



# PKO Bank Hipoteczny

## Issuer of Mortgage Covered Bonds in PKO BP Group

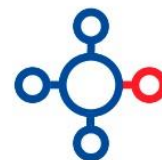
# Key investment highlights of PKO Bank Hipoteczny



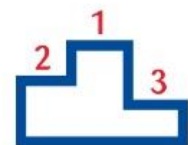
Data as of 31.07.2023



The biggest mortgage Bank in Poland  
PLN 17.4 bn residential mortgages loan  
portfolio in cover pool  
(total cover pool: 17.7 bn)



Effective business model  
synergies with its parent company PKO BP  
– leader of Polish banking sector



The biggest covered bonds issuer in Poland  
PLN 9.7 bn of outstanding  
53.7% of market share



First issuer of EUR denominated  
benchmark green covered bonds  
out of Poland and Central & Eastern Europe



Aa1 - Covered Bond rating  
the highest achievable by Polish debt  
securities



Green covered bonds  
in line with ICMA and certified by Climate  
Bonds Initiative



Strongly committed to ESG  
with eligible portfolio of green assets

1. Overview of the Polish economy
2. Polish banking sector
3. Polish property market and residential mortgage lending
4. PKO Bank Hipoteczny – covered bonds issuer
5. Green Covered Bonds as an important addendum to the funding mix
6. PKO BP Group overview
7. Appendices



# Overview of the Polish economy



# Macroeconomic and banking sector forecasts

		2021	2022	2023F	2024F
GDP	% y/y	6.9	5.1	0.7	3.2
Consumption	% y/y	6.2	3.3	-1.2	3.6
Investments	% y/y	1.2	5.0	5.2	2.2
Fiscal balance <sup>1)</sup>	% GDP	-1.8	-3.7	-4.8	-4.0
Public debt <sup>1)</sup>	% GDP	53.6	49.1	49.2	48.9
Inflation CPI (av)	%	5.1	14.4	11.8	4.7
LFS unemployment rate (av)	%	3.4	2.9	3.1	3.2
NBP reference rate	% eop	1.75	6.75	5.50	4.50
WIBOR 3M	% eop	2.54	7.02	5.44	4.38
EUR/PLN	PLN eop	4.60	4.69	4.58	4.45
CHF/PLN	PLN eop	4.45	4.77	4.67	4.41

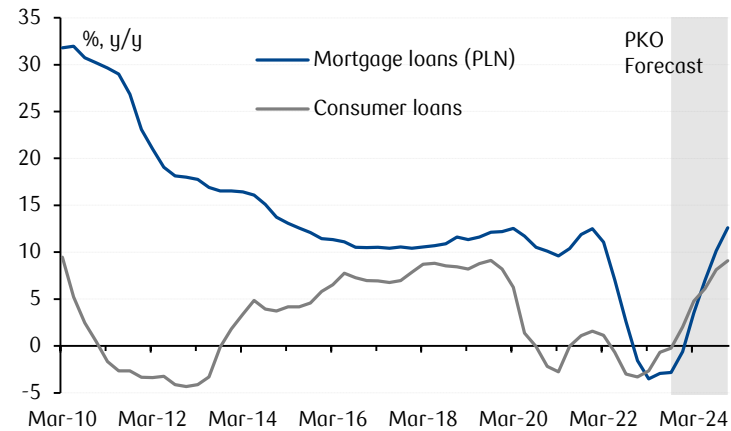
		2021	2022	2023F	2024F
Loans total	% y/y	4.7	1.1	2.5	7.2
Mortgage loans PLN	% y/y	12.5	-1.6	-0.6	12.6
New sales of mortgage loans	%, y/y	49.0	-43.6	11.4	74.8
Consumer loans	% y/y	1.6	-3.3	2.0	9.1
New sales of consumer loans	%, y/y	26.7	-1.0	14.0	19.7
Nonfinancial economic entities loans	% y/y	3.2	4.8	4.2	5.5
Deposits total	% y/y	10.8	5.6	6.1	6.4
Deposits for private individuals	% y/y	6.0	4.1	10.3	7.3
Net assets of private individuals (TFI)	% y/y	8.0	-20.5	25.2	13.3
Nonfinancial economic entities deposits	% y/y	10.5	8.0	5.9	6.5

Source: Statistics Poland, Ministry of Finance, National Bank of Poland, PKO Bank Polski forecasts

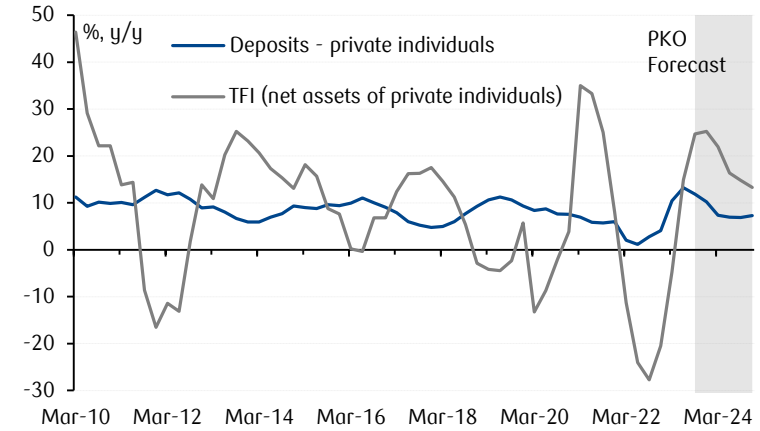
1) General government In ESA2010 terms, forecast for 2022.

# Loan and deposit market (FX adjusted)

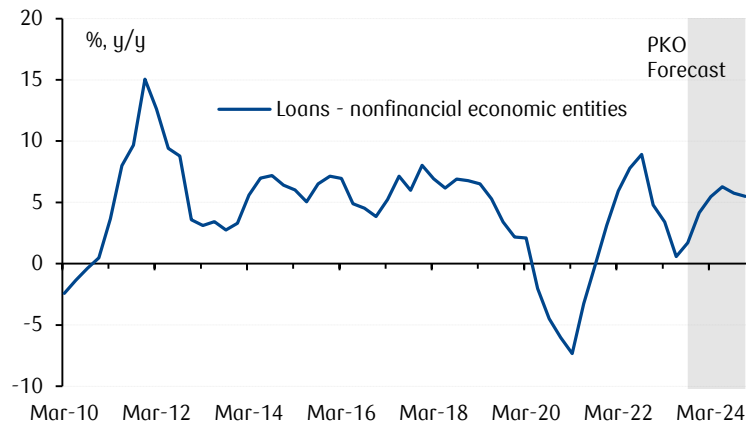
## Mortgage and consumer loans



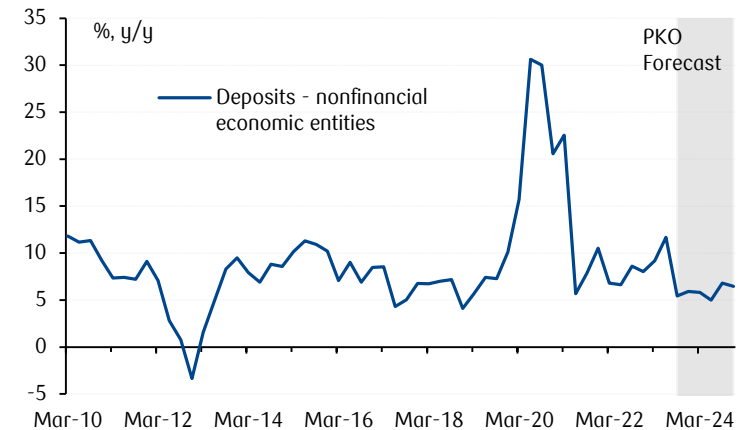
## Private individuals deposits and net assets (TFI)



## Loans for nonfinancial economic entities

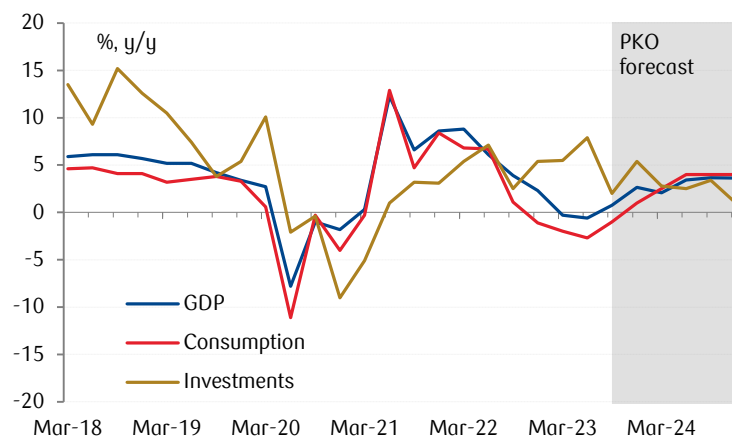


## Deposits of nonfinancial economic entities



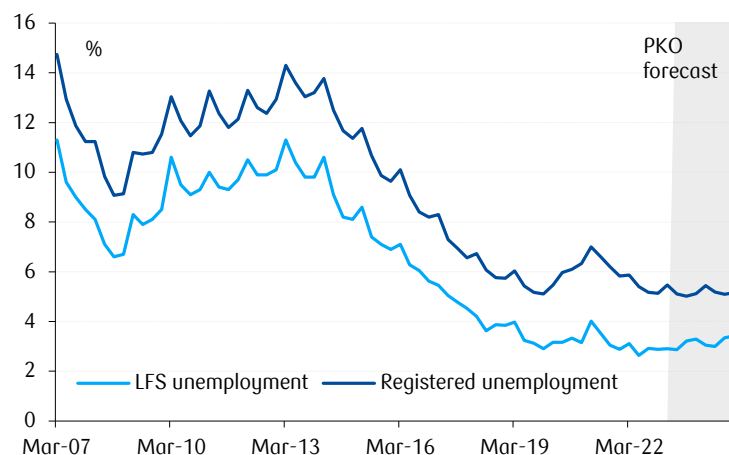
# The economy is turning the corner

## GDP and its main components



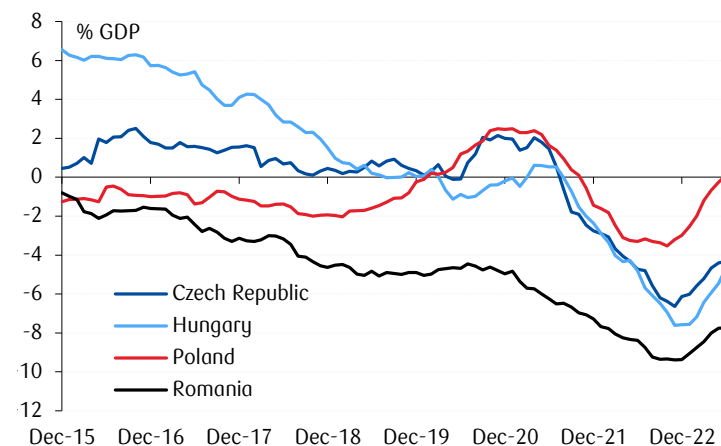
Source: Statistics Poland, PKO Bank Polski

## Unemployment rate in Poland



Source: Statistics Poland, PKO Bank Polski

## Current account

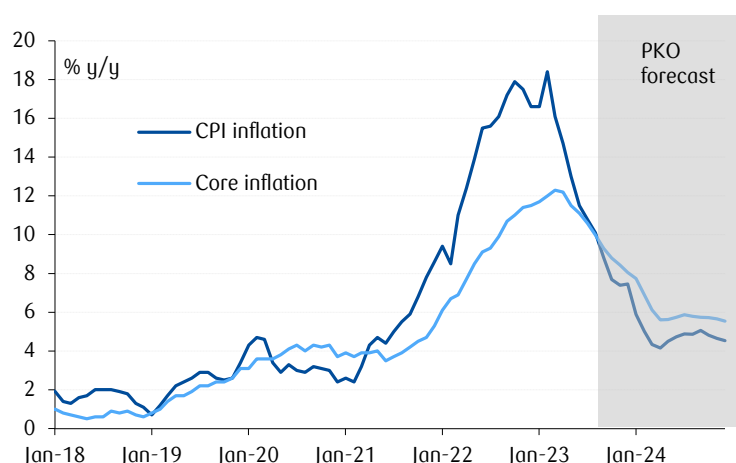


Source: Statistics Poland, PKO Bank Polski

- **GDP growth rate in 2q23 went down further into negative territory (-0.6% y/y), but it should mark a turning point in the cycle.** Consumer demand was the weakest link in early 2023, dragged by steep decline in real incomes in 2q22-1q23. However, the return to rise in real incomes in 2q23 is likely to mark a turning point. The recovery of real incomes will be followed by a rebound in consumer demand. Fixed investments are supported by expenditures on fast-tracked energy transition. Export is still doing better than expected, despite the unfavourable external environment.
- **External position keeps improving.** Exports resilience and quick reversal of the negative cost shock on the imports side have led to a significant improvement in Poland's balance of payments that has already turned positive (12 rolling sum), stronger than in other countries in the region.
- **Labour market remains tight,** which is reflected in low unemployment rate (close to all-time lows). Economic downturn results in a decline in the number of vacancies and smaller scale of recruitment, but employment reductions are minor. Nominal wage growth remains double-digit.

