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BANK POLSKI

June 2024

# Financial Stability Report

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# Financial Stability Report

Financial Stability Department
Warsaw, 2024

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This Report presents the analysis and assessment of threats to financial system stability in Poland.

The stability of the financial system is a situation when it performs its functions in a continuous and efficient way, even when unexpected, highly adverse and low-probability disturbances occur on a significant scale.

The analysis conducted in this issue of the report is based on data available up to 30 April 2024 (cut-off date). The report was approved by the Management Board of Narodowy Bank Polski at its meeting on 3rd June 2024.

This Report is a translation of NBP *Raport o stabilności systemu finansowego. Czerwiec 2024.* in Polish. In case of discrepancies, the original prevails.

# Table of Contents

Executive summary 6
Recommendations 8
1. Macroeconomic and external factors 10
1.1. External factors 10
1.2. Macroeconomic situation in Poland 12
1.3. Financial markets 13
1.4. Real estate market 16
2. Banking sector situation 22
2.1. Lending 22
2.2. Credit risk 29
2.3. Banking sector exposure to Treasury bonds 37
2.4. Legal risk associated with the portfolio of FX housing loans 39
2.5. Liquidity risk and funding 41
2.6. Earnings 45
2.7. Capital adequacy 50
2.8. Stress tests 54
2.9. Market assessment of banks 59
2.10. Selected indicators describing the situation of the banking sector 62
3. Main risk areas in the non-banking sector 65
3.1. Insurance companies 65
3.2. Investment funds 73
4. Systemic risk assessment 80
4.1. Structural risk: *elevated but poses no threat to financial stability* 85
4.2. Cyclical risk: *moderate* 92
Glossary 98
Abbreviations 101

# List of Boxes

**Box 2.1. Low use of bank loan by Polish non-financial corporations – the analysis of the reasons**..26

**Box 4.1. The resolution processes in Poland – an effective reduction of systemic risk arising from the weaknesses of certain institutions** ........................................................................................................82

**Box 4.2. Exposure of the banking sector to sectors vulnerable to transition risks related to climate change**............................................................................................................................................88

**Box 4.3. Positive neutral rate for the countercyclical capital buffer**........................................................93

# Executive summary

**The domestic banking sector, a key element of Poland's financial system, remains resilient to shocks.** Banks show a high loss-absorption capacity while maintaining the capacity to provide financial services even in pessimistic stress test scenarios.

**Banks' substantial excess capital ensures space both for building the macroprudential capital buffers and for the lending expansion**. In 2023, the growth in banks excess capital was specifically driven by high nominal profits and the issuance of eligible debt instruments which reduced the extent to which capital is being used to meet MREL requirements. As a result, the credit crunch risk resulting from insufficient level of excess capital that was identified in the Report's previous editions was eliminated.

**The growth rate of lending to the non-financial sector is beginning to steadily recover, but the pace of growth in the next two years will not be high enough for the loan to GDP ratio to increase.** The causes of this development mainly originate in continued low loan demand. However, there are no signs that lending to the economy is constrained due to supply-side factors.

**Legal risk associated with FX housing loans is effectively managed by banks, however it continues to remain the major burden to the domestic banking sector.** For three years, banks have offered settlements to their clients and set aside appropriate provisions. The costs of provisioning are high and will also remain high in the future, although they are likely to be substantially lower than the costs incurred so far.

**The financial stability assessment has for some time been significantly impacted by the volatility of the legal environment in which banks operate.** This results from both new legislative initiatives (i.e. loan repayment holidays) as well as uncertainty about the interpretations of the provisions of law on consumer protection. This diminishes predictability of the operating conditions of banks and the credit market and may cause moral hazard. This generates costs for the banking sector and may also result in higher costs of financial services and their limited access for customers, especially households. This also bears the potential investors perception of domestic banking sector attractiveness as the costs of such risk materialisation are difficult to estimate.

**The reform of benchmarks encounters a number of challenges.** In October 2023, the Steering Committee of the NWG postponed the deadline for implementation of the benchmark reform to the end of 2027. In addition, in March 2024 the Steering Committee of the NWG decided to review the choice of WIRON as an alternative benchmark for WIBOR, and undertook an analysis of other near Risk Free Rates that could serve as that alternative benchmark. This means that uncertainty regarding the final replacement of WIBOR persists.

**The deteriorating economic situation in Poland and higher loan servicing costs did not lead to a significant rise in the cost of credit risk.** It should continue to remain moderate owing to the robust

labour market, the still relatively high capacity of enterprises to service their liabilities and banks' prudential lending policy in the past.

**Banks in Poland are resilient to liquidity risk**. This is because of, among others, the high share of retail deposit funding, small deposit concentration, a high share of guaranteed deposits and a large portfolio of liquid assets.

**Banks' investment in Treasury bonds and bonds guaranteed by the State Treasury remains high but their sensitivity to risk associated with such exposure is moderate**. The high resilience of banks to bond-related price risk stems primarily from the lower share of the portfolio of marked-to-market bonds. The risk associated with the portfolio of bonds that are not marked-to-market – which may materialise should the need arise to sell it at market price – is insignificant. This results from the sector's high excess liquidity and the high share of securities marked-to-market as well as the possibility to use Treasury securities as collateral in conditional operations.

**As regards the insurance sector, as there is a lack of regulatory restriction on double gearing of capital and the proportion of expected profits included in future premiums (EPIFP) in own funds is high, the real resilience of the sector may be inadequately reflected by capital ratios.** As the scale of the phenomena in the domestic insurance sector – which is well above the EU average – is significant, high solvency ratios may inadequately reflect the loss-absorption capacity of insurers. Imposing a restriction on double gearing and eliminating EPIFP would result in a decline in the sector's SCR from 240% to 175%.

**Excessive liquidity transformation remains a risk for open-ended investment funds.** In the case of most open-ended funds, the share of deposits, which are the most liquid assets, still runs at a low level, and there are still active funds whose liquidity ratio is close to zero. This increases the liquidity risk of the whole sector of open-ended investment funds.

# Recommendations

**In addition to identifying and assessing risk in the financial system, the role of the Report is to offer measures aimed at mitigating systemic risk.** This is one of the ways to fulfil the statutory mandate of NBP, which includes acting to maintain domestic financial stability (Article 3 paragraph 2 items 6a and 6b of the Act on Narodowy Bank Polski). In the opinion of NBP, implementation of the following recommendations will be conducive to maintaining the stability of Poland's financial system.

**1. Reduction of legal and regulatory risk**

**Both public institutions and private entities should take into account the appropriate balance of consumer protection activities. Financial safety net institutions should aim to reduce uncertainty about the legal and regulatory environment in which banks operate.** Predictability of the environment in which the financial system functions facilitates risk assessment and has a favourable impact on access to credit and other financial services. **In turn, banks should approach the construction of contracts with consumers with particular care and inform them adequately about the offered products.**

**2. Reform of interest rate benchmarks**

**Efforts should be made to eliminate uncertainty about which benchmark will ultimately replace WIBOR.** In the process of reviewing alternative benchmarks to WIBOR, the priority should be to ensure the unquestionable quality of the input data, which would avoid possible reporting errors in the future.

**3. Settlements in FX housing loans**

**Banks and borrowers should continue to reach settlements in FX housing loan cases, thus contributing to accelerating the pace of dispute resolution.** Amicable settlements allow for a quick resolution of disputes, which is favourable for both sides.

**4. The MREL**

**Banks should successively increase the share of eligible debt instruments in the MREL requirement in order to cover with them the entire amount earmarked for recapitalisation.** A suitable share of debt instruments ensures the feasibility of resolution and at the same time limits undesirable interactions between macroprudential policy and the MREL requirement.

**5. Releasable capital buffers**

**It is justified to implement a positive level of counter-cyclical buffer.** The adoption by the FSC-M of a new strategy of applying the counter-cyclical capital buffer, containing a neutral buffer element, is a step towards achieving this aim. This would help to secure an adequate level of capital in banks in the event of the occurrence of unpredictable or hard-to-predict systemic risk and reduce uncertainty and costs for the economy, should this risk begin to materialise.

## 6. The cooperative banking sector

**The cooperative banks should take steps to increase the number of shareholders and activate cooperative members.** The high earnings achieved recently by the cooperative banks create suitable conditions for them to increase financial incentives for their shareholders, e.g. in the form of dividend payments. Reversing the negative trend in the number of shareholders would contribute to the strengthening of confidence in cooperative banking, as well as stabilising the sector's capital base in the long term.

## 7. Insurance companies

**When making their solvency assessments, insurance companies should consider the risk stemming from a high share of expected profits included in future premiums (EPIFP) in own funds and double gearing of capital.** Own funds obtained by including EPIFP and double gearing of capital have a limited ability to cover losses, despite belonging to the highest quality category according to the regulations. Insurance companies should therefore allocate a greater proportion of their profits to increasing capital, particularly in the period of record earnings over the past year.

**It is desirable to increase the supply of insurance products enabling hedging of longevity risk along the lines of other developed markets.** They would also complement the services available to participants in the voluntary part of the pension system. The lack of such products results in this risk being borne by the elderly, which combined with the risk of short-sightedness and a declining replacement rate can have a negative impact on the situation of the financial system.

## 8. Investment funds

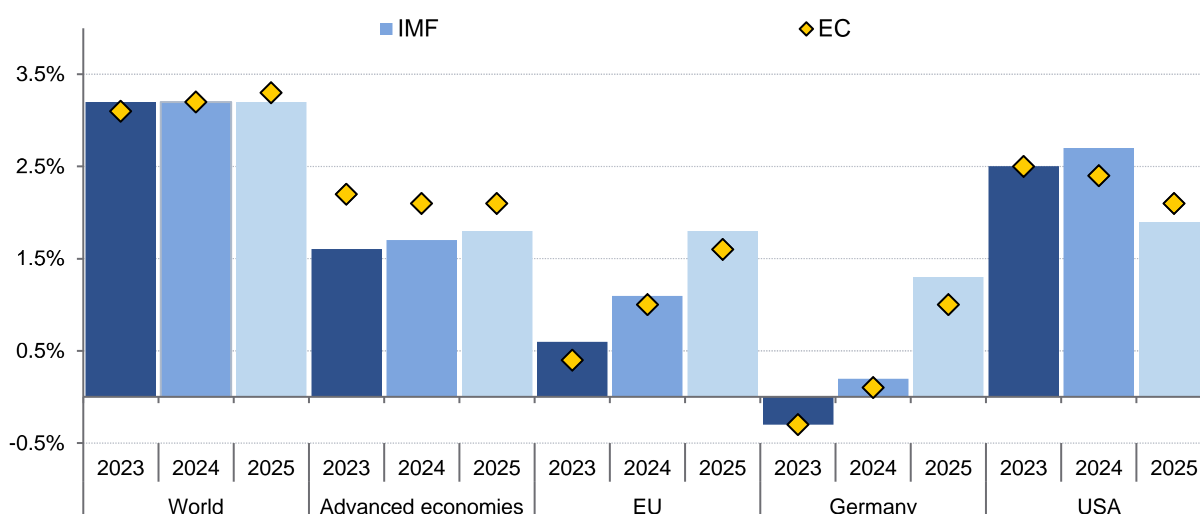
**In view of the experience of recent years, open-ended investment funds should seek to develop good practice in reducing liquidity mismatch between assets and liabilities.** It is desirable that the liquidity profile of the assets corresponds to the frequency of unit redemption. Increasing the share of liquid assets, including creating liquidity buffers in the form of deposits, would contribute to reducing the scale of this risk.

# 1. Macroeconomic and external factors

## 1.1. External factors

**Global economy is expected to grow modestly in 2024-2025.** The IMF forecasts that the global economy will continue to grow by 3.2% in the years 2024-2025, i.e. as in the year 2023[1]. The economic growth in advanced economies is expected to gradually accelerate (to 1.7% in 2024 and 1.8% in 2025, against 1.6% in 2023) while in emerging economies it would reach 4.2% in 2024 and 2025 against 4.3% in 2023. The EU economic growth is expected to accelerate to 1.1% in 2024 and 1.8% in 2025 against 0.6% in 2023, (see Figure 1.1).

**Figure 1.1.** Estimations of GDP growth in 2023 and projections for 2024-2025




Note: the European Commission projection for the world and the developed economies does not include European Union states.

*Source: IMF, EC.*

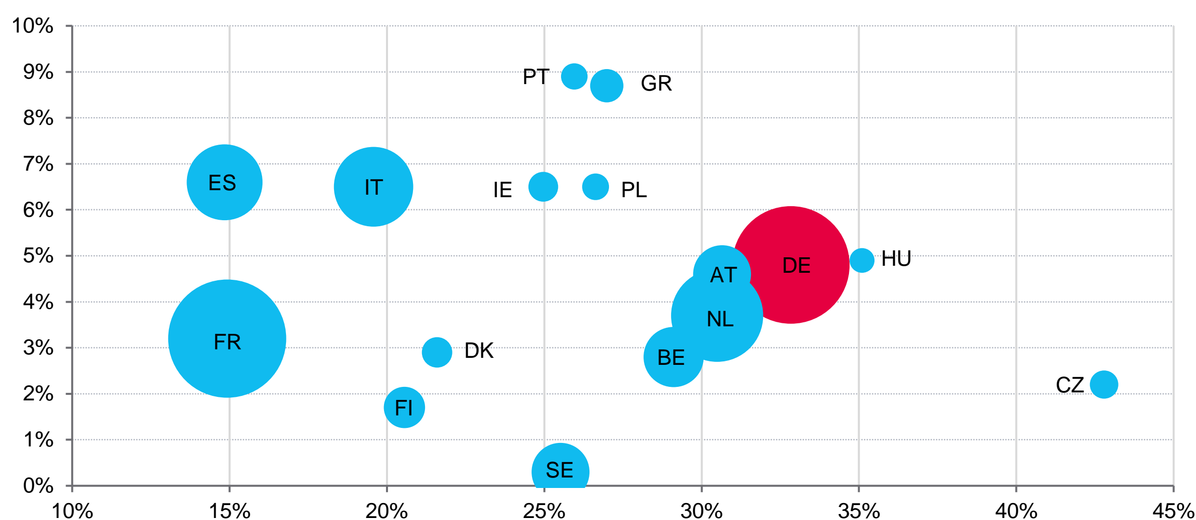
**According to the forecasts of the European Commission[2] and the IMF, the economy of the European Union will be characterized by low but accelerating economic growth in the years 2024-2025.** In the opinion of the EC, economic growth will be supported by rising consumption (due to growing real wages amid falling inflation) and investment (among others, due to the expected gradual easing of financing conditions[3]). An increase in demand from the EU's main trading partners is also expected. Germany, which is Poland's main economic partner, is expected to grow more slowly than expected in the previous forecasts of the IMF and the EC due to the persistence of weak industrial sentiment and the low dynamics of investment.

[1] IMF, World Economic Outlook, April 2024, Regional Economic Outlook – Europe, April 2024.
[2] European Commission, European Economic Forecast. Spring 2024.
[3] See NBP, Inflation Report – March 2024.

**The European banking sector has significant resilience to shocks, which is reflected in high capital adequacy ratios.** At the end of 2023 Q4, the CET1 ratio in the EU was on average 16%[4], accompanied by high profitability of banks achieved in 2023 mainly due to increased net interest margin. This was a result of faster and stronger repricing of interest rates on assets than on liabilities, amid elevated interest rates. Moreover, credit risk provisions remained practically at the same level as in 2022, while the non-performing loans ratio stayed at a record low (1.9% in 2023 Q4).[5]

**However, the favorable trends in the European banking sector observed up to now will most likely weaken in the coming quarters.** Factors which may drive banks' interest margins downward include the following: (i) interest rate cuts expected by the market, (ii) very low lending growth rates observed for several quarters, (iii) heightened uncertainty as a result of an escalation of geopolitical risk globally, (iv) rising funding costs (both market funding and deposits). The slowdown in the growth of net earnings in EU banks was already visible in 2023 Q4.

