

### PKO Bank Hipoteczny – Issuer of Mortgage Covered Bonds in PKO BP Group

#### **Company Presentation**

September 2021

### Key investment highlights





Polish banking sector with strong capital base

Developing residential property market with stable prices

Prospects for further growth in residential mortgages



Leader of Polish banking sector with dominant position in mortgages



A specialized mortgage bank...

... issuing covered bonds collateralised exclusively with PLN residential mortgages...

... rated by Moody's at country ceiling level (Aa1)

... with eligible portfolio for green covered bonds

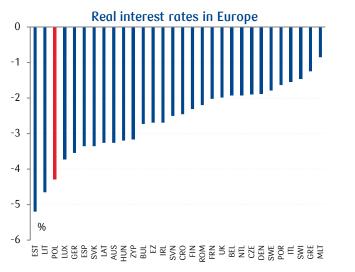


1)	Overview of the Polish economy and its banking sector
2	Polish property market and residential mortgage lending
3	PKO Group overview
4	PKO's dedicated covered bond issuer - PKO Bank Hipoteczny & cover pool description
5	Green Covered Bonds as an important addendum to the funding mix
6	Polish statuatory covered bond framework aligned with the best EU benchmark
7	Appendices

### Stable economy in uncertain times

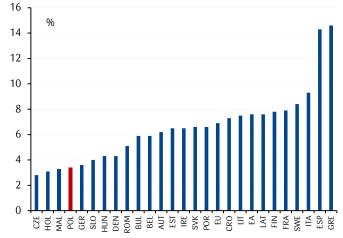


- Economic situation in 2020 was determined by the pandemic, but the scale of the recession in Poland (2.7% GDP decline) was one of the smallest among all EU countries. The quick implementation of generous anti-crisis measures has protected the economy and prevented the rise in unemployment and the wave of bankruptcies. The fiscal measures have been supported by the NBP policy the 140 bp rate cut to a record low of 0.1% and newly implemented QE.
- Due to the relatively stable situation on the labour market, private consumption rebounded strongly as soon as restrictions had been lifted and became the main pillar stabilizing the economy in 2h20 and in 2021. In 2q21 the economy has already made up for the pandemic losses, outpacing the regional peers.



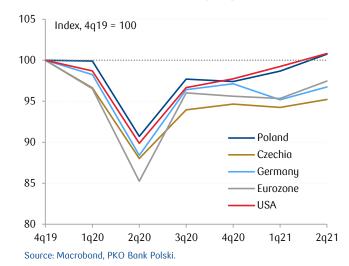
Source: Refinitiv Datastream, Eurostat, PKO Bank Polski, data for July 2021

One of the lowest unemployment rates in UE



#### Source: Eurostat, PKO Bank Polski.

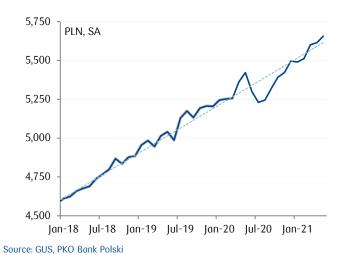
#### GDP has recovered to the pre-pandemic level



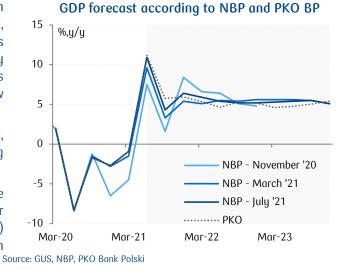
#### Improved economic outlook

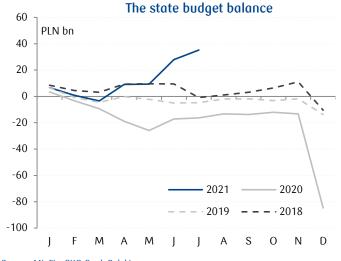


- Economic activity rebounded significantly in 2q21, with a double-digit GDP growth (11.1.% y/y). The economy is driven by all the three main factors: consumption, investment and exports. The high-frequency data confirm that pent-up demand is boosting private consumption. In the coming quarters a sustained fiscal-monetary stimulus, strong foreign demand and a reduction in 'forced savings' by households should stay behind a solid GDP growth. In 2022 the EU fund inflows and the New Polish Deal program should generate an additional pro-growth stimulus.
- The return to the pre-pandemic trends is broad-based. Employment is recovering, wages are rising in line with the pre-pandemic trend. Tax revenues are growing strongly, which significantly improves the situation of the central budget.
- The mid-term trend of improving external balance stays in place. In our view, the increase in the trade balance is largely structural, and in the future may be further reinforced by the new trend of nearshoring. The key risk for companies are: (global) shortages in production components, rising costs of supplies, which together with rising wages increase the cost pressure.







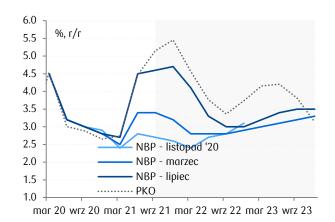


### Monetary policy normalization on the horizon



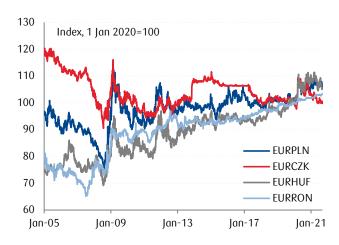
- Rapid recovery comes at the expense of high inflation. The CPI inflation will likely remain above 5% in 2021 and only slightly decline in 2022. The key inflationary factors are the upward trend in energy and food prices, rising administered prices and wages, which push up service prices.
- The vaccination process in Poland has accelerated spectacularly in 2q21, but the risk of another outbreak of pandemic in 2h21 is still high. This means that the normalization of economic policy, and especially monetary policy, will be slow and cautious.
- The market prices in a revolution in domestic monetary policy, but the central bank clearly prefers evolution. The NBP remains in a crisis mode and is cautious about policy normalization. We believe that the MPC will wait with start of rate hikes until 2022.

CPI inflation above the NBP target for longer

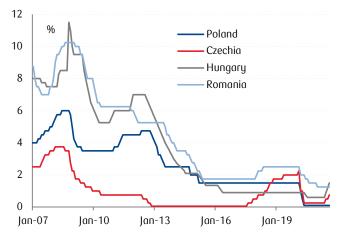






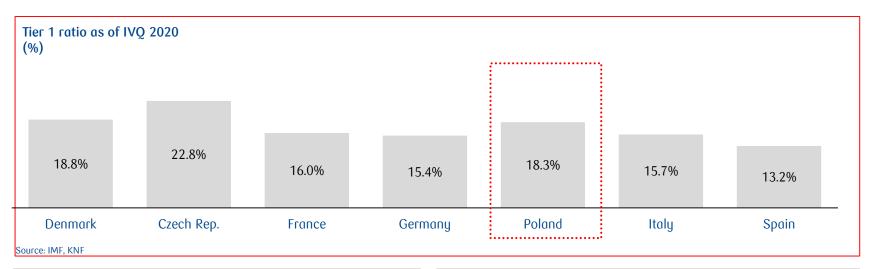


Interest rates in CEE



### Polish banking sector – strong capital base...



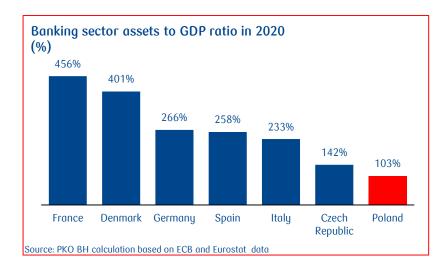


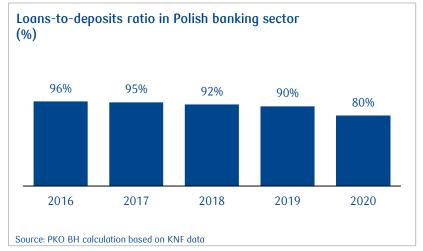
KPIs	Banking sector
TCR	21.1%
ROE	3.4%
ROA	0.4%
C/I	59.5%
Capital to assets ratio	9.7%
Total NPL ratio (phase 3)	6.9%
NPL % of mortgage loans	2.4%

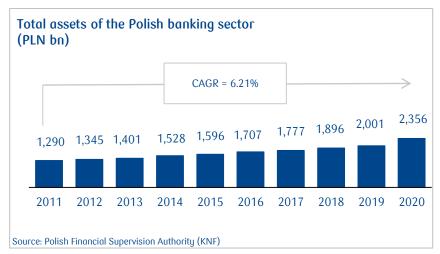
Key marke	t parameters			
04	31.12.2018	31.12.2019	31.12.2020	30.06.2021
%	1.72%	1.72%	0.21%	0.21%
WIBOR 3	Μ			
€	4.30	4.26	4.61	4.52
EUR/PLN				
Source: NBP, Reu	iters			

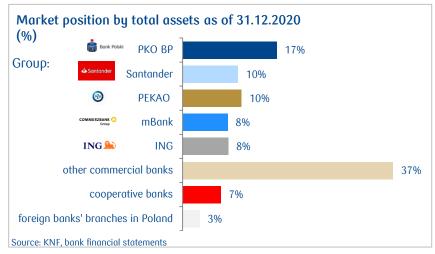
### ...combined with high potential for further growth