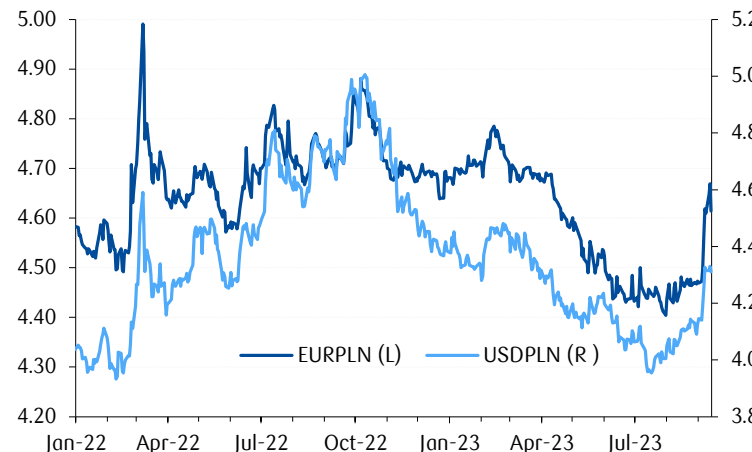
# Disinflation gains momentum, NBP has started to cut rates

## Inflation measures in Poland



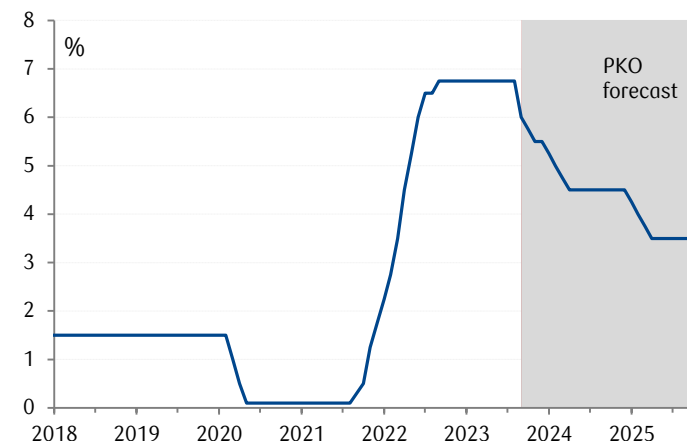
Source: GUS, PKO Bank Polski

## PLN exchange rate



Source: Refinitiv, PKO Bank Polski

## NBP reference rate



Source: Macrobond, PKO Bank Polski.

- **Continued disinflation has opened room for NBP rate cuts.** The disinflation process in 2q23 has become broad-based – decline in fuel prices, slower growth in food and energy prices was accompanied by a decrease in core inflation. It results not only from statistical factors, but also from a clear weakening of the momentum of consumer prices. The MPC cut NBP rates by 75bps in September, bringing the reference rate to 6.00%. The cut was a reaction to faster-than-expected decline in inflation combined with a stronger-than-expected deterioration of the economic situation, both locally and abroad. **Given the expected continuation of the disinflationary trend we think the MPC will continue cutting rates, although at a slower pace.**
- **PLN on a swing.** The surprisingly strong interest rate cut caused significant PLN depreciation both against majors and HUF and CZK. Zloty reversed most of the recent strengthening caused by reviving risk appetite in the global financial markets and strong fundamentals of the Polish economy (e.g. a rapid improvement in the balance of payments).
- **Fiscal position deteriorates less than feared.** Public finances bear the costs of fighting the energy crisis and spike in defence spending. However, an increase in fiscal deficit and public debt is smaller than feared, thanks to a rebound in tax revenues.



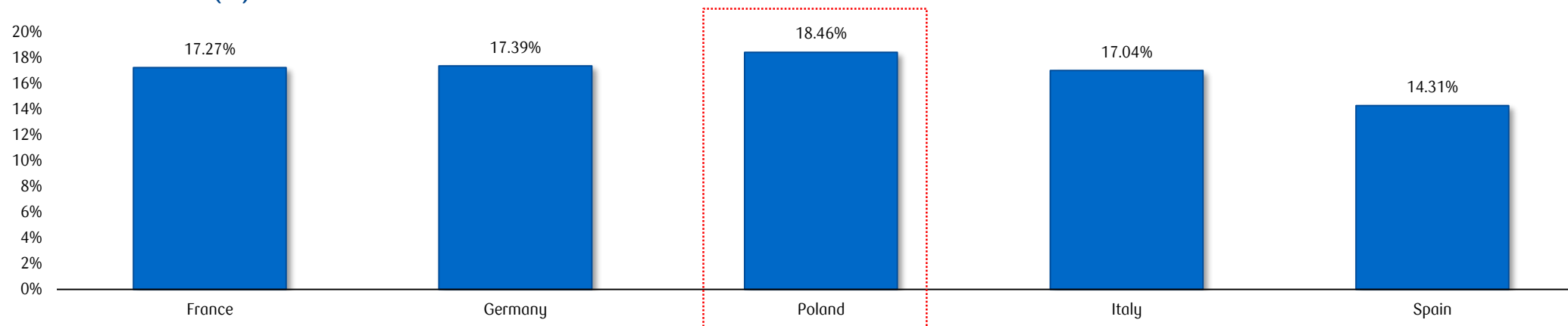


Bank Hipoteczny

# Polish banking sector

# Polish banking sector

Tier 1 as of 31.03.2023 (%)





Source: ECB, KNF

KPIs of the Polish banking sector as of 30.06.2023

KPIs	Banking sector
TCR	20.27%*
ROE	9.11%
ROA	0.55%
C/I	48.74%
Total NPL ratio	4.9%
NPLs in % of mortgage loans	2.2%

Source: KNF, BFG  
\* As at 31.03.2023

Key market parameters

	31.12.2019	31.12.2020	31.12.2021	30.12.2022	31.07.2023
 WIBOR 3M	1.72%	0.21%	2.54%	7.02%	6.76%
 EUR/PLN	4.26	4.61	4.60	4.69	4.41

Source: GPW Benchmark, NBP

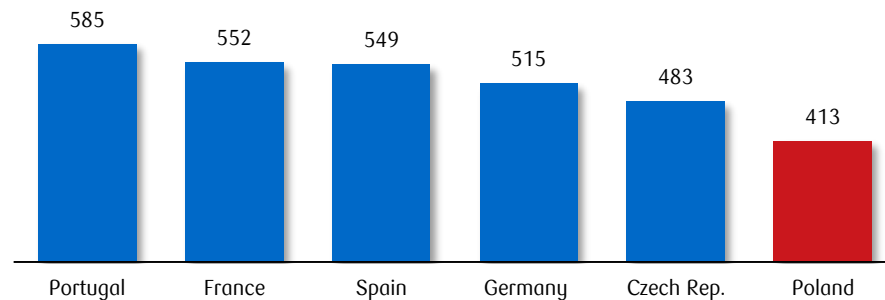




# Polish property market and residential mortgage lending

# Polish residential market - considerable development potential

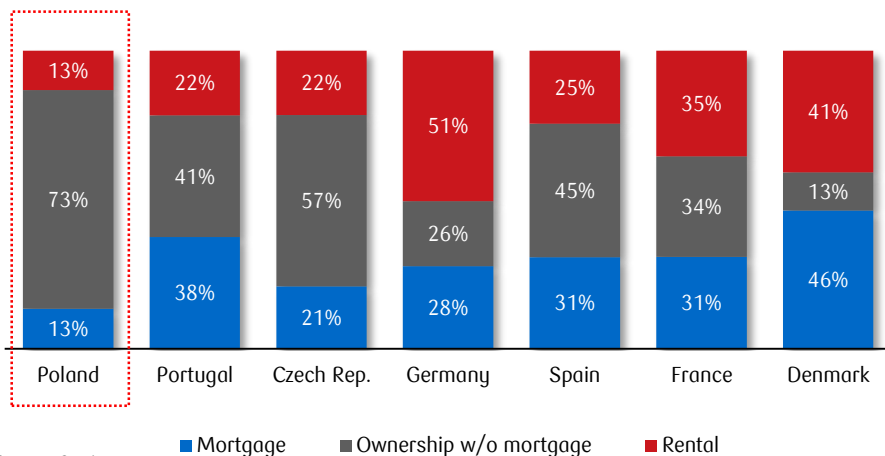
Dwellings per 1,000 inhabitants in selected EU countries for 2022



Source: Deloitte Property Index report published in September 2023

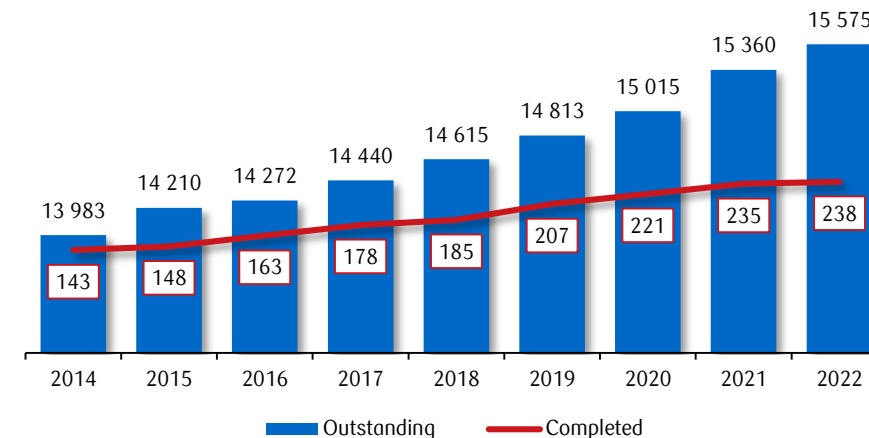
- Relatively low number of dwellings per thousand inhabitants in comparison to other EU countries
- Constantly growing number of completed and outstanding dwellings. In 2022 the number of dwellings completed was 2% higher than in 2021, but the number of construction projects started decreased by 28% y/y
- Polish ownership rates are among the highest in the EU and relatively low in terms of rental dwellings
- The housing shortage in Poland is estimated at about 1 mn apartments
- The number of dwellings in Poland has been growing on average by about 210 000 p.a. over the last five years

Dwelling ownership status for 2021 (%)



Source: Statista.com

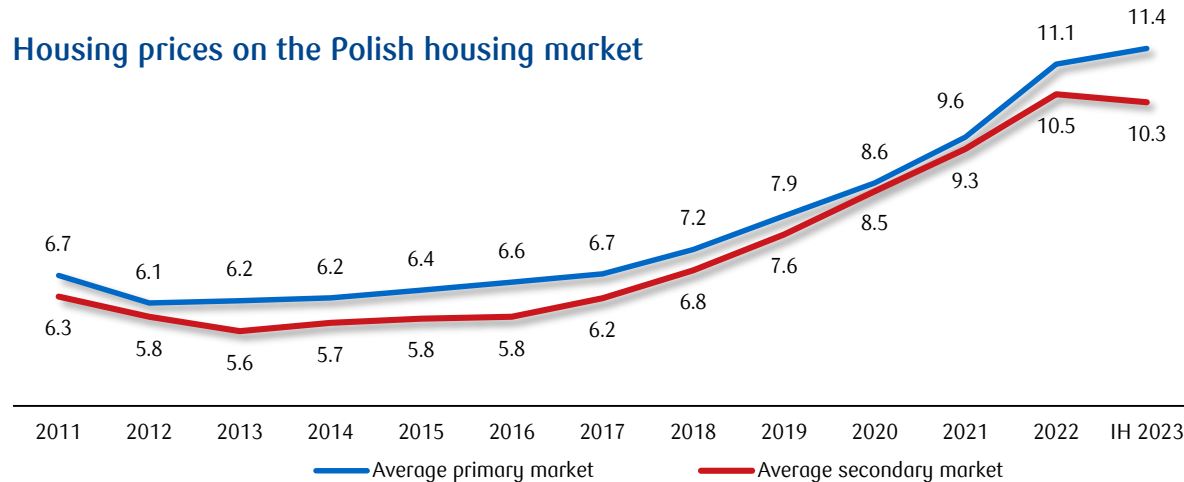
Growing number of dwellings in Poland (thous.)



Source: Statistics Poland (GUS)

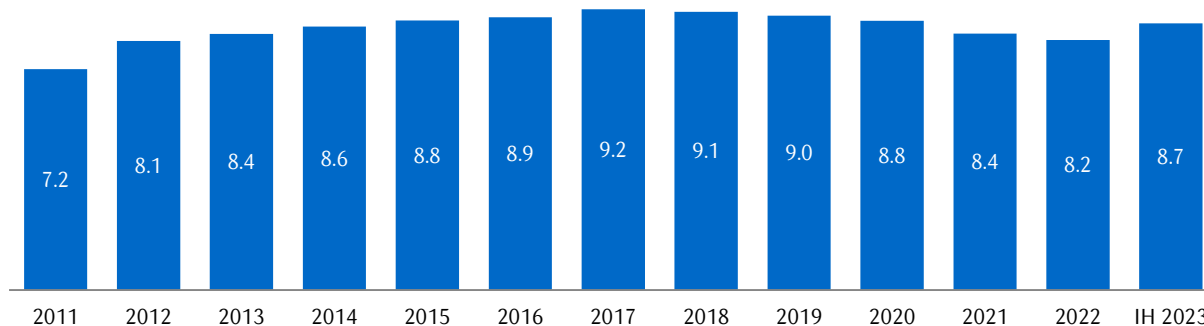
# Rising housing prices on the Polish housing market persist

## Housing prices on the Polish housing market



Source: PKO BH calculation based on NBP and Statistics Poland (GUS) data

## Affordability on primary market (transaction prices (PLN ths/sqm) vs average annual salary)



Source: PKO BH calculation based on NBP and Statistics Poland (GUS) data

### Primary market

- Average price growth between 2018 and 2022 was ca. 10% p.a.
- In the first half of 2023, the average price increase in major cities in Poland was about 3.5%.
- Affordability has been slightly decreasing during last 5 years due to significant increase of house prices (a bit higher than average increase of salary).
- The increase in affordability seen in H1 2023 is a result of the decline in dynamic price growth towards the end of 2022, and salary growth in H1 2023.

### Secondary market

- Average house prices on secondary market are 5-8% lower compared to the primary market.
- In the first half of 2023, the average price of flats on the secondary market was lower than the primary market by up to 10%.
- This is a result of the price adjustment at the end of 2022 in the secondary market and the standard delay in responding to price changes relative to the primary market.