**Figure 1.2.** Quality (NPL ratio, vertical axis) and share in corporate loans (horizontal axis) of loans secured with commercial property in EU countries in 2023 Q4




Note: the size of the circles reflect the volume of exposures in EUR billion, red indicates countries with an increase in the NPL ratio for CRE loans between 2023 Q3 and Q4. The figure includes only those EU states, in which the banking sector's CRE exposure exceeded EUR 10 billion in 2023 Q4.

*Source: European Banking Authority, Risk Dashboard 2023 Q4.*

**One of the main medium-term risks for EU banks is the possibility of an asset quality deterioration.** A growing number of bankruptcy declarations has been observed in the EU since the pandemic. The level of corporates' liquidity buffers is also falling, which is reflected in the higher share of enterprises

[4] See EBA, Risk Dashboard 2023 Q4.
[5] See EBA, Risk Dashboard 2023 Q4.

with an increasing ratio of interest costs to cash.[6] This may increase the costs of refinancing of existing debt.

**The quality of banks' exposures to the commercial real estate (CRE) market in the EU is gradually deteriorating**, which is a result of an ongoing downturn and price decreases in this market.[7] The exposure of the EU banking sector to CRE market is significant (according to EBA data, in 2023 Q4 it constituted on average 22.1% of the loan portfolio for non-financial corporations and 5% of assets). As a result of these tendencies, the non-performing loans ratio for CRE loans increased in the EU (4.3% in 2023 Q4 compared to 3.9% in 2022 Q4). The biggest growth (from 2.05% to 4.8%) occurred in German banks, which have one of the largest exposures to mortgages secured by commercial property (see Figure 1.2). The deterioration of negative trends in the CRE market may additionally affect the portfolio quality of the European banking sector. On average, the quality of banks' exposure to CRE is lower in countries, where these loans have a lower share in banking sector's corporate loan portfolio.

## 1.2. Macroeconomic situation in Poland

**Following a period of declining economic activity in the first half of 2023, Poland is in a recovery phase, which is driven by the gradual fading of the effects of the earlier supply shocks.** GDP growth rate in 2023 Q3 and Q4 rose to 0.5% and 1.0% y/y respectively. The economic recovery in this period was supported by a significant increase in investment, amid close-to-zero growth in household consumption and a high positive contribution of net exports to GDP growth rate.

**CPI inflation in Poland declined significantly compared to the high levels observed in the first half of 2023, in February, March and April 2024 running at levels consistent with the inflation target of 2.5% +/-1 percentage point.** In February and March annual consumer growth declined to 2.8% and 2.0% respectively and rose to 2.4% in April.[8] The fall in inflation was supported by the fading of cost pressure related to the earlier external supply shocks and the weakened consumer demand amid the tightening of the NBP's monetary policy in 2021-2022. The appreciation of the zloty exchange rate and lower inflation in Poland's main economic partners also contributed to slower price growth.

[6] See IMF, Global Financial Stability Report, April 2024.

[7] This is not only due to cyclical reasons, but also to structural ones. The condition of enterprises active on the CRE market is deteriorating and demand for office rental space is falling because, among others, an increase in remote working.

[8] Data for April 2024 based on the Statistics Poland Quick Estimate of 30 April 2024.

**According to the March "Inflation and GDP projection"[9], in both the scenarios presented[10], the years 2024-2026 will see an acceleration of economic growth in Poland on the back of the further waning of the effects of the global supply shock.** The rebound of economic activity will also be supported by fiscal measures that increase household disposable income, including wage rises for selected groups of public sector workers and the further increase in the value of social benefits. GDP growth rate will reach its peak in 2025, when a sharp increase in the inflow of EU funds under the new 2021-2027 framework is expected. The scale of the forecast recovery will be limited by the assumption made in the projection that interest rates will remain unchanged and that the scale of economic recovery abroad will be only moderate.

**In both scenarios of the March projection, CPI inflation will run at an annual average significantly below the reading of 2023, and from the second half of 2025 to the end of 2026 it will remain at a level consistent with the NBP inflation target.** The gradual impact of a significant reduction in cost pressure in the economy due to a marked decline in global of energy commodities will contribute to a fall in consumer price growth rate compared to 2023. The disinflation process is also supported by low inflation in the environment of the Polish economy and the fading of the earlier supply chain disruptions. On the other hand, the scale of the fall in domestic inflation will be limited by a significant recovery in demand.

**Besides the scale and scope of the shielding measures on energy prices, the future economic situation and CPI inflation path is also highly dependent on other fiscal measures including future developments in public finance sector expenditure and revenue.** Apart from internal conditions, geopolitical risks and the scale of supply chain disruptions, as well as the shape of fiscal and monetary policy in the major developed economies will be important sources of uncertainty in the projection.

## 1.3. Financial markets

### 1.3.1. International environment

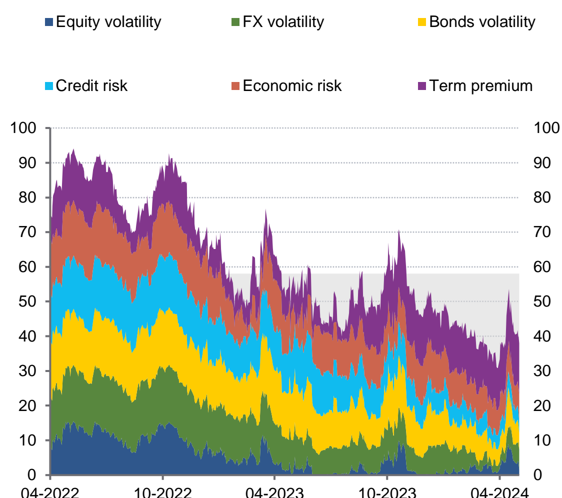
**The global financial markets saw risky assets valuations grow and their volatility fall**. In the global risk index all categories recorded declines (see Figure 1.3). The equity volatility index VIX reached the level seen before the outbreak of the COVID-19 pandemic, which was accompanied by a rise in the S&P500 index to the all-time high. Investors were particularly interested in companies involved in the

[9] The projection was prepared under the assumption of unchanged NBP interest rates based on the data available until 15 February 2024 (consequently, the reference rate of 5.75% was assumed).

[10] The March projection was prepared in two scenarios, depending on the assumptions regarding the shielding measures impacting on energy and food prices. The scenario of an extension of the shielding measures assumed the maintenance of shielding measures on food and energy prices in 2024 and future years. The scenario of withdrawal of the shielding measures assumed the reinstatement of the 5% VAT rate on staple food products from April 2024 and the complete unfreezing of electricity and gas prices for households from 2024 Q3.

development of AI. In many cases other stock market indices worldwide also reached record levels. Volatility of bond prices declined despite the fact that uncertainty about the time when major central banks would start interest rate cuts remained high.

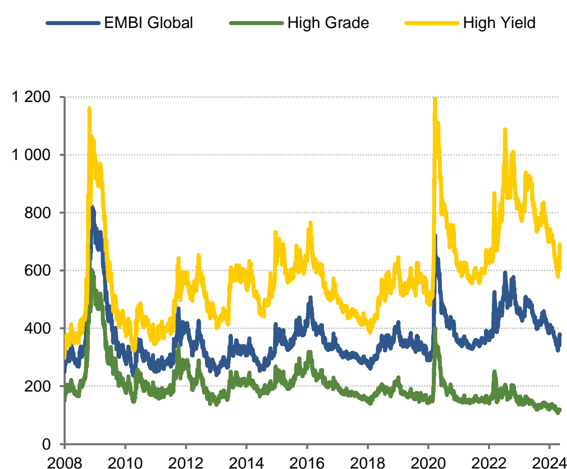
**Figure 1.3** Risk pricing on global financial markets




Notes: Risk index estimate based on normalised empirical distribution of selected risk categories according to weights defined on the basis of the analysis of the main components: stock market volatility – the VIX index, bond volatility – the MOVE index, currency volatility – the JPM G7 volatility index, economic risk – TED spread, credit risk – the credit spread of corporate bonds; the grey area denotes risk-neutral levels, below 22 points – risk appetite, above 55 points – risk aversion

*Source: Bloomberg data, own study based on Morgan Stanley Research "EM Risk Indicator: A Regime-Switching Model Approach".*

**Figure 1.4.** Credit spreads of EM Treasury bonds and corporate bonds (pb)




Notes: EMBI – EM bonds index, High Grade – corporate bonds of high credit rating, High Yield – corporate bonds of low credit rating.

*Source: Bloomberg.*

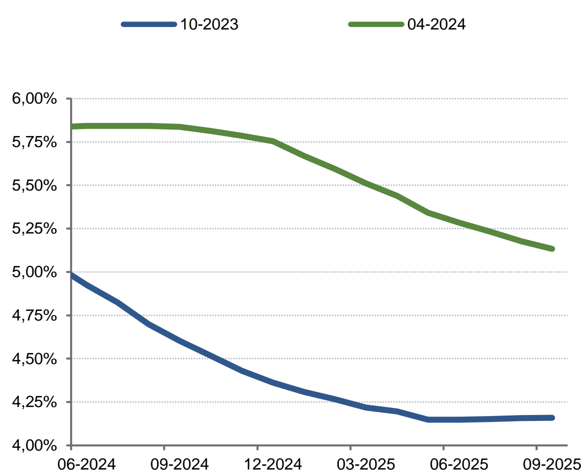
**The risk of recession which boosted expectations of high and more pronounced interest rate cuts at the end of 2023, considerably decreased.** As a result, the yield on Treasury bonds of major economies first decreased considerably and then increased moderately. Despite the prevailing risks (Ukraine, Gaza Strip, Taiwan), the geopolitical risk affected market valuations to a lesser extent; yet, with the approaching Presidential elections in the United States the importance of this factor may grow.

**Rising likelihood of materialization of the soft scenario of economic slowdown limited the credit risk premium.** In the EU the spreads between Italian 10Y Treasury bonds and German Bunds narrowed and the spread of Italian 5Y CDS decreased. Credit spreads of high grade corporate bonds reached levels recorded before the global financial crisis (see Figure 1.4). The spreads of low grade corporate bonds saw a strong downward trend, reaching the 2021 low, similarly to the spreads of sovereign bonds of the emerging markets.

### 1.3.2. Financial market in Poland

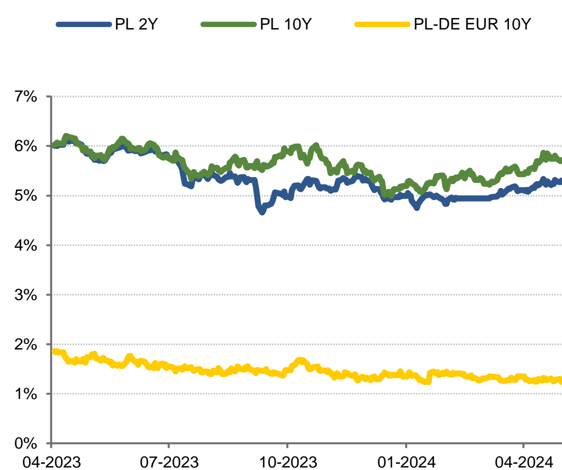
**As a result of the uncertainty about the sustainability of the disinflation process, NBP interest rates remained at a stable level and the prospects for interest rate cuts waned, according to market assessment.** FRA rates increased compared with the previous *Report*, with current forecasts of the first interest rate cut at the beginning of 2025 (see Figure 1.5).

**Figure 1.5.** FRA-implied expected WIBOR 1M rate




*Source: Bloomberg, own calculations.*

**Figure 1.6.** Yields on Treasury securities and spread to German Bunds




Note: Spread in the yields on Polish bonds denominated in PLN and in EUR to 10Y German Bunds.

*Source: Bloomberg.*

**The SPW yield curve flattened, yet remains positively sloped.** Yields fluctuated, first declining together with mounting expectations of NBP interest rate cuts in 2023 and then – following their cooling – continued to grow (see Figure 1.6). Bond yields at the shorter end of the curve slightly rose and the yield of 10-year bonds declined. The long end of the yield curve was affected by the trends in the global debt markets (declining yields of German Bunds and American bonds) to a greater extent. Higher bonds supply driven by the financing of the growing borrowing needs of the Treasury was a domestic factor putting downward pressure on prices. The credit spread of Poland's 10Y Eurobonds to German Bunds narrowed despite the expected increase in the sovereign debt of the Republic of Poland.

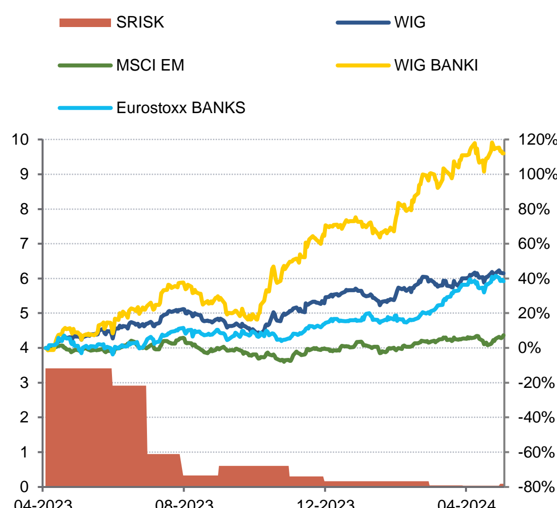
**The zloty exchange rate against the euro appreciated, while other currencies of the CE-3 region showed the opposite tendency.** Apart from the generally favourable sentiment in the global markets, the zloty appreciation was supported by the following: growing expected interest rate disparity between Poland and the euro area, improved data on the domestic economy and expectations of the release of the EU funds (see Figure 1.7). The tensions between Israel and Iran contributed to a temporary depreciation of the zloty. The Czech Republic and Hungary expected a faster pace of interest rate cuts by their central banks. The stabilization of the risk balance for the exchange rate contributed to a decline in the implied volatility of the exchange rate of the zloty against the euro.

**Figure 1.7.** Zloty echange rate against EUR and CHF and implied EUR/PLN volatility

Note: left axis: EUR/PLN and CHF/PLN exchange rate. Right axis: volatility of EUR/PLN exchange rate implied from 3M options.

*Source: Bloomberg.*

**Figure 1.8** Market assessment of undercapitalisation of Polish banks and stock exchange indice variations




Note: left axis – market assessment of undercapitalisation of the largest banks based on the SRISK measure with an assumed level of k=5% (PLN billion), right axis – equity indices: of the emerging markets (MSCI EM), WIG, WIG Banks and Eurostoxxx Banks were normalized to 0 at the end of June 2022.

*Source: NBP, Bloomberg.*

**The equity market saw price increases, which was particularly evident in the banking sector.** The WIG index posted an all-time high level (see Figure 1.8) as a result of growing risk appetite, stabilizing volatility, improving economic prospects, unblocking of the UE funds and higher than expected quarterly earnings of companies. The WIG Banks Index stood out not only against the broader index but also in the global perspective (more information about banks' equities in Chapter 2.9). The market assesses that the level of capital of the largest banks quoted on the Warsaw Stock Exchange is accurate, which is evidenced by the low level of the SRISK measure (see Figure 1.8), whereas recapitalization would be necessary for certain banks only and its scale is low – at the level recorded before the COVID-19 pandemic.

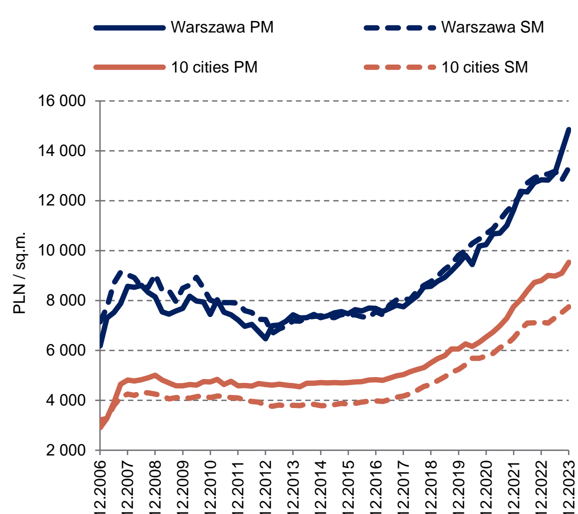
## 1.4. Real estate market[11]

In the second half of 2023, the housing market saw a considerable increase in demand amid limited supply, which caused further rise in nominal prices. The insufficient supply was the result of a small number of building permits issued and investment projects launched, which in turn was the consequence of real estate developers having reduced the number of new project starts in the years 2021-

[11] For more information on the current situation in the real estate sector in Poland see the paper "Information on home prices and the situation in the residential and commercial real estate market in Poland in 2023 Q4", available on the website of the Bank: https://nbp.pl/publikacje/cykliczne-materialy-analityczne-nbp/rynek-nieruchomosci/informacja-kwartalna/

2022. The market offering and the time needed to sell the entire stock of dwellings put on the primary market has sharply decreased in the past quarters. The housing stock on the market and developer production in progress also declined. Amid these supply conditions, the increase in demand, driven by the “Safe Credit 2%”, accelerated growth in nominal prices. Prices in real terms on the primary markets (PM) were also on the rise, yet declined slightly in the secondary markets (SM).