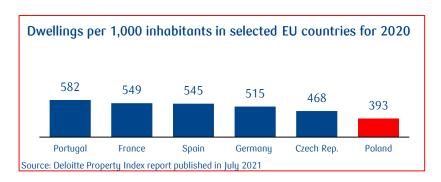




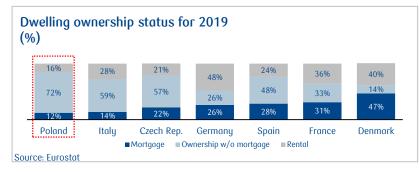


### Polish residential market - increasing prices...

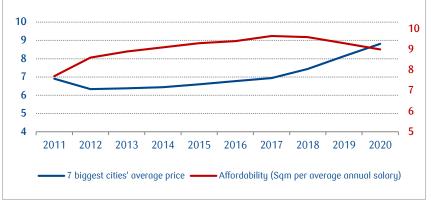




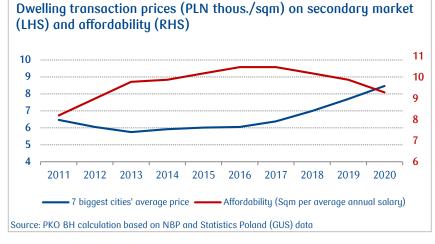




Dwelling transaction prices (PLN ths/sqm) on primary market (LHS) and affordability (RHS)

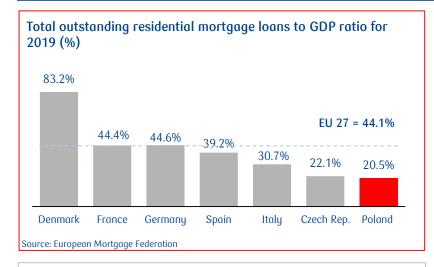


Source: PKO BH calculation based on NBP and Statistics Poland (GUS) data

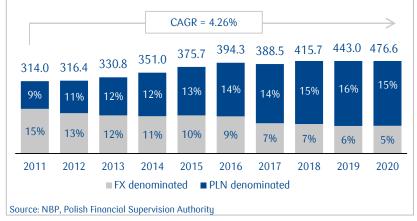


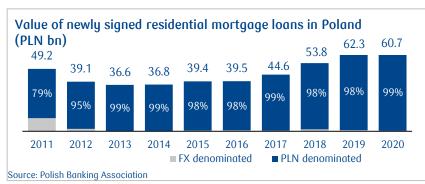
### ... and strong potential for further mortgage growth



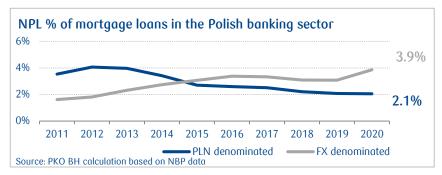


### Outstanding value of residential mortgage loans in Poland (PLN bn) as % of total assets





Standard mortgage loan features: Interest: based on floating rate
Currency: Polish zloty
Tenor: 25-30 years
Loan payments: amortized
LTV: up to 80%
Source: PKO BH own analysis



### Residential market in Poland – volumes and prices

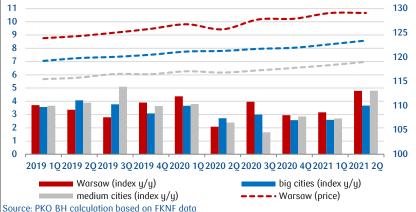




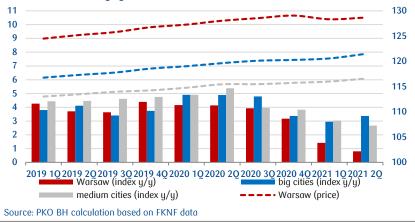
### Number of transactions on secondary market registered in PKO internal database



Dwelling transaction prices (PLN ths/sqm) on primary market of 7 biggest cities (LHS), index q/q and index y/y (RHS)



Dwelling transaction prices (PLN thous./sqm) on secondary market (LHS) and index y/y (RHS)

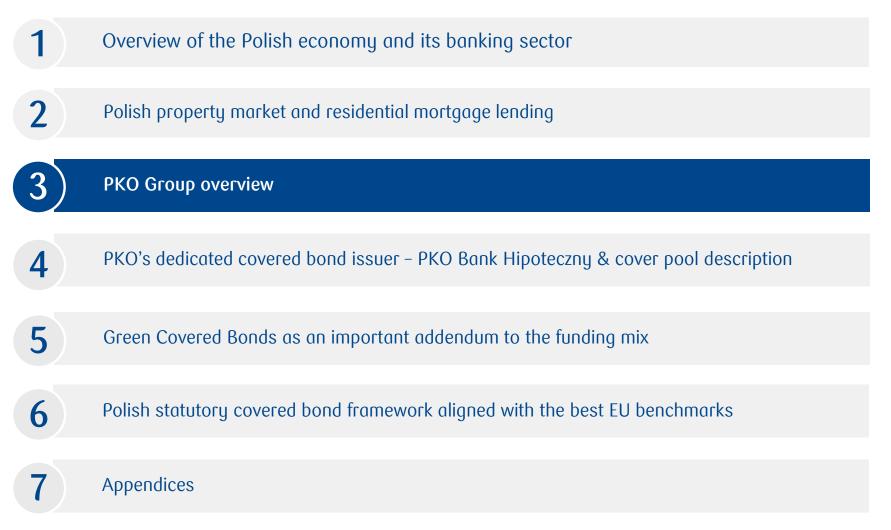


### COVID-19 impact on residential market in Poland



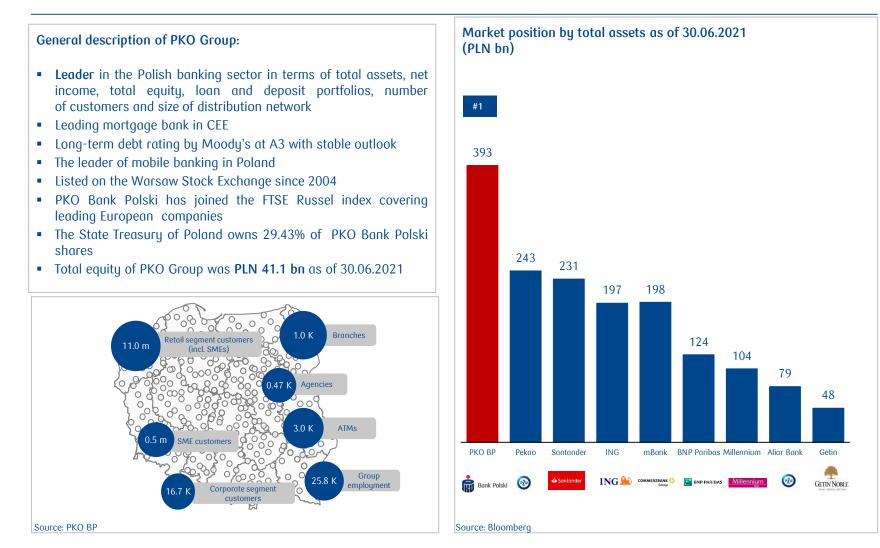
Cey effects of COVID	pandemics on residential property market and H2 2021 outlook:	Q2 2020	H2 2020	H1 2021	H2 2021
Transactions - In t	mber of transactions dropped significantly in Q2 2020 e to lockdown restrictions. he second half of 2020 market rebounded partially. he <b>H1 2021 number of transactions exceeded pre-pandemic levels</b>	s.	_	ア	ス
Rental rates in s - Sit	cline in rental rates for residential properties due to decline short-term rental market. uation on the rental market (short and long term) will not improve in 21 yet, except from the regions with high tourist value during holiday		-	_	_
Property prices - Str mo	sidential property prices growth dynamics muted in 2020; rally in H1 ong demand boosted by low interest rates and improvement in the acroeconomic situation caused a return to high turn-over and operty prices increased by 12-15% depending on the region.	2021.	_	א	ス
CPI H	PI is expected to stay above 4,0% in 2021 and potentialy around 5% I2 2021 what encourage property (including institutional investors) t nvest their funds as a capital protection.		_	א	ス
	gh sales results observed in H1 2021 and projected through 2021 are nsistent with the information on high demand for mortgage loans.	e	_	7	ス
C#	VID-19 Polish residential property market rema	iins strong	I		÷





### PKO Group – the leader in the Polish banking sector...





### ...showing leadership in residential mortgages



#### Key financial data of PKO Group (PLN bn)

	IH 2021	IH 2020	IH 2021/ IH 2020 change	
Net profit/loss (PLN mn)	2,413	1,306	+84.7%	
Assets	392.6	377.2	+4.2%	
Loans	224.6	231.2	-2.9%	
Deposits	293.8	281.8	+4.3%	
Equity	41.1	44.1	-6.8%	

#### Key performance indicators of PKO Group as of 30.06.2021

KPIs	PKO Group 1H2021	PKO Group 2020
TCR	18.9%	18.2%
ROE	12.1%/11.1%*	-6.0%/7.1*
ROA	-1,3%	-0.7%
C/I	38.1%	41.0%
Total NPL ratio	4.5%	4.4%
NPL ratio for PLN residential mortgage loans	1.7%	1.6%
Source: DKO PD financial statements		
Source: PKO BP financial statements,		



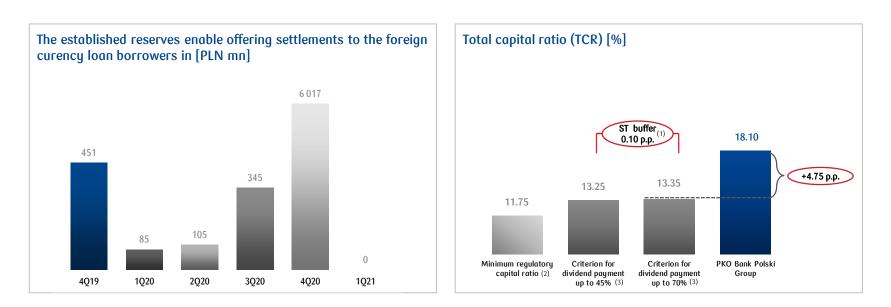




\* Return on equity adjusted for the costs of legal risk and other impacts of the EGM's decision to enter into voluntary settlements with the foreign currency mortgage loan consumers.