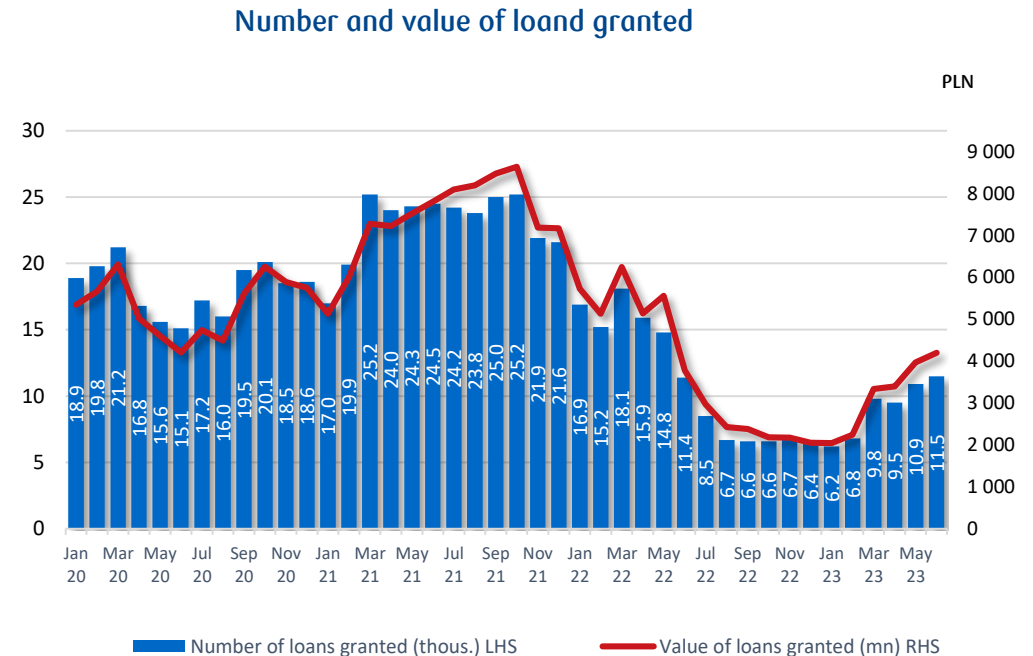
### Real estate prices

- Despite the slowdown on real estate market in 2022 (mainly due to an increase in interest rates), the residential properties prices remained high, with a slight upward trend on the primary market and horizontal trend on the secondary market.
- We estimate that in 2023, the price growth will be ca. 5% - 8%.



# Current situation

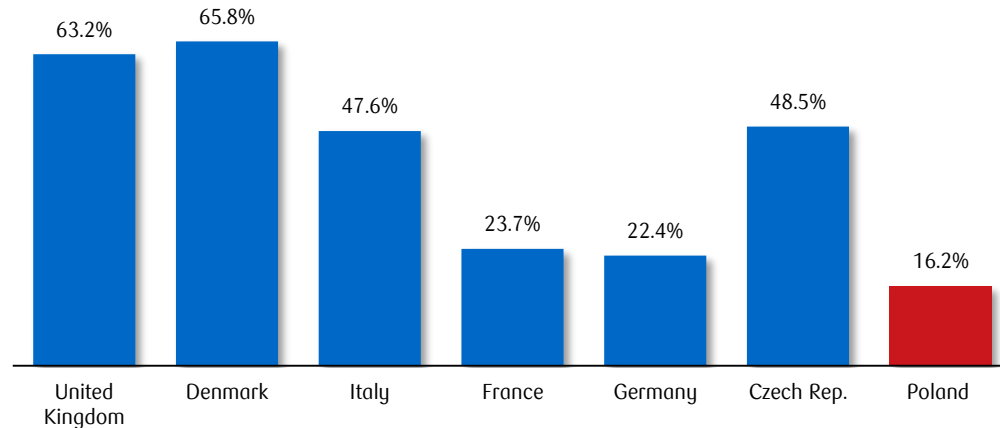
- Sales on the primary and secondary markets, after reaching a minimum in Q3 2022, began to grow gradually in the following two quarters (Q1 2023 and Q2 2023). In the following quarters of 2023, we expect a further growth level of sales.
- Sales growth in H2 2023 will be supported by a new government project with a preferential interest rate.
- Despite the recovery in the housing loan market, 39.4% less loans were granted in volume and 40.3% less in value in the first half of 2023 compared to the first half of 2022.
- The rate of growth in mortgage sales above observed levels will depend on the rate of decline in inflation and the prospects of interest rate cuts.
- In the first half of 2023, the increased demand for housing was not accompanied by a higher supply of new units, upsetting the relative supply-demand balance in the housing market observed in 2022. Very good sales and new supply not keeping up with them signify the markets entering a phase of expressed excess demand.



Source: PKO BH calculated on BIK data

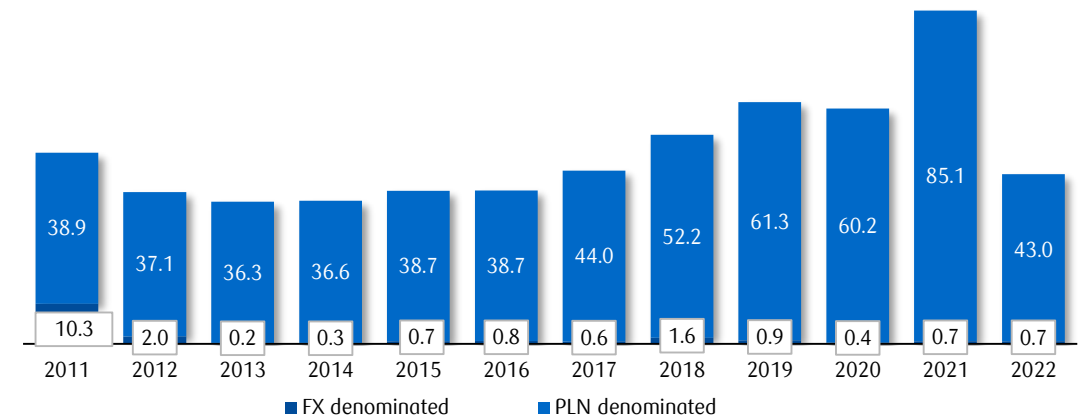
# Situation on the domestic mortgage market

Ratio of total outstanding residential mortgage loans to GDP ratio for 2022 (%)



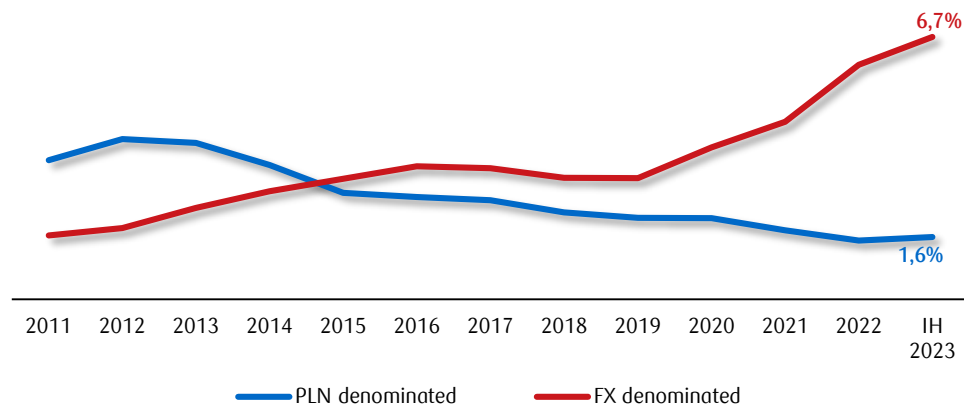
Source: EMF Quarterly review Q4 2022, <https://www.statista.com/>

Value of newly signed residential mortgage loans in Poland (PLN bn)



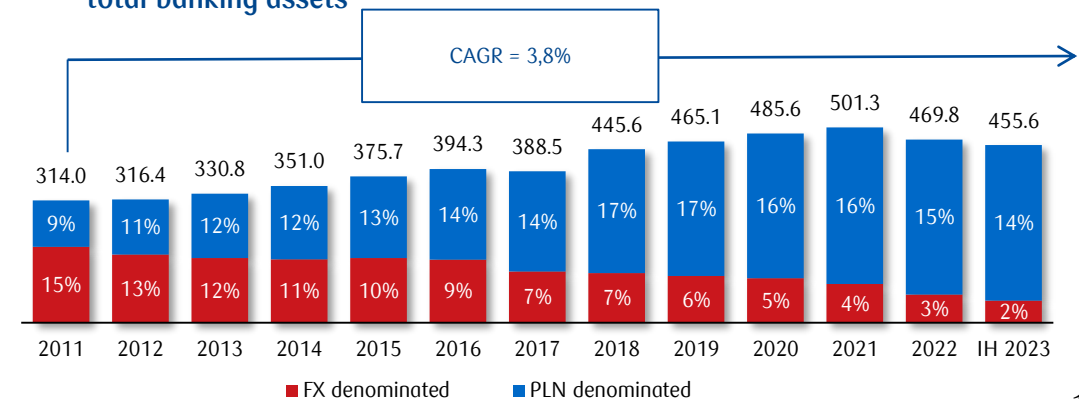
Source: Polish Banking Association

NPLs of mortgage loans in the Polish banking sector (%)



Source: NBP, Polish Financial Supervision Authority

Outstanding value of residential mortgage loans in Poland (PLN bn) as % of total banking assets



Source: PKO BH calculation based on NBP and KNF data



# PKO Bank Hipoteczny – covered bonds issuer

# Strategy for 2023-2025 „Efficient in action, committed to development”

Our advantages enable us to pursue an ambitious strategic mission caring for sustainable development. We provide:

**Our clients** with tailor-made credit products for real estate financing



**Our investors** with high-security covered bonds



## Our strategic mission

**Our employees** with diverse and friendly working environment



**Our shareholder** with sources of stable funding



### Our advantages:



Scale of business



Security



High quality of loan portfolio



Cost effectiveness

# Strategic goals 2023-2025

We want to achieve ambitious strategic goals having in mind not only current profitability, but also investing in development that goes beyond the horizon of the strategy. Strategic goals of PKO Bank Hipoteczny:





# Key Achievements 1H 2023 – financial highlights

Net profit  
PLN 59.7 mn



Total assets  
PLN 19.5 bn



Total equity PLN 1.5 bn  
TCR 19.5%  
CET1 19.5%



Outstanding covered  
bonds PLN 9.7 bn



No. of loans  
106 188



Residential mortgages  
portfolio  
PLN 18.4 bn



Low cost of risk 0.06%

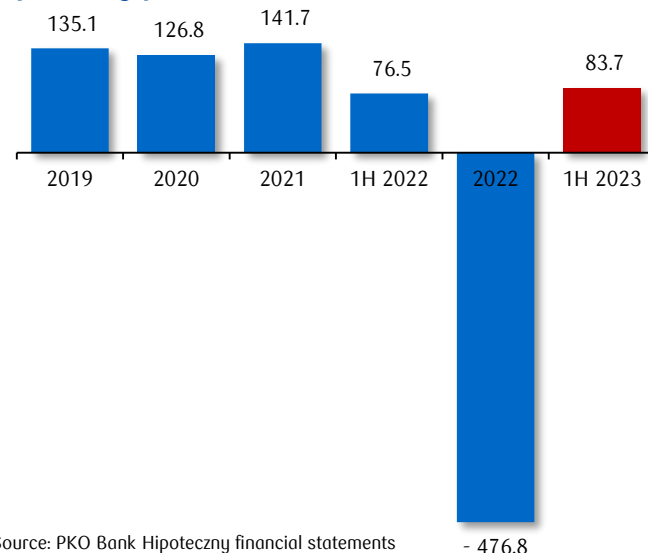


No. of employees 57

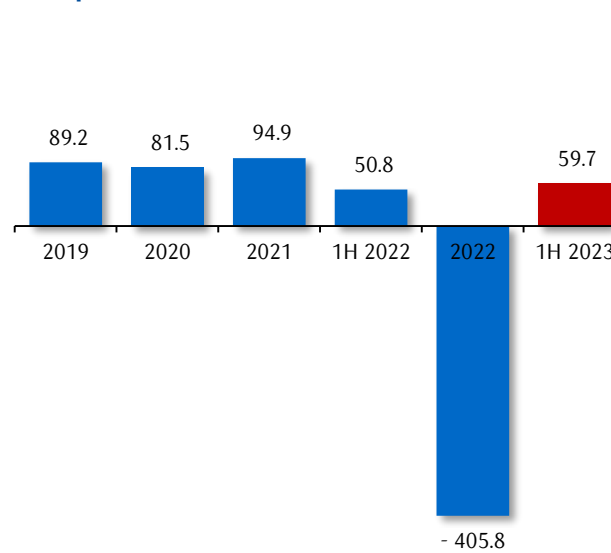


# Results in 2022 affected by mortgage moratoria

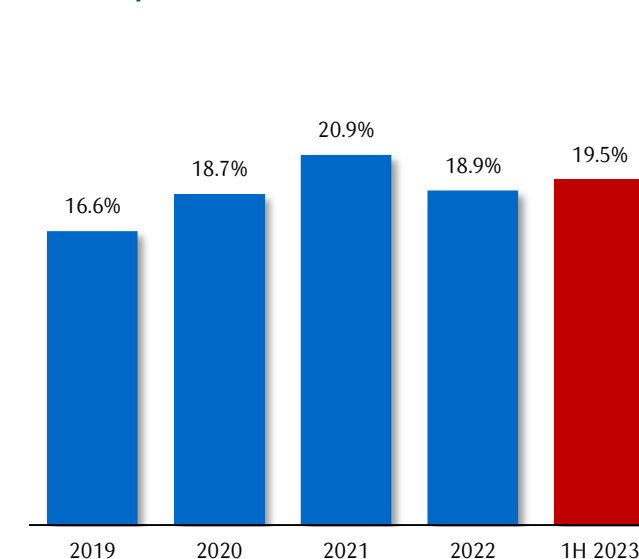
Operating profit (in PLN mn)



Net profit (in PLN mn)



Total capital ratio (in %)

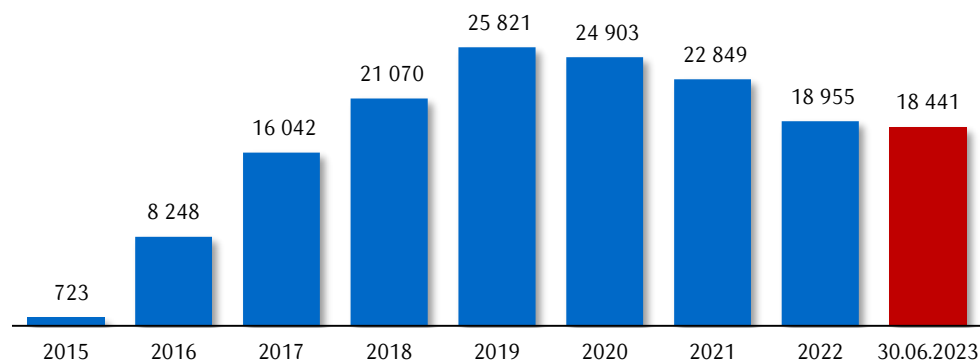


Source: PKO Bank Hipoteczny financial statements

- Mortgage moratoria („credit holidays”) were implemented in 2022 to all borrowers who finance their own housing needs. Four installments in 2H2022 were subject to moratoria and one loan installment per quarter in 2023. Moratoria are voluntary for the borrowers. This affected profitability of the Bank in 2022 as well as its capital ratios. Credit holidays may be extended for 2024.
- On June 15, 2023 the European Court of Justice ruled that banks were not entitled to demand that customers pay for the cost of capital on any foreign currency mortgages that have already been deemed by local judges to have contained “unfair terms.” The ruling might have a negative impact on the Polish banking sector, but should not affect PKO BH directly as the issuer has no CHF-denominated mortgage loans in its portfolio.
- Suspensions of repayment of principal and interest installments required the recalculation of future flows. A behavioral model was developed, based on which it was estimated in July 2022, that 63% of the Bank’s customers would take advantage of the repayment suspension.
- Bank adjusted the gross amount of mortgage loans in 2022 by the amount of 667.8 PLN by reducing interest income, which meant that it closed the year with a loss. This amount covered the result of the credit holidays used in 2022 and 2023, but may change if more customers decide to benefit from mortgage moratoria by the end of 2023. Results of 2022 were also impacted by regulatory costs of PLN 37.3 mn and banking tax of PLN 69.6 mn.
- Solid capital position attest to the safety and stability of the Bank’s operations.