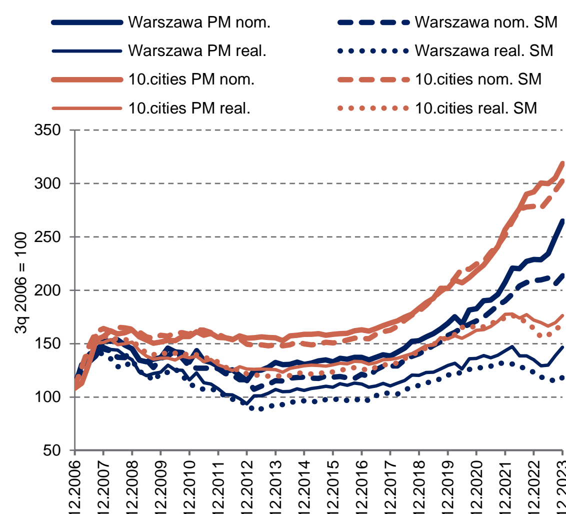
**Figure 1.9.** Nominal home transaction prices in the primary market (PM) and secondary market (SM)




Note: 6 cities include Gdańsk, Gdynia, Kraków, Łódź, Poznań and Wrocław, and 10 cities include: Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin and Zielona Góra.

*Source: NBP.*

**Figure 1.10.** Index of nominal and real growth in home transaction prices in the primary market (PM) and secondary market (SM) in Warsaw and 10 cities (Q3 2006=100)




*Source: NBP.*

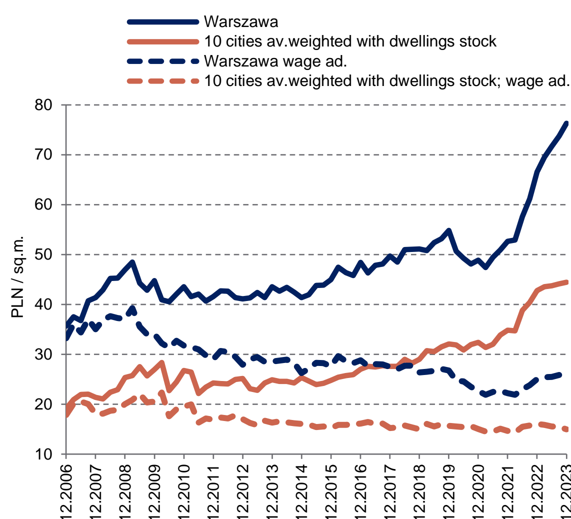
**Rent rates in major cities also grew, despite a rise in the supply of rental housing**. Yet, the monthly rent was lower than an instalment of a loan taken out for the purchase of own housing. In Q4 2023, the profitability of rental was higher than interest income on deposits, yet lower than yield on Treasury bonds. These circumstances combined with the buyers’ confidence in the value of capital invested in real estate and higher perception of risk of investment in the capital market kept potential investors interested in investment in rental housing.

**The commercial real estate market is subject to changes accelerated by the pandemic.** As a result of the development of teleworking, tenants are less interested in office space or more interested in smaller office yet located in buildings with high energy efficiency[12] and situated in good locations. Teleworking and development of e-commerce have negatively affected the demand for retail space but boosted

[12] This results from significant rises in energy carrier costs which are to some extent the effect of climate changes and the related climate policy.

demand for warehousing space. As a result, we have seen a falling supply of new office space, stagnation in the supply of new retail space and a constantly growing supply of warehousing space. The office and retail real estate market in Poland has so far seen steady or even falling vacancy rates amid growing rents (see Figure 1.13 and Figure 1.14). Growing maintenance costs and service charges of such real estate may turn out to be a problem, especially in the case of older buildings.

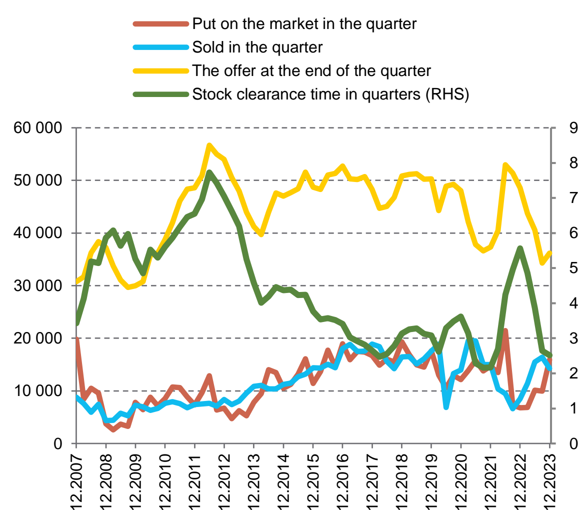
**Figure 1.11.** Average transaction rental rate in nominal and real terms compared to wages in selected groups of cities in Poland




Note: 10 cities include: Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin and Zielona Góra.

*Source: NBP.*

**Figure 1.12.** Dwellings put for sale in the primary market, sold and remaining on offer in the six largest markets in Poland and the selling time of the offer




Note: the group of 6 markets include: Kraków, Łódź, Poznań, Warsaw, Tri-City and Wrocław.

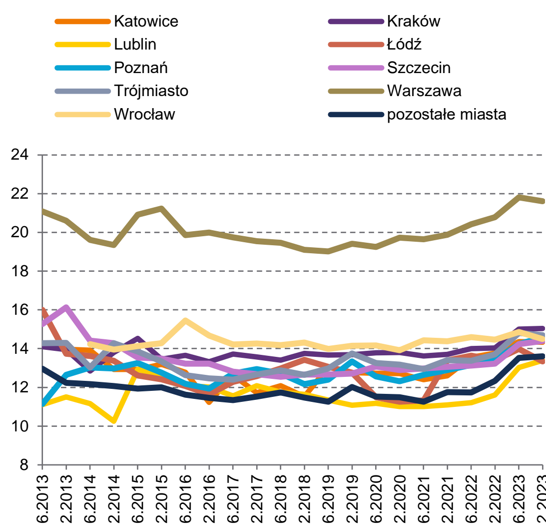
*Source: NB based on JLL.*

**The value of the domestic real estate stock is still relatively low, and the exposure of Polish banks to the commercial real estate sector are small relative to their assets.** The value of loans granted for the purchase or construction of commercial real estate granted by banks in Poland amounted to PLN 66.7bn at the end of 2023 Q4 (approx. 16% of the value of all the loans granted to business) (see Figure 1.15). It should be added that commercial real estate is financed also by investment funds, insurance companies and private investors. The exposure of Polish financial institutions such as investment funds and insurance companies to the commercial real estate sector is small relative to their assets.

**In 2023, Poland saw a significant fall in the volume of transactions involving commercial real estate, which is largely due to subdued activity of foreign investors.** The estimated value of sale transactions

involving commercial real estate purchased for investment purposes[13], i.e., intended for rental, in Poland in the whole of 2023 amounted to PLN 2bn (see Figure 1.16).[14] Such a low transaction volume was seen for the last time in Poland in 2010.

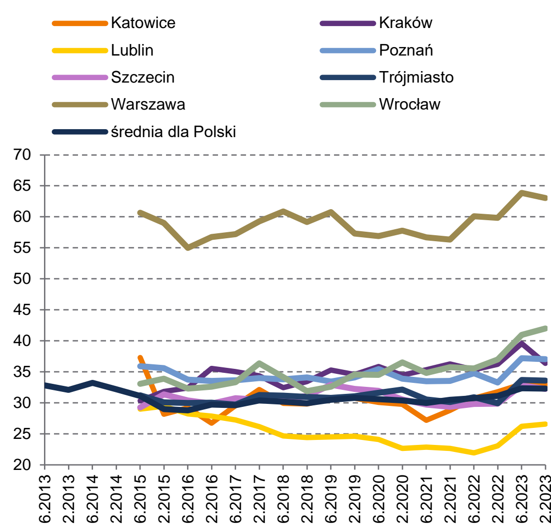
**Figure 1.13.** Transaction rents for A class office space (average in EUR/sq.m/month)




Note: other cities include Białystok, Bydgoszcz, Kielce, Olsztyn, Opole, Rzeszów, Zielona Góra.

*Source: NBP.*

**Figure 1.14.** Transaction rents for space in commercial centres with an area of 100-500 sq.m (EUR/sq.m/month)




*Source: NBP.*

**The low activity of foreign investors is largely due to growing costs of financing seen in the euro area after a long time of low interest rates.**[15] This causes a decline in the profitability of leased buildings and thus, a fall in their market value. Yields (the price-to-rent ratio) of prime commercial real estate in Europe have started to rise along in the wake of a general rise in interest rates, which means that prices

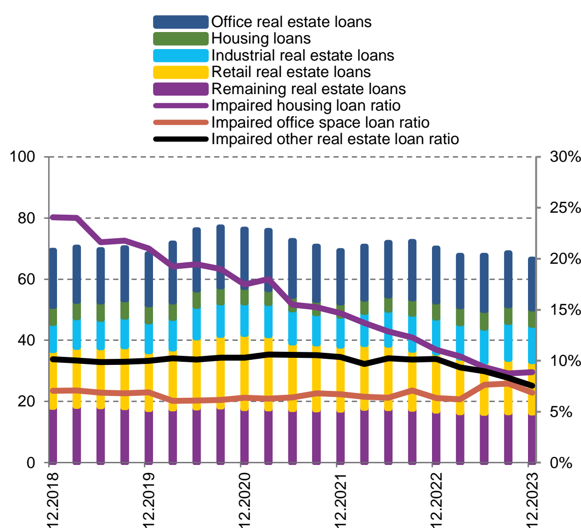
[13] Based on Comparables.pl data. The above investment projects concern the entire operating company which leases a building and derives profit from it. Such transactions take place between: 1/a developer who has commercialised the real estate and sells it to an investor, and 2/two investors. Yet, it should be emphasized that such data do not make it possible to formulate conclusions concerning foreign investors' share in the ownership of commercial real estate in Poland. There is a large stock of real estate which was built by an owner for their own use, sometimes even decades ago. Moreover, some domestic investors chose a developer to build for them real estate for rental and then manages such real estate. The above economic developments are not recorded in statistics concerning commercial investment.

[14] Approx. 33.2% transaction value accounted for warehousing space, 33.1% office space and 26.5% retail space.

[15] See: ECB Financial Stability Review, November 2023.

and appraisals of this real estate are on the decline. As the real estate appraisals are getting more realistic, the risk of a fall in the value of loan collateral is getting higher. The appearance of other forms of investment bearing higher interest rates is another factor negatively affecting investors' situation. The yield on German Treasury bonds, which was negative in real terms for many years, has risen, coming closer to the yields of prime commercial real estate in Europe. In this situation, the number of investors ready to purchase new or repurchase the existing real estate is declining, which may put further downward pressure on real estate prices in the European Union.

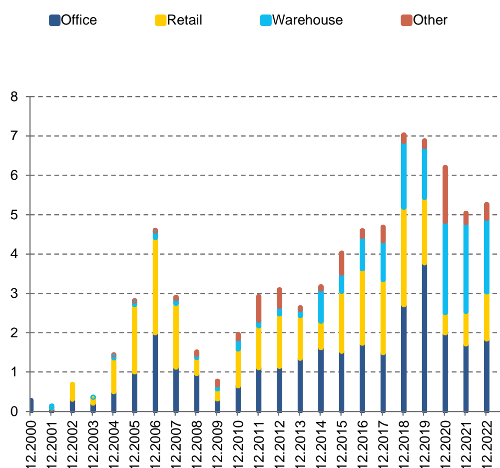
**Figure 1.15.** Loans for enterprises intended for the purchase of real estate (in PLN billons, LHS) and the index of impaired loans (in %, RHS).




Note: data exclusive of BGK.

*Source: NBP.*

**Figure 1.16.** The value of transactions involving investment in commercial real estate in particular years (in EUR billion)




*Source: Comparables.pl*

**There are no major tensions on the Polish commercial real estate market – the rent levels are stable, the vacancy rate is not excessive and the level of the stage 2 and stage 3 loans is also stable.** Yet, the worse situation of and prospects for foreign investors will also negatively impact their activity on the Polish market.

**The Polish office real estate market is seeing changes in tenants' demand, which is shifting towards modern, energy-efficient buildings in prime locations.** As a result of a relatively high supply of such office buildings, in particular in the centre of Warsaw, old buildings, including ones located in more distant areas of the city, are becoming less attractive for investors. They have started to demolish older buildings and erect modern office buildings or apartment buildings in their place. Similar trends are observed in the retail real estate market. High quality retail centres are being modernised and sometimes extended, whereas some of the oldest retail centres have already been or will soon be demolished and the land will be used for other purposes. Thus, the analysis of the trends in the commercial real estate market in Poland should take into account the fact that the location, quality and energy efficiency

of the building is of great importance for investor. This is important on the office market, on which exist buildings that were constructed before 2000 as well as modern buildings that were delivered in the recent years. Older buildings require significant modernizations in order to be able to compete for tenants with modern buildings, which have a high energy efficiency. The analysis of the investment in the construction and commercialization of an A class office building in Warsaw[16] shows that the owners of those buildings can temporarily reduce their costs by the funds they should allocate to the renovation fund. In this situation they can temporarily reduce the rents and together with the good location and quality of their buildings they can attract the tenants of older buildings.

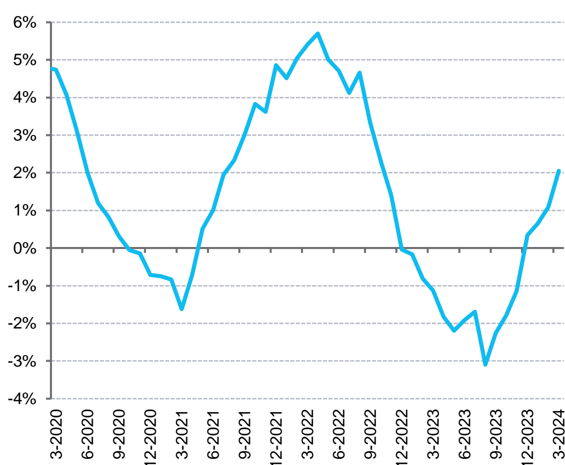
[16] See Olszewski, K., Trojanowski, D., and Łaszek, J. (2024). Low interest rates and uncreative destruction in the office market. Real Estate Management and Valuation.

# 2. Banking sector situation

## 2.1. Lending

**After ten months of decline in bank debt, the annual growth rate of loans to the non-financial sector became positive in December 2023 (see Figure 2.1).** It mainly resulted from an increase in PLN housing and consumer loans to households (see Figure 2.2). Lending to households was supported by a number of supply and demand factors, including: (i) the banks' favourable capital and liquidity position, (ii) lower interest rates compared to the previous year and a good labour market situation, and (iii) the launch of the "2% Safe Mortgage" housing loans subsidy programme[17].

