerial positions, excluding members of the Management Board, who were deemed to have a significant impact on the Bank's risk profile and fulfilled the necessary conditions for bonus accrual (with no reservations as to the performance of their assigned duties), were eligible for variable remuneration. A total variable remuneration accrued and paid to those individuals was PLN 1,191.2 thousand.
5. A total of 6 individuals holding managerial positions, excluding members of the Management Board, who were identified as having a significant impact on the Bank's risk profile, received a cash award of PLN 51 thousand for the implementation of individual projects in 2021.
6. A total of 25 individuals holding managerial positions, excluding members of the Management Board, who were identified as having a significant impact on the Bank's risk profile were recognized for their contribution to the Bank's results.. They were acknowledged for their exemplary attitude reflecting the Bank's values, above-average commitment, and efficiency, effectiveness, and timeliness in carrying out their assigned tasks. Their contributions played a role in enhancing the perception of BOŚ as a specialized bank. Additionally, their efforts contributed to the Group achieving a net profit of over PLN 47 million in 2021, compared with a net loss of PLN 307 million in the previous year. Notably, both the core business areas of interest income (which increased to PLN 376 million, up 1.4% year-on-year) and commission income (reaching PLN 142 million, marking a 5.4% increase from the previous record level in 2020) demonstrated improvement. As a gesture of recognition, discretionary awards totaling PLN 377.8 thousand were paid to those individuals.

In accordance with the provisions outlined in Chapter IV, paragraph 14.4 of the Executive Compensation Policy (excluding members of the Management Board), the variable remuneration was not subject to any deferment mechanism, and no portion of the remuneration was paid in the form of shares.

The amount of variable remuneration for 2022 has not yet been determined and awarded.

46. Notes to the statement of cash flows

Cash and cash equivalents

For the purpose of the statement of cash flows, cash and cash equivalents include the following highly liquid balances with maturities of less than three months.

Item	December 31st 2022	December 31st 2021
Cash and balances with central bank (Note 21)	575,875	361,581
Deposits with other banks, recognised as cash equivalents (Note 22)	213,790	344,762
Investment securities (Note 24)	4,465,127	2,899,584
Total	5,254,792	3,605,927

The balance of cash and cash equivalents includes the obligatory reserve maintained with the NBP.

In accordance with Par. 12 of NBP Resolution No. 40/2015, the Bank may use the funds held in the obligatory reserve for current cash settlements.

The amount of the obligatory reserve declared to be maintained in December 2022 was PLN 618,966 thousand (December 2021: PLN 295,202 thousand). The Bank is required to maintain the average cash balance per month above the declared obligatory reserve.

On June 21st 2018, the Management Board of the National Bank of Poland passed a resolution to exempt the Bank from the obligation to maintain 55% of the required minimum reserves. The exemption is effective from July 2nd 2018 to December 31st 2021.

Reconciliation of differences between changes in the statement of financial position and changes of the corresponding items disclosed in the statement of cash flows from operating activities

Item	for the year ended	
	December 31st 2022	December 31st 2021
Change in amounts due from banks	157,916	- 245,131
Change in deposits with other banks, recognised as cash equivalents	- 130,972	311,434
Total change in deposits with other banks and amounts due from banks	26,944	66,303
Change in investment securities	- 1,899,187	262,483
Change in investment securities recognised in cash and cash equivalents	1,565,543	719,632
Purchase of securities measured at amortised cost	475,938	70,595
Cash receipts from redemption of securities measured at amortised cost	- 204,225	- 28,287
Interest income on securities measured at amortised cost	- 63,833	- 45,169
Transfer of interest on securities measured at amortised cost to interest on investing activities	109,969	49,988
Remeasurement of financial assets measured at fair value through other comprehensive income	- 36,337	-116,766
Total change in investment securities	- 52,132	912,476
Change in other assets and income tax	- 50,690	29,940
Deferred income tax expense disclosed in the statement of profit or loss	15,845	7,896
Deferred income tax on measurement of investment securities	7,014	22,245
Non-monetary changes in intangible assets and property, plant and equipment	- 14	475
Change in other assets and income tax	- 27,845	60,556
Change in provisions	70,836	26,426
Effect of actuarial valuation on revaluation reserve	- 578	- 310
Total change in provisions	70,258	26,116
Change in other liabilities and income tax	57,739	- 21,675
Current income tax expense	- 81,736	- 39,709
Income tax paid	88,561	31,715
Total change in other liabilities and income tax	64,564	- 29,669
Change in liabilities arising from issue of bank securities and subordinated liabilities	- 24,072	111
Redemption of bonds, including:	32,500	-
<i>on subordinated bonds</i>	32,500	-
Interest paid on bonds issued by the Bank, including:	14,901	12,036
<i>on subordinated bonds</i>	14,901	12,036
Interest accrued on bonds issued by the Bank, including:	- 23,329	- 12,147
<i>on subordinated bonds</i>	- 23,329	- 12,147

47. Description of derivative financial instruments and foreign exchange transactions

Foreign exchange and currency derivatives transactions:

Instrument	December 31st 2022	December 31st 2021	December 31st 2022	December 31st 2021	December 31st 2022	December 31st 2021
	FX Swap		FX Forward		FX Spot	
Description of the instrument	A transaction that obligates the parties to a contract to enter into an initial exchange of currencies on a specified date and at a specified exchange rate and a forward (final) exchange rate for that currency on a specified date in the future (other than the first leg settlement) and at a rate agreed upon at the date of the transaction (usually different from the initial exchange rate). The currency that one counterparty is required to pay to the other as a result of the final exchange is the same currency that the counterparty received in the initial exchange.		A forward transaction to exchange a specified amount of currency for another currency on a specified date, at a fixed forward rate. This is a forward outright contract. All terms and conditions of the transaction are determined on the date of its execution.		A transaction to exchange a specific amount of currency for another currency, at a rate agreed upon at the time of the transaction. Typically, the transaction is settled within two business days of the execution date.	
Purpose of acquisition or issue	for trading/liquidity		for trading		for trading	
Number of transactions	36	44	21,123,934	2,447,091	91	43
Notional amount (PLN thousand)	360,035	869,957	284,920	394,672	457,812	110,894
Fair value (PLN thousand)	-875	10,263	4,732	9,316	-432	-54
- positive	135	12,526	9,291	10,083	259	75