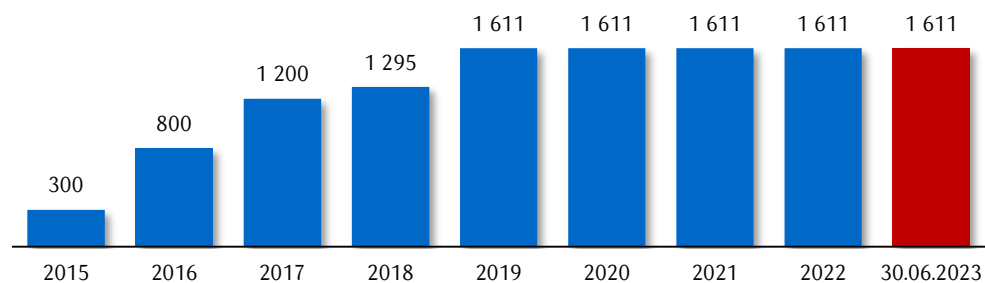
# Volumes of covered bonds and PLN-denominated residential mortgage loan portfolio

Residential mortgage loan portfolio – outstanding (PLN mn)



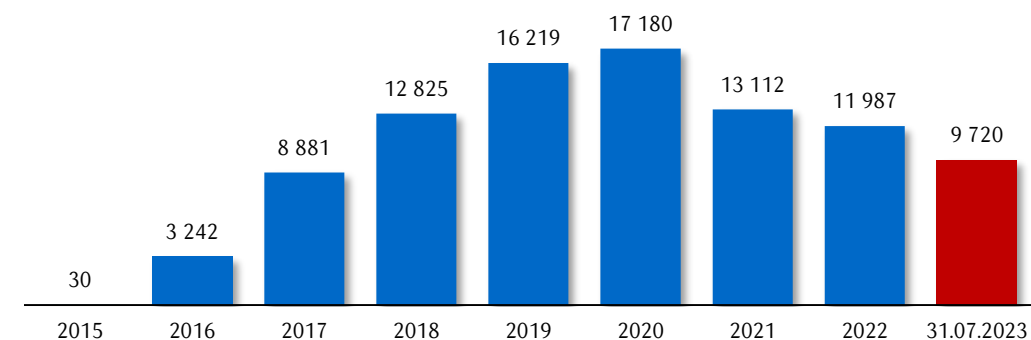
Source: PKO Bank Hipoteczny financial statements

Share capital (PLN mn)



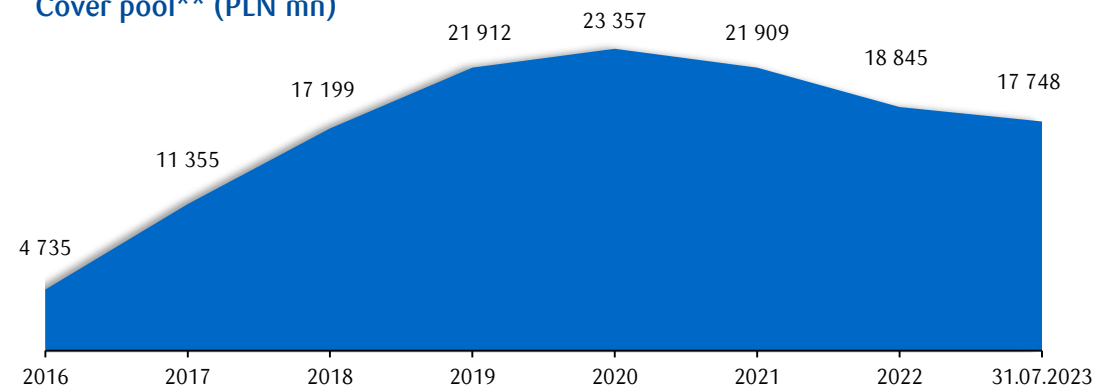
Source: PKO Bank Hipoteczny financial statements

Covered bonds outstanding\* (PLN mn)



Source: PKO Bank Hipoteczny cover pool reports

Cover pool\*\* (PLN mn)



Source: PKO Bank Hipoteczny cover pool reports

\*EUR denominated issues converted by EUR/PLN NBP fixing rate as of the end of particular periods

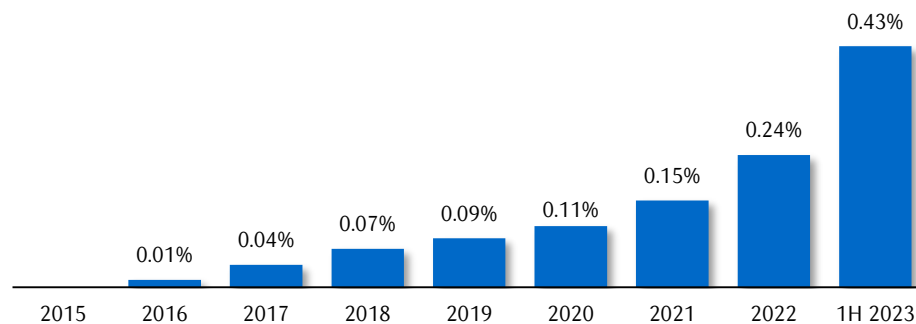
\*\*Without hedging instruments included into the cover pool; liquidity buffer included but not counting towards coverage and OC

# Excellent quality of the housing loan portfolio at PKO BH



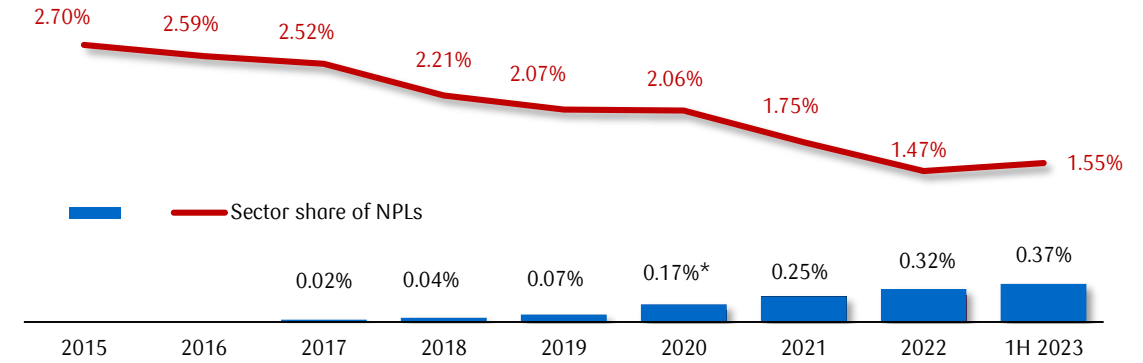
- Reminder actions taken by the Bank at an early stage of the arrears of the loans as well as active management of the impaired loan portfolio (NPL) aimed at returning to timely service => **NPL ratio significantly below the sector level.**
- Slightly growing DPD30+ and NPL portfolio, as a consequence of high interest rates.
- Credit holidays and forecast of falling interest rates mitigate the risk of greater deterioration.

## Share of DPD30 (%)



Source: PKO Bank Hipoteczny data

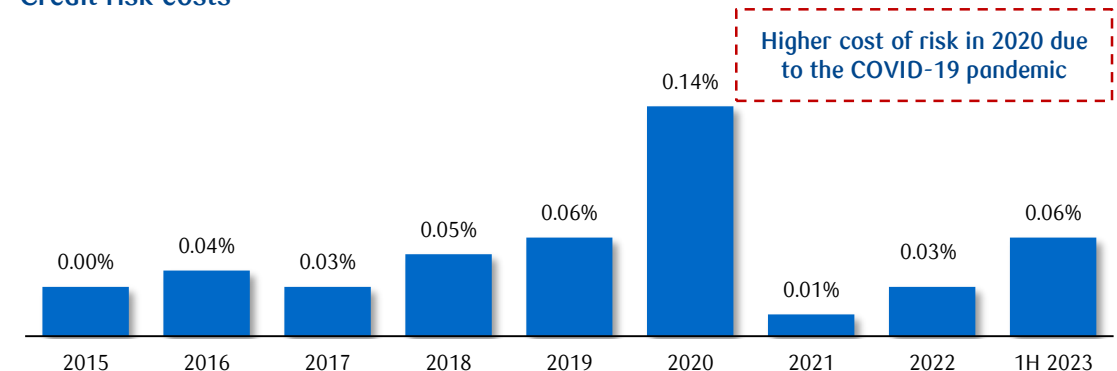
## Share of NPLs (%) vs. sector



Source: PKO Bank Hipoteczny data / NBP Banking sector financial data

\*Increase of NPLs due to implementation of EBA Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013. This is a change in the definition, which does not affect the quality of the portfolio and the cost of risk.

## Credit risk costs



Source: PKO Bank Hipoteczny data

# Safe lending criteria

## Polish banking regulations

- LTV (market value)  $\leq 80\%^*$

## Polish regulations on mortgage banks

- LTMV (mortgage lending value)  $\leq 100\%$
- First-ranking lien in mortgage register
- Legal title: ownership or perpetuity

## PKO BH criteria (current offer)

- PLN loans only
- Residential mortgages (principal dwelling only)
- Contractual maturity: up to 35 years
- Interest rate: floating and fixed for 5 years (11.1% of the credit portfolio as of 31 July 2023)

## PKO BH criteria

- New construction (selectively) and secondary market
- Collateral: flats or houses
- Not in arrears (in case of pooling)

Subject to approval by the Cover Pool Monitor, the receivables are registered in the cover pool

\* In the case of using credit insurance of the required financial contribution and in a situation where the loan is secured by a mortgage established on a dwelling, LTV  $\leq 90\%$  is allowed.



# High-quality cover pool of purely residential mortgages in PLN

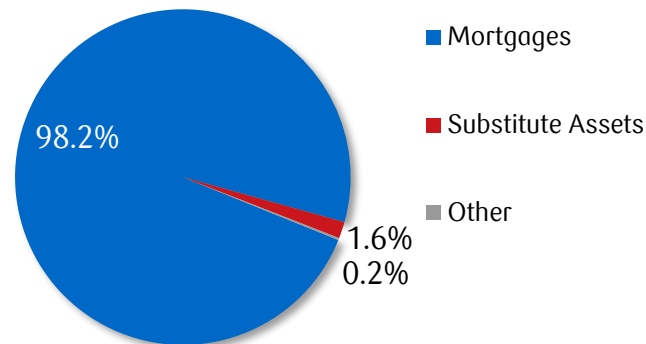


Data as of 31.07.2023

## Cover pool value



## Cover pool structure (%)



## Mortgage characteristics:

- **Mortgages: PLN and residential only**
- **Overcollateralisation above regulatory limits: 76%** (vs. 5% required)
- Number of loans: 101 940
- Average loan value PLN 171k / EUR 38.7k
- Average indexed LtV 35.5%
- 10 Largest Exposures: 0.1% of total exposures

## Features of standard residential mortgage loans in the Cover Pool:

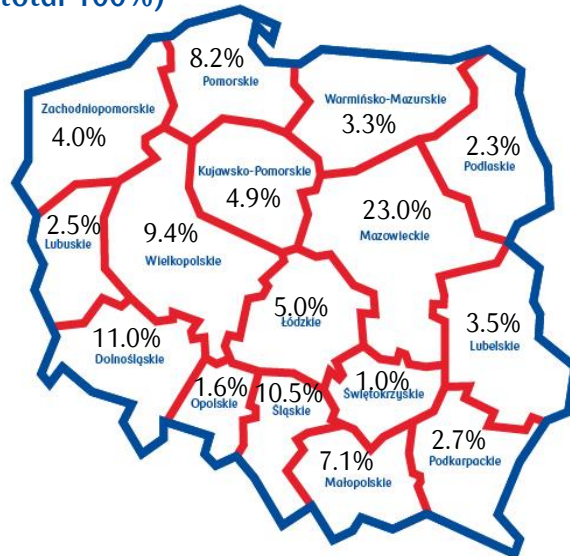
- **Variable** interest rate based on WIBOR rate or **fixed** interest rate for 5 years
- Amortizing **monthly (no interest-only)**
- For **own housing** purposes (no buy-to-let)

Source: PKO Bank Hipoteczny data including: <https://www.pkobh.pl/en/reports/cover-pool-reports/>