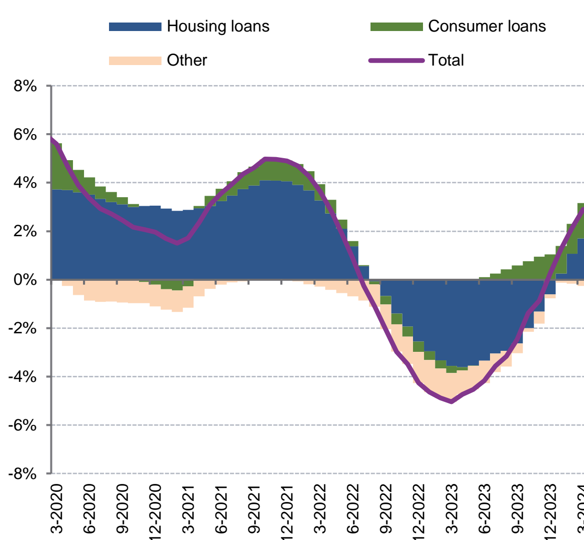
**Figure 2.1.** Growth rate of loans to the non-financial sector, y/y




Note: The figure presents transactional changes.

*Source: NBP.*

**Figure 2.2.** Growth rate of loans to households and contribution of its main components[18], y/y




Note: The figure presents transactional changes. The *Other* category covers credit card loans, loans to individual entrepreneurs and individual farmers as well as other receivables.

*Source: NBP.*

### *Housing loans*

**The demand for housing loans increased significantly in the second half of the previous year, primarily due to the entry into force of the "2% Safe Mortgage" housing loans subsidy programme.** The number of loan applications remained elevated until the end of the year when the programme was

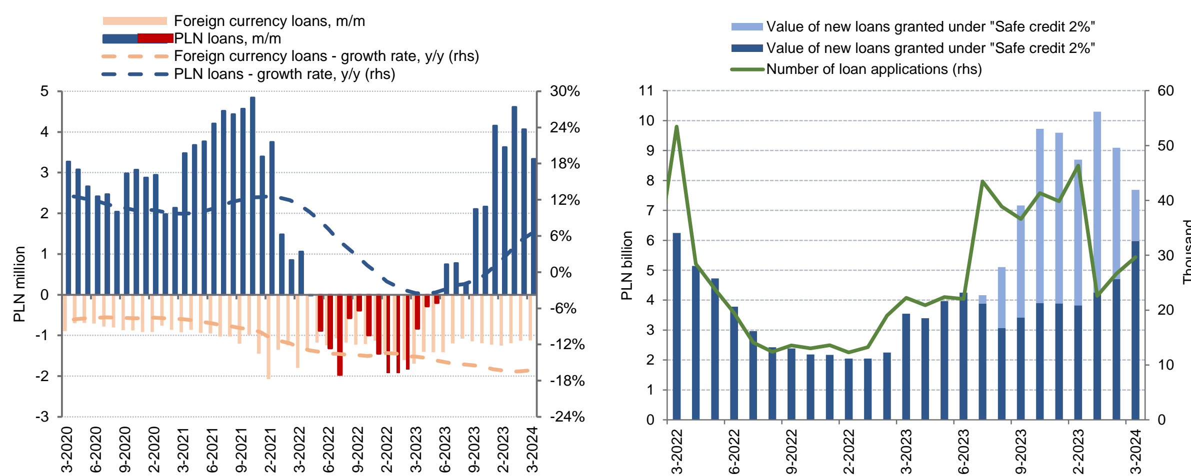
[17] For more information on the programme, see "Financial System Stability Report", December 2023, NBP, footnote 27, available at: www.nbp.pl.

[18] The contribution of a category of loan to the growth rate of housing loans is the product of the growth rate of a given category and its total share in loans to households (relatively constant over a number of years).

suspended (Figure 2.4)[19]. The demand for loans was additionally driven by lower interest rates than in 2022, rising real wages and the amended recommendations of the UKNF regarding the level of the so-called interest rate buffer[20]. At the beginning of 2024, the demand for loan decreased, but it continued to be higher than in the corresponding period of the previous year.

**Figure 2.3.** Growth rate (y/y) and changes (m/m) in the value of housing loans on the balance sheet of the banking sector

**Figure 2.4.** Value of new housing loans and number of loan applications




Note: The figure presents transactional changes.

*Source: NBP.*

*Source: Estimates based on BIK and ZBP data.*

**Value of new PLN housing loans increased steadily in annual terms, which translated into an increase in the growth rate of PLN loans (see Figure 2.3 and Figure 2.4).** However, it continued to be

[19] Due to exhausting of the pool of funds allocated for subsidised loans taken out under the 2023-2024 programme, the acceptance of applications has been suspended since 2 January 2024. Lending banks had a possibility to register the applications in the subsidy record system until 7 January this year.

[20] See „Stanowisko UKNF skierowane do Prezesów Zarządów Banków oraz Dyrektorów oddziałów instytucji kredytowych ws. oceny zdolności kredytowej przy udzielaniu kredytów oprocentowanych zmienną i okresowo stałą stopą procentową" ["Position of the UKNF addressed to Presidents of the Management Boards and directors of branches of credit institutions on creditworthiness assessment when granting floating-rate or periodically fixed rate loans", 7 February 2023, available at: Position_UKNF_ws_ocs_assessment_of_creditworthiness_81068.pdf and "Recommendation S", FSC, available at: https://www.knf.gov.pl/knf/pl/komponenty/img/Rekomendacja_S_nowelizacja_czerwiec_2023_82872.pdf.

restricted by overpayments and early loan repayments[21]. Loans with interest rate subsidies accounted for more than a half of the value of all new loans granted in the period from July 2023 to February 2024[22]. More than 90 thousand loan agreements for the amount exceeding PLN 37 billion have been signed under the "2% Safe Mortgage" programme[23]. New housing loans were mostly based on a periodically fixed interest rate. In the second half of 2023, this interest rate formula was applied in more than 80% of new loan agreements in terms of value and volume[24]. Such a high increase compared to the first half of last year, when the share of these loans reached approx. 60%, results from the fact that the loans granted under the housing programme are based exclusively on a periodically fixed interest rate.

**A number of factors of different directions and strengths of impact will affect the rate of housing loan growth in the coming quarters. However, a further increase of activity in this segment of the lending market can be expected.** The announced entry into force of the new housing programme "#na Start" ["#for the Start"][25] should foster further growth in demand, similar to rising real wages and interest rates expected to remain at a level lower than in 2023. Any potential growth in housing real estate prices will drive an increase of the average amount of the loan taken. Housing loans growth rate will continue to be negatively affected by loan overpayments associated with the extension of the so-called loan repayment holidays[26]. Tightening of income criteria for lending by banks is also possible, due to the reduction in the value of the "loan service-to-income" ratio allowing to apply for the FWK support from 50% to 40%[27]. The "loan service-to-income" criterion has been the most common reason for

[21] The extent of overpayments and early repayments of loans throughout 2023 was lower than in the previous year. This was associated with lower interest rates and a reduced number of suspendable interest instalments as part of so-called loan repayment holidays used by some households to reduce their bank debt.
[22] Despite the termination of the programme, due to very high number of applications submitted in December 2023, loan agreements under the programme were also signed in the first quarter of 2024.
[23] BGK data.
[24] NBP estimates based on UKNF data.
[25] See "Projekt ustawy o kredycie mieszkaniowym #na Start" [Draft Act on #na Start housing loan], available at: https://legislacja.rcl.gov.pl/projekt/12383851.
[26] See ustawa z dnia 12 kwietnia 2024 r. o zmianie ustawy o wsparciu kredytobiorców, którzy zaciągnęli kredyt mieszkaniowy i znajdują się w trudnej sytuacji finansowej oraz ustawy o finansowaniu społecznościowym dla przedsięwzięć gospodarczych i pomocy kredytobiorcom [Act of 12 April 2024 amending the Act on the Support to Borrowers who have taken out a housing loan and are in financial difficulties and the Act on Crowdfunding for Business Ventures and Aid to Borrowers] (Journal of Laws 2024, item 696).
[27] See above.

applying for this type of support. For prudential reasons, banks may also restrict granting those loans where the value of the ratio is lower than 40%.

*Consumer loans*

**The annual growth rate of consumer loans has been positive since June last year and has been increasing steadily (see Figure 2.2**). The interest in consumer loans resulted mainly from an improvement in the situation of households and from the demand for financing the purchase of durable goods. This was reflected in an increase in the value of new cash and instalments loans. Among new cash loans, the fastest growth was recorded in loans for amounts over 50,000 zlotys, although their share in new consumer loans in real terms fell (see Chapter 2.2). Consolidation loans had a significant share in large cash loans. Consumers' interest in the deferred payment service (*Buy Now Pay Later*, BNPL), which is currently offered to consumers mainly by loan companies, was also growing. However, the group of banks providing this service is also increasing. Moreover, some banks purchase portfolios of such receivables from other entities, consequently increasing the value of their own instalment loans in balance sheets.

**Improving consumer sentiment[28] and projected growth in private consumption[29] will have a positive impact on the demand for consumer loans in the coming quarters**. In connection with the growing engagement of banks in the deferred payment market, this will drive further lending growth in this market segment.

*Corporate loans*

**After approximately one year of decline, the annual growth rate of corporate loans started to increase slowly in the second half of last year, although it is still lower than a year earlier. This results, among others, from the continuing low demand for loans on current account and working capital loans, with moderate positive growth in investment loans (see Box 2.1).** Demand for short-term loans remains subdued, among other things due to decreasing values of corporate inventories[30],[31]. Long-term loans grew steadily, supported by improving investment sentiment.

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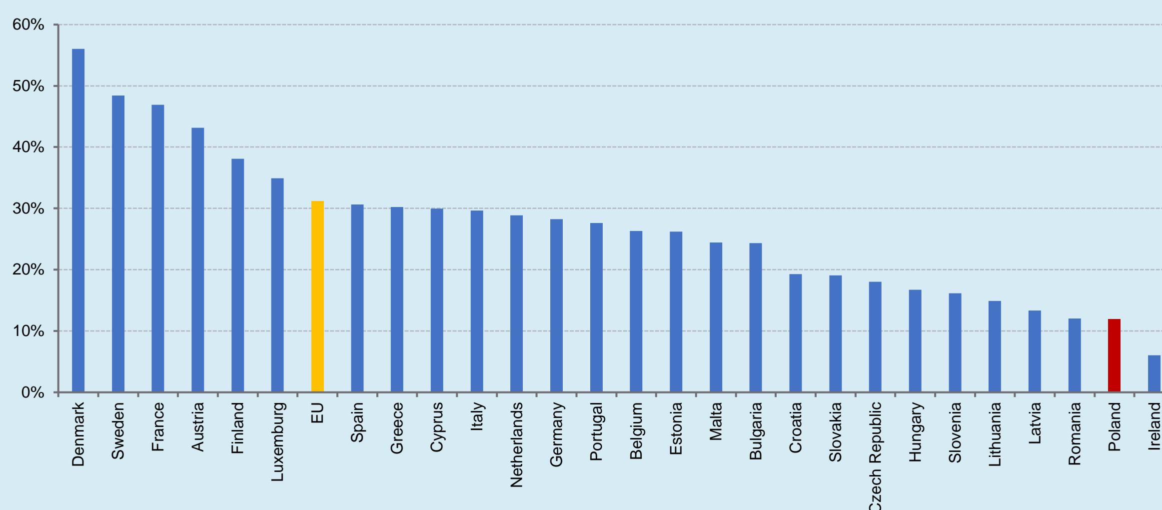
[28] See "Consumer tendency - March 2024", Statistics Poland, available at: https://stat.gov.pl/en/topics/business-tendency/business-tendency/consumer-tendency-march-2024,3,51.html.
[29] See "Inflation Report. March 2024", NBP, available at: www.nbp.pl.
[30] In the period of expected rapid growth of prices and tensions in the supply chains in 2022, companies were increasing their inventories intensively, co-financing their purchases with short-term loans. Although these inventories are shrinking, they partially remain in companies.
[31] Information concerning the situation of enterprises, their investments, inventories, opinions concerning the demand for loans and the reasons for its changes as well as the availability of bank loan referred to in this chapter comes (unless

**Banks continued their prudent lending policy towards the corporate sector, especially towards SMEs, and according to the companies themselves, loan availability deteriorated in the first quarter of this year after a temporary increase in 2023**. However, both large enterprises and SMEs continued to indicate a high success rate in applying for a loan. Nevertheless, the rate was significantly lower for SMEs than for large enterprises.

**Box 2.1. Low use of bank loan by Polish non-financial corporations – the analysis of the reasons**

**Polish non-financial corporations[32] use bank loans to finance their activities to a relatively limited extent[33].** This is a phenomenon observed in most countries of Central and Eastern Europe, but the loan-to-GDP ratio in Poland is the lowest in this group of countries and one of the lowest in the EU as a whole (see Figure 2.5). Moreover, the value of this indicator has been declining since the outbreak of the COVID-19 pandemic (see Figure 2.6).

**Figure 2.5.** Corporate loan-to-GDP ratio in EU countries at the end of December 2023




Notes: Loans include exclusively loans granted to enterprises operating in the given country. GDP in current prices, annualised.

*Source: Estimates based on ECB and NBP data.*

**Demand-side factors prevail among the reasons of low corporate indebtedness in Polish banks.** The low demand for bank loan is of structural nature but has been recently reinforced by cyclical factors. The current favourable situation of Polish companies enables them to use their own financial resources, especially in the period of increased uncertainty in the economic environment. Additionally, in the pandemic period, companies received unprecedented support from the state in the form

stated otherwise) from: „Szybki Monitoring NBP. Analiza sytuacji sektora przedsiębiorstw" [NBP Quick Monitoring Survey. Economic climate in the enterprise sector], issues: January and April 2024, available at www.nbp.pl.

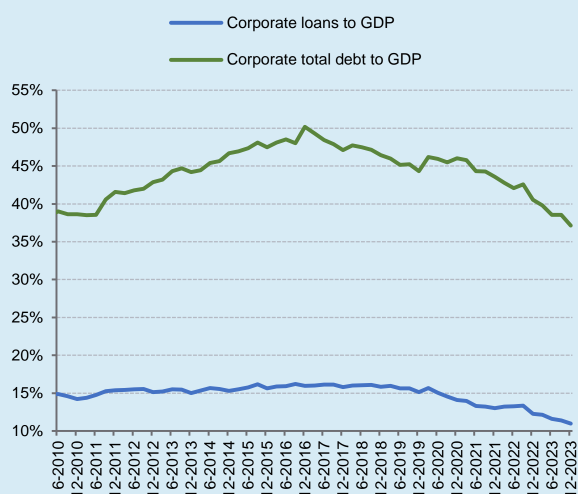
[32] Hereinafter referred to as "enterprises".

[33] Unless otherwise indicated, loan means loan from banks or branches of credit institutions operating in Poland.

of subsidised loans and subsidies (approx. PLN 73 billion of partly non-refundable subsidies for SMEs and large companies under the so-called PFR financial shields), which undermined the demand of this sector for bank loan. Some of these funds still remain in company accounts (see Figure 2.9).

**As a result of internationalisation of the economic activity, enterprises incur debt to foreign entities, both in the non-financial and financial sector (see Figure 2.7).** The value of companies' liabilities to foreign entities[34] is higher than to Polish banks and accounts for almost 40% of total corporate indebtedness. Enterprises belonging to multinational groups usually have a relatively easy access to funding from foreign connected entities.

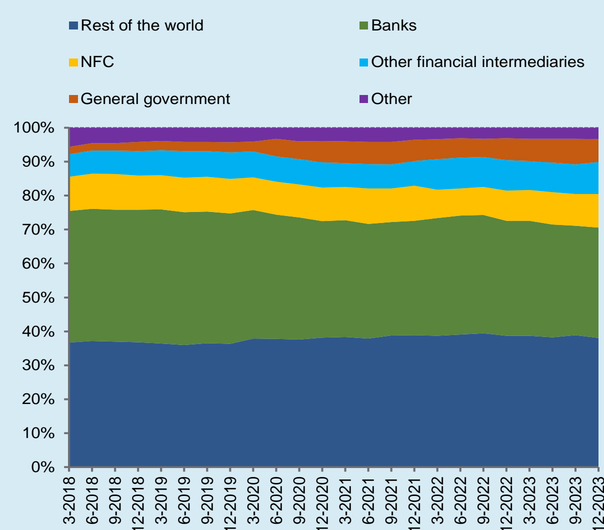
**Figure 2.6.** Corporate loan and corporate total debt to GDP ratios




Notes: GDP in current prices, annualised. Corporate indebtedness comprises debt securities[35], loans and borrowings (excluding trade credit).