- negative	-1,010	-2,263	-3,923	-1,112	-691	-129
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Future income / payments	Variable		Variable		Variable	
Average maturity	2023-01-07	2022-02-22	2023-02-16	2022-05-08	2023-01-03	2022-01-03
Early settlement	None		At client's request		None	
Exchange or conversion into another asset/ liability	None		None		None	
Other terms	None		None		None	
Type of risk associated with the derivative instrument	Operational risk, market risk, counterparty risk		Operational risk, market risk, counterparty risk		Operational risk, market risk, counterparty risk	

Interest rate derivative transactions:

Instrument	December	December	December	December	December	December 31st	December	December 31st
	Interest rate swaps (IRS)		Interest rate swaps (IRS hedging PLN)		Interest rate swaps (IRS hedging EUR)		Forward transactions in bonds	
Description of the instrument	A transaction that obligates both parties to exchange periodic interest payments on a specified notional amount over an agreed period of time. Interest payments made are expressed in the same currency and calculated at a fixed rate for each party (one rate may be fixed and the other variable or both may be variable but depend on different indices). This category also includes IRS transactions whose notional amount changes over time – amortised swaps.		A transaction that obligates both parties to exchange periodic interest payments on a specified notional amount over an agreed period of time. Interest payments made are expressed in the same currency and calculated at a fixed rate for each party (one rate may be fixed and the other variable or both may be variable but depend on different indices).		A transaction that obligates both parties to exchange periodic interest payments on a specified notional amount over an agreed period of time. Interest payments made are expressed in the same currency and calculated at a fixed rate for each party (one rate may be fixed and the other variable or both may be variable but depend on different indices).		A forward transaction to buy/sell a specified amount of a security on a specified date at a fixed forward price. All terms and conditions of the transaction are determined on the date of its execution.	
Purpose of acquisition or issue	for trading		as hedge (fair value hedge accounting)		as hedge (cash flow hedge accounting)		for trading	
Number of transactions	133	160	2	7	-	-	-	-
Notional amount (PLN thousand)	2,966,679	3,714,400	258,000	258,000	-	-	-	-

Fair value (PLN thousand)	51,372	32,654	30,562	9,121	-	-	-	-
- positive	196,082	103,851	30,562	9,121	-	-	-	-
- negative	-144,108	-71,378	-	-	-	-	-	-
Future income / payments	Variable		Variable		Variable		Variable	
Average maturity	2027-02-24	2025-07-17	2025-07-25	2025-07-25	-	-	-	-
Early settlement	Generally none, but possible in transactions with non-banking clients in cases specified in contracts. Possible, rarely used.		None		None		None	
Exchange or conversion into another asset/ liability	None		None		None		None	
Other terms	None		None		None		None	
Type of risk	Operational risk, market risk, counterparty risk		Operational risk, market risk, counterparty risk		Operational risk, market risk, counterparty risk		Operational risk, market risk, counterparty risk	

Forward contracts and options

Instrument	December 31st	December 31st	December 31st	December 31st	December 31st	December 31st 2021
	Futures contracts for shares and stock indices, foreign exchange rates		Forward contracts for stock indices, exchange rates, commodities		Contracts for difference (CFDs)	
Description of the instrument	A futures share/stock market indices contracts is a standardized transaction that requires cash settlement in the future or the underlying asset's delivery, depending on the share price or the value of the index, foreign exchange rate and position taken.		Forward contracts for sale and purchase of various currencies with determined future settlement date. This type of instrument allows transacting parties to make money on interest rate differences between the currencies in a pair. A standard forward contract is a transaction where the settlement date falls more than two days from the transaction date (a two-day settlement period is typical for spot transactions).		Contracts for difference (CFDs) are derivative instruments. This means that their value depends directly on the value of the underlying instrument on which they are based. The underlying instruments may be both sport market instruments, such as currency pairs, gold or silver, and forward market instruments, such as index futures offered on global exchanges, commodity exchange derivatives, etc. CFDs allow transacting parties to take long or short positions and the outcome is calculated on the basis of the difference in exchange rates only. Trading CFDs therefore does not involve taking a physical position.	
Purpose of acquisition or issue	for trading		for trading		for trading	
Number of transactions	6,195	1,534	50,116	142,200	207,833	165,650
Notional amount (PLN thousand)	38,004	71,234	17,643	21,887	657,815	810,776
Fair value (PLN thousand)	-	-	-	-	-	-
- positive	45	1,706	1,057	-	19,145	20,522
- negative	-633	-133	-5	-1,353	-1,700	-4,031
Future income / payments	Variable		Variable		Variable	

Maturity	Variable	Variable	Variable
Early settlement	Yes	Yes	Yes
Price/ Price range	None	None	None
Exchange or conversion into another asset/ liability	None	None	None
Additional collateral	None	None	None
Other terms	None	None	None
Type of risk	Operational risk, equity price risk, currency risk	Operational risk, currency risk, equity price risk, commodity price risk	Operational risk, currency risk, interest rate risk, commodities risk, equity risk

Foreign exchange and currency derivative transactions:

Item	December 31st 2022	December 31st 2021
Notional value	1,102,767	945,357
Total foreign exchange and currency derivative transactions:		
<i>assets</i>	9,685	10,997
<i>liabilities</i>	-5,624	-22,765

Interest rate derivative transactions:

Item	December 31st 2022	December 31st 2021
Notional value	3,224,679	3,972,400
Total interest rate derivative transactions:		
<i>assets</i>	226,644	112,972
<i>liabilities</i>	-144,108	-71,378

Forward contracts and options:

Item	December 31st 2022	December 31st 2021
Notional value	713,462	903,898
Total forward and option contracts:		
<i>assets</i>	20,247	22,227
<i>liabilities</i>	-2,338	-5,516

Total derivative financial instruments:

Item	December 31st 2022	December 31st 2021
Notional value	5,040,908	5,821,655
Total derivative financial instruments:		
<i>assets</i>	256,576	146,197
<i>liabilities</i>	-152,070	-99,659

Offsetting financial assets and financial liabilities

The Group does not offset its financial instruments in financial assets and liabilities recognised in the financial statements.

48. Fair value of financial assets and liabilities

The carrying amount and the fair value of financial assets and liabilities other than measured at fair value disclosed in the financial statements are presented below.