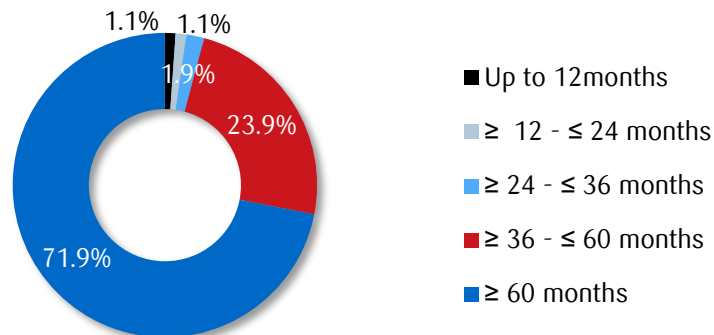
EUR/PLN NBP fixing exchange rate as at 31.07.2023, 1 EUR= 4.4135

...with good diversification and low LTV ratio as of 31.07.2023

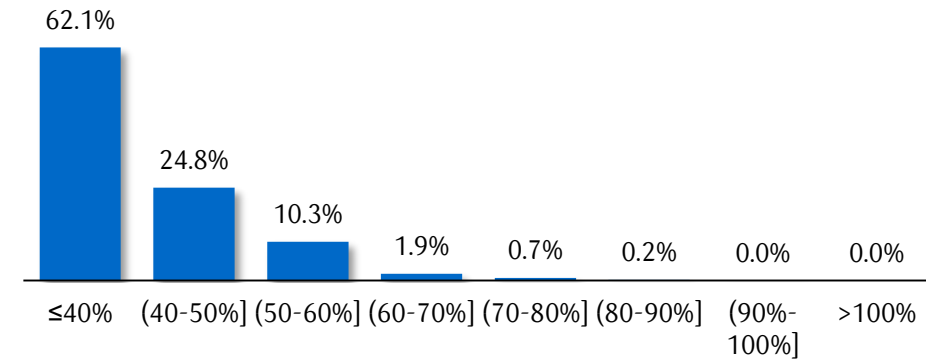
Cover pool composition by geographical location in Poland (total 100%)



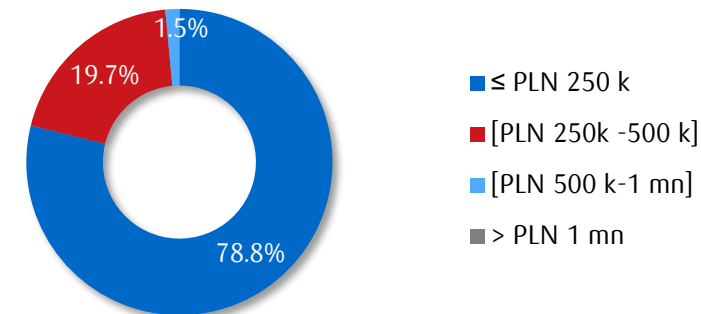
Cover pool composition by loan seasoning (%)



Cover pool composition by LTV (%)

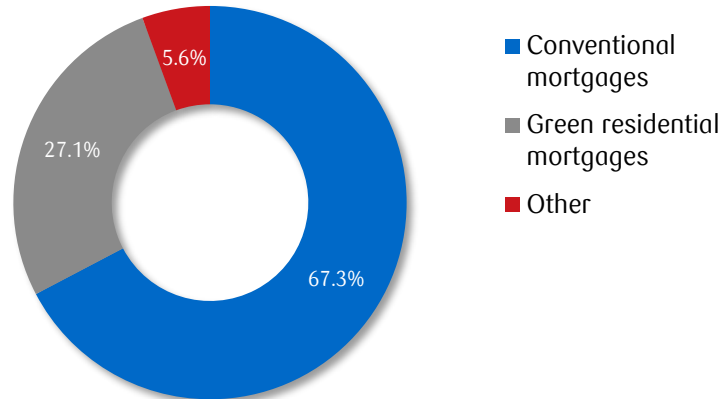


Cover pool composition by loan value (%)



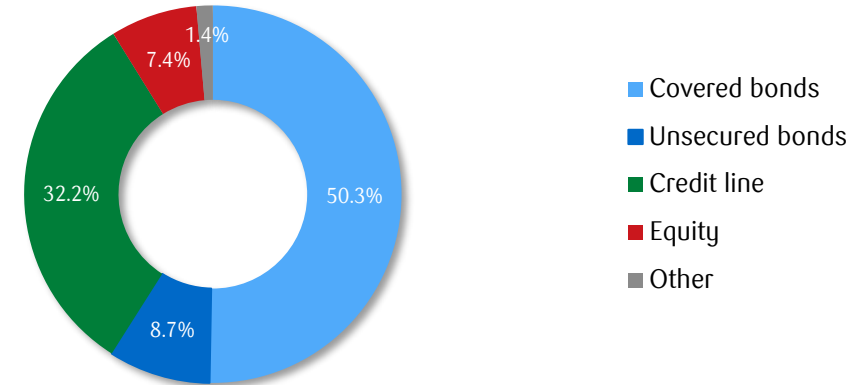
# Asset and liability structure as of 30.06.2023

PKO Bank Hipoteczny assets' structure in %



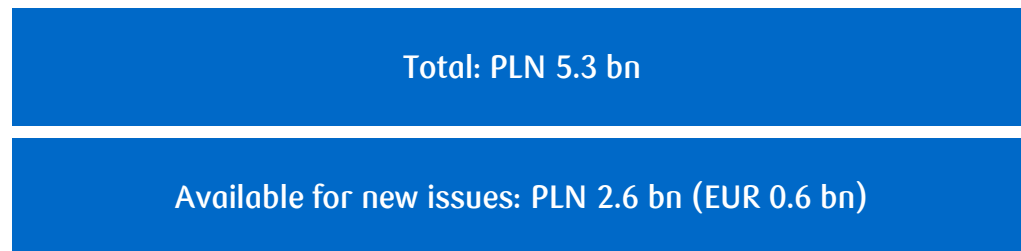
Source: PKO Bank Hipoteczny financial statement

PKO Bank Hipoteczny funding structure in %



Source: PKO Bank Hipoteczny financial statement

Green assets in cover pool (as of 31.07.2023)



Source: PKO Bank Hipoteczny Cover pool report as of 31.07.2023

Total assets in cover pool (as of 31.07.2023)



Source: PKO Bank Hipoteczny Cover pool report

\*EUR/PLN NBP fixing exchange rate as at 31.07.2023, 1 EUR= 4.4135

# Covered bond rating at country ceiling level

MOODY'S

Government of Poland rating

A2/P-1

stable outlook

PKO Bank Polski rating

A3/(P)P-2

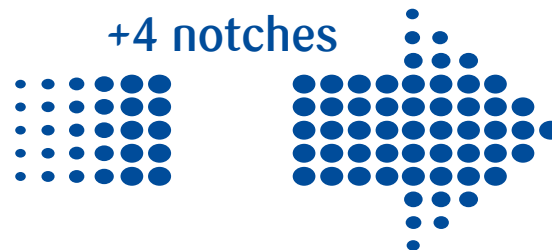
stable outlook

PKO Bank Hipoteczny rating

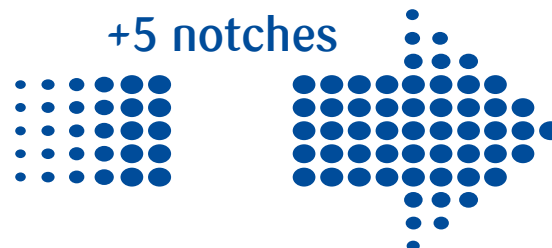
A3/P-2

stable outlook

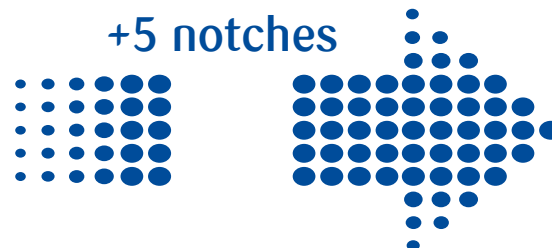
+4 notches



+5 notches



+5 notches



PKO Bank Hipoteczny  
Covered Bond Rating  
(PLN & EUR)

Aa1

*Poland country ceiling = Aa1*

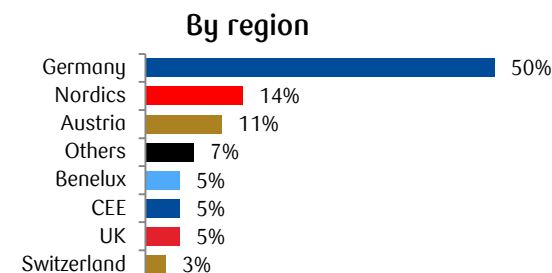
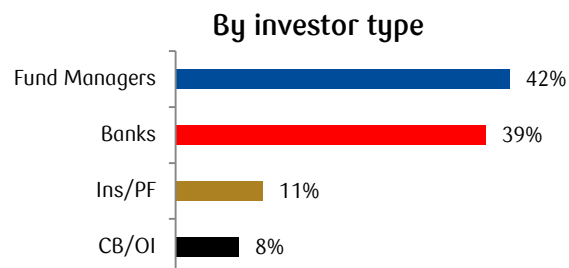
PKO Bank Hipoteczny covered bond rating is based on:

- High cover pool quality
- OC at the minimum level of 5% (Moody's OC consistent with Aa1 rating is 0.5%)
- Legally defined and predictable bankruptcy procedure

# No. 1 Polish EUR bond issuer in the international markets

	#3 Benchmark issue	#4 Benchmark issue	#1 Private issue	#6 Benchmark issue
Issue size	500 000 000 EUR	500 000 000 EUR	25 000 000 EUR	500 000 000 EUR
Moody's rating	Aa1	Aa1	Aa1	Aa1
Re-offer spread	MS + 28 bp	MS + 23 bp	MS + 20 bp	MS + 36 bp
Annual coupon	0.750%	0.750%	0.820%	2.125%
Price/Yield as of issue date as of issue date	99.906/0.764%	99.892/0.769%	100/0.820%	99.98/2.132%
Issue date	27.09.2017	22.03.2018	02.02.2017	04.07.2022
Maturity date	27.08.2024	24.01.2024	02.02.2024	25.06.2025
Stock Exchange listing venue	Luxemburg and Warsaw	Luxemburg and Warsaw	Luxemburg	Luxemburg and Warsaw
ISIN	XS1690669574	XS1795407979	XS1559882821	XS2495085784

Distribution of all outstanding EURO-denominated benchmark covered bond issues of PKO BH





# Green Covered Bonds as an important addendum to the funding mix

# Green covered bonds as a financing tool for PKO Bank Hipoteczny mortgages

PKO Bank Hipoteczny as a first bank in Poland has identified a significant influence of buildings on climate and decided to establish a strategic project to acquire green assets and issue green covered bonds.

## Documentation/ Framework

- PKO Bank Hipoteczny green covered bonds are in line with **ICMA Green Bond Principles (GBP)**.
- Second Party Opinion of PKO Bank Hipoteczny **Green Covered Bond Framework** has been issued by Sustainalytics.
- PKO Bank Hipoteczny green covered bonds are certified by **Climate Bonds Initiative**.



## Methodology

- In 2022 PKO Bank Hipoteczny updated its Framework, which includes criteria and methodology to identify energy efficient residential buildings in the Bank's loan portfolio. It was developed by green buildings consultant Drees & Sommer.
- PKO Bank Hipoteczny methodology is approved by Climate Bonds Initiative under their Low Carbon Criteria as proxy for energy-efficient residential properties in Poland.



## Special offer for green mortgages

- Dedicated offer for financing of energy efficient mortgages with valid EPCs in PKO BP.



## Energy Efficient Mortgage Label

- PKO Bank Hipoteczny joined the **Energy Efficient Mortgage Label** in February 2021.
- **We report in HDT format since 1Q'22.**



# PKO Bank Hipoteczny Green Covered Bonds are in line with ICMA GBP



## Use of Proceeds

- Financing and refinancing of eligible assets on PKO Bank Hipoteczny's balance sheet.
- Eligible assets include loans for residential buildings as defined in the eligibility criteria:
  - new or existing residential buildings representing top 15% low carbon buildings in Poland;
  - existing residential buildings in Poland, which have undergone a property upgrade (major renovations, refurbishment, thermo-modernization or efficiency upgrade) achieving a 30% Energy efficiency improvement.

## Project Evaluation and Selection

- PKO Bank Hipoteczny has established a **Green Covered Bond Committee (GCBC)** which is comprised of one representative from each of the following areas of the bank: **Treasury, Residential Mortgage Loans, Risk, Compliance, Controlling and The Cover Pool Register**.
- GCBC reports directly to the Management Board of the Bank.
- GCBC's role is to oversee the process for evaluation and selection of eligible loans according to the adopted methodology.

## Management of Proceeds

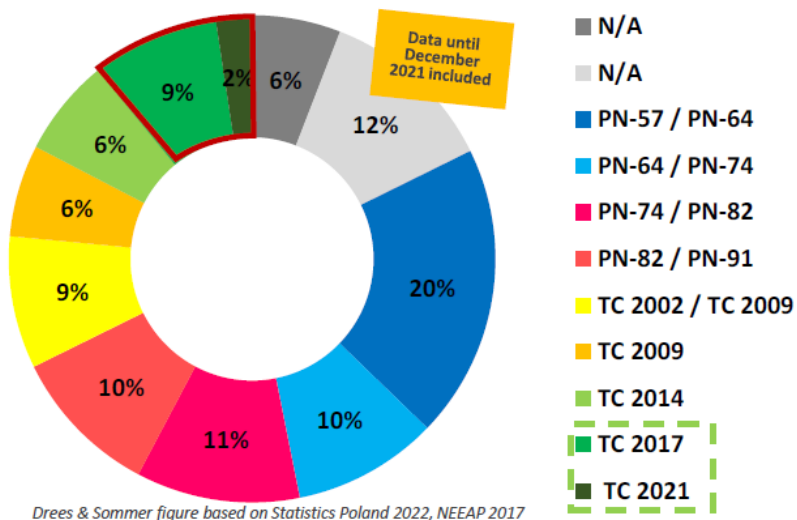
- The proceeds from green covered bonds can be allocated either to refinance existing portfolio or to finance new loans which fulfill eligibility criteria.