#### **PKO BP – very resistant to FX mortgage risk** Over PLN 14 billion of capital above the regulatory minimums





(1) Polish FSA's additional buffer for Bank's sensitivity to an adverse macroeconomic scenario. Previously the level of buffer was 0.66 p.p.

(2) Tier 1: CRR 6% + conservation buffer 2.5% + OSII buffer 1% + countercyclical buffer 0.01% + FX buffer for the Group 0.18%

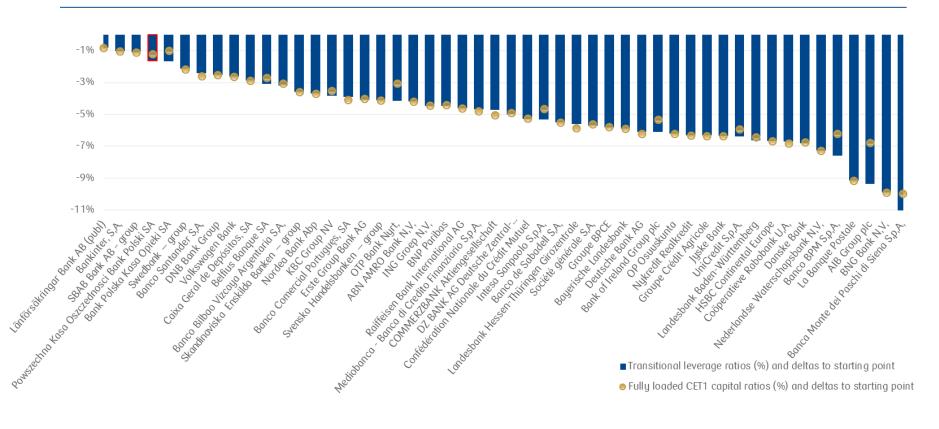
(3) TCR: CRR 8% + conservation buffer 2.5% + OSII buffer 1% + countercyclical buffer 0.01% + FX buffer for the Group 0.24% Having considered dividend payment adjustments for the following criteria:

K1 - share of the foreign currency mortgages for households in total receivables from non-financial sector (1Q'21: Bank: 9.8%; Group: 7.9%); no adjustment when K1<10%; no adjustment when K1<10%.

K2 - share of the foreign currency mortgages granted in 2007/08 in total portfolio of foreign currency mortgages (1Q'21: Bank: 39.0%; Group: 38.3% (-) 0.2 p.p. q/q; adjustment by -30 p.p. (for >20% share if K1>5%).

Bank Hipoteczny

## PKO Group – PKO Bank Polski among the most resilient banks in Europe in the EU-wide stress tests

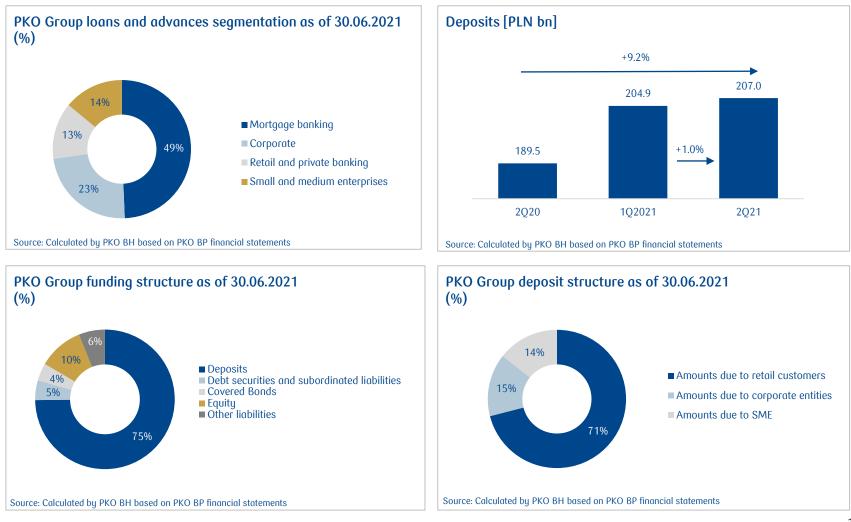


Under the stress test CET1 Transitional decreases to 15.37% in 2023 from 16.99% at the end of 2020

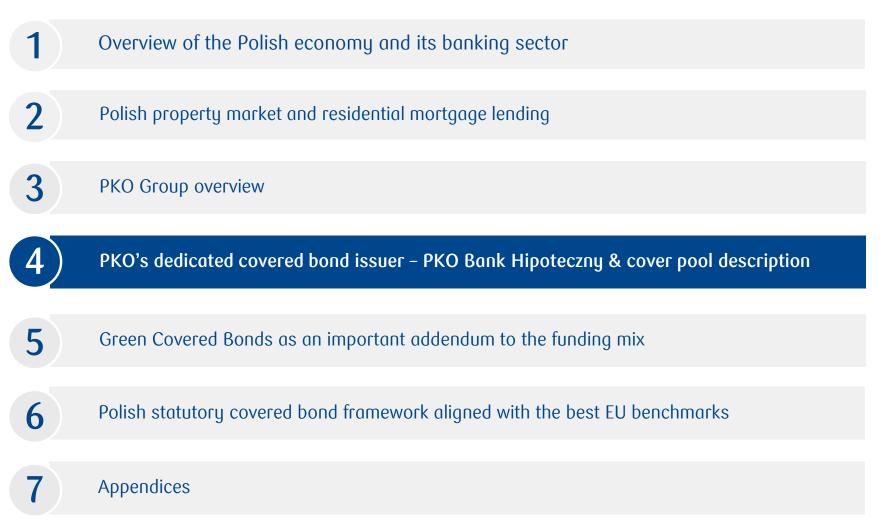
CET1 Fully Loaded declines to 15.19% in 2023 from 16.39% at the end of 2020

**Bank Hipoteczny** 

## PKO Group – solid funding and capital base backing Bank Hipoteczny a diversified loan structure

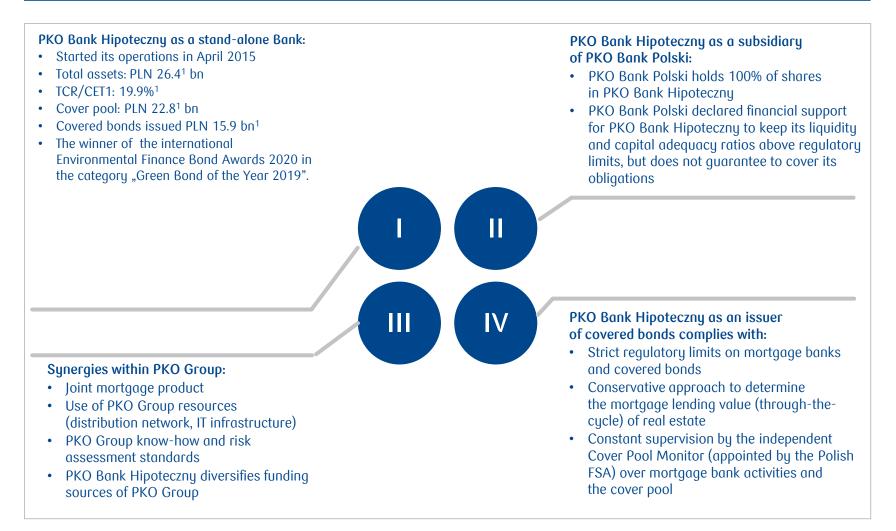






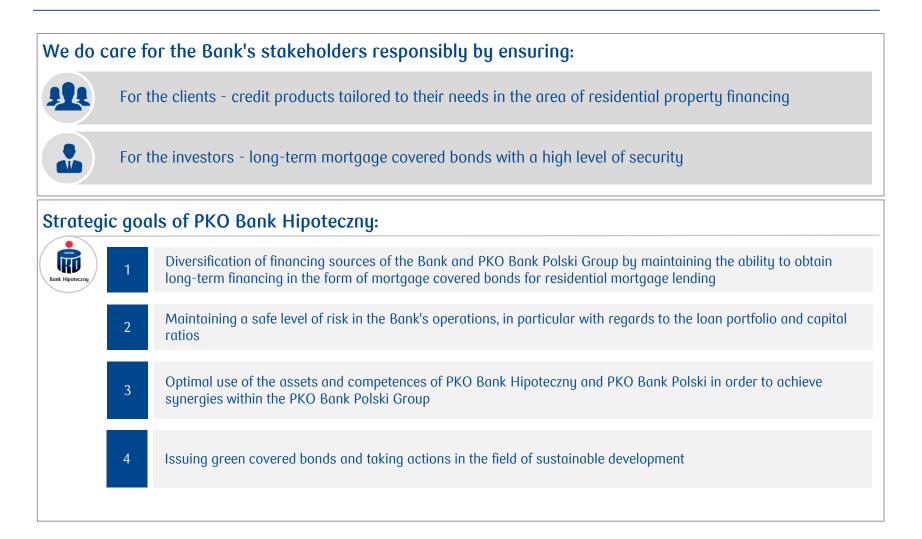
### PKO Bank Hipoteczny - issuer of covered bonds leveraging on leading position in residential mortgages