Item	Carrying amount December 31st	Fair value December 31st 2022	Carrying amount December 31st	Fair value December 31st 2021
FINANCIAL ASSETS				
Amounts due from banks	242,831	244,385	400,747	402,886
Amounts due from clients including:	11,125,827	11,159,557	11,499,466	11,458,745
amounts due in PLN	8,684,003	8,747,366	8,997,577	9,016,098
amounts due in foreign currencies	2,441,824	2,412,191	2,501,889	2,442,647
Investment securities – measured at amortised cost	1,900,215	1,626,239	1,582,366	1,544,358
Debt securities, including:	1,900,215	1,626,239	1,582,366	1,544,358
Treasury securities	1,691,585	1,465,902	1,373,528	1,362,035
other	208,630	160,337	208,838	182,323
FINANCIAL LIABILITIES				
Amounts due to central bank and other banks	141,143	141,143	420,389	420,389
Amounts due to clients, including:	18,820,809	18,401,324	17,007,863	17,015,812
institutional clients	7,992,332	7,991,372	7,897,176	7,897,249
retail clients	10,120,218	10,095,536	8,515,701	8,523,304
other clients	118,584	118,584	84,032	84,032
international financial institutions	589,675	195,832	510,954	511,227
Subordinated liabilities	345,035	335,736	369,107	356,419

Amounts due from banks

Amounts due from banks include interbank deposits, nostro accounts and loans and advances. Fair value of interbank deposits, due to their short-term nature (fixed-rate interbank deposits up to six months) is equal to their carrying amount. Bonds issued by banks were measured at fair value, after accounting for a change in the credit spread calculated on the basis of comparable issues by similar banks.

Amounts due from clients

Amounts due from clients are disclosed net of impairment allowances. Amounts due from clients in the balance sheet are chiefly measured at amortised cost using the effective interest rate (99% of the carrying amount of credit facilities).

The fair value of credit facilities is assumed to be their value resulting from currently estimated future principal and interest cash flows (separately for facilities denominated in foreign currencies and for facilities denominated in PLN) calculated using the effective interest rate for each facility (except for facilities with an undetermined schedule or non-performing loans, for which the fair value is assumed to be the same as carrying amount) and discounted at the average effective interest rate of the facilities granted over the last twelve months. For mortgage loans, account was taken of prepayments. In the case of facilities in foreign currencies, which the Bank ceased to grant, an average effective interest rate on the corresponding facilities denominated in PLN was applied, adjusted for the difference between the rates in specific currencies and PLN.

Investment securities measured at amortised cost

Investment securities measured at amortised cost include Treasury bonds held within the HtC business model. The fair value of the bonds is assumed to be the current valuation derived from quoted market prices plus accrued interest.

Amounts due to central bank and other banks

Amounts due to the central bank as well as liabilities arising from repo transactions are disclosed at carrying amount. Liabilities arising from repo transactions were recognised at carrying amount due to the lack of available market data necessary to calculate the fair value of basic repo transactions of the Bank with the counterparty.

Interbank deposits, due to short maturities, were disclosed at carrying amounts, and the borrowings (principal and interest) were discounted using the average effective interest rate.

Amounts due to clients

Amounts due to clients disclosed in the statement of financial position are measured at amortised cost, using the effective interest rate method. The fair value of amounts due to clients is assumed to be their value resulting from discounting principal and interest for all deposits at the weighted average interest rate that was in effect for deposits accepted in December 2022. In the absence of payment schedules for current accounts, they were recognised at the carrying amount.

Amounts due to international financial institutions (principal and interest) were discounted using the average effective interest rate (for EUR) or the interest rate of the most recent transaction executed in a given currency (for PLN).

Liabilities arising from issue of securities

Liabilities arising from issue of securities are measured at fair value taking into account change in credit spread for PLN-denominated bonds, determined based on the latest issue carried out by the Bank.

Subordinated liabilities

Subordinated liabilities were measured at fair value, with the change in the credit spread determined on the basis of the latest issue made by the Bank.

49. Allocation of financial instruments measured at fair value based on the fair value measurement method

Under IFRS 13, 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) regardless of whether that price is directly observable or estimated using another valuation technique. When estimating fair value, the Group takes into account the adjustment for counterparty credit risk.

As at December 31st 2022 and December 31st 2021, the Group allocated financial assets and liabilities measured at fair value into three categories (levels) based on the measurement method:

1. **Level 1: mark-to-market valuation** directly from available quotations of instruments on the market. This applies to quoted equity and debt securities and NBP bills (quotations based on the reference rate),
2. **Level 2: mark-to-model valuation approach**, with model parameterisation based on active market quotations for the type of instruments concerned or prices obtained in transactions concluded close to the reporting date on normal market terms. Fair value is also determined by reference to other, similar instruments, by analysing discounted cash flow and with other valuation methods commonly used by market participants, and in the case of financial instruments to which no valuation method can be applied – at cost. This applies to unlisted bank securities, equity securities and derivatives (including forward transactions for securities), except where they meet the criteria for allocation to Level 3. Additionally, in the portfolio of assets available for sale DM BOŚ holds shares of an entity for which there is no active market. Due to the above, the fair value of these securities is based on the valuation model developed by the Company and using comparable values for businesses listed on the Warsaw Stock Exchange,
3. **Level 3: mark-to-model valuation approach**, with model parameterisation based on active market quotes for a given type of instruments and the model parameters based on estimated risk factors. This applies to municipal securities (measured using the discounted cash flows method, with credit spreads used in the valuation determined on the basis of internal ratings), securities of other banks (prices are determined based on the margins of securities quoted in the market at the time of price determination, issued by selected issuers), unlisted equity securities and illiquid equity securities (measured using the discounted cash flows method). In the case of DM BOŚ are financial instruments acquired with the intention to introduce them to regulated trading. Fair value is determined based on an analysis of the company's financial position, taking into account impairment losses.