## Reporting

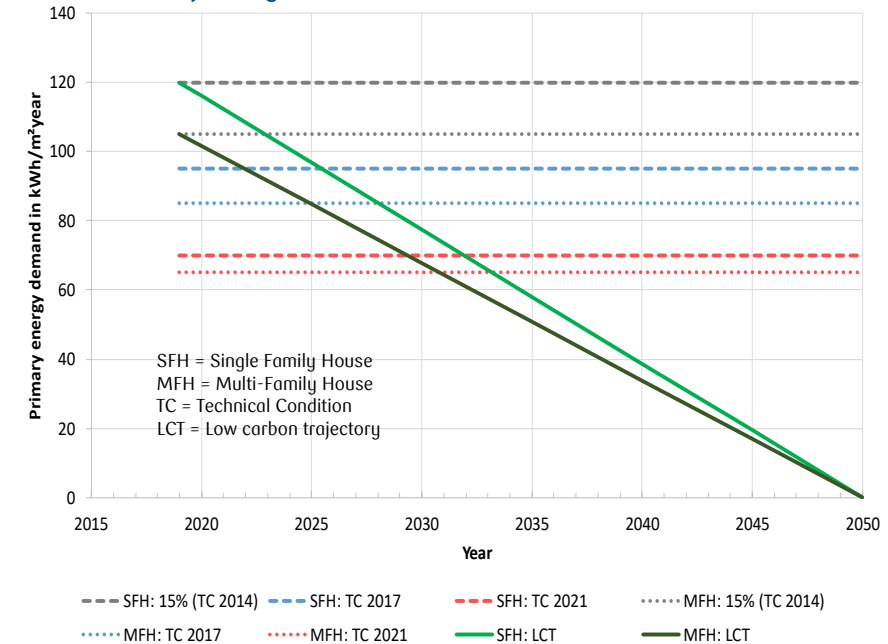
- **Allocation reporting** is available to investors after every green covered bond issuance and annually thereafter, until the bonds have been fully repaid.
- **Impact reporting** is done on an annual basis on climate benefits associated with the green eligible loans on:
  - estimated annual primary energy savings in MWh;
  - estimated annual GHG emissions avoided in tons of CO2 equivalent.

# PKO Bank Hipoteczny Green Covered Bonds Methodology

- Based on the statistical analysis of buildings and mandatory building energy performance codes minimum criteria for a green bond were determined
- Buildings are deemed to be within the Top 15% of its local market if: Technical Condition is TC 2017 or newer
- Our eligibility criteria are not static and are in line with the trajectory provided by CBI (aimed at climate neutrality by 2050).
- New buildings complying with Technical Note 2017 or later by year of construction are automatically eligible for qualification for bonds where the mid-point of the bond term is no later than 2025.



## A Low Carbon Trajectory



Source: <https://www.climatebonds.net/files/files/Residential%20Proxy%20Poland%281%29.pdf>

- A low carbon trajectory (LCT) connects the basis requirements of TC 2014 (SFH: PED ≤ 120 kWh/m²year | MFH: PED ≤ 105 kWh/m²year) as the start of the year 2019 towards the Zero-Emission-Goal in 2050 with zero non-renewable primary energy.
- The low carbon trajectories for single- and multifamily houses serve as the 15th percentile baseline for the local Polish residential market.





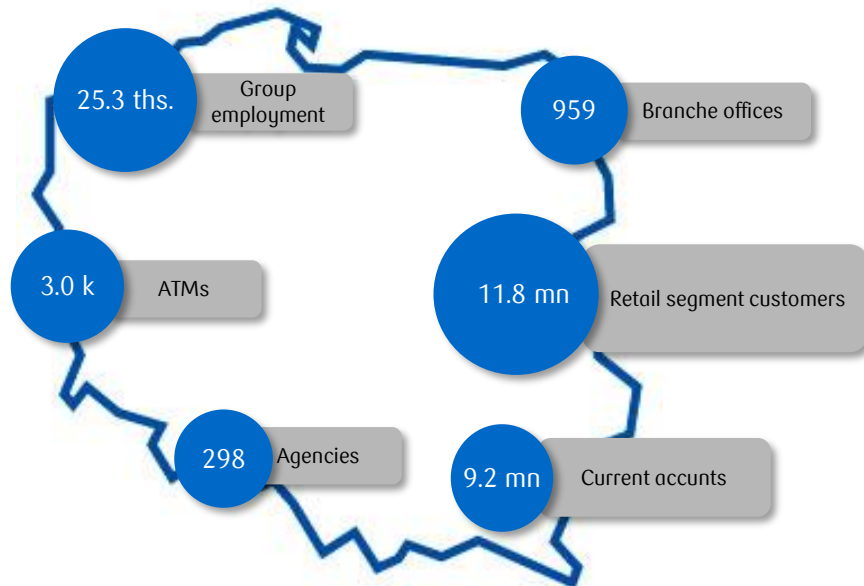
# PKO BP Group overview

# PKO BP Group – a leader in the Polish banking sector



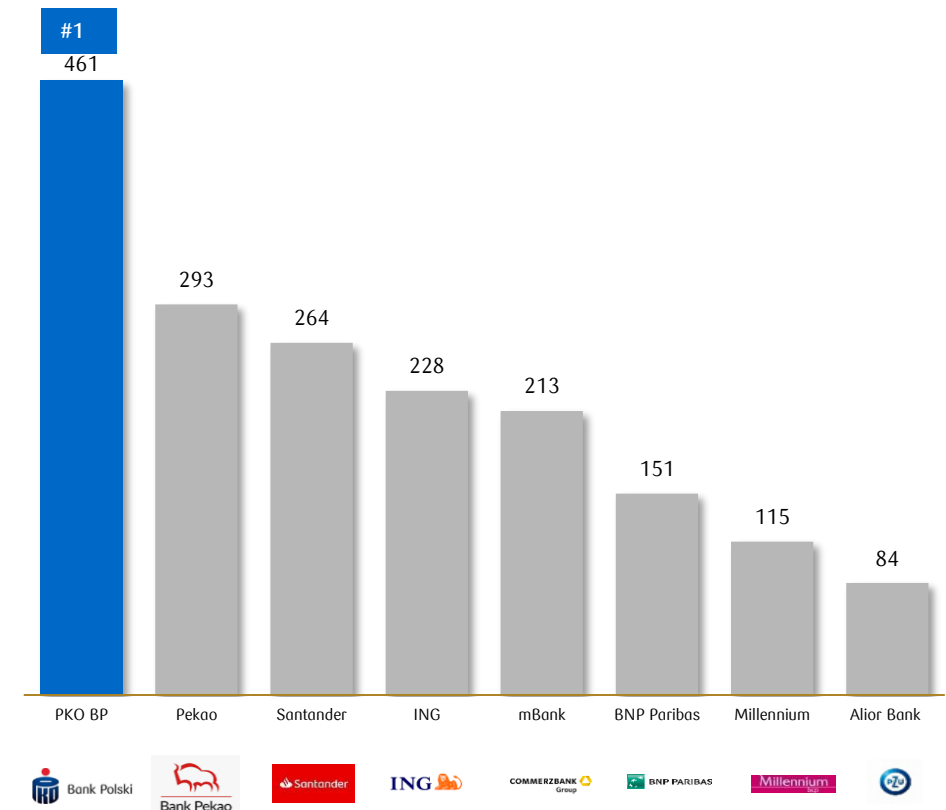
## General description of PKO BP Group\*:

- Leader in the Polish banking sector in terms of total assets, net income, total equity, loan and deposit portfolios, number of customers and size of distribution network, mobile banking
- Long-term debt (senior unsecured) rating by Moody's at A3 with stable outlook
- PKO BP Group is the biggest bank listed at WSE with capitalisation of PLN 45.2 bn as of 30.06.2023
- PKO BP included in FTSE Russel index covering leading European companies
- The State Treasury of Poland owns 29.43% of PKO BP shares



Source: PKO BP 2022 financial statement

## Market position by total assets as of 30.06.2023 (PLN bn)



Source: Financial statements of the banks

\*PKO BP Group includes among others PKO Bank Polski S.A., PKO Leasing S.A. Group, PKO Towarzystwo Funduszy Inwestycyjnych S.A., PKO Finance AB and PKO Bank Hipoteczny S.A.

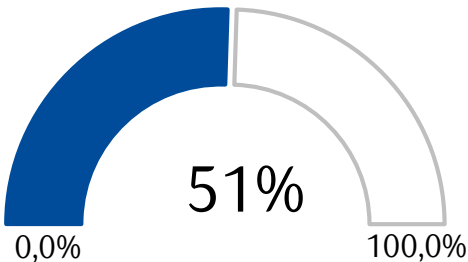
# PKO BP CHF mortgage settlement program as at 30.06.2023



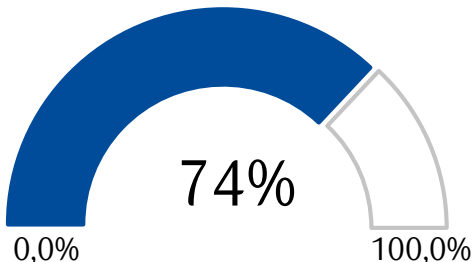
Bank Polski

- More than 52 ths motions submitted for mediation
- Almost 32 ths mediations concluded successfully
- More than 31 ths settlements concluded

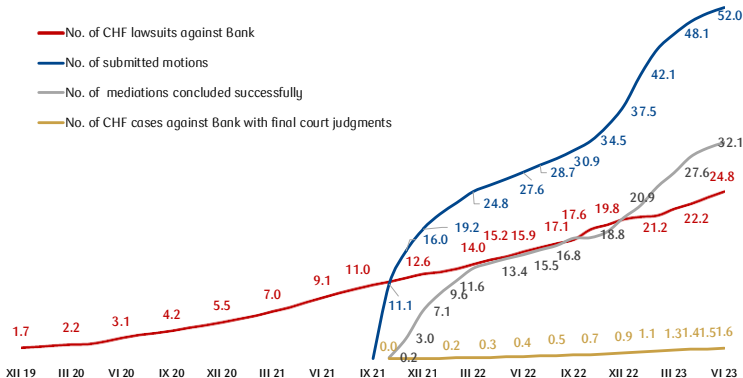
Share of motions submitted to the total no. of entitled CHF customers



Share of successfully completed cases in total completed cases

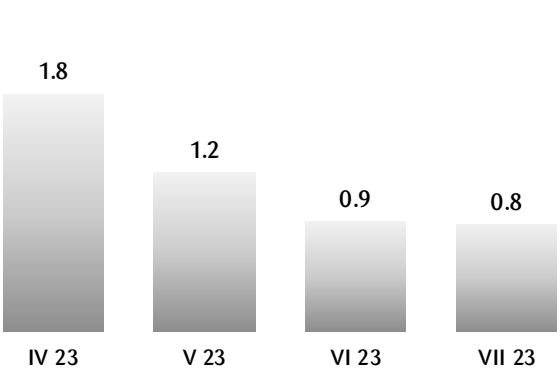


Number of cases regarding settlements of CHF borrowers

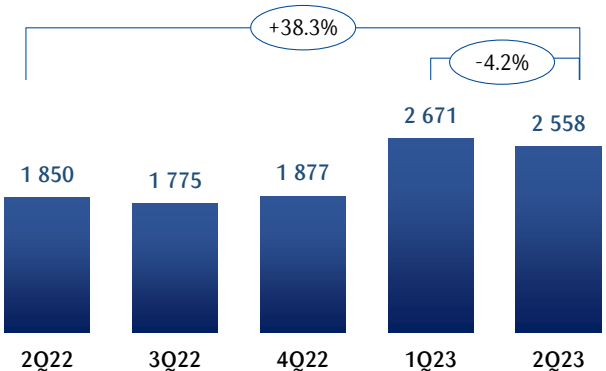


Data starting from the moment when program of settlements for Swiss franc borrowers was launched

New mediation motions submitted [ths. Items]



The number of new court proceedings in a quarter [Items]





# Solid capital position of PKO BP Group at the end of 1H 2023



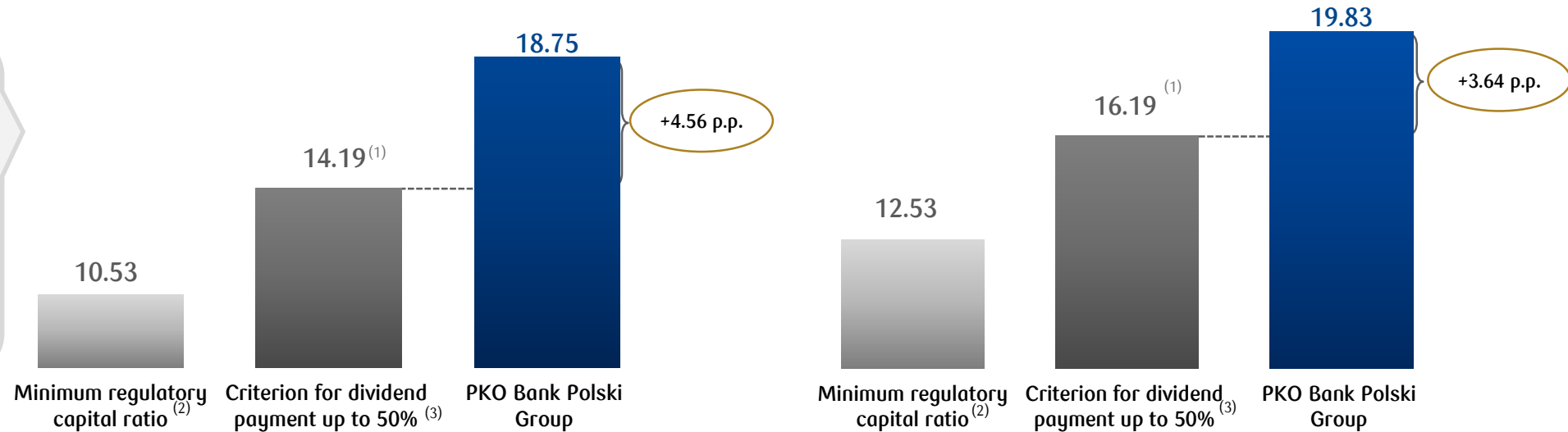
Bank Polski

CET1 = Tier 1 capital ratio [%]

Total capital ratio (TCR) [%]

Bank meets the financial requirements for the payment of dividends at the level **up to 50%** of 2022 net profit

Negative opinion of KNF after CJEU ruling



(1) - PFSA's buffer for Group's sensitivity to an adverse macroeconomic scenario recommended in Pillar II is 0.66% (Bank: 0.72%)

(2) - Tier 1: CRR 6% + conservation buffer 2.5% + OSII buffer 2% + countercyclical buffer 0.03%

TCR: CRR 8% + conservation buffer 2.5% + OSII buffer 2% + countercyclical buffer 0.03%

(3) - Good credit quality of the portfolio of receivables from the non-financial sector, both in the Group and the Bank level (NPL share <5%)

From Q2 2023, no adjustment of the dividend payout ratio by the K1 and K2 criteria due to decrease below 5% of foreign currency housing loans for households share in the entire portfolio of receivables from the non-financial sector (K1: Group: 3.36%, Bank 4.04%; K2: Group: 28.03%, Bank 28.91%).