### Updated strategy of PKO Bank Hipoteczny for 2020-2022





## Operating model of PKO Bank Hipoteczny 2020-2022

WID-19



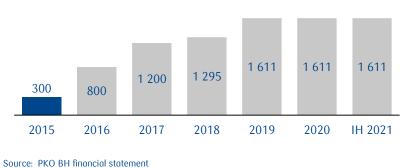
Mortgage lo	Dans	Mortgage covered bonds and unsecured bonds			
Clients	The mortgage loans offer of PKO Bank Hipoteczny includes mortgage-backed residential loans for individual clients		<ul> <li>The offer of mortgage covered bonds is primarily addressed to Polish and foreign institutional investors</li> <li>The offer of unsecured bonds is primarily addressed to domestic investors</li> </ul>		
Distribution, Marketing, Agency model	<ul> <li>PKO Bank Polski acts as an agent of PKO Bank Hipoteczny</li> <li>Sale of the residential mortgage loans is done with the use of distribution channels of PKO Bank Polski</li> <li>Marketing of the mortgage lending is conducted only by PKO Bank Polski</li> </ul>	Distribution Marketing	• The distribution of unsecured bonds is carried out through the Issue Agent of PKO Bank Polski. In the case of mortgage covered bonds, we additionally use the support of investment banks outside the PKO BP Group.		
Pooling model	<ul> <li>PKO Bank Polski Group transfers to PKO Bank Hipoteczny residential mortgage loans granted by PKO Bank Polski in PLN.</li> </ul>	Funding	<ul> <li>The main source of financing for PKO Bank Hipoteczny are funds obtained through mortgage covered bonds issuances by the Bank.</li> <li>Additional sources of funding are: unsecured bond issues, credit lines granted by PKO Bank Polski and other international institutions.</li> </ul>		

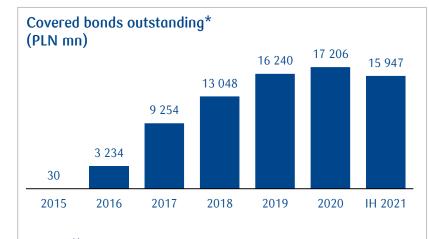


- Together with PKO Bank Polski, we implemented online solutions for our clients and employees to suport the process of granting and servicing motgage loans.
- Digitalization is one of the key aspects of our operating model in pandemic times

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

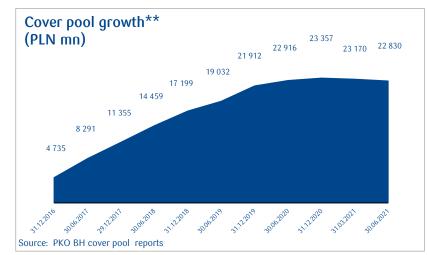






**Bank Hipoteczny** 





\*EUR denominated issues converted by EUR/PLN NBP fixing rate

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

### Robust lending criteria...



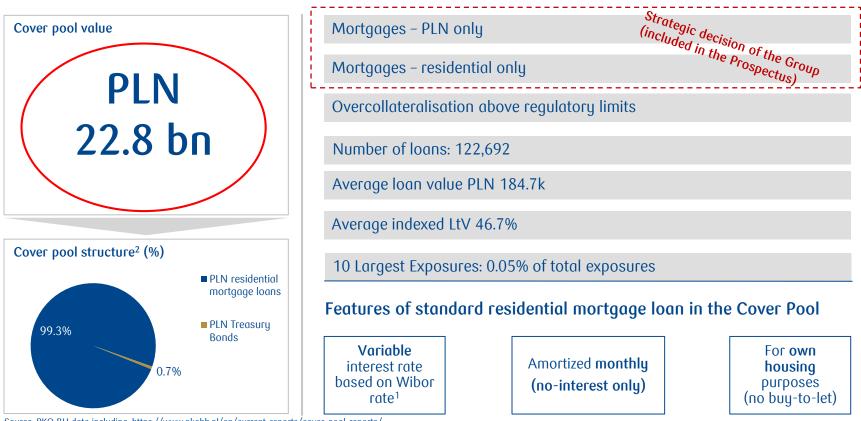
Criteria	Polish banking regulations	1 LtV (market value) $\leq 80\%^1$			
		2 LtMLV (mortgage lending value) ≤ 100%			
	Polish regulations on mortgage banks	3 First-ranking lien in mortgage register			
		4 Legal title: ownership or perpetuity			
		5 PLN loans only	Strategic decision		
	PKO Group criteria	6 Residential mortgages (principal dwelling only	Strategic decision of the Group (included in the Prospectus)		
	(current offer)	7 Contractual maturity: up to 35 years			
		8 Interest rate: floating and periodically fixed			
		9 New construction (selectively) and secondary	market		
	PKO Bank Hipoteczny criteria	10 Collateral: flats or houses			
		11 Not in arrears (in case of pooling)			
	Subject to approval by t	he Cover Pool Monitor, the receivables are register	ed in the cover pool		

<sup>1</sup> 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 ≤ 90% is allowed.

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



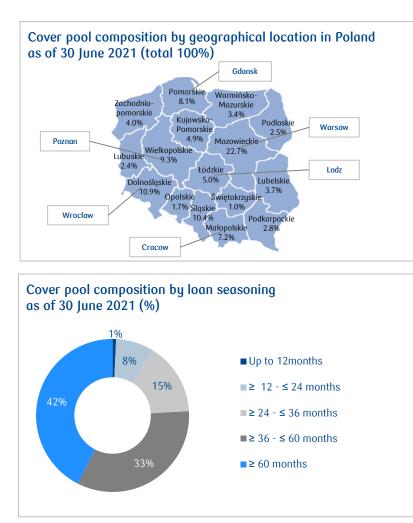
#### PKO Bank Hipoteczny cover pool as of 30 June 2021

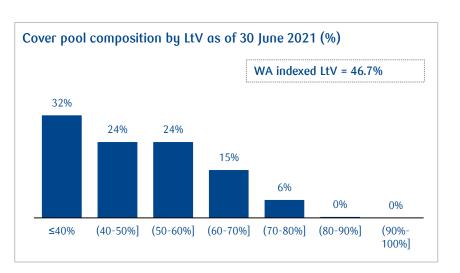


Source: PKO BH data including: <u>https://www.pkobh.pl/en/current-reports/</u> <sup>1</sup>Accounts for 99.1 % of mortgage loans in the cover pool <sup>2</sup>Without hedging instruments included into the cover pool; liquidity buffer included but not counting towards coverage and OC

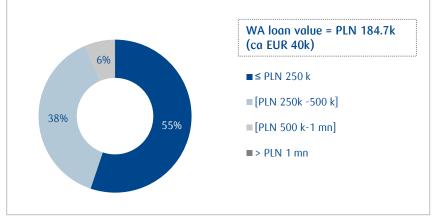
### ...with good diversification and low LtV ratio







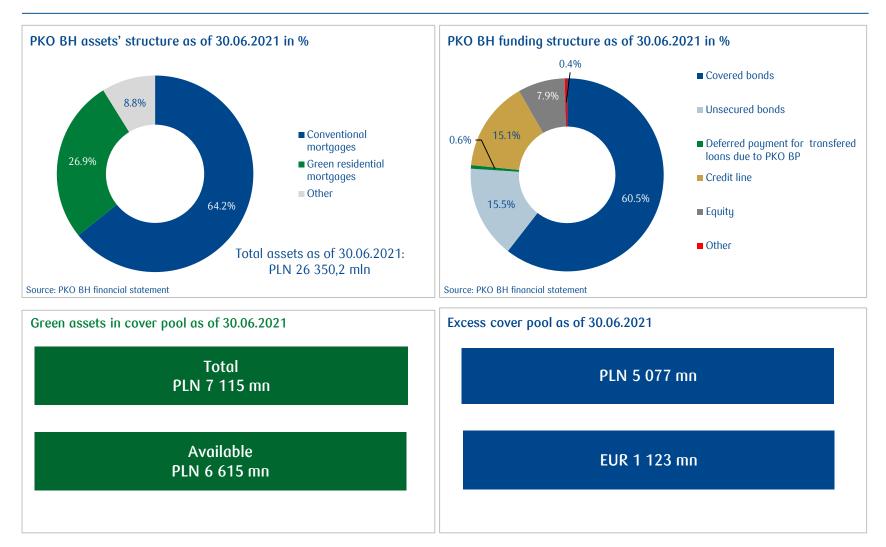




Source: PKO BH data including https://www.pkobh.pl/en/current-reports/cover-pool-reports/

### Assets and liabilities structure





### Key Financials IH 2021 Selected financial data

Selected financial data (PLN mn)	As of 30.06.2021	As of 30.06.2020
Net interest income	152.7	173.2
Net fees and commissions	(3.6)	(1.3)
General administrative expenses	(24.8)	(26.0)
Regulatory charges	(24.6)	(25.2)
Net allowances for expected credit losses	(1.4)	(19.6)
Operating result	55.9	60.0
Profit before income tax	55.9	60.0
Net profit	33.9	35.5
Total assets	26,350	27,495
Loans	24,021	25,481
Total equity	2,074	2,063
Share capital	1,611.3	1,611.3
Total Capital Ratio	19.9%	17.5%
Tier 1 (CET 1)	1,985.0	1,879.5



In the first half of 2021, PKO Bank Hipoteczny's profit before tax amounted to PLN 55.9m and net profit to PLN 33.9m.