*Source: Estimates based on NBP and Statistics Poland data.*

**Figure 2.7.** Structure of corporate debt by creditor




Notes: Corporate indebtedness consists of debt securities, loans and borrowings (excluding trade credit); the "Banks" category comprises monetary financial institutions; the "Other financial intermediaries" category includes ancillary financial institutions and captive and lending institutions; the "General government" category comprises central and local government institutions; the "Other" category includes insurance institutions, pension funds, non-money market mutual funds as well as households and non-profit institutions supporting households.

*Source: NBP Financial Accounts.*

**A limited number of companies, especially micro and small enterprises decide to resign from applying for a loan, even if they assess that this type of financing would be useful for them.** This is,

[34] Total due to debt securities, loans and borrowings.

[35] Indebtedness due to debt securities currently accounts for approx. 6% of corporate debt (total loans and borrowings and debt securities). In the years 2014-2017, this share more than doubled, and subsequently it started to fall.

among other things, caused by an increased availability of funding from other sources, the belief of those entities that their creditworthiness is not sufficient, more restrictive financing conditions, formal conditions that (in their opinion) are difficult to meet, signals received from banks that financing is not possible or a fear that their application will be rejected[36]. Many small enterprises do not have adequate collaterals, however, due to the *de minimis* guarantee programme for the micro and SMEs sector, operating in Poland since 2014[37], the importance of the last obstacle is losing its significance.

**For many enterprises, especially SMEs, leasing is a more attractive form of financing than loan.** The advantages of leasing over bank loan include shorter procedures, lower formal requirements, collateral in the form of a leased asset, and tax benefits. Polish enterprises belong to the European leaders in terms of the popularity of this funding form. It is used by almost 40% of surveyed SMEs compared to approx. 20% in the EU[38].

**The availability of funding is not a significant barrier to the development of Polish companies.** Banks pursue a prudent corporate lending policy, however, there are no signs of excessive credit supply limitation. Only 6% of the surveyed SMEs indicate access to funding as the most important problem in their activity, which corresponds to the average level for EU countries.

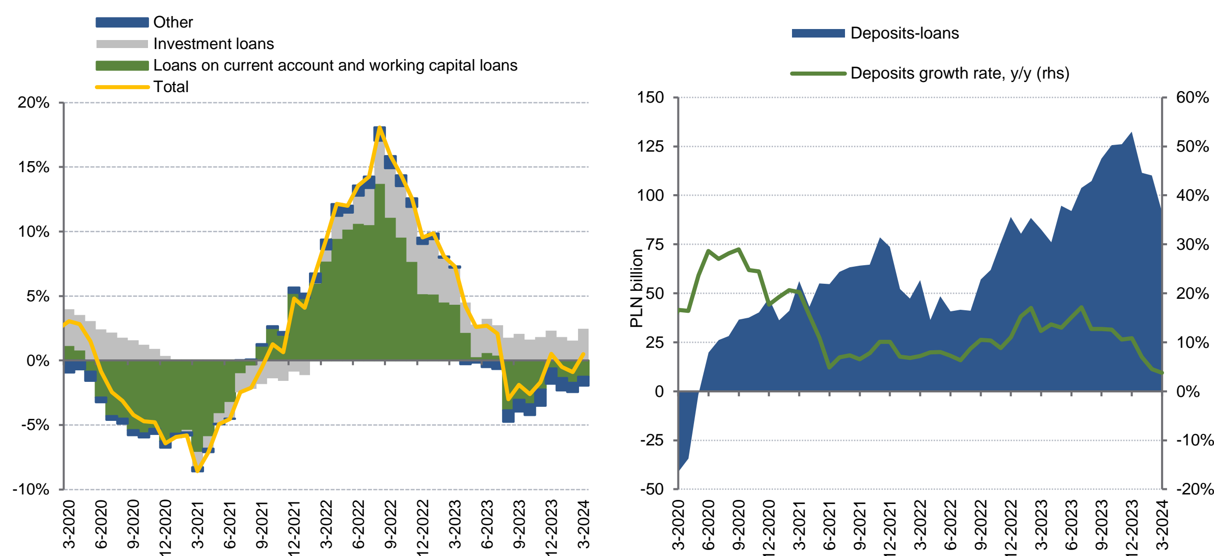
**In the coming quarters, an increase in lending in the segment of non-financial enterprises may be expected, among others, as a consequence of the projected increase in capital expenditure associated with the energy transition and releasing the access to EU funds.** Enterprises' investment activity should increase due to unfreezing of funds from the EU Resilience and Recovery Plan, with a major effect expected in 2025-2026. However, investment projects will require pre-financing or co-financing, at least partially. An enhanced demand for long-term corporate loans can therefore be expected as early as the second half of 2024, unless the demand for an additional source of investment funding is satisfied using funds held in companies bank accounts[39]. Corporate deposits continue to grow (although at a rate slower than in the first half of last year) and their surplus over loans has been maintained since the pandemic period (see Figure 2.9). On the other hand, the projected growth in domestic demand may

[36] „Szybki Monitoring NBP. Analiza sytuacji sektora przedsiębiorstw" ["NBP Quick Monitoring Survey. Economic Climate in the enterprise sector"], January 2024, available at www.nbp.pl.
[37] More information on the programme is available at https://www.bgk.pl/male-i-srednie-przedsiebiorstwa/zabezpieczenie-finansowania/gwarancja-de-minimis/strefa-przedsiebiorcy/.
[38] The data on funding sources of Polish enterprises compared to the ways of enterprise financing in the EU, referred to in this box, come from: "Survey on the access to finance of enterprises (SAFE). Analytical Report 2023", European Commission, December 2023, available at: https://single-market-economy.ec.europa.eu/access-finance/data-and-surveys-safe_en.
[39] Surveys conducted by NBP among Polish enterprises show that more than 70% of their capital expenditure has been financed from their own resources.

foster the development of enterprises' activity, which together with gradual depletion of inventories should increase corporate demand for loans on current account and working capital loans. In the SMEs loan segment, the *de minimis* guarantee programme will continue to support lending.

**Figure 2.8.** Growth rate of corporate loans and contribution of its main components, y/y

**Figure 2.9.** Corporate deposits




Note: The figure presents transactional. The *Investment Loans* category includes loans for investments and real estate purchases. The *Other* category includes, among others, car loans, loans for security purchases and other receivables.

*Source: NBP*.

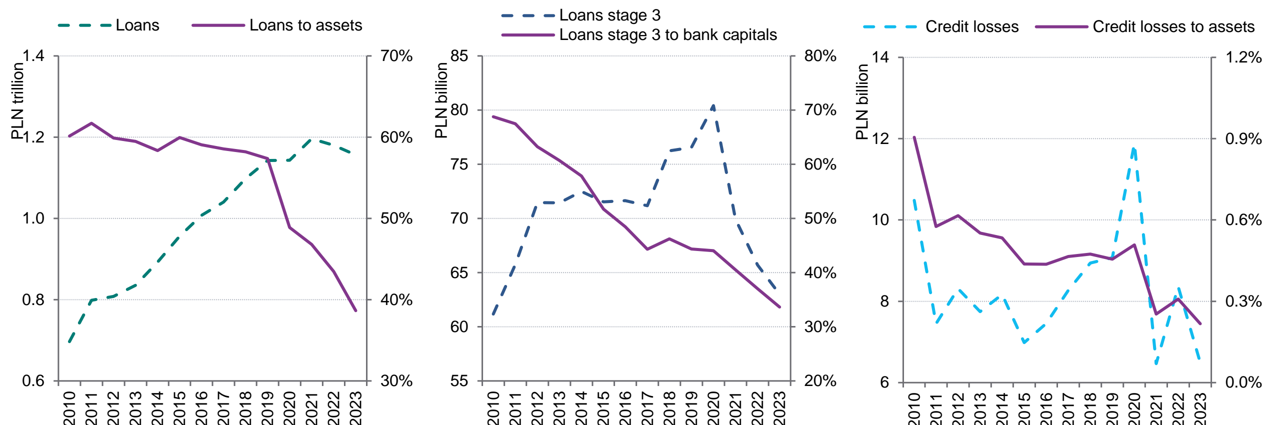
*Source: NBP.*

**The anticipated favourable capital and liquidity position of the banking sector should foster further growth in lending to the non-financial sector, although legal and regulatory factors (for example related to the shape of consumer protection programmes, such as loan repayment holidays or FWK), as well as the related uncertainty, may affect banks' ability and propensity to lend.**

## 2.2. Credit risk

**The exposure of the banking sector to credit risk has been systematically decreasing over the past few years. It was the result of a decline in both the size of the loan portfolio and an improvement in indicators illustrating its quality. Following the outbreak of the COVID-19 pandemic, the growth rate of lending to the non-financial sector decreased markedly which, accompanied by the rapidly increasing banks' balance sheets, translated into a decline in the share of loans in the banking sector assets (see Figure 2.10, left-hand panel) and in relation to GDP (see Figure 4.1).** Since 2021, a rapid decline in impaired loans has also been recorded, among others, due to improvements in the quality of service and the general standing of borrowers. After a temporary increase in the years 2017-2020, credit losses also saw a clear decline in the subsequent years (see Figure 2.10, right-hand panel). At the same time, the capacity to absorb credit losses has increased significantly due to the continued growth of the banking sector's capital base (see Figure 2.10, middle panel).

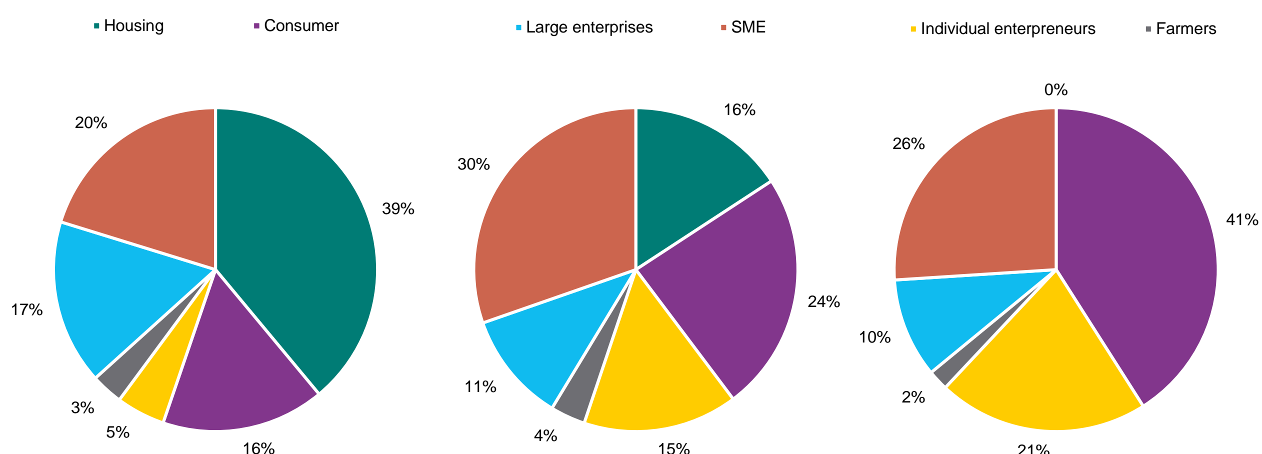
**Figure 2.10.** Loan portfolio for non-financial sector compared to banking sector assets (left-hand panel), impaired loans compared to bank capitals (middle panel) and credit losses compared to bank assets (right-hand panel)




*Source: NBP.*

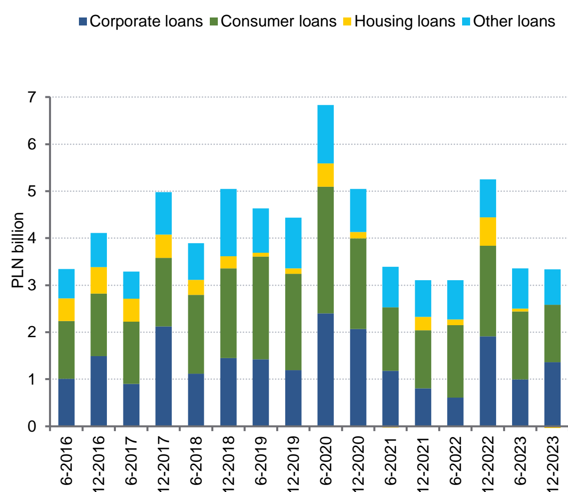
**The level of credit risk varies between individual loan portfolios.** Consumer loans and loans to SMEs and individual entrepreneurs generate the highest credit losses, despite a relatively lower share of loans to the non-financial sector in the portfolio (see Figure 2.11). It results from the higher credit risk profile of these borrowers, nevertheless, credit losses are offset by the high margins earned on these loans. Housing loans, as a category with the highest share in the portfolio of loans to non-financial sector, contribute to the balance of impaired loans to a limited extent. In 2023, these loans generated very low credit losses.

**Figure 2.11.** Structure of the loan portfolio (left-hand panel), impaired loans (middle panel) and credit losses (right-hand panel) at the end of 2023.




*Source: NBP.*

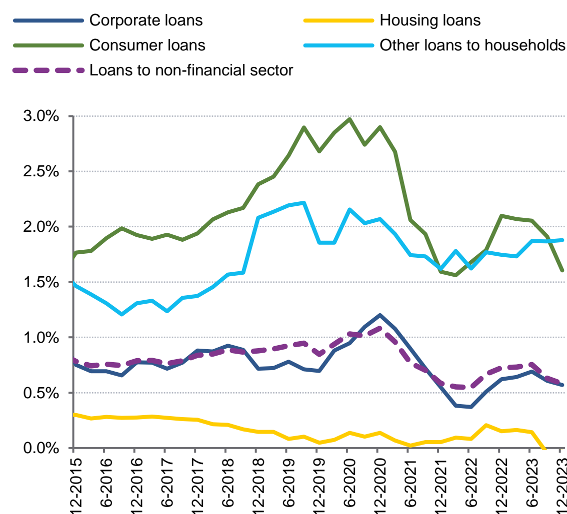
**Figure 2.12.** Loan losses in loans to non-financial sector




Notes: data on credit losses in housing loans excluding the impact of the costs of provisions for legal risks of FX loans recognised as credit losses by several banks; the "Other" category means loans to households other than housing and consumer loans and loans to non-commercial institutions operating for households.

*Source: NBP.*

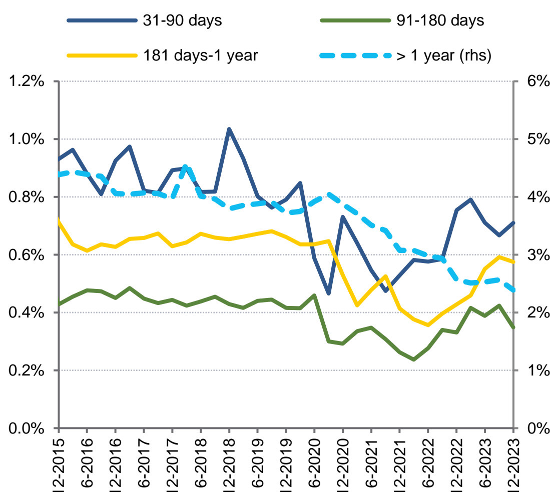
**Figure 2.13.** Loan losses to net loans ratio




Notes: annualised data; the category *Other for HH* designates loans to households other than housing and consumer loans - mainly loans to entrepreneurs and individual farmers.