Financial instruments by fair-value hierarchy level:

December 31st 2022	Level 1	Level 2	Level 3	Total
Financial assets held for trading	36,475	226,784	-	263,259
<i>debt securities</i>	20,643	-	-	20,643
<i>equity securities</i>	15,787	815	-	16,602
<i>derivative financial instruments</i>	45	225,969	-	226,014
Derivative hedging instruments	-	30,562	-	30,562
Investment securities measured at fair value through other comprehensive income and profit or loss	6,310,812	106,624	690,467	7,107,903
<i>debt securities</i>	6,292,269	106,624	623,545	7,022,438
<i>equity securities</i>	18,543	-	66,922	85,465
Amounts due from banks	-	-	244,385	244,385
Amounts due from clients	-	-	11,159,557	11,159,557
Investment securities measured at amortised cost	1,626,239	-	-	1,626,239
Total	7,973,526	363,970	12,094,409	20,431,905

December 31st 2022	Level 1	Level 2	Level 3	Total
Financial liabilities held for trading	1,541	151,436	-	152,977
<i>derivative financial instruments</i>	634	151,436	-	152,070
<i>equity securities</i>	907	-	-	907
Amounts due to other banks	-	-	141,143	141,143
Amounts due to clients	-	-	18,401,324	18,401,324
Subordinated liabilities	-	-	335,736	335,736
Total	1,541	151,436	18,878,203	19,031,180

Changes in securities measured at fair value through other comprehensive income	Level 3
At beginning of period January 1st 2022	1,017,347
Purchase	-
Sale and redemption	-302,467
Total gains and losses	-24,413
in profit or loss	-18,804
in other comprehensive income	-5,609
At end of period December 31st 2022	690,467

December 31st 2021	Level 1	Level 2	Level 3	Total
Financial assets held for trading	18,692	137,013	-	155,705
<i>debt securities</i>	5,321	-	-	5,321
<i>equity securities</i>	13,261	47	-	13,308
<i>derivative financial instruments</i>	110	136,966	-	137,076
Derivative hedging instruments	-	9,121	-	9,121
Investment securities measured at fair value through other comprehensive income and profit or loss	4,379,989	129,229	1,017,347	5,526,565
<i>debt securities</i>	4,361,446	129,229	950,407	5,441,082
<i>equity securities</i>	18,543	-	66,940	85,483
Amounts due from banks	-	-	402,886	402,886
Amounts due from clients	-	-	11,458,745	11,458,745
Investment securities measured at amortised cost	1,544,358	-	-	1,544,358
Total	5,943,039	275,363	12,878,978	19,097,380

December 31st 2021	Level 1	Level 2	Level 3	Total
Financial liabilities held for trading	131	99,528	-	99,659
<i>derivative financial instruments</i>	131	99,528	-	99,659
Amounts due to other banks	-	-	420,389	420,389
Amounts due to clients	-	-	17,015,812	17,015,812
Subordinated liabilities	-	-	356,419	356,419
Total	131	99,528	17,792,620	17,892,279

Changes in securities measured at fair value through other comprehensive income	Level 3
At beginning of period January 1st 2021	1,297,304
Purchase	1,154,823
Sale and redemption	-1,365,770
Total gains and losses	-69,010
in profit or loss	-14,931
in other comprehensive income	-54,079
At end of period December 31st 2021	1,017,347

Financial instruments may be reallocated between Level 1 and Level 2 based on the availability of quotations from an active market at the reporting date.

An instrument is reallocated from Level 2 to Level 3 when valuation changes from an observable factor to an unobservable factor or when a new unobservable risk factor is applied to the valuation that simultaneously results in a significant effect on the valuation of the instrument.

An instrument is reallocated Level 3 to Level 2 when valuation changes from an unobservable factor to an observable factor or when the effect of the unobservable factor on the valuation of the instrument ceases to be significant.

Reallocations between the measurement methods take place on the date and as at the end of the reporting period.

In the period from January 1st to December 31st 2022, there were no reallocations of instruments between the levels. Measurement of Level 3 instruments does not affect the statement of profit or loss. The fair value measurement of Level 3 instruments is disclosed in other comprehensive income. Net profit (loss) includes accrued interest, interest paid, discount or premium, foreign exchange differences and reversed provisions (in the case of equity securities).

As at December 31st 2022, the sensitivity of the valuation of municipal instruments allocated to Level 3 to a +/- 1 bp change in the credit spread (unobservable model parameter) was PLN 14 thousand (December 31st 2021: PLN 24 thousand).

50. Segment reporting

In accordance with IFRS 8, operating segments are determined on the basis of internal reports on components of an enterprise that are subject to periodic reviews by the management responsible for taking operational decisions. IFRS 8 defines an operating segment as a component of an entity:

1. that engages in business activities from which it may earn revenues and incur expenses,
2. whose operating results are regularly reviewed by the entity's chief operating decision maker,
3. for which discrete financial information is available.

The following is the policy for segment reporting applied in the periods ended December 31st 2022 and December 31st 2021, by the following lines of business:

1. institutional clients,
2. retail clients,
3. treasury and investments,
4. brokerage business,
5. other (not allocated to the segments).

The Institutional Client business line encompasses transactions conducted with corporate clients, small and medium-sized enterprises (SMEs), and strategic clients through Business Centres, branches, and the Bank's Head Office. The Retail Client business primarily serves individuals, micro-enterprises, housing communities, and non-governmental organizations (NGOs) without credit facilities.

The Treasury and Investments business line encompasses various activities, including transactions on the interbank market, as well as transactions involving debt securities, derivatives, and equity investments. Treasury and investment activities include management of the Bank's liquidity, foreign exchange and interest rate risks and fund transfer pricing settlements with other business divisions (segments).

The brokerage business provides services to both retail and institutional clients.

Other activities (not allocated to segments) include items of the statement of profit or loss that are not allocated to any of the business areas listed in items 1-4, in particular income and expenses related to unclassified clients.

The financial data of BOŚ Leasing-EKO Profit S.A. and MS Wind Sp. z o.o. are classified into the institutional client segment.

To enhance presentation clarity, interest income and similar revenues generated by the treasury and investment business area are allocated to the institutional client division and the retail client division. This allocation reflects the tertiary nature of the treasury and investment business in relation to these two divisions, allowing for a more accurate representation of revenue distribution across the different business segments. The allocation is determined based on keys that consider the scale of credit and deposit activities in each division. Starting from the fourth quarter of 2022, there has been a change in the key used for allocating the results of treasury and investment activities from transfer settlements to the business divisions. Previously, the key was based on the "balance of business line assets." However, it has now been modified to "balance of business line assets and liabilities".

The results of the operating segments for the corresponding period of the previous year have been restated to ensure comparability.

The treasury and investment products include financial instruments, current and term deposits, interbank deposits and deposits from ALM clients, loans from other banks and loans granted to banks, debt and equity securities, and derivatives.

Brokerage activities mainly involve purchase and sale of securities for the banking book and for the trading book, maintaining securities accounts, fee-based management of third parties' securities portfolios, and offering securities the primary market or through initial public offerings.