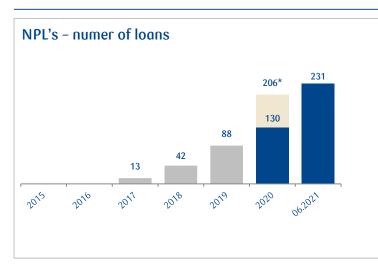
•

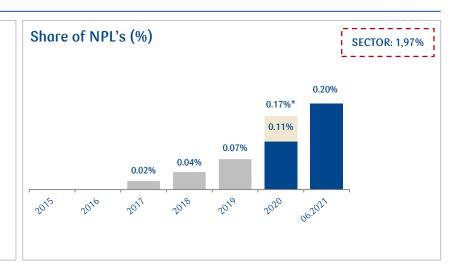
•

٠

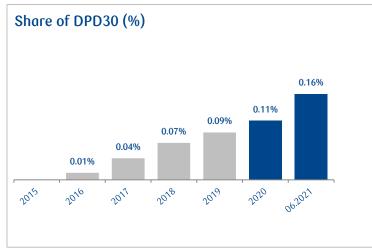
- Net interest income for the period amounted to PLN 152.7m, a decrease of 12% resulting from the amortisation of the loan portfolio and falling interest rates.
- The result on allowances for expected loan losses in the first half of 2021 amounted to only PLN 1.4 million, compared to PLN 19.6 million in the corresponding period of the previous year, which was mainly due to an improvement in forecasts of the main macroeconomic indicators, concerning Gross Domestic Product and rate of unemployment.

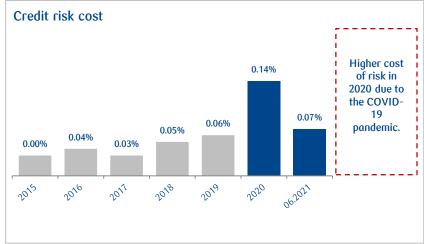
### Excellent quality of the housing loan portfolio at PKO Bank Hipoteczny





Bank Hipoteczny

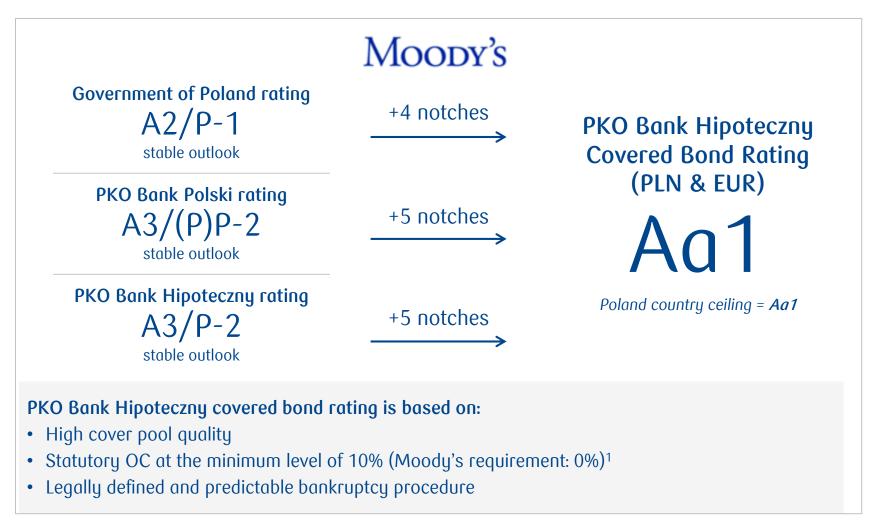




\*Increase in the number and share of NPL's due to implementation EBA Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013. This is a change in the definition without affecting the quality of the portfolio and the cost of risk.

### Rating at country ceiling level





# The first Polish EUR benchmark-size bond issuer in the international markets, with solid debt capital markets track record built over recent years

Ins/PF

CB/OI

12%

7%

denominated benchmark

covered bond issues of

**PKO Bank Hipoteczny** 



	#1 Bench issue		#2 Benchmark issue	#3 Benchmark issue	#4 Benchmark issue	#5 Benchmark issue	TAP of #5 Benchmark issue	TAP of #1 Benchmark issue
Issue size	EUR 50	00	EUR 500	EUR 500	EUR 500	EUR 500	EUR 100	EUR 100
Moody's Rating	Aa3		Aa3	Aa3	Aa3	Aa3	Aa3	Aa3
Margin	MS + 18 (3 bp over 9		MS + 27 bp (3 bp over govies)	MS + 28 bp (11 bp over govies)	MS + 23 bp (12 bp over govies)	MS + 34 bp	MS + 28.9 bp	MS + 29 bp
Coupon	0.125	%	0.625%	0.750%	0.750%	0.250%	0.250%	0.125%
Price / Yield as of issue date	99.702 / 0	.178%	99.972 / 0.630%	99.906 / 0.764%	99.892% / 0.769%	99.933% / 0.274%	100.145%/0.197%	99.489%/0.281%
Issue date	24.10.20	016	30.03.2017	27.09.2017	22.03.2018	28.01.2019	01.03.2019	08.03.2019
Maturity date	24.06.20	022	24.01.2023	27.08.2024	24.01.2024	23.11.2021	23.11.2021	24.06.2022
Stock Exchange Listing	LuxSE and	I WSE	LuxSE and WSE	LuxSE and WSE	LuxSE and WSE	LuxSE and WSE	LuxSE and WSE	LuxSE and WSE
ISIN	XS150835	51357	XS1588411188	XS1690669574	XS1795407979	XS1935261013	XS1935261013	XS1508351357
		By	investor type		<u>.</u>	By region		
Distribution of outstanding El	JR –	Fund	Managers Banks		45% 36%	Germany Nordics Austria Others	14% 10% 7%	52%

CFF

UK

Switzerland 3%

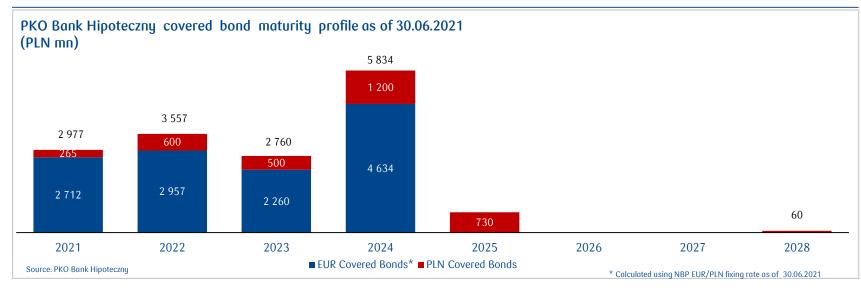
Benelux

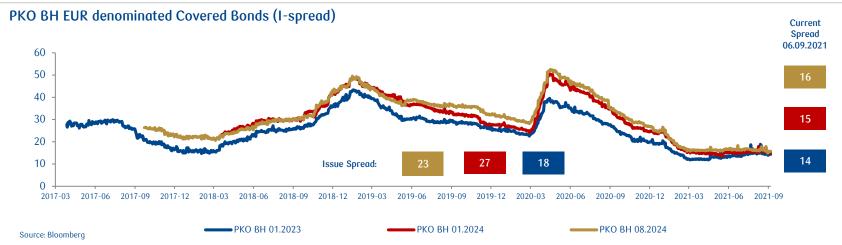
6%

5%

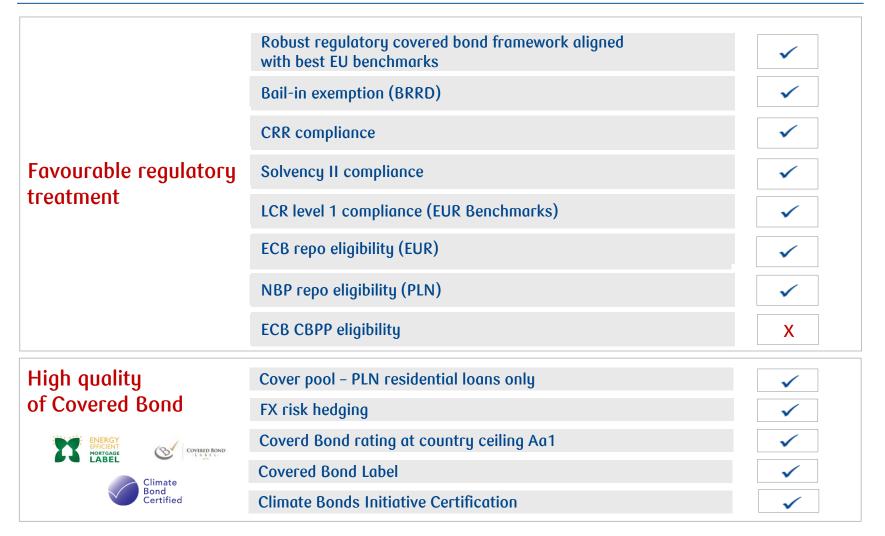
3%

### PKO Bank Hipoteczny covered bond maturity profile





### Value offered to investors – standard covered bond ticking the boxes



Bank Hipoteczny





### Climate change is important to PKO BH

40%

of energy

consumption

"0%"CO<sub>2</sub>: 2055..2070

**PARIS2015** 

COP21.CMP11





36%



35%

75%

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



### PKO BH has established a strategic project for acquiring green assets and issuing green covered bonds

Documentation/ Framework	<ul> <li>PKO BH green covered bonds are in line with ICMA Green Bond Principles</li> <li>Second Party Opinion of PKO BH Green Covered Bond Framework has been issued by Sustainalytics</li> <li>PKO BH green covered bonds are certified by Climate Bonds Initiative</li> </ul>
Methodology	<ul> <li>Criteria and methodology to identify energy efficient residential buildings in the Bank's loan portfolio was developed by green buildings consultant Drees&amp;Sommer</li> <li>PKO BH methodology is approved by Climate Bonds Initiative under their Low Carbon Criteria as proxy for energy-efficient residential properties in Poland</li> </ul>
Special Offer for green mortgages	> Dedicated special offer for financing of energy efficient mortgages with valid EPCs in PKO Group.
Energy Efficient Mortgage Label	<ul> <li>PKO Bank Hipoteczny joined Energy Efficient Mortgage Label in February 2021</li> <li>At the end of February 2021, 31 institutions from 13 EU countries joined EEM Label</li> <li>The EEML aims to support the EU's Green Deal and climate neutrality by 2050 and align the product portfolio with regulatory changes such as the new EU taxonomy, the Mortgage Directive and the CRR Capital Requirements Regulation</li> </ul>