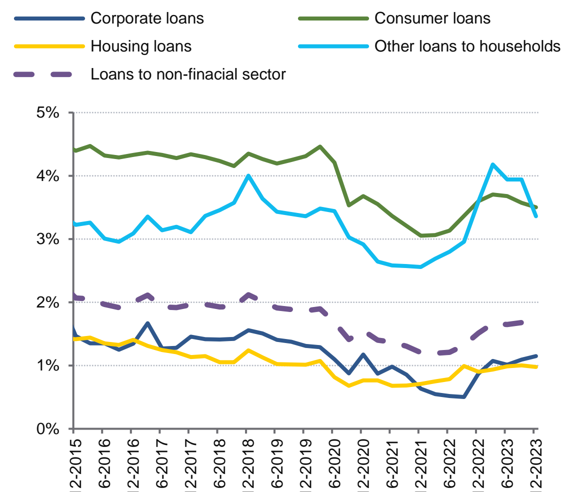
*Source: NBP.*

**Figure 2.14.** Shares of loans in arrears to the non-financial sector in individual arrears classes



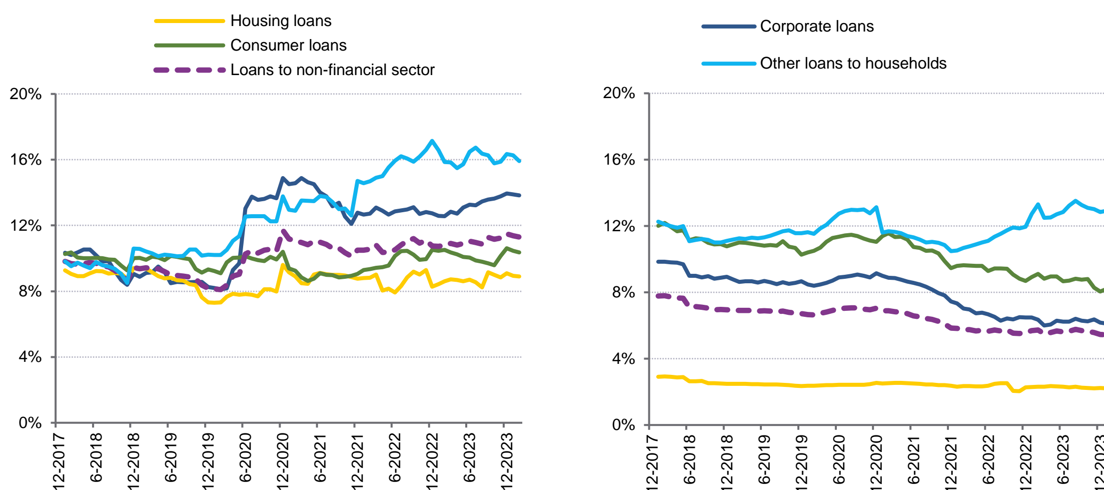

*Source: NBP.*

**Figure 2.15.** Shares of short and medium-term arrears (31 days to 1 year) for individual types of loans to the non-financial sector




*Source: NBP.*

**Figure 2.16.** Share of Stage 2 loans (left-hand panel) and impaired (Stage 3) loans (right-hand panel) in individual types of loans to the non-financial sector



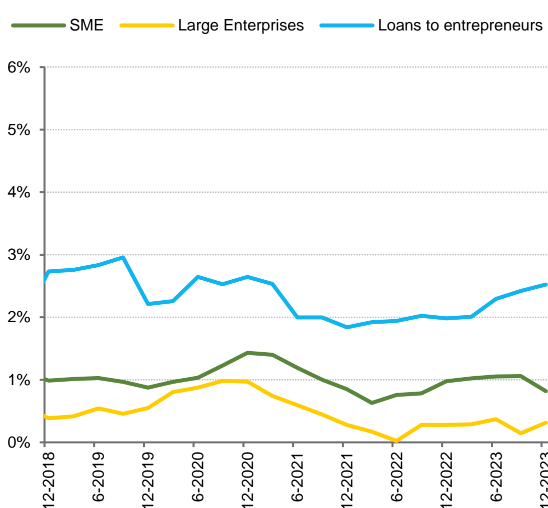

Notes: Stage 2 loan ratio - data for banks applying IAS/IFRS. Share of Stage 3 loans (impaired loans) - aggregate data for the banking sector.

*Source: NBP.*

### *Loans to business entities*

**In the second half of 2023, the majority of credit risk indicators stabilised, except loans to individual entrepreneurs.** Nominal value of credit losses increased slightly, however, in relation to net loans, the losses were noticeably lower than in the second half of 2022 and prior to the pandemic (see Figure 2.12 and Figure 2.13). Short and medium-term arrears have not changed and remained lower than prior to the pandemic (see Figure 2.14 and Figure 2.15). The impaired loan (Stage 3) ratio remained stable.

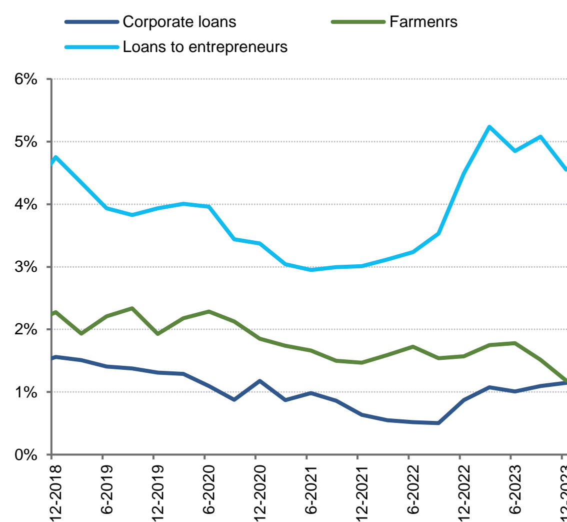
**Figure 2.17.** Ratio of loan losses to net loans in corporate loans




Notes: Annualised data.

*Source: NBP.*

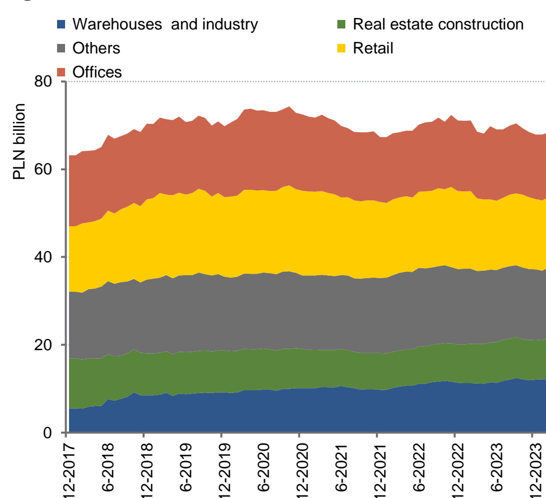
**Figure 2.18.** Percentage of corporate loans in arrears of up to 1 year




*Source: NBP.*

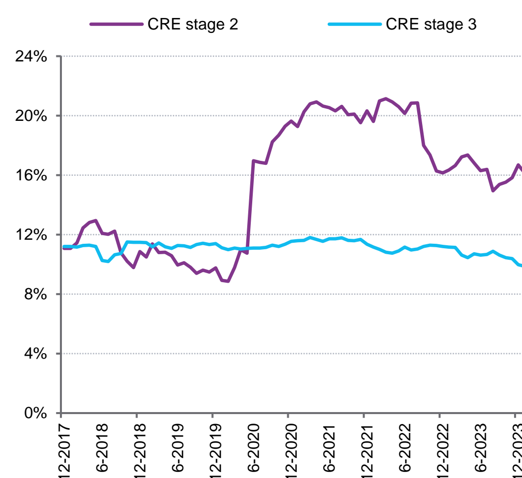
**The ratio of Stage 2 loans has slightly increased (see Figure 2.16).** This was associated with the reclassification of relatively high exposures to entities representing certain industries in the manufacturing section, including the production of fertilisers, plastics and chemical products. On the contrary, risk assessment improved significantly in construction and real estate services as well as in industries particularly affected by the pandemic, i.e. tourism, hotels and restaurants.

**Figure 2.19** Loans for commercial real estate




*Source: NBP.*

**Figure 2.20** CRE loan ratio in Stages 2 and 3




*Source: NBP.*

**The level of credit losses strongly depends on the size of enterprises.** The smallest entities, including primarily individual entrepreneurs, remain particularly sensitive to the economic downturn. This segment shows the highest share of loans with arrears up to 1 year and a growing ratio of loan losses to net loans (see Figure 2.17 and Figure 2.18).

**Banks' engagement in lending to commercial real estate (CRE) remained at a constant and relatively low level while credit risk indicators tended downwards (see Figure 2.19 and** Figure 2.20**).** The share of loans with a significant increase in credit risk (Stage 2) has remained at elevated levels since the pandemic, although significantly lower than in 2020-2022 and did not differ from the average for businesses.

**The expected acceleration in economic and manufacturing growth, along with the improved assessments of economic standing and indicators of the general business climate, indicate a likely stabilisation of credit risk at the current, relatively low level**[40]. Further decline in the profitability of enterprises may be a risk factor, among others, due to rising employment costs[41].

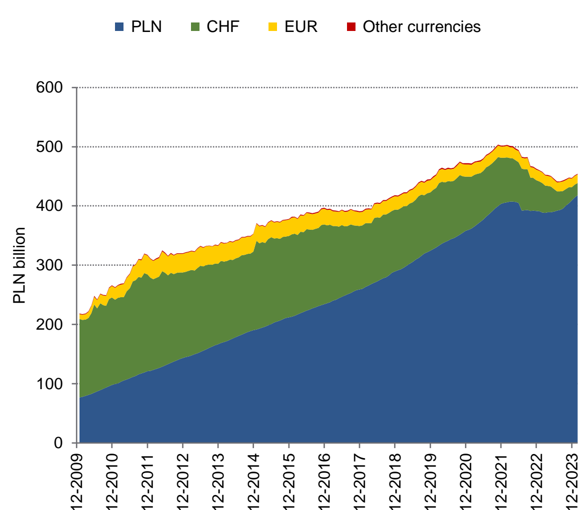
[40] Business tendency in manufacturing, construction, trade and services 2000-2024 (September 2024), Statistics Poland https://stat.gov.pl/obszary-tematyczne/koniunktura/koniunktura/

[41] See „Szybki Monitoring NBP. Analiza sytuacji sektora przedsiębiorstw" [NBP Quick Monitoring Survey. Economic climate in the enterprise sector], issues: January and earlier, NBP, available at: www.nbp.pl.

### *Loans to households*

**Amid the good labour market situation and the operation of aid programmes, the majority of the housing loan risk indicators in the second half of 2023 remained low.** The following factors had a particularly favourable impact on those indicators: (i) very low unemployment level, (ii) high wage growth, and (iii) loan repayment holidays. In the second half of 2023, credit losses recorded their all-time lows, turning negative in 2023 H2 (see Figure 2.12 and Figure 2.13). Although they were slightly underestimated by the accounting treatment of provisions for the costs of legal risk of CHF loans[42], losses would also be low if this factor was excluded. Arrears in housing loans have also stabilised at relatively low levels (see Figure 2.15). The impaired loan ratio decreased slightly in the second half of 2023 and in early 2024, while the Stage 2 loan ratio stabilised at a level close to the long-term average (see Figure 2.16).

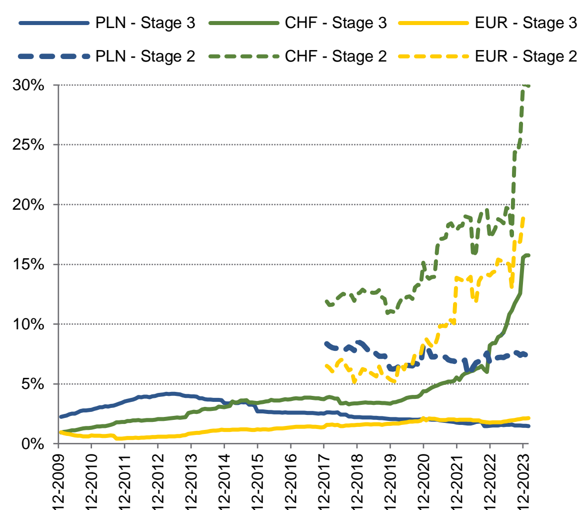
**Figure 2.21.** Portfolio of housing loans by loan currency




Notes: Gross carrying amount.

*Source: NBP.*

**Figure 2.22.** Impaired loan ratios (Stage 3) and shares of Stage 2 loans by loan currency




Notes: Share of Stage 2 loans – data for banks applying IAS/IFRS. Share of Stage 3 loans (impaired loan ratio) – aggregate data for the banking sector.

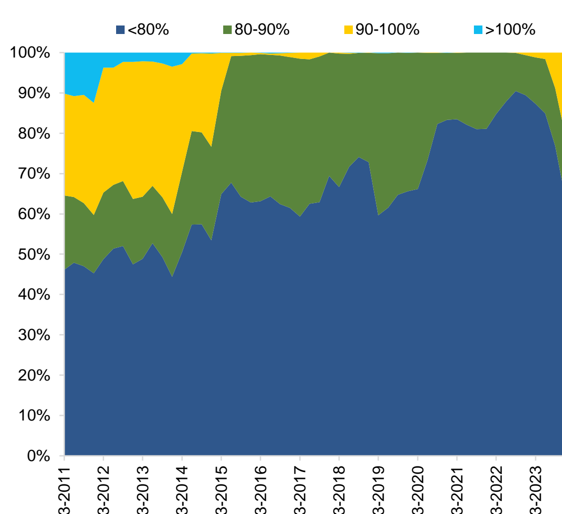
*Source: NBP.*

**The risk ratios of FX housing loans were significantly higher than in the case of PLN loans, however, due to the rapid decrease in the value of these loans, credit losses or values of loans in arrears were relatively low.** The decline in the portfolio (see Figure 2.21) mainly resulted from the practice of writing off costs of legal risk from the gross carrying value of these loans. To a lesser extent, it was also affected by factors such as: (i) instalment repayments, (ii) loan currency conversion in connection with out-of-court settlements and (iii) removal from the balance sheet following legally valid annulment of loan

[42] In the case of loans on the balance sheet (still during repayment), almost all banks write off the costs of legal risk from the so-called gross carrying amount, consequently reducing the basis for the credit risk provision.

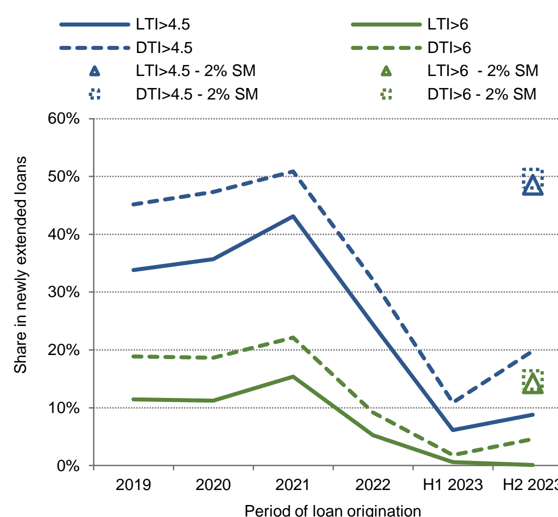
agreements. The share of CHF loans in housing loans at the end of February 2024, measured by the gross carrying amount, fell to 4.5% while the share of loans in all foreign currencies - to 8.0%. The quality of FX housing loans has deteriorated significantly over the last few years (see Figure 2.22), however, it mainly resulted from the materialisation of legal risk, including the classification of loans to Stage 2 and 3 by some banks only on the basis of premises related to this risk. In addition to the materialisation of credit risk, the natural ageing process of this portfolio, due to lack of inflows of new loans, also had an impact towards increasing credit risk indicators[43].

**Figure 2.23.** Distribution of LTV values of newly extended housing loans




*Source: NBP estimates based on UKNF data.*

**Figure 2.24.** Shares of newly extended housing loans with high LTI and DTI ratios




Note: Data for the second half of 2023 separately for the "2% Safe Mortgage" (2% SM – single points) and the aggregate without 2% SM (lines).

*Source: NBP estimates based on UKNF data.*

**Housing loans granted in the second half of 2022 and in 2023 on market terms (other than the "2% Safe Mortgage") were exposed to a lower risk upon origination than loans extended in the previous few years.** It is demonstrated by a low share of high-value loans in relation to borrowers' income (exceeding the equivalent of 4.5 and 6 years' income – see Figure 2.24).