Assets and liabilities of the areas specified in items 1-2 above have been separated on the basis of the Bank's lending and deposit base.

Net interest income includes transfer settlements between the Institutional client segment, the retail client segment, and the treasury and investment business. Transfer measurement of funds is based on reference rates and additional funding rates, taking into account currency, stability of funds and maturities, which are referenced to the yield curve. All relevant assets and interest-bearing liabilities, as well as off-balance sheet items that generate demand for liquidity are subject to transfer rates measurement. Measurement is performed on a monthly basis and is based on the (daily) average of individual interest-rate transactions allocated to a given division separately for each currency.

The operating result of the institutional client segment and the retail client segment is determined by subtracting administrative costs directly related to the segments' transactions or units and costs and loss allowances allocated to the segments, including cross-settlements for serving clients of the institutional client division by the Bank's operating branches (focused on services for clients of the retail division), from the result of banking activities within these divisions.

Segment's net finance income (costs) comprises:

1. Net interest income, i.e., the sum of the difference between interest income on credit facilities and municipal bonds from clients and cost of funds received from ALM (treasury and investment activity) and income from the transfer of funds to ALM less interest expenses paid to the Bank's clients.
2. Net fee and commission income, i.e., the difference between fee and commission income and expenses allocated to a given transaction and allocated to the business area. The net result includes income and expenses both recognised on a one-off basis and accounted for on a straight-line basis, while transaction-related income and expenses accounted for at the effective interest rate are recognised in net interest income.
3. Gain (loss) on foreign exchange transactions, i.e., income on negotiated FX transactions (forwards and spots) and income on foreign exchange according to the Bank's exchange rate table. The item includes gain (loss) on derivative transactions.
4. Net other income and expenses
5. Effect of legal risk of mortgage loans denominated in foreign currencies, relating to recognised /reversed provisions for pending and future court cases, as well as the settlements programme related to the judgment of the Court of Justice of the European Union (ECJ) in case C-260/18.
6. Net impairment losses and measurement of receivables at fair value through profit or loss, i.e., gain (loss) on changes in impairment losses on loans, municipal and corporate bonds, and gain (loss) on loans, municipal and corporate bonds measured at fair value allocated to a given business area. The result includes changes in the portfolio of impaired foreign currency loans due to exchange rate fluctuations.

The financial result of the treasury and investment business area is the sum of the results of the treasury and equity investment business areas of the Bank, which include:

1. Interest income – calculated as the sum of interest income on transactions with external clients and the result of transfer pricing settlements between funds and other segments. External interest income and expense relate to transactions on the interbank market (deposits and loans), as well as debt securities purchased and issued. The result on transfer pricing settlements of funds is the difference between income from financing of assets of other segments and transfer costs for deposits received from other segments.
2. Gain (loss) on foreign exchange transactions includes gain (loss) on foreign exchange trading transactions, remeasurement of the provision for foreign-currency loans, and changes in the measurement of active currency forward hedges. This item includes gain (loss) of foreign exchange transactions not allocated to other segments.
3. Gain (loss) on hedge accounting includes gain (loss) on cash-flow hedging transactions and fair-value hedging transactions.

4. Gain (loss) on financial instruments measured at fair value through profit or loss, gain (loss) on transactions in the trading book and on transactions in financial instruments, including FX swaps.
5. Gain (loss) on investment securities – gain (loss) on shares and debt securities and on measurement of financial instruments.
6. Dividend income.
7. Difference in value of impairment allowances, gain (loss) on shares and exposures to financial institutions allocated to the treasury and investment business area.

Below are presented the consolidated financial results of the BOŚ Group for the periods ended December 31st 2022 and December 31st 2021 attributable to the segments.

No.	Selected items of the statement of profit and loss for the 12 months ended December 31st 2022	INSTITUTIONAL CLIENTS	RETAIL CLIENTS	TREASURY AND INVESTMENTS	BROKERAGE BUSINESS	OTHER (NOT ALLOCATED TO SEGMENTS)	BOŚ GROUP
I.	Net interest income	288,473	201,714	188,708	81,197	- 1,752	758,340
1.	Interest and similar income, including:	1,054,157	577,792	- 415,301	97,061	9	1,313,718
	<i>transactions with external clients</i>	646,276	125,775	427,768	6,059	-	1,205,878
	<i>transactions with other segments</i>	407,881	452,017	- 843,069	91,002	9	107,840
2.	Interest expense and similar charges, including:	- 765,684	- 376,078	604,009	- 15,864	- 1,761	- 555,378
	<i>transactions with external clients</i>	- 156,688	- 233,284	- 46,347	- 11,186	- 33	- 447,538
	<i>transactions with other segments</i>	- 608,996	- 142,794	650,356	- 4,678	- 1,728	- 107,840
II.	Net fee and commission income	61,304	10,175	-	56,621	- 532	127,568
III.	Dividend income	181	-	6,743	264	-	7,188
IV.	Gain (loss) on financial instruments measured at fair value through profit or loss	- 17	- 31	- 1,744	24,670	-	22,878
V.	Gain (loss) on hedge accounting	-	-	119	-	-	119
VI.	Gain (loss) on investment securities	-	-	-	-	-	-
VII.	Gain (loss) on foreign exchange transactions	16,634	3,710	16,510	39	- 3	36,890
VIII.	Gain (loss) on derecognition of financial instruments	2,079	- 9	-	-	-	2,070
IX.	Net banking income	368,654	215,559	210,336	162,791	- 2,287	955,053
X.	Net other income and expenses	4,157	390	-	- 21,343	2,247	- 14,549
XI.	Effect of legal risk of mortgage loans denominated in foreign currencies	-	- 144,306	-	-	-	- 144,306