Use of Proceeds	<ul> <li>Financing and refinancing of eligible assets on PKO Bank Hipoteczny balance sheet.</li> <li>Eligible assets include loans for residential buildings as defined in the eligibility criteria:         <ul> <li>new or existing residential buildings representing top 15% low carbon buildings in Poland;</li> <li>existing residential buildings in Poland, which have undergone a property upgrade (major renovations, refurbishment, thermo-modernization or efficiency upgrade).</li> </ul> </li> </ul>
Project Evaluation and Selection	<ul> <li>PKO Bank Hipoteczny has established a Green Covered Bond Committee (GCBC) which is comprised of one representative from each of the following offices of the bank: Treasury, Residential Mortgage Loans, Risk, Compliance, Controlling and The Cover Pool Register.</li> <li>GCBC reports directly to the Management Board of the Bank.</li> <li>GCBC's role is to oversee the process for evaluation and selection of eligible loans according to the adopted methodology.</li> </ul>
Management of Proceeds	<ul> <li>The proceeds from green covered bonds will be allocated either to refinance exisiting portfolio of to finance new loans. The proceeds should be allocated within 24 months.</li> <li>We will apply to Sustainalytics for post issuance verification.</li> </ul>
Reporting	<ul> <li>Allocation reporting is available to investors after every green covered bond issuance and annually thereafter, until the bonds have been fully repaid.</li> <li>Impact reporting is done on annual basis on climate benefits associated to the Green buildings eligible loans on:         <ul> <li>estimated annual primary energy savings in MWh;</li> <li>estimated annual GHG emissions avoided in tons of CO<sub>2</sub> equivalent</li> </ul> </li> </ul>

### Energy efficient buildings as an underlying base for the issuance of green covered bonds

Bank Hipoteczny

Technical requirements for energy efficient buildings evolved over time Over the years different buildings codes existed regarding the energy performance of buildings. Poland's building energy performance requirements contain limits for non-renewable primary energy demand for heating, ventilation, cooling and hot water in kWh/m<sup>2</sup>.

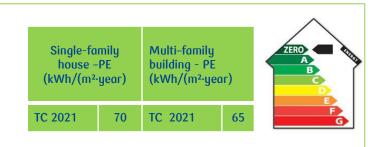
Binding requirements for energy efficient residential buildings were defined in the Regulation of the Minister of Infrastructure and Construction of November 14, 2017.

according to	y house - PE the ordinance year) from	Multi-family building – PE according to the ordinance (kWh/(m²·year) from:			
TC 2014	120	TC 2014	105		
TC 2017	95	TC 2017	85		
TC 2021	70	TC 2021	65		

Maximum value for the PE indicator for heating, ventilation and hot water supply needs

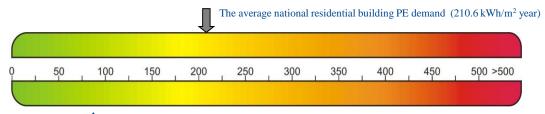
Low energy consumption buildings in Poland/NZEB The "building with low energy consumption" should be understood as a building that meets the requirements related to energy saving and thermal insulation contained in technical building regulations - Technical Conditions 2017, effective from 1 January 2017.

A building with nearly zero energy consumption (nZEB) should be understood as a building that meets the requirements related to energy saving and thermal insulation contained in the regulations - Technical Conditions 2021, effective from January 1, 2021.



Annual use of non-renewable primary energy PE [kWh/(m2 ·year)]

Energy Performance Certificate A document on the basis of which the energy efficiency of a building can be assessed Central Register of Energy Performance of Buildings carried out since March 2015 by the Ministry of Infrastructure and Development



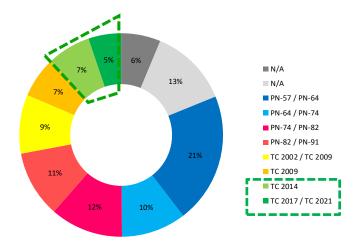
↑ Requirements for new residential buildings (TC 2017)

## Green covered bonds Methodology – Top 15% approach



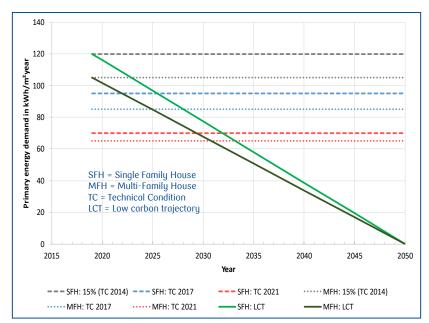
#### A top 15% approach

- Based on the statistical analysis of buildings and mandatory building energy performance codes minimum criteria for a green bond were determined.
- The asset which does comply with the requirements of the building code TC 2014 is positioned in the Top 15% of the market and is eligible for the green bond of PKO BH



Assets with TC 2014 or newer represent the top 15% low carbon buildings of the Polish residential market

#### A Low Carbon Trajectory



### A low carbon trajectory (LCT) connects: the basis requirements of TC 2014 (SFH: PE≤ 120 | MFH: PE≤ 105 kWh/m²year) as the start in 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 **15<sup>th</sup> percentile** baseline for the local Polish residential market.

# Green covered bonds Methodology – proxy for green residential buildings in Poland



	PKO-BH green bond criteria	Poland			
	The object fulfills one or more of the following criteria:	Single-Family House	Multi-Family House		
1)	<b>Primary energy consumption</b> complies with low carbon trajectory based on year of issuance, duration of bond	PE ≤ 95 kWh/m²year Year of bond issuance and duration	PE ≤ 85 kWh/m²year Year of bond issuance and duration		
2)	<b>Energy Performance Certificate</b> (EPC) available and <b>Primary Energy demand (PE)</b> is less than or equal and complies with low carbon trajectory based on year of issuance, duration of bond	EPC available and PE ≤ 95 kWh/m²year Year of bond issuance and duration	EPC available and PE ≤ 85 kWh/m²year Year of bond issuance and duration		
3)	Energy standard or newer based on year of bond issuance	Year of bond issuance = 2020 - 2025: TC 2017 with a linear decreasing bond term (mid point) of 6 years in 2020 and 1 year in 2025 Year of bond issuance = 2026 - 2032: TC 2021 with a linear decreasing bond term (mid point) of 7 years in 2026 and 1 year in 2032	Year of bond issuance = 2020 - 2025: TC 2017 with a linear decreasing bond term (mid point) of 6 years in 2020 and 1 year in 2025 Year of bond issuance = 2026 - 2031: TC 2021 with a linear decreasing bond term (mid point) of 6 years in 2026 and 1 year in 2031		
4)	<b>Year of construction is equal or newer</b> based on year of bond issuance	Year of bond issuance = 2020 - 2025: Year of construction = 2017 or newer with a linear decreasing bond term (mid point) of 6 years in 2020 and 1 year in 2025 Year of bond issuance = 2026 - 2032: Year of construction = 2021 or newer with a linear decreasing bond term of 7 years in 2026 and 1 year in 2032	<u>Year of bond issuance = 2020 - 2025:</u> Year of construction = 2017 or newer with a linear decreasing bond term (mid point) of 6 years in 2020 and 1 year in 2025 <u>Year of bond issuance = 2026 - 2031:</u> Year of construction = 2021 or newer with a linear decreasing bond term of 6 years in 2026 and 1 year in 2031		
5)	<b>Property upgrade</b> with reduction in carbon emissions	Major renovation with an improvement in the CO <sub>2</sub> 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 $\geq$ 30%. Term 1-5 years: 30% improvement   Term 5-30 years: 30%-50% linear improvement   Term $\geq$ 30 years : 50% improvement			



### PKO Bank Hipoteczny joined Energy Efficient Mortgage Label in February 2021

- ✓ The Energy Efficient Mortgage Label was created in 2020 by the European Mortgage Federation -European Bond Council (EMF-ECBC) as a clear and transparent quality label for consumers, lenders and investors to identify energy-efficient mortgage loans (EEMs) for residential buildings
- ✓ At the end of February 2021, 31 institutions from 13 EU countries joined EEM Label.
- ✓ The EEML aims to support the EU's Green Deal and climate neutrality by 2050 and align the product portfolio with regulatory changes such as the new EU taxonomy, the Mortgage Directive and the CRR Capital Requirements Regulation
- ✓ EEML is going to provide more information on the portfolios of energy efficient loans as assets to be included in green covered bonds
- ✓ EEML will apply a harmonized disclosure standard by means of a harmonized formula (HDT) to improve comparability.