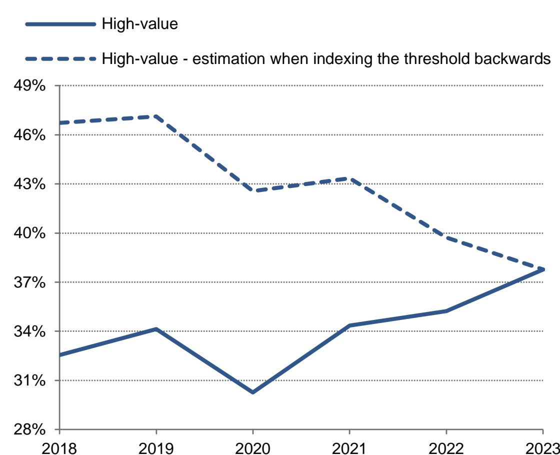
**On the contrary, relatively high LTI, DTI and LTV ratios applied to loans granted under the "2% Safe Mortgage" programme, accounting for approx. 50% of loans granted in the second half of 2023. However, the risk of these loans is limited due to state aiding borrowers in repayment.** In the first 10-year repayment period, part of instalments[44] is subsidised by BGK. On the other hand, at the end of the 10-year period, due to the equal principal amount instalments (decreasing total instalment) used in

[43] For a broader discussion of the impact of legal risk and other factors on credit risk indicators of FX housing loans, see "Financial Stability Report. December 2023", NBP, pp. 26-28.
[44] Over 40% for the first instalment of a typical 25-year loan from the end of 2023.

these loans, a substantial part of the loan principal amount will already be repaid[45] and *ceteris paribus* – instalments and the current burden on household budgets will not increase.[46] On the other hand, the missing downpayment (up to the amount of 20% of expenditure on real estate purchase) of high LTV loans (see Figure 2.23) is guaranteed by BGK.

**Credit risk indicators in consumer loans remained relatively low.** In addition to the favourable labour market situation, the contributing factors included, in particular, the tightening of banks' lending policies in this market segment over the last 2 years. Following an earlier rise from the all-time lows at the end of 2021 and the first half of 2022, credit losses and the share of loans with short and medium-term arrears dropped in 2023 (see Figure 2.12, Figure 2.13 and Figure 2.15). A slight decrease in the impaired loan ratio was also recorded. On the other hand, the ratio of Stage 2 loans slightly increased in the fourth quarter of 2023 (see Figure 2.16).

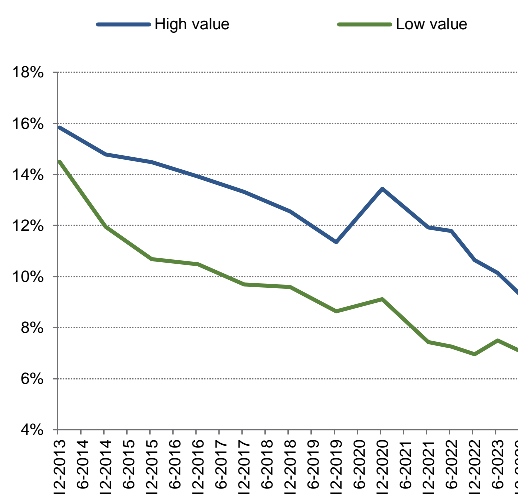
**Figure 2.25.** Share of high-value loans in newly extended consumer loans in 2018-2023




Notes: high-value consumer loans – loans with the value above 50 thousand zlotys upon origination. A dashed line for loans extended before 2023, the share assuming indexation of the 50 thousand zloty threshold adjusted (downward) by the wage growth index.

*Source: NBP estimates based on Statistics Poland and UKNF data.*

**Figure 2.26.** Impaired loan ratios for high-value consumer loans and other loans



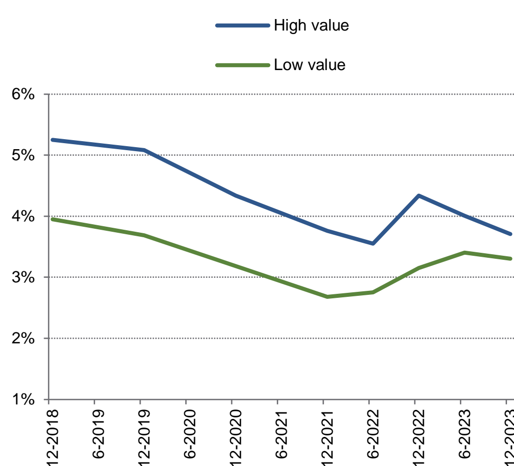

*Source: NBP estimates based on Statistics Poland and UKNF data.*

**The share of high-value loans in new consumer loans has seen a downward trend for several years** – taking into account the indexation of the PLN 50 thousand threshold by wage growth (see Figure 2.25). Trends of changes in the quality of high value loans did not significantly differ from changes in

[45] For example, in a loan with a 25-year repayment term, 40% of the principal amount will be repaid after 10 years.
[46] Assuming that the interest rate remains unchanged against the current level, the instalment at the end of the 10-year period will be similar (with repayments on an equal aggregate instalment basis) to the instalment paid by the borrower when taking out the loan (for a standard 25-year loan, taken out at the end of 2023).

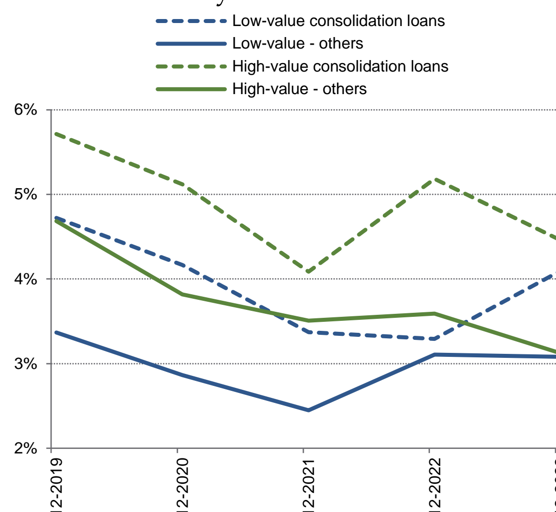
the consumer loan aggregate as a whole. The ratio of impaired loans and, after an earlier increase, the share of loans with short and medium-term arrears dropped (see Figure 2.26 and Figure 2.27). A similar trend occurred in the case of high-value consolidation loans (see Figure 2.28). Consolidation loans account for almost a half (48% at the end of 2023) of high-value loans.

**Figure 2.27.** Share of consumer loans with short and medium-term arrears (31 days to 1 year) of high-value loans and other loans




*Source: NBP estimates based on UKNF data.*

**Figure 2.28.** Share of consumer loans with short and medium-term arrears of high-value loans and other loans by credit consolidation criterion




*Source: NBP estimates based on UKNF data.*

**Household credit risk ratios should stabilise at the current low levels.** This will be supported by the expected improvement in business conditions, good situation on the labour market (high nominal and real wage growth, only a slight forecast unemployment growth), aid programmes for housing loan borrowers and the banks' conservative lending policy in earlier periods.

**Extension of loan repayment holidays will have a positive impact on the housing loan risk ratios, however, their costs for banks outweigh the benefits of reducing credit risk provisions.**[47] In case of failure to extend the programme, loan servicing problems could affect mainly that group of 2020-2021 borrowers who borrowed at the limit of their creditworthiness and whose income growth since then has been significantly lower than inflation.[48] However, the impact on credit losses would still be limited borrowers can apply for FWK support.

## 2.3. Banking sector exposure to Treasury bonds

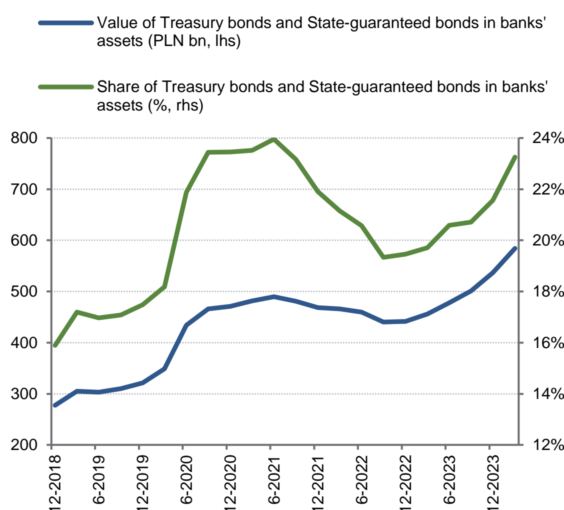
**In 2023, the value of the Treasury bond portfolio in banks' assets increased significantly. As at the end of the first quarter of 2024, the book value of Treasury bonds and State Treasury-guaranteed bonds amounted to 584 billion zlotys (see Figure 2.29).** The share of this portfolio in assets increased

[47] See "Financial Stability Report. June 2023", p. 30.

by 3.5 percentage points throughout the year to 23.3% and approached the record high observed in mid-2021.

**The total growth of the portfolio value was partially due to an increase in the market portfolio valuation** (primarily measured by other comprehensive income). It resulted from a decline in Treasury bond yields in the second half of 2023 (see Figure 1.6). The yield curve shifted downwards along its entire length, however, the largest decline in yields, by nearly 80 bp in the 2-year sector, took place at the short end of the curve. It was beneficial for banks, as the duration of Treasury securities they hold has now approached 2 and has been decreasing since mid-2021 (see Figure 2.30). The market increase in bond valuation has translated into an increase in book value and, consequently, in the banking sector's exposure to these securities.

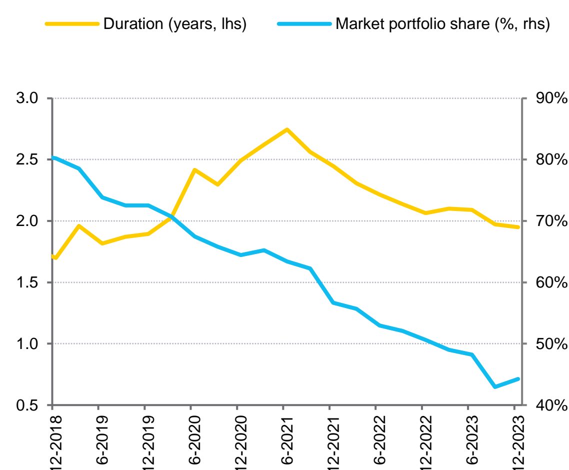
**Figure 2.29.** Share of Treasury bonds and State Treasury-guaranteed bonds in banking sector's assets




Note: Banking sector excluding BGK.

*Source: NBP.*

**Figure 2.30.** Duration and the share of Treasury bonds and Treasury-guaranteed bonds portfolio marked to market




Note: Banking sector excluding BGK.

*Source: NBP.*

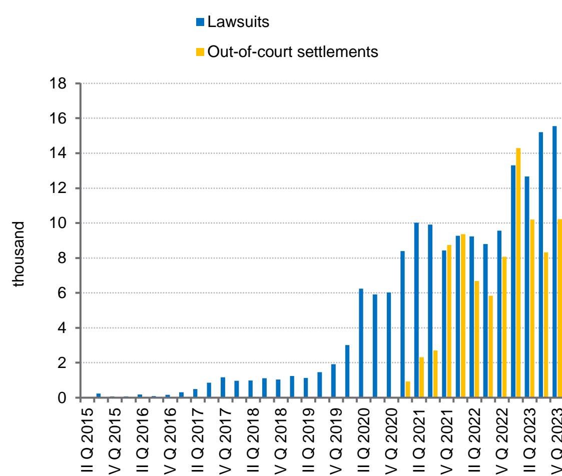
**However, the continued appreciation of the portfolio not marked to market was more significant to the scale of exposure (measured by amortised purchase cost).** This part of the banks' portfolio is, as a rule, insensitive to current market changes, therefore the increase in its value in the second half of 2023 by 48 billion zlotys implied a direct growth of banks' exposure to Treasury securities. This portfolio now accounts for more than a half of the banking sector's total Treasury securities portfolio, although as recently as 2018 it accounted for approx. 20% (see Figure 2.30). The significant share of the portfolio not marked to market reduces the banks' vulnerability to market changes by protecting their current earnings and capital. At the same time, the risk associated with the necessity of its sale at a market price remains limited (see Chapter 4.1.4).

## 2.4. Legal risk associated with the portfolio of FX housing loans

**Legal risk associated with the FX housing loans portfolio remains the most important risk to financial stability.** Widespread challenging of the provisions in loan agreements by borrowers based on consumer protection grounds leads to uncertainty and elevated provisioning adversely affecting the financial standing of banks.

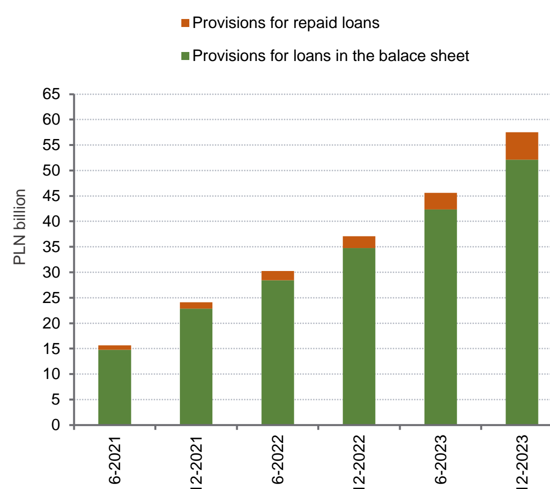
**In 2023, the growth rate of new lawsuits relating to FX housing loans increased.** The second half of the year saw several new CJEU rulings that have not fundamentally changed the existing interpretation of the EU consumer protection law, but clarified certain aspects of it that will adversely affect the legal position of banks and may additionally encourage borrowers to challenge the contractual provisions in courts. At present, approx. 150 thousand cases involving FX housing loans are pending in courts. As a result of the inflow of new lawsuits, the length of proceedings tends to increase. The clarification by the CJEU or the Supreme Court of the Republic of Poland of the interpretative questions raised by the common courts and assigning the newly appointed Representative of the Minister of Justice for the Protection of Consumer Rights[49] with a task of, among others, streamlining of legal proceedings, may result in reducing the time needed for borrowers to obtain a final verdict and accelerate booking of new provisions. At the end of 2023, the majority of cases were still in the first-instance stage and only a small part had been concluded via a final judgement (approx. 17 thousand cases in total, including approx. 10 thousand in 2023) or an amicable out-of-court settlement with the bank.

**Figure 2.31.** Quarterly number of new lawsuits concerning FX housing loans and out-of-court settlements




*Source: NBP estimates based on UKNF data.*

**Figure 2.32.** Provisions for FX housing loans (cumulative at month-end)



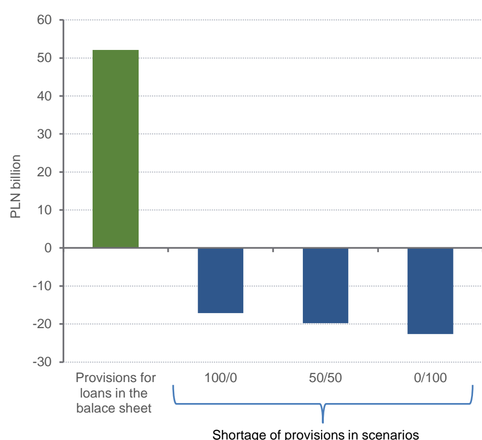

*Source: NBP estimates based on UKNF data.*

[49] Regulation of the Minister of Justice of 12 January 2024 on the appointment of the Representative of the Minister of Justice for the Protection of Consumer Rights (Official Journal of the Ministry of Justice of 2024, item 4).

**Compared to an elongated litigation, reaching of an out-of-court settlement between a bank and a borrower significantly reduces the time needed to resolve a problem.** By the end of 2023, banks signed approx. 89 thousand amicable out-of-court settlements. Jurisprudence that is increasingly favourable towards borrowers makes banks offer progressively better settlement terms to attract customers' interest in amicable solutions. However, after March 2023, the number of out-of-court settlements signed fell in consecutive quarters (see Figure 2.31).