XII.	Net impairment losses	- 174,310	66,137	2,164	-	14	- 105,995
XIII.	Net finance income (costs)	198,501	137,780	212,500	141,448	- 26	690,203
1.	Direct costs	- 41,367	- 24,159	- 2,522	- 83,912	- 1,330	- 153,290
	Profit (loss) after direct costs	157,134	113,621	209,978	57,536	- 1,356	536,913
2.	Indirect costs and mutual services	- 91,905	- 90,163	- 17,013	-	-	- 199,081
	Profit (loss) after direct and indirect costs	65,229	23,458	192,965	57,536	- 1,356	337,832
3.	Amortisation/depreciation	- 24,867	- 24,408	- 2,297	- 9,456	- 1,705	- 62,733
4.	Other costs (taxes, BFG, PFSA)	- 41,558	- 32,122	- 797	- 6,211	- 276	- 80,964
XIV.	PROFIT (LOSS) BEFORE TAX	- 1,196	- 33,072	189,871	41,869	- 3,337	194,135
XV.	Allocated profit (loss) of ALM	48,145	142,163	- 190,308	-	-	-
XVI.	Gross profit (loss) after ALM allocation	46,949	109,091	- 437	41,869	- 3,337	194,135
XVII.	Income tax expense						- 65,891
XVIII.	NET PROFIT (LOSS)						128,244
XIX.	Segment assets	8,587,826	2,589,306	10,274,185	311,039	243,825	22,006,181
	<i>including amounts due from banks and clients</i>	8,493,701	2,589,306	277,136	4,855	3,660	11,368,658
	Segment liabilities	6,683,430	9,138,745	3,200,448	2,410,813	572,745	22,006,181
	<i>of which amounts due to banks and clients</i>	6,654,185	9,138,745	779,009	2,265,303	124,710	18,961,952
	Expenditure on property, plant and equipment	31,318	27,649	3,661	12,159	-	74,787

No.	Selected items of the statement of profit and loss for the 12 months ended December 31st 2021	INSTITUTIONAL CLIENTS	RETAIL CLIENTS	TREASURY AND INVESTMENTS	BROKERAGE BUSINESS	OTHER (NOT ALLOCATED TO SEGMENTS)	BOŚ GROUP
I.	Net interest income	167,306	55,068	150,858	2,089	- 826	374,495
1.	Interest and similar income, including:	293,044	137,288	9,450	3,441	3	443,226
	<i>transactions with external clients</i>	266,546	89,120	74,720	254	-	430,640
	<i>transactions with other segments</i>	26,498	48,168	- 65,270	3,187	3	12,586
2.	Interest expense and similar charges, including:	- 125,738	- 82,220	141,408	- 1,352	- 829	- 68,731
	<i>transactions with external clients</i>	- 4,542	- 27,498	- 23,731	- 374	-	- 56,145
	<i>transactions with other segments</i>	- 121,196	- 54,722	165,139	- 978	- 829	- 12,586
II.	Net fee and commission income	63,134	7,331	-	71,965	- 576	141,854
III.	Dividend income	241	-	6,286	203	-	6,730
IV.	Gain (loss) on financial instruments measured at fair value through profit or loss	24	52	21,404	46,153	-	67,633
V.	Gain (loss) on hedge accounting	-	-	764	-	-	764
VI.	Gain (loss) on investment securities	-	-	197	-	-	197
VII.	Gain (loss) on foreign exchange transactions	18,361	14,070	- 7,308	183	- 6	25,300
VIII.	Gain (loss) on derecognition of financial instruments	1,596	- 6				1,590
IX.	Net banking income	250,662	76,515	172,201	120,593	- 1,408	618,563
X.	Net other income and expenses	- 9,177	- 5,613	11,047	- 6,645	1,673	- 8,715
XI.	Effect of legal risk of mortgage loans denominated in foreign currencies	-	- 20,783	-		-	- 20,783

XII.	Net impairment losses	- 38,396	- 78,008	2,324	-	- 14	- 114,094
XIII.	Net finance income (costs)	203,089	- 27,889	185,572	113,948	251	474,971
1.	Direct costs	- 34,584	- 23,006	- 2,564	- 73,653	- 1,190	- 134,997
	Profit (loss) after direct costs	168,505	- 50,895	183,008	40,295	- 939	339,974
2.	Indirect costs and mutual services	- 74,746	- 78,323	- 14,477	-	-	- 167,546
	Profit (loss) after direct and indirect costs	93,759	- 129,218	168,531	40,295	- 939	172,428
3.	Amortisation/depreciation	- 20,361	- 23,499	- 2,083	- 8,196	- 1,704	- 55,843
4.	Other costs (taxes, BFG, PFSA)	- 18,959	- 14,061	- 499	- 3,513	- 284	- 37,316
XIV.	PROFIT (LOSS) BEFORE TAX	54,439	- 166,778	165,949	28,586	- 2,927	79,269
XV.	Allocated profit (loss) of ALM	90,014	53,971	- 143,985	-	-	-
XVI.	Gross profit (loss) after ALM allocation	144,453	- 112,807	21,964	28,586	- 2,927	79,269
XVII.	Income tax expense						- 31,813
XVIII.	NET PROFIT (LOSS)						47,456
XIX.	Segment assets	8,647,203	2,919,112	8,142,876	309,601	210,767	20,229,559
	<i>including amounts due from banks and clients</i>	8,542,836	2,919,112	423,220	12,407	2,638	11,900,213
	Segment liabilities	6,700,204	7,397,756	3,274,243	2,434,085	423,271	20,229,559
	<i>of which amounts due to banks and clients</i>	6,695,198	7,397,756	1,029,420	2,218,149	87,729	17,428,252
	Expenditure on property, plant and equipment	16,901	15,584	2,201	8,254	-	42,940

51. Related-party transactions

As at December 31st 2022, Bank Ochrony Środowiska S.A. was the parent of Dom Maklerski BOŚ S.A., BOŚ Leasing-EKO Profit S.A., as well as MS Wind Sp. z o.o.

The National Fund for Environmental Protection and Water Management (NFOŚiGW) was the parent of the Bank.

The key management personnel are also considered to be related parties.

Transaction with the National Fund for Environmental Protection and Water Management, i.e., the main shareholder of the Bank

As at December 31st 2022, the amount of funds provided by the NFOŚiGW for preferential loans under the Prosumpt program for the financing of purchase and installation of renewable energy sources was PLN 7,169 thousand (December 31st 2021: PLN 10,299 thousand).

NFOŚiGW is a party related to the State Treasury. The Bank enters into transactions with entities related to the State Treasury, mainly with entities operating in the public finance sector.

Transactions with related entities:

Dom Maklerski BOŚ S.A.

The Bank's branches maintain current accounts of Dom Maklerski BOŚ S.A. Transactions in current accounts are primarily payments and cash withdrawals by the company's clients. The bank accounts of the Brokerage House, where both client funds and its own funds are held, accrue interest based on the WIBID rate.

The Bank provided a revolving working capital facility to Dom Maklerski BOŚ S.A.

The above transactions are temporary in nature and were executed due to the Bank's internal needs and on market terms.

BOŚ Leasing - EKO Profit S.A.