### **PKO BH Green Covered Bond Framework** Second Party Opinion

### Sustainalytics issued a SPO to our Framework

✓ PKO Bank Hipoteczny SA has obtained an independent Second Party Opinion from Sustainalytics to confirm the validity of PKO BH's Greend Bond Framework

"Sustainalytics is of the opinion that the PKO Bank Hipoteczny SA Green Covered Bond Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2018."

✓ The assessment prepared by Sustainalytics was based on following categories:





Management of proceeds



Reporting

Project evaluation/selection

✓ PKO Bank Hipoteczny SA publishes allocation and impact reports on a yearly basis on its website. This guarantees trasparency of the entire process as the allocation report provides the total amount of proceeds allocated to eligible loans and balance of unallocated proceeds, while the impact report gives information about GHG emissions avoided in tons of CO<sub>2</sub> equivalent





Climate Bond Certified





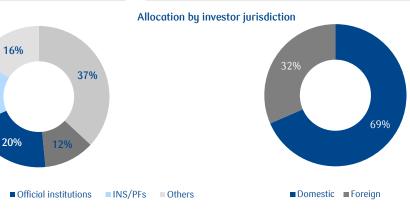
# PKO BH issued first ever green covered bond ion the Polish market



16%

Banks

Key features			
Size	PLN 250 000 000		
Rating Moody's	Aa1		
Coupon	Wibor 3M + 0.51%		
Coupon Payment	Quaterly		
Issue date	2 December 2019		
Maturity date	2 December 2024		
Listing	WSE/BondSpot		
ISIN	PLPKOHP00199		





**Bank Hipoteczny** 

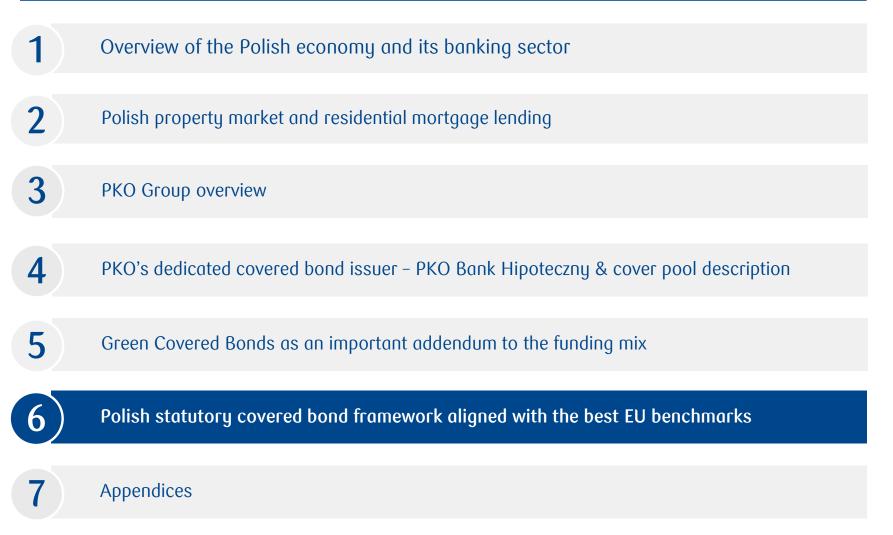
- PKO Group has conducted two issues of green covered bonds secured by highquality mortgage loans in zloty.
- Green mortgage bonds of PKO Bank Hipoteczny are certified by the international agency Climate Bonds Initiative. The certification is granted only to bonds that meet the highest standards in terms of positive impact on the environment.
- PKO Bank Hipoteczny is a regular issuer of mortgage covered bonds and has already carried out a total of 20 issues on the domestic and foreign market.

#### Source: PKO Bank Hipoteczny

Fund Managers

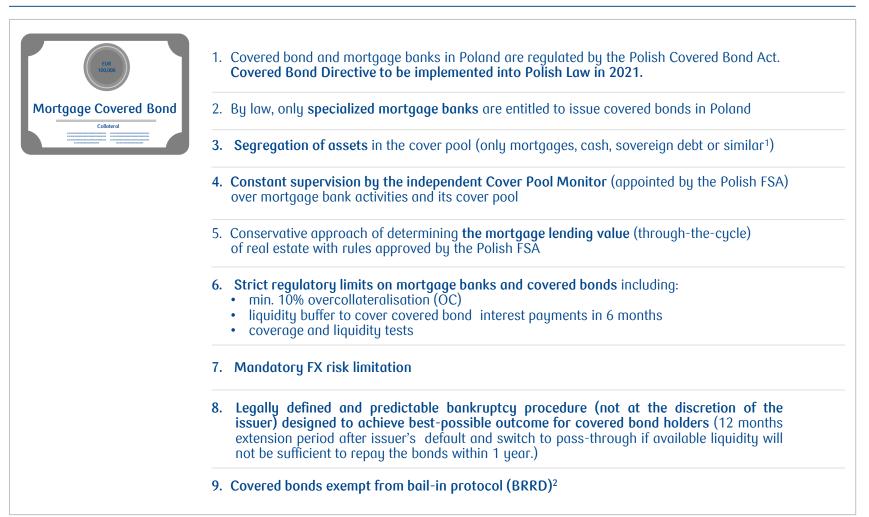
Allocation by investor type





## Robust regulatory regime



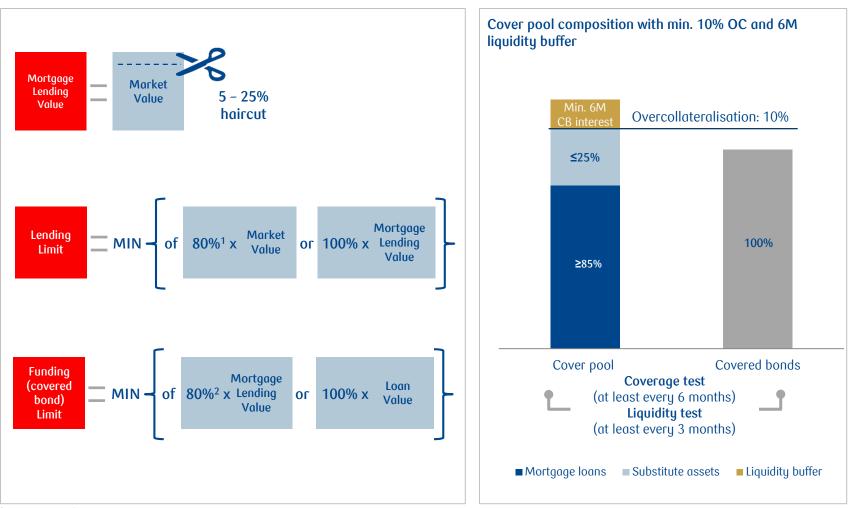


<sup>&</sup>lt;sup>1</sup> Securities issued or guaranteed by the State Treasury of the Republic of Poland, the National Bank of Poland, the ECB, governments and central banks of the EU and OECD member states (except for states that have restructured their external debt in the past five years).

<sup>&</sup>lt;sup>2</sup> 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. 46

## Stringent regulatory limits





<sup>1</sup> Up to 90% only if low down payment insurance is in place

<sup>2</sup> For residential mortgage loans, while 60% for commercial mortgage loans



1	Overview of the Polish economy and its banking sector
2	Polish property market and residential mortgage lending
3	PKO Group overview
4	Polish statutory covered bond framework aligned with the best EU benchmarks
5	PKO's dedicated covered bond issuer – PKO Bank Hipoteczny & cover pool description
6	Green Covered Bonds as an important addendum to the funding mix
7)	Appendices

# PKO Group has become a regular covered bond issuer



### Key features of PLN-denominated covered bonds of PKO Group

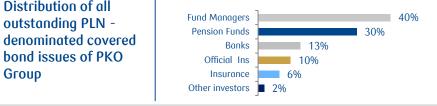
	Series #4	Series #6	Series #7	Series #8	Series #9	Series #10	Series #11	Series #12	Series #13
Issue date	28.04.2017	27.10.2017	27.04.2018	18.05.2018	27.07.2018	24.08.2018	26.10.2018	10.06.2019	02.12.2019
Issue size, mn	PLN 500	PLN 500	PLN 700	PLN 100	PLN 500	PLN 60	PLN 230	PLN 250	PLN 250
Maturity date	18.05.2022	27.06.2023	25.04.2024	29.04.2022	25.07.2025	24.08.2028	28.04.2025	30.09.2024	02.12.2024
Соироп	WIBOR 3M +0.69% (23bp over govies)	WIBOR + 0.60% (29 bp over govies)	WIBOR 3M + 0.49% (42 bp over govies)	WIBOR 3M + 0.32% (39 bp over govies)	WIBOR 3M + 0.62% (39 bp over govies)	3.4875% p.a.	WIBOR 3M + 0.66% (40bp over govies)	WIBOR 3M + 0.60%	WIBOR 3M + 0.51%
Stock Exchange Listing	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot	WSE and BondSpot
ISINs	РLРКОНР 00041	РLРКОНР 00066	PLPKOHP 00074	PLPKOHP 00082	PLPKOHP 00090	PLPKOHP 00108	PLPKOHP 00116	PLPKOHP 00132	РLРКОНР 00199
Moody's Rating	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3	Aa3