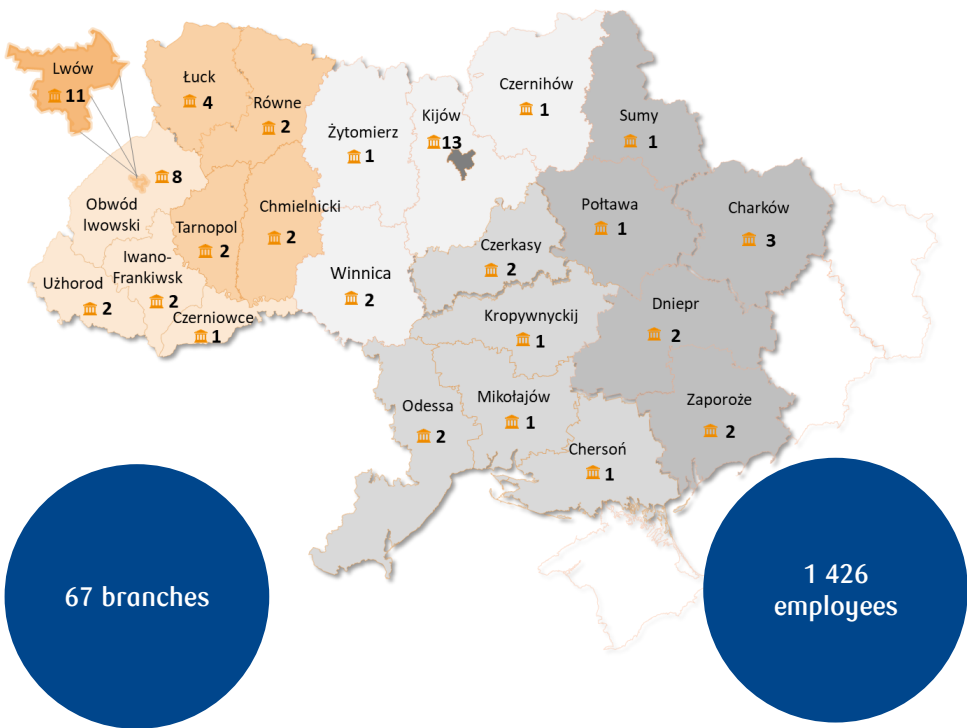
# Kredobank as a Ukrainian part of business at PKO BP Group



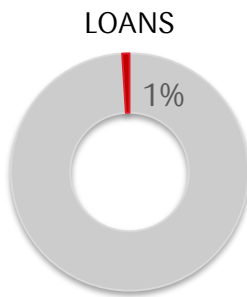
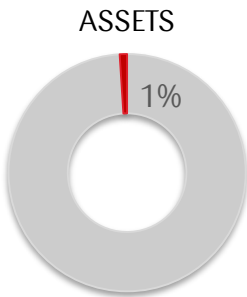
Bank Polski

KREDOBANK S.A. is an universal bank servicing both retail and SME clients, operating mainly in western part of Ukraine and Kiev region

- Continuation of activities in regions not affected by active hostilities. 13 branches were located in the regions most affected by the war
- The company's management board estimates potential losses at a level which has no impact on KREDOBANK S.A.'s ability to continue its operations
- Based on guarantees received from the European Bank for Reconstruction and Development and European Commission funds deposited with the BGK, KREDOBANK S.A. expanded lending in the first half of 2023



KREDOBANK'S SHARE OF THE GROUP'S RESULTS  
June 30, 2023:



KREDOBANK S.A. (mIn PLN)	Jun 30, 2023	Jun 30, 2022	Δ
Gross loans	1 573	2 177	-28%
Gross deposits	4 373	3 326	31%
Total assets	5 068	4 168	22%
Equity	557	512	9%
	6M 23	6M 22	Δ
Net income	110	8	>100%

# Ambitious ESG goals 2023-2025



Bank Polski



**Highest** volume of new financing for sustainable and transformation projects

**Top 3 Bank** ESG financing in each business segment

**Scope 1 and 2** climate neutrality by 2030

**>90%** energy purchased certified as green-sourced

**Green bonds** preparation for the issue of the bank's own green bonds

- 1 Financial education of young people
- 2 Support the digital transformation of various social groups including seniors
- 3 Counteracting social exclusion
- 4 Support for the population of Ukraine and for the country reconstruction process

- >40%** women in managerial positions
- >30%** women in material risk taker positions
- ~0%** gender pay gap
- >2%** participation of people with disabilities in job applications, recruitment interviews, and among employees
- <7%** voluntary leavers rate
- <14%** ratio of total staff turnover

**Reduction CO<sub>2</sub> emission** preparation and publication of a trajectory of CO<sub>2</sub> emissions reduction

**Expanding disclosures** systematic expansion of the scope of disclosures in the scope of CO<sub>2</sub> emissions of the bank

# Credit / ESG ratings and ownership



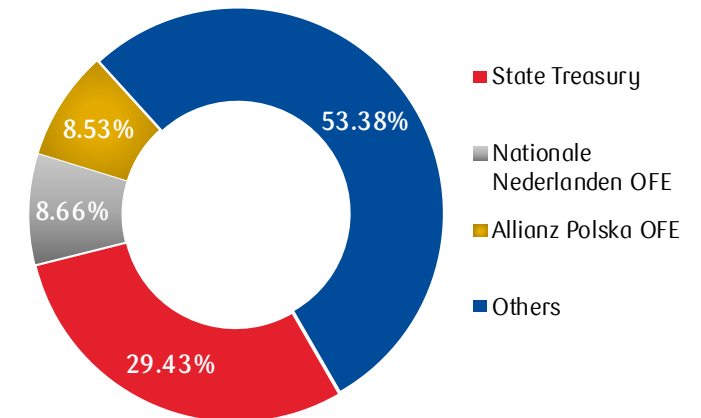
Bank Polski

## Credit Ratings

Moody's Investors Service	Long-term rating	
	Deposits	A2
	Liabilities	A3
	Counterparty risk	A2
	Outlook	Stable
	Short-term rating	
	Deposits	P-1
	Liabilities	(P)P-2
	Counterparty risk	P-1
	Baseline Credit Assessment	baa2

## Shareholder structure

(number of shares: 1 250 mln)



- The Bank's shares have been listed on the Warsaw Stock Exchange since November 10, 2004.
- Largest domestic bank on the WSE in terms of capitalization PLN 45 billion (as at 30/06/2023)
- Bank PKO BP is included in the following indices: WIG, WIG20, WIG30, WIG Banki, WIG-ESG, FTSE Russell, Stoxx 600
- ISIN: PLPKO0000016; Bloomberg: PKO PW; Reuters: PKOB WA

## ESG Ratings



A ↔

(A in 2022)

CCC	B	BB	BBB	A	AA	AAA
-----	---	----	-----	---	----	-----



23.5 Medium Risk ↓

(21 in 2022)

Severe	High	Medium	Low	Negligible
--------	------	--------	-----	------------



3.3 ↔

(3.3 in 2022)

0	3.3	5
---	-----	---



46 ↔

(46 in 2022)

0	46	100
---	----	-----





Bank Hipoteczny

# Appendices

# Promoting ESG throughout the organization by conducting the Bank's operations in a sustainable and impactful manner



## Environmental

**We take care about our common future by:**

- Moving to new headquarters in September 2023 – SkySawa building certified by BREEAM Interim "Outstanding" rating
- Promoting pro-environmental real estate solutions
- Being a PKO Group's competence center for green residential mortgages
- Issuing green covered bonds
- Reducing the carbon footprint of Bank's operations and usage of plastic and printed materials



## Social

- Participating in socially responsible initiatives in the field of mortgage products, including sectoral works
- Educating customers on mortgage loans, green solutions and real estate sector via new dedicated online platform
- Putting emphasis on the transparency of communication with customers by promoting an understandable and simple language



## Corporate Governance

- Promoting diversity as a value
- Creating a friendly working environment and taking care of employees' development
- Enabling effective communication between employees
- Promoting a healthy lifestyle among employees



# PKO BH Green Covered Bonds: EU Taxonomy – eligibility criteria for climate change mitigation



Economic activity	Screening Criteria	Residential Single-Family <sup>1</sup>	Residential Multi-Family <sup>2</sup>
<b>7.1 Construction of new buildings</b> Built after 31/12/2020	<b>Nearly Zero-Energy Building</b> Primary energy demand minus 10%	At least 10% lower than the requirements for the primary energy demand of the "Nearly Zero-Energy Building" standard (NZEB). Based on the "Energy Performance of Buildings Directive (EPBD)", the NZEB-standard is implemented in the implemented in Technical Condition 2021 (TC 2021) requirements.	
	Indicative reference values:	PED ≤ 63 kWh/(m²year)	PED ≤ 58.8 kWh/(m²year)
<b>7.2 Renovation of existing buildings</b> Built before 31/12/2020	<b>Major Renovation</b> Cost optimal level	The building renovation complies with the applicable requirements for major renovations as defined in the Energy Performance of Buildings Directive (EPBD), based on the cost optimal level as defined in Technical Condition 2014 (TC 2014).	
	<b>Property Upgrade</b> Relative improvement ≥ 30% in primary energy demand	Relative improvement in primary energy demand ≥ 30% in comparison to the performance of the building before the renovation. Reductions through renewable energy sources are not taken into account.	
<b>7.7 Acquisition and ownership of buildings</b> Built before 31/12/2020 <sup>3</sup>	<b>top 15%</b> of the national existing building energy code	Technical condition TC 2017 or newer	
	<b>top 15%</b> of the national existing building stock	PED ≤ 95 kWh/m²year FED ≤ 67.7 kWh/m²year	PED ≤ 85 kWh/m²year FED ≤ 60.6 kWh/m²year

<sup>1</sup> SFH: Single-Family house with 1-2 units | <sup>2</sup> MFH: Multi-Family house with >2 units | PED = primary energy demand | FED = Final energy demand | <sup>3</sup> For buildings built 01/01/2021 or newer, the criteria in 7.1 are required to comply with.

Source: Drees & Sommer low carbon building criteria are based on EU Taxonomy (Delegated Act – July 2021). Criteria are valid for assets located in Poland. Status: May 2022

# PKO BH Green Covered Bonds Methodology: Climate Bonds Initiative (CBI) certified eligibility criteria

Green Bond criteria - The object fulfills one of the following criteria:				Residential Single-Family <sup>1</sup> and Multi-Family <sup>2</sup>
Climate Bonds Initiative	New Construction or Existing Buildings	1)	<b>Energy standard or year of construction is equal or newer</b> <i>based on CBI's low carbon buildings criteria in compliance with CBI's established residential market proxy for Poland</i>	New buildings complying with Technical Note 2017 or later by year of construction are automatically eligible for qualification for bonds where the mid-point of the bond term is no later than 2025.
	Existing Buildings	2)	<b>Property upgrade</b> <i>in compliance with CBI's established residential property upgrade methodology</i>	Major renovation with an improvement in the CO2 emissions figure from EPC from before and after the retrofit, based on tenor of bond, which meet the requirement of Technical Note 2014 (issued after July 2015). Minimum improvement in carbon emissions ≥ 30% Term 1-5 years: 30% improvement Term 5-30 years: 30%-50% linear improvement Term ≥ 30 years: 50% improvement

# Robust regulatory regime

- Covered bonds and mortgage banks in Poland are regulated by the Polish Covered Bond Act. Covered Bond Directive was implemented into Polish Law in July 2022
- By law, only **specialized mortgage banks** are entitled to issue covered bonds in Poland
- **Segregation of assets** in the cover pool (only mortgages, cash, sovereign debt or similar\*)
- **Constant supervision by the independent Cover Pool Monitor** (appointed by KNF) over mortgage bank activities and its cover pool
- Conservative approach of determining **the mortgage lending value** (through-the-cycle) of real estate with rules approved by KNF
- **Strict regulatory limits on mortgage banks and covered bonds** including:
  - min. 5% overcollateralisation (OC)
  - liquidity buffer to cover the maximum cumulative net liquidity outflow in 180 days
  - coverage and liquidity tests
- **Mandatory FX risk limitation.**
- **Legally defined and predictable bankruptcy procedure** (not at the discretion of the issuer) designed to achieve best-possible outcome for covered bond holders (12 months extension period after issuer's default and switch to pass-through if available liquidity will not be sufficient to repay the bonds within 1 year)
- Covered bonds exempt from bail-in protocol (BRRD)\*\*



\*Securities issued or guaranteed by the State Treasury of the Republic of Poland, the National Bank of Poland, the ECB, governments and central banks of the EU and OECD member states (except for states that have restructured their external debt in the past five years).

\*\*In the event of compulsory restructuring of mortgage banks, covered bonds may be subject to compulsory write-down and/or conversion to the extent the value of the covered bonds exceeds the value of the cover pool.