The Bank maintains current accounts and fixed-term deposit accounts of BOŚ Leasing - EKO Profit S.A. The Bank provided investment loans to the company, and in 2022, the multi-purpose credit line was converted into a revolving facility. The Bank also entered into IRS transactions with the company.

In 2022, the Bank was a party to rental contracts with the company concerning:

1. in Warsaw – a contract for sublease of office space from the Bank, at Al. Jana Pawła II 12, concluded on October 31st 2019, extended by Annex 2 of March 1st 2021 for a period until February 29th 2024;
2. in Toruń –
 - lease contract of May 20th 2022 concluded in Toruń for the period from June 1st 2022 to June 1st 2025;
 - sublease contract of November 7th 2022 for part of office space leased under contract a), between BOŚ Leasing-EKO Profit SA and BOŚ S.A. The contract was concluded for an indefinite period;
 - sublease contract of November 7th 2022 for office space in 15 Business Centers of BOŚ SA, concluded between BOŚ SA and BOŚ Leasing-EKO Profit SA. The contract was concluded for an indefinite period;

Rental payments under contracts b) and c) offset each other.

3. in Katowice – lease contract of June 9th 2022 concluded in Katowice for the period from June 9th 2022 to June 30th 2027.

In 2022, BOŚ Leasing - EKO Profit S.A. did not enter into any additional agreements with the Bank for the purchase of lease receivables with recourse. As at December 31st 2022, all such agreement had expired. In 2022, no agreements were concluded to purchase lease receivables without recourse.

The above transactions and lease contracts were executed due to the Bank's internal needs and on an arm's length basis.

MS Wind Sp. z o.o.

The Bank maintains current accounts and term deposit accounts for MS Wind Sp. z o.o. The Bank provided to MS Wind Sp. z o.o. a facility to finance a wind farm project and entered into an IRS contract with the company.

As at December 31st 2022, the outstanding balance of the facility was PLN 18.6 million. Eighty per cent of the facility amount is hedged with the IRS contract for fixed interest rate.

The above transactions are temporary in nature and were executed due to the Bank's internal needs and on market terms.

Loans to and deposits from members of the Management Board and the Supervisory Board of the Group

As part of the operating activities, transactions with members of the management body and the key management personnel comprise mainly loans and deposits. The balances of individual items of the statement of financial position as at December 31st 2022 and December 31st 2021 as well as income and expenses for the 12 months ended December 31st 2022 and December 31st 2021 are presented below:

Key management personnel

Item	December 31st 2022	December 31st 2021
Loans	246	297
Deposits	959	739
Total	1,205	1,036

Item	December 31st 2022	December 31st 2021
Interest expense on deposits	3	1
Interest income on loans	3	2

The credit and deposit products were provided to the key management personnel on the same terms as those offered by the Bank to the general public.

Remuneration of the key management personnel of the Bank

Supervisory Board	Remuneration		For serving on governing bodies of subordinated entities	
	paid for 2022	paid for 2021	paid for 2022	paid for 2021
Wojciech Wardacki ¹	-	93	-	-
Andrzej Matysiak ²	154	68	-	-
Paweł Sałek	156	152	-	-
Piotr Bielarczyk ³	72	-	-	-
Tadeusz Wyrzykowski ³	72	-	-	-
Aleksandra Świdorska ³	72	-	-	-
Iwona Marciniak ³	83	-	-	-
Piotr Sadownik ³	80	-	-	-
Zbigniew Dynak ⁴	72	69	-	-
Emil Ślęzak ⁵	187	161	-	-
Janina Goss ⁶	136	131	-	-
Ireneusz Purgacz ⁷	82	149	-	-
Piotr Wróbel ⁷	73	133	-	-
Marcin Jastrzębski ⁷	73	133	-	-
Leszek Banaszak ⁷	72	133	-	-
Robert Czarnecki ⁷	73	132	-	-
Total ⁸	1,457	1,354	-	-

¹ Member of the Supervisory Board until June 23rd 2021

² Member of the Supervisory Board from June 30th 2022

³ Member of the Supervisory Board from June 23rd 2021 to June 30th 2022

⁴ Member of the Supervisory Board from November 23rd 2022

⁵ Member of the Supervisory Board until November 23rd 2022

⁶ Member of the Supervisory Board until December 10th 2022

⁷ Member of the Supervisory Board until June 30th 2022

⁸ All payments were short-term employee benefits.

The total amount of remuneration paid to members of the Supervisory Board in 2022 included remuneration of Supervisory Board members, reimbursement of overpaid social security contributions and PPK contributions paid by BOŚ S.A.

Management Board	Remuneration		For serving on governing bodies of subordinated entities	
	paid for 2022	paid for 2021	paid for 2022	paid for 2021
Wojciech Hann ¹	716	637		-
Marzena Kocut ²	296	540		-
Bogusław Białowas ³	91	181		-
Arkadiusz Garbarczyk	800	817		-
Emil Ślęzak ⁴	68	-		-
Jerzy Zań	617	523		-
Robert Kasprzak ⁵	605	454		-
Total	3,193	3,152		-

including:				
– short-term employee benefits;	3,193	2,664		-
– long-term employee benefits	-	-		-
– post-employment benefits	91	181		-
– termination benefits	-	-		-
– share-based payments (phantom shares)	-	307		-

¹ Member of the Management Board until November 23rd 2022

² Member of the Management Board until May 23rd 2022

³ Member of the Management Board until June 17th 2020

⁴ Member of the Management Board from November 24th 2022

⁵ Member of the Management Board from February 15th 2021

The total amount of remuneration paid to members of the Management Board of the Bank in 2022 included remuneration under management services contracts, post-employment benefits, and contributions to the Employee Capital Plan paid by BOŚ S.A.

52. Disposal, liquidation and merger of companies

The Group did not divest, liquidate or merge any subsidiaries in 2021 and 2022.

53. Dividends paid (aggregate or per share) separately for ordinary shares and other shares

No dividend was paid or declared in 2021 and 2022.

54. Reform of benchmarks

The Bank initiated the "Implementation of the requirements of the BMR Regulation" (BMR Project) in order to ensure compliance with the changes arising from the regulations of the European Parliament and the Council (EU) 2016/1011 of June 8th 2016, and Regulation (EU) No. 596/2014 (OJ L 171 of June 29th 2016, as amended), commonly referred to as the "BMR Regulation." The purpose of the BMR Project is to align the Bank's operations with the requirements set forth in the BMR Regulation. The BMR Project involves the participation of representatives from various organizational units responsible for product areas (such as retail and corporate), interest rate risk management, legal, accounting, and IT.