#### By investor type

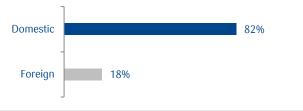
**Distribution of all** 

outstanding PLN -

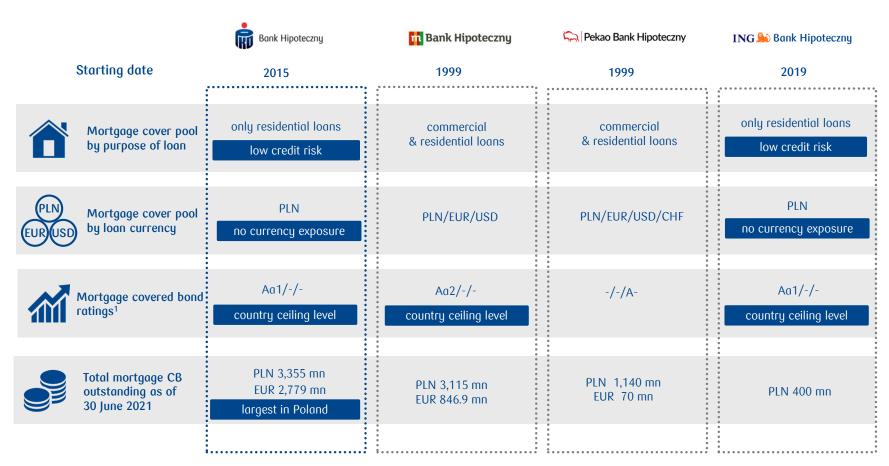
Group



#### By investor jurisdiction



PKO Bank Hipoteczny is the issuer of covered bonds entirely backed by prime PLN residential mortgages



<sup>1</sup> Moody's /S&P/Fitch

Source: http://www.pekaobh.pl; https://mhipoteczny.pl; https://www.pkobh.pl/en/

**Bank Hipoteczny** 

# Regulatory safeguards built into bankruptcy procedure



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

#### Covered bondholders entitled with option to intervene in bankruptcy procedure Coverage test failed passed passed n/a passed failed Liquidity test 1. Covered bonds repaid according to terms 1. Maturity date of all covered bonds extended and conditions of the covered bonds, to the date falling three years after the latest cover asset Covered bonds taking 12 months extension into account maturity date repayment 2. Receiver may enter into hedging transactions 2. Distinct rules for pro-rata repayment before extended maturity date Resolution of covered bondholders with 2/3 majority to sell Resolution of covered bondholders with 2/3 majority the separate bankruptcy asset pool to another bank 1. to disapply maturity extension or Holders option 2. to sell cover assets to another bank or non-bank

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%

# Details on protective features of the Polish Covered Bond framework in case of issuer bankruptcy (1/4)



#### Clear and straightforward process of bankruptcy declaration

- In case of insufficient assets to satisfy all the bank's obligations, according to the balance sheet prepared as at the last day of the relevant reporting period, the management board, the receiver or the liquidator must <u>promptly</u> notify the KNF
- A creditor of the bank, including a holder of debt securities issued by the bank, cannot file a bankruptcy procedure concerning a mortgage bank.
- Before declaring the bank's bankruptcy, the bankruptcy court will question a representative of the KNF, the members of the bank's management board and receiver, and the liquidator regarding the grounds for declaring the bank bankrupt

### Clearly defined order of priorities of payments from the separate bankruptcy asset pool

- Costs of liquidating the separate bankruptcy asset pool which include the trustee's fee, interest and other ancillary payments under the covered bonds
- Outstanding principal amount of the covered bonds and the hedging instruments



### Clear deadlines for key actions of bankruptcy procedure defined in the legal framework

On day one of the declaration of mortgage bank's bankruptcy:

- Bankruptcy administration put in place (=bankruptcy receiver) and management and supervisory bodies of the bank dissolved
- Appointment of trustee (kurator) to represent the holders of the covered bonds in the bankruptcy proceedings
- Constitution of the separate bankruptcy asset pool (confirmation of ring-fencing) on the basis of the cover pool register and additionally including: assets in the liquidity buffer, proceeds from payments under receivables in the cover pool, assets acquired by the mortgage bank in exchange for assets in the cover pool
- Rejection of set-off of claims of the bank's creditors with the bank's claims against these creditors included in the separate bankruptcy asset pool (in principle)
- Application of rules concerning satisfaction of claims of the holders of covered bonds to satisfaction of claims of counterparties to hedging transactions entered in the cover pool register
- Maturity of all outstanding covered bonds is extended by 12 months. Due interest under the covered bonds is paid in the manner set out in the terms and conditions of the covered bonds

Within 21 days from the declaration of mortgage bank's bankruptcy:

• Trustee to report to the bankruptcy estate the aggregate principal amount of all outstanding covered bonds due before and after the date of declaration of bankruptcy and the aggregate amount of all interest

Within 3 months from the declaration of mortgage bank's bankruptcy:

- Bankruptcy receiver is required to conduct the coverage and liquidity tests on the basis of separate bankruptcy asset pool for the mortgage cover bonds
- Depending on results of the tests, one of the three scenarios will be triggered

Within 1 month from the announcement of the test results:

• Deadline for requesting a meeting of covered bond holders



### Explicit rules for early repayment of covered bonds

Both tests are positive:

- The claims under the covered bonds are satisfied in accordance with the terms and conditions of the covered bonds, taking into account the extension of maturity of the covered bonds by 12 months
- A meeting of holders may, within 2 months from the date of announcing the results of the tests, request the receiver, by way of resolution adopted with a majority of two-thirds of votes of holders of the outstanding covered bonds, to sell all receivables and rights in the separate bankruptcy asset pool:
  - to another mortgage bank together with transferring to the purchaser all obligations of the bankrupt bank under the covered bonds; or
  - to another bank or another mortgage bank without transferring to the purchaser the obligations of the bankrupt bank under the covered bonds
- Proceeds from asset sale (interest under the outstanding covered bonds payable in the next six months + amount of claims of holders of the covered bonds which became due before the date of declaration of bankruptcy and were not paid before that date) >= 5% of the principal amount of the outstanding covered bonds
- These proceeds will be paid pro-rata to the holders of the covered bonds on the next interest payment date, but not earlier than 14 days after the day on which the decision of the judge-commissioner approving the receiver's report on the progress of the bankruptcy proceedings becomes final and binding

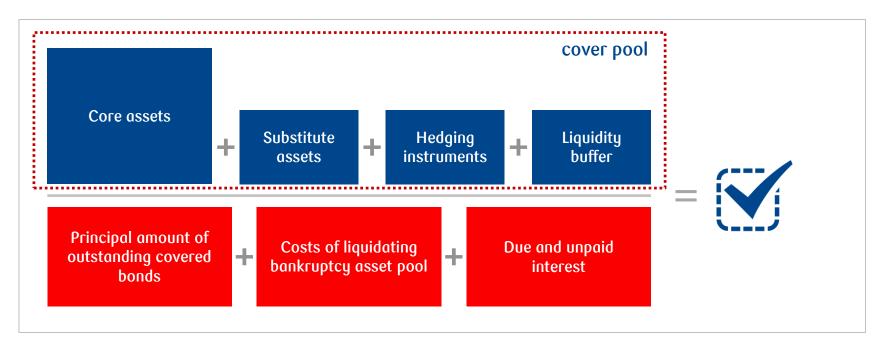


### Explicit rules for early repayment of covered bonds

At least one test is negative:

- The maturity date of the covered bonds, including the covered bonds which became due before the date of declaration of bankruptcy, is extended to the date falling three years after the latest maturity date of a mortgage bank's receivables in the cover pool
- Proceeds under the loans received by the bank (interest payable in the next six months + costs of bankruptcy proceedings) >= 5% of the principal amount of the outstanding covered bonds
- These proceeds will be paid pro rata to the holders of the covered bonds on the next interest payment date, but not earlier than 14 days after the day on which the decision of the judge-commissioner approving the receiver's report on the progress of the bankruptcy proceedings becomes final and binding
- A meeting of the holders may adopt a resolution on disapplying the extension of the maturity date or on the sale of the assets in the cover pool. The assets in the cover pool may be sold to another bank which is not a mortgage bank without transferring to the purchaser the obligations of the bankrupt bank under the covered bonds. The assets in the cover pool, possession of which is not restricted to banks, may also be sold to an entity which is not a bank





The coverage test verifies whether the value of assets in a cover pool allows for full satisfaction of all claims under outstanding covered bonds.

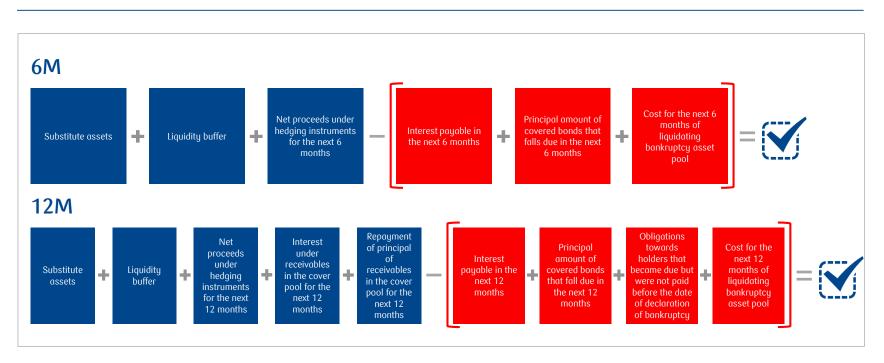
The coverage test must be performed every six months.

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

- real data as of day of testing
- scenarios concerning changes of FX rates

# ... and the Liquidity test





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

### 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 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 and on 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 (action 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 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 my differ from this presentation 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 not obligation to update or periodically review the presentation. PKO BH has no obligation to inform any recipient of any 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 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.





PKO Bank Hipoteczny web page: <u>www.pkobh.pl</u>