# Regulatory safeguards built into bankruptcy procedure

Process	Covered bond repayment	Recourse and priorities	Hedging
<p>P1. Clear process of bankruptcy declaration</p> <p>P2. Clear deadlines for key actions of bankruptcy procedure defined in the legal framework</p>	<p>C1. Avoidance of time subordination</p> <p>C2. Explicit rules for early repayment of covered bonds</p> <p>C3. Explicit procedure for treatment of covered bonds, which became due before declaration of bankruptcy</p>	<p>R1. Dual recourse (separate bankruptcy asset pool and general bankruptcy estate)</p> <p>R2. Clearly defined order of priorities of payments from the separate bankruptcy asset pool</p>	<p>H1. Hedging arrangements will survive declaration of bankruptcy and will be extended by 12 months.</p> <p>H2. Possibility of the bankruptcy receiver to enter into hedging transactions (provided tests are passed)</p>

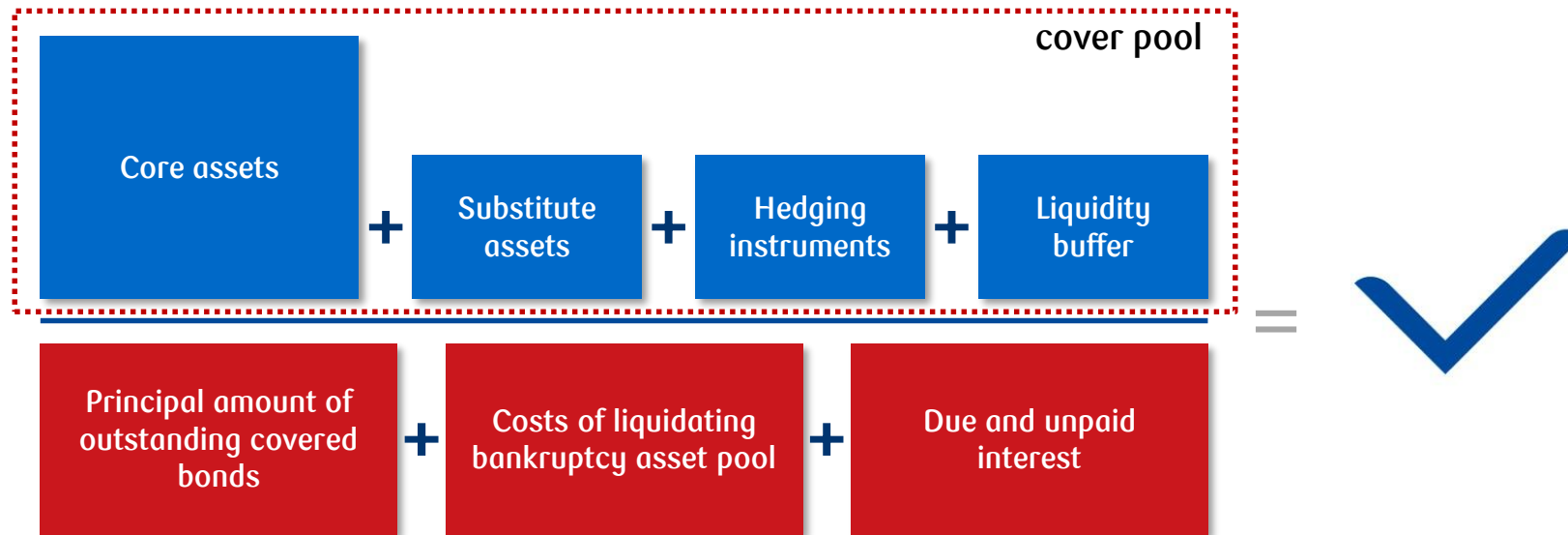
## Covered bondholders entitled with option to intervene in bankruptcy procedure

Coverage test	passed	passed	failed
Liquidity test	passed	failed	n/a
Covered bonds repayment	<ol style="list-style-type: none"> <li>Covered bonds repaid according to terms and conditions of the covered bonds, taking 12 months extension into account</li> <li>Receiver may enter into hedging transactions</li> </ol>	<ol style="list-style-type: none"> <li>Maturity date of all covered bonds extended to the date falling three years after the latest cover asset maturity date</li> <li>Distinct rules for pro-rata repayment before extended maturity date</li> </ol>	
Holders option	Resolution of covered bondholders with 2/3 majority to sell the separate bankruptcy asset pool to another bank	Resolution of covered bondholders with 2/3 majority <ol style="list-style-type: none"> <li>to disapply maturity extension or</li> <li>to sell cover assets to another bank or non-bank</li> </ol>	

Probability of default according to Moody's Idealised Cumulative Default Probabilities table:

- Baa1: 5Y - 1.10%; 7Y - 1.67%; 10Y - 2.60%
- A3: 5Y - 0.73%; 7Y - 1.11%; 10Y - 1.80%

To ensure the safety of the Covered Bonds the Bank is obliged to perform the coverage test

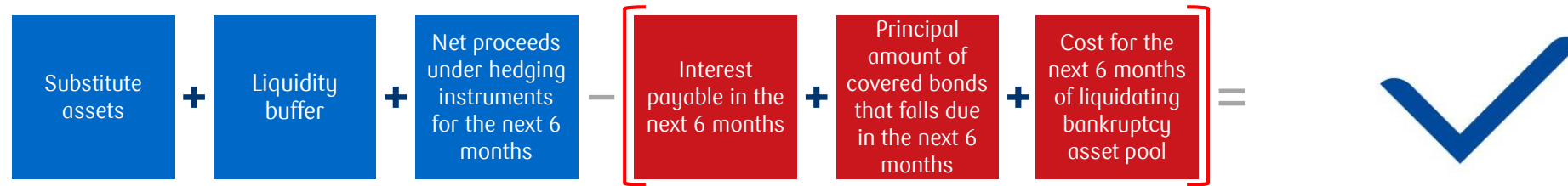


The coverage test:

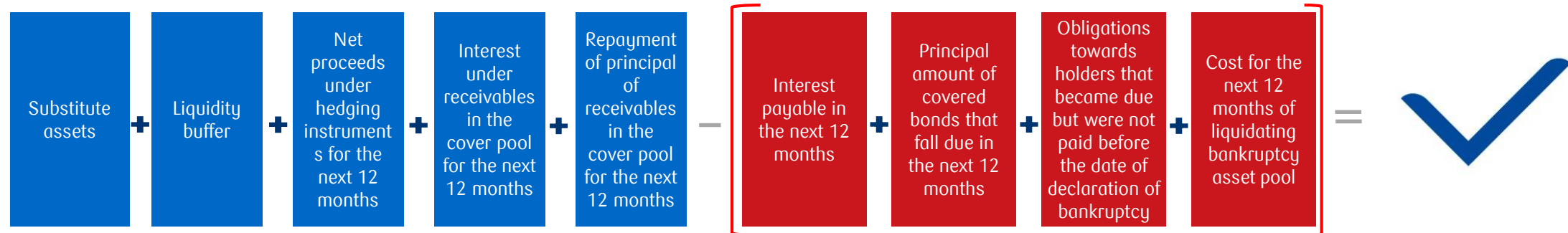
- **verifies whether the value of assets** in a cover pool **allows for full satisfaction of all claims** under outstanding covered bonds,
- **must be performed every six months**,
- is performed based on the following sets of data:
  - real data as of day of testing,
  - scenarios concerning changes of FX rates.

## ...and the liquidity test

6M



12M



The purpose of the liquidity test is to **verify that assets in a cover pool are sufficient for full satisfaction of all claims** under outstanding covered bonds, even if their maturity is extended in bankruptcy proceedings.

The liquidity test must be **performed at least every three months**.

The test is performed based on the following sets of data:

- real data as of day of testing,
- scenarios concerning changes of FX rates,
- scenarios concerning the shift of interest rate curves.



# Experienced management team



Katarzyna  
Kurkowska-  
Szczechowicz

## President of the Management Board

graduate of the Faculty of Economics at the Warsaw School of Economics, majoring in Finance and Banking, and a master's degree in law from the Faculty of Law and Administration at the University of Warsaw.

Responsible for internal audit, HR, legal and compliance departments.

Piotr Jaworski

## Vice President of the Management Board

graduate of the Faculty of Management as well as Accounting and Finance at the University of Warsaw. He has 15 years of professional experience gained in investment banking and on the financial market. He holds a PhD degree in economics. He is licensed as an Investment Advisor and a Certified International Investment Analyst. Responsible for treasury department, products and IT.

Piotr Kochanek

## Vice President of the Management Board

graduate of the Faculty of Mathematics of the Silesian University of Technology. Since 2014, he has been associated with PKO Bank Hipoteczny as Head of the Risk Department. Responsible for risk and credit departments.

Stanisław Skoczylas

## Vice President of the Management Board

graduate of the Cracow University of Economics (now Cracow University of Economics) with a degree in Finance and Banking. Responsible for finance and financial controlling departments.

# Thank you

## Contact

Katarzyna Goebel - Head of Treasury  
15 Puławska Str.  
02-515 Warsaw  
Tel: +48 724 044 069  
e-mail: katarzyna.goebel@pkobh.pl  
e-mail: IR.pko.bh@pkobh.pl

Edyta Kusińska - IR Expert  
15 Puławska Str.  
02-515 Warsaw  
Tel: +48 722 030 099  
e-mail: edyta.kusinska@pkobh.pl  
e-mail: IR.pko.bh@pkobh.pl

[www.pkobh.pl/relacje-inwestorskie](http://www.pkobh.pl/relacje-inwestorskie)



# Disclaimer



This presentation serves general information and advertising purposes. This presentation does not constitute an investment recommendation or information recommending or suggesting an investment strategy. It does not constitute information which, directly or indirectly, expresses a particular investment proposal in respect of a financial instrument or an issuer or which proposes a particular investment decision; and it does not constitute information recommending or suggesting an investment strategy, explicitly or implicitly, concerning one or several financial instruments or issuers.

This presentation and the information therein were prepared and provided for information purposes only. They are not (directly or indirectly) intended or to be construed as and do not constitute a direct or indirect offer, recommendation or solicitation to buy, hold or sell any securities or other financial instrument, or an invitation to make an offer to buy, to subscribe for or otherwise acquire any securities or other financial instrument or to provide or obtain any financial services.

The information contained herein does not claim to be comprehensive or complete. This presentation is not a prospectus or sales prospectus or a comparable document or a comparable information and therefore does not contain all material information which is necessary for making an investment decision. Any offer of securities, other financial instruments or financial services would be made pursuant to offering materials to which prospective investors would be referred.

This presentation contains information and statements, taken or derived from generally available sources (other than PKO Bank Hipoteczny S.A., "PKO BH"). This applies especially (but is not limited) to market, industry and customer data and reports.

PKO BH believes such sources to be reliable. PKO BH is not able to verify the information from such sources, however, and has not verified it. Therefore PKO BH does not give any warranty or guarantee, makes no representation and does not assume or accept any responsibility or liability with regard the accuracy or completeness of such information, which was taken or derived from such sources.

This presentation contains forward-looking statements. Forward-looking statements are all statements, information and data which are not statements, information and data of historical facts. They include in particular (but are not limited to) statements, information and data relating to plans, objectives or expectations, relating to future results or developments, or relating to assumptions in connection with such statements, information or data, with regard to PKO BH, products, services, industries or markets. Forward-looking statements are based on plans, estimates, projections, objectives and assumptions as and to the extent they are available to the management of PKO BH in advance to and for such statements. Forward-looking statements are only valid on such basis and only as of the date they are made. PKO BH undertakes no obligation to update or revise any forward-looking statement (e.g. in case of new information or events).

Forward-looking statements, by their very nature, are subject to risks and uncertainties. A number of factors could cause actual developments and results to differ materially from the forward-looking statements and in particular in a materially negative way. Such factors include, but are not limited to, changes in the conditions on the financial markets in Poland, Europe or other countries or regions in which PKO BH operates, holds substantial assets or from which it derives substantial revenues; developments of assets prices and market volatility, potential defaults of borrowers and trading counterparties, implementation of strategic initiatives, effectiveness of policies and procedures, regulatory changes and decisions, political or economic developments in Poland or elsewhere. Therefore this presentation does make any statement or prediction in relation to any actual development or result (in particular (but not limited to) values, prices, portfolios, financial items or other figures or circumstances). Changes in underlying assumptions have a material impact on expected or calculated developments. Earlier or later presentations may differ from this presentation in relation to forward-looking statements, in particular in relation to developments and results as well as assumptions. PKO BH undertakes no obligation to notify recipients of this presentation with regard to such differences or presentations.

Past performance is not a reliable indicator for future performance. Exchange rates, volatility of financial instruments and other factors can have a negative effect on it. The presentation of data and performance related to the past or the depiction of awards for the performance of products are thus not a reliable indicator for the future performance.

All information in this presentation relates to the date of preparation of this document only (and historic information to its respective relevant date) and is subject to change at any time, without such change being announced or published and without the recipient of this presentation being informed thereof in any other way. There is no guarantee or warranty for the continuing accuracy of the information. The information herein supersedes any prior versions hereof and any prior presentation and will be superseded by any subsequent versions hereof, any subsequent presentations, and any offering materials. PKO BH has no obligation to update or periodically review the presentation. PKO BH has no obligation to inform any recipient of any subsequent presentation or subsequent versions hereof.

This presentation does not constitute investment, legal, accounting or tax advice. It is no assurance or recommendation that a financial instrument, investment or strategy is suitable or appropriate for the individual circumstances of the recipient. Any transaction should only be effected after an own assessment by the investor of the investor's individual financial situation, the suitability for the investor and the risks of the investment. This presentation cannot replace personal advice. It does not consider the individual situation of the investor. Each recipient should, before making an investment decision, make further enquiries with regard to the appropriateness of investing in any financial instruments and of any investment strategies, and with regard to further and updated information with respect to certain investment opportunities and should seek the advice of an independent investment adviser for individual investment advice and the advice of a legal and tax advisor. To the extent that this presentation contains indications with regard to tax effects it is noted that the actual tax effects are subject to the individual circumstances of the investor and subject to any future changes.

This presentation and its contents must not be further published, reproduced, redistributed, disclosed or passed on to any third party, in whole or in part, for any purpose, without the prior consent of PKO BH. Please note that the distribution of information relating to issuers of financial instruments, and offer and sale of financial instruments may not be permitted in all countries (in particular not in the USA or to U.S. persons). Persons who obtain possession of this document have to inform themselves about national restrictions and have to comply with them.