The Bank has developed an "Action Plan for Material Changes or Discontinuation of Interest Rate Benchmarks", in accordance with the provision of Article 28(2) of the BMR Regulation.

In response to the announcement made by the Financial Conduct Authority (FCA) on March 5th 2021, regarding the cessation of LIBOR rates for all currencies, except the USD, by the end of 2021, the Bank's activities under the BMR Project initially focused on preparing for the implications of these changes. This first phase of the project aimed to ensure that the Bank was well-equipped to address the challenges arising from the discontinuation of these rates.

The Bank utilized the LIBOR CHF and LIBOR USD rates in a variety of retail and corporate products.

As at December 31st 2022, the Bank did not have any exposures in its portfolio that were based on GBP, EUR, or JPY LIBOR rates.

Regarding the portfolio of contracts based on CHF LIBOR, the Bank transitioned these contracts to the SARON Compound Rate in accordance with the Commission's (EU) Implementing Regulation of October 14th 2021. This regulatory provision designates SARON Compound Rate as a statutory substitute for certain maturities of the Swiss franc LIBOR rate (CHF LIBOR).

The Bank offered clients the option to sign an addendum to their agreements, which addressed the actions to be taken in the event of temporary or permanent unavailability of the SARON Compound Rate reference index. The addendum also regulated the potential consequences of any changes in the preparation and publishing of this index.

For products that were previously based on the USD LIBOR index, the Bank made the decision to use the CME Term SOFR index as the alternative benchmark. According to the announcement made by the Financial Conduct Authority, USD LIBOR is scheduled to cease to be published as of June 30th 2023. The Bank is currently launching new products that are based on the CME Term SOFR index.

Members of the BMR Project are actively engaged in the activities of the National Working Group on Benchmark Reform (NGR), which was established in July 2022. The NGR Group, apart from having a broad representation of financial institutions, also includes representatives from various entities and organizations. These include the Polish Financial Supervision Authority, the Ministry of Finance, the National Bank of Poland, the Bank Guarantee Fund, the Polish Bank Association, and WSE Benchmark.

The goal of the National Working Group is to prepare and facilitate the effective implementation of the Risk-Free Rate (RFR) reference index in the Polish financial market.

In September 2022, the Steering Committee of the National Working Group (NGR SC) made the decision to select WIRON as the index to replace WIBOR in the Polish financial market.

The Bank has planned and is executing project work in line with the NGR Roadmap and the recommendations approved by the NGR Steering Committee. These guidelines provide a framework for the implementation of the WIRON benchmark in both new contracts and the existing portfolio.

The Bank maintains a continuous monitoring process to stay informed about the market developments and updates related to the benchmark reform and the reform's impact on the Bank.

The Bank is currently implementing the necessary changes for the new benchmarks, including IT infrastructure adjustments and updates to internal regulations and contractual documentation.

Item	December 31st 2022
Assets based on the WIBOR rate	
Mortgage loans	1,328,089
Consumer loans	259,518
Other credit products	6,722,497
Debt securities	1,984,273
Liabilities based on the WIBOR rate	
Issue of debt securities	345,035
Deposits	1,412,446
Liabilities based on the WIBID rate	
Deposits	2,441,566
Derivative instruments (notional amount)	
IRS	2,500,712
Assets based on the LIBOR rate	
Mortgage loans	27,907
Other credit products	167,310

Interest rate risk

Interest rate risk can arise from mismatches in the repricing dates between the replacement index and the contract index, as well as mismatches in the index conversion dates across various agreements and contracts, such as loans and IRS contracts. Furthermore, there is a potential risk that the interbank derivatives market may not provide sufficient hedging options for mitigating the underlying interest rate risk inherent in credit-related on-balance sheet transactions. The Bank actively monitors the magnitude of sensitivity of its exposure to the risk and implements appropriate measures in line with its interest rate risk management principles.

The risks mentioned above have no impact on the interest rate risk management strategy.

Legal risk

Regarding legal (including judicial) risks, it is important to consider the treatment of loans linked to the BMR index in the event that a specific index is discontinued. Two distinct situations should be distinguished: one where a specific index ceases to be published without a designated replacement, and the other where a replacement index is specified in accordance with applicable law (similar to CHF LIBOR).

1. In the first situation, the legal risk (and potential litigation risk) pertains to the determination of the interest rate on the loan, specifically the calculation of interest amount for the client. If the contract between the Bank and the client specifies the method of determining the alternative benchmark, there is a risk the risk arises from the potential for that the client rejects the benchmark chosen by the Bank, leading to a dispute regarding the interpretation of the contractual provisions. On the other hand, if the contract does not specify an alternative benchmark, uncertainty arises regarding the method of determining the interest rate on the loan.
2. In the second situation, the legal risk is significantly lower because the "new" BMR will automatically become part of the contract by operation of law, reducing the likelihood of potential claims by clients.

Hedge accounting

The Bank uses hedge accounting to hedge the fair value of fixed-rate bonds with WIBOR-based Interest Rate Swap instruments (see Note 44 "Hedge Accounting" for details). As a result of the BMR ratio reform, the reference rate for the hedging instrument will change.

55. Events after the reporting date

Opinion of the Advocate General of the CJEU on residential foreign currency loans

On February 16th 2023, the CJEU Advocate General delivered his opinion in Case C-520/21. The impact of the CJEU Advocate General's opinion on legal risk and the estimation of the level of provisions for legal risk is presented in Note 39 "Legal risk of residential mortgage-backed loans linked to foreign exchange rates".

Signatures of Members of the Management Board

Date	Name and surname	Position held	Signature
March 21st 2023	Emil Ślęzak	Vice President of the Management Board, responsible for activities of the Management Board	Signed with qualified e-signature
March 21st 2023	Arkadiusz Garbarczyk	Vice President of the Management Board – First Deputy of President of the Management Board	Signed with qualified e-signature
March 21st 2023	Robert Kasprzak	Vice President of the Management Board	Signed with qualified e-signature
March 21st 2023	Jerzy Zań	Vice President of the Management Board	Signed with qualified e-signature

Signature of the person in charge of bookkeeping:

March 21st 2023	Andrzej Kowalczyk	Director of the Accounting Department	Signed with qualified e-signature
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