**Banks continue to book provisions for legal risk, which constitutes a significant item in their profit and loss account.** In accordance with the IFRS rules, banks create provisions to cover expected costs. In the period of three years, until December 2023, the total amount of provisions booked amounted to approx. PLN 75 bn, of which several billion had already been used to cover the costs of final court rulings and out-of-court settlements concluded with borrowers (see Figure 2.32). Unfavourable towards banks CJEU's verdicts, the tightening of the jurisprudence of the common courts and the increasing propensity of customers to pursue litigation, require banks to update their estimates of potential costs and create additional provisions. In this context, it can be highlighted that approx. 110 thousand borrowers, who had been granted a loan in Swiss francs, have not initiated any action to reduce their debt either via litigation or out-of-court settlement.

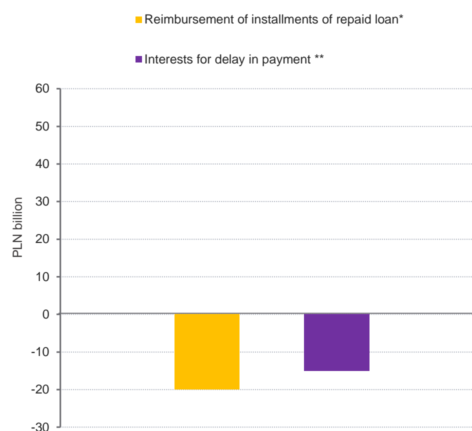
**Figure 2.33.** Provisions for legal risk and the estimated shortfall for scenarios of the proportion of out-of-court settlements vs litigation




Notes: The simulation was performed at the Swiss franc exchange rate as of 29 December 2023 (4.6828).

*Source: NBP estimates based on UKNF data and own assumptions.*

**Figure 2.34.** Hypothetical costs due to repaid loans and additional customer claims




* The estimate includes all loans repaid. At the end of 2023, the provisions for repaid loans amounted to over PLN 5 bn (approx. 25% of the estimated amount).

** Hypothetical interest costs for delay in payment calculated on the basis of the total number of actual lawsuits filed with the courts (gross amount, i.e. does not include any interest charged to banks),

*Source: NBP estimates based on UKNF data and own assumptions.*

**It has to be noted that banks have already incurred significant costs by booking the relevant provisions. However, it cannot yet be conclusively stated that this process is likely to decelerate substantially in the near future.** The extent of additional provisions necessary to cover the risk of loans in banks' balance sheets may range from a dozen to more than PLN 20 bn (see Figure 2.33). This amount is significantly lower compared to the level of provisions made so far. However, it does not include additional elements that could potentially raise banks' costs in the event of annulment of agreements (see Figure 2.34).

**The value of further needed provisions will depend on the rulings concerning the settlement conditions between borrowers and banks.** CJEU verdicts issued in 2023 and early 2024 explicitly excluded any possibility for banks to claim remuneration or compensation for the use of loan principal and strengthened the procedural position of consumers claiming interest for delay in payment (although a uniform jurisprudence concerning the starting date from when interest should be accrued has not been established yet).[50] Additional provisions may be required for costs on account of lawsuits filed by borrowers who had already repaid a loan.

## 2.5. Liquidity risk and funding

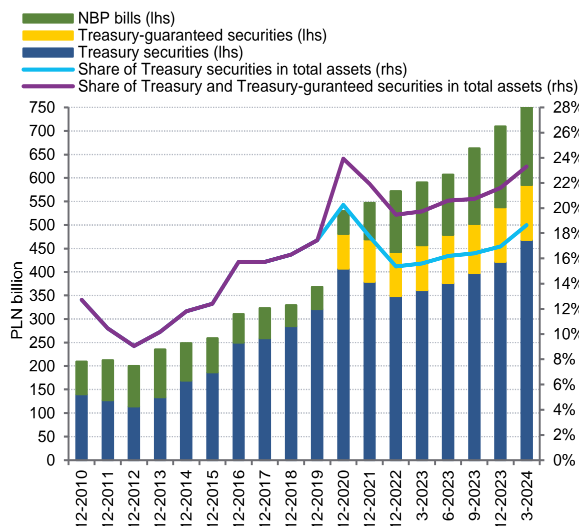
**The liquidity position of the banking sector was good, as is evidenced, among others, by the high value of the liquid asset portfolio in relation to liabilities.** In the second half of 2023, most banks increased the value of their portfolios of liquid assets, mainly Treasury bonds (see Figure 2.35). Consequently, at the end of March 2024, almost a third of the banking sector's balance sheet (excluding BGK) consisted of Treasury securities issued and guaranteed by the Treasury and NBP bills. Although the liquidity position of individual banks is strongly diversified, the standing of banks with the relatively highest liquidity risk profile has been improving systematically (see Figure 2.36).

**The short-term liquidity ratios (LCR), which all banks in Poland are required to comply, significantly exceeded the supervisory minima (see Figure 2.37).** At the end of March 2024, the average value of the LCR for commercial banks reached 232%, one of the highest levels recorded since the LCR has been fully implemented. An increase in banks' exposure to Treasury securities and in their market value[51] because of the gradual decline in the yield curve was a contributing factor. The estimated value of the surplus of liquid assets, understood as the excess of liquid assets over net liquidity outflows in compliance with the LCR of 100%, increased compared to the *Report's* previous edition (see Figure 2.38).

[50] Costs of interest for customers may be offset against interest for delay in payment for banks, however, given the process of litigation to date, the applicability of this mechanism can be limited.

[51] For the purposes of calculating the LCR, debt securities are reported at market value regardless of which portfolio they are classified to by a bank.

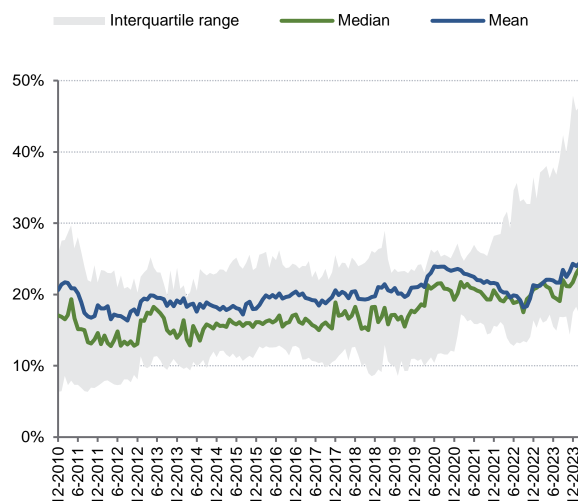
**Figure 2.35.** NBP bills and Treasury/Treasury-guaranteed securities in total assets of banking sector




Note: Excluding BGK.

*Source: NBP.*

**Figure 2.36.** Share of domestic Treasury securities and NBP bills in total assets of domestic commercial banks




Note: Excluding BGK.

*Source: NBP.*

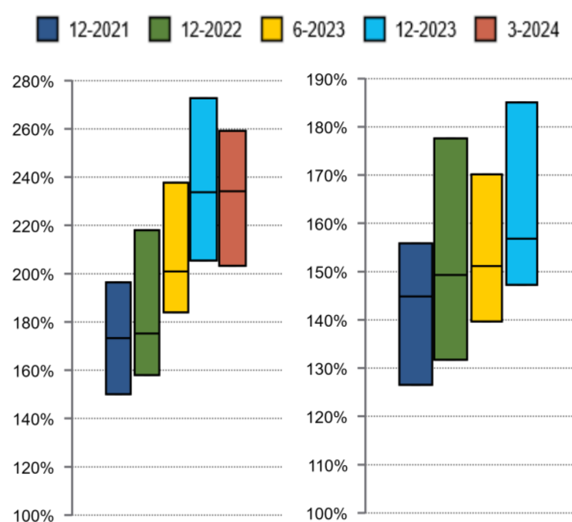
**The results of the LCR-based liquidity stress tests[52] based on December 2023 data have indicated that domestic commercial banks demonstrate high resilience**. Most banks have appropriate liquid asset buffers to cover increased outflows (above assumed in the LCR) and to maintain the LCR above the required supervisory minima. The prevailing part of the sector would not face any problems in covering its liabilities in the event of repricing of its portfolio of Treasury securities and loss of customer confidence, which would mainly be reflected in increased deposit outflows.[53] The total liquid assets shortfall[54] would amount to approx. PLN 0.8 bn. On the other hand, in the case of a potential liquidity shock, banks – apart from sale of their liquid assets – could also raise a refinancing loan from NBP.

**Maturity mismatch between assets and liabilities in the Polish banking sector remains a key source of funding risk (see Figure 2.39)**, however, its potential to develop into a systemic risk is limited.[55] The funding structure of Polish banks is mainly based on stable household deposits, characterised by a high degree of fragmentation, mostly covered by the BFG guarantee. Moreover, there is the persistent excess

[52] The level of the LCR-based liquidity stress tests adopted in the simulation was equal for all banks. In fact, the probability and magnitude of a potential shock for individual banks may be irregular and driven by many factors, including those which are not directly associated with the bank's liquidity profile.
[53] Key assumptions: a 15% revaluation of Treasury securities, a 2.5-fold increase in the volume of deposit outflows classified in the LCR as stable, volatile and subject to higher outflow rates, inclusion of deposit outflows typically excluded from the calculation, and a 2-fold increase in the use of off-balance sheet for non-financial customers.
[54] The shortfall in liquid assets is understood as the amount missing to guarantee the LCR after a shock of at least 100%.
[55] This issue is discussed in more detail in Box 2.2: "Financial Stability Report. December 2023", NBP, Warsaw, p.43.

of deposits over loans to the non-financial sector for several years (in March 2024, it was approximately 34%). The systemic risk of maturity mismatch is also mitigated by the relatively low level of household savings, which, coupled with their liquidity preference, may limit interest in some alternative categories of assets.

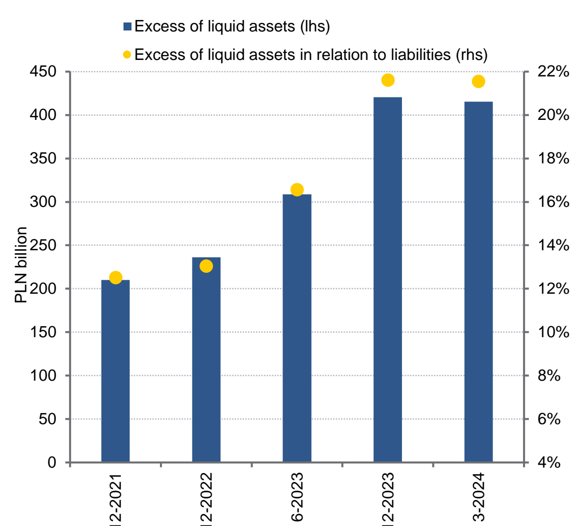
**Figure 2.37.** The LCR ratios of domestic commercial banks (left-hand panel) and NSFR (right-hand panel)




Notes: The horizontal lines indicate individual quartiles while the height of the box indicates the interquartile range. Banks with high LCRs were excluded from the sample: for commercial banks – over 500%. Excluding BGK and associating banks. The LCR of cooperative banks operating independently in March 2024 amounted to 462% and for institutional protection schemes – 387% and 379%.

*Source: NBP.*

**Figure 2.38.** Excess of liquid assets at domestic commercial banks




Notes: Excess/shortage of liquid assets understood as excess of liquid assets over net outflows under the condition that LCR=100%. Excluding BGK and associating banks.

*Source: NBP.*

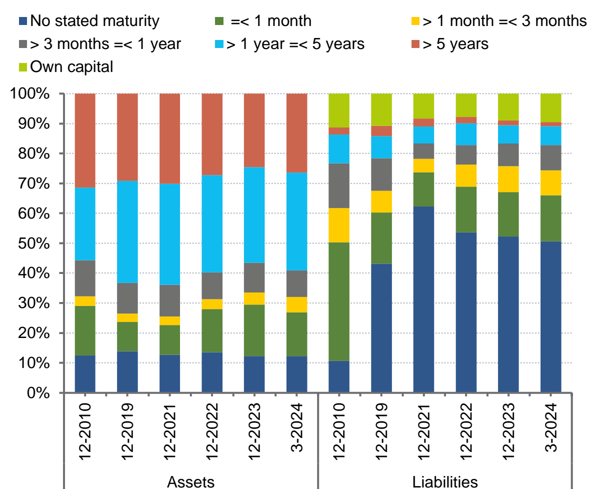
**Bank deposits remain as the main category of household savings, growing systematically and representing the prevailing item in the structure of their domestic financial assets (see Figure 2.40).** Since 2020, a noticeable rise has been recorded in households' interest in Treasury savings bonds, and from the beginning of 2023 investment funds, but the share of these instruments in financial assets of households is still insignificant (5.8% and 8.3%, respectively).

**It can be expected that household deposits will remain the main source of funding for the banking sector in Poland in the consecutive years.** The risk aversion and liquidity preference of Polish households is relatively sustainable. Until now, the growth of household wealth has moderately translated into an increase in the share of equity instruments in the structure of their financial assets. The structure of household savings in Poland also shows a preference for immediate availability of savings funds. Both conditions are fostered by relatively low amounts of savings.

**All commercial banks met the long-term liquidity standard (NSFR), which reached the average value of approx. 163% as at the end of December 2023 (see Figure 2.37).** Meeting the standard was

facilitated by its structure, which assigns the so-called high stable funding weights to retail deposits, irrespective of the deposit maturity.

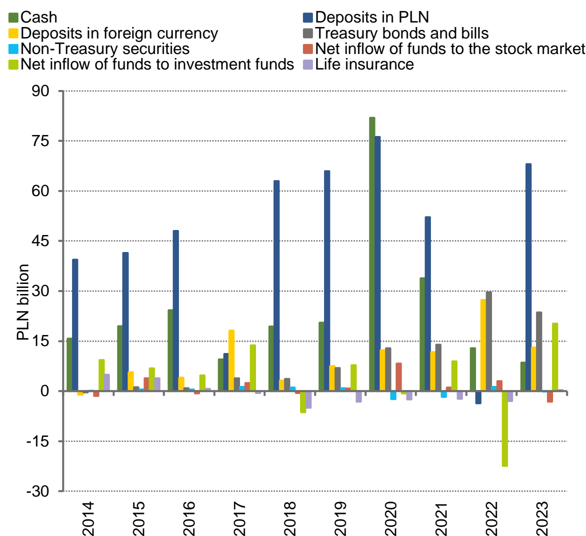
**Figure 2.39.** Term structure of assets and liabilities of the banking sector




Note: Excluding BGK. The item "No stated maturity" on the liabilities side recognises amounts that cannot be attributed to the specific maturity, mainly current accounts (ROR) and savings accounts and smaller items (e.g. income tax liabilities, provisions). Current deposits of the non-financial sector account for around 93%.

*Source: NBP.*

**Figure 2.40. The** change in the main categories of household financial assets (y/y)




*Source: NBP.*

**The favourable liquidity position of the banking sector indicates that from the perspective of systemic risk, no sufficient arguments exist to justify the need to introduce additional liquidity regulations in addition to those already existing and applied in the EU.** Although the potential introduction of a requirement to increase funding by debt instruments[56] could result in reducing the term mismatch between assets and liabilities, it could at the same time lead to unintended and undesirable consequences.[57] In particular, due to the insufficient demand from domestic players, it would be necessary to place a significant part of their issuance in foreign markets, which would generate additional FX and interest rate risks. Another effect could be, for example, the suboptimal financing structure of the

[56] In the first half of 2023, as part of the public debate in Poland proposals for regulatory changes were presented aimed at reducing the maturity mismatch between banks' assets and liabilities and increasing the share of debt instruments, in particular covered bonds, in the funding structure of the Polish banking sector: https://www.knf.gov.pl/aktualnosci?articleId=82207&p_id=18.
[57] This issue is discussed in more detail in Box 2.2: "Financial Stability Report, December 2023", NBP, Warsaw, p. 43.

economy through reduced lending in segments with high-risk weights[58] or in housing loans. Additional issues of debt instruments could drive up banks' funding costs and, consequently, contribute to a continued decline in interest rates on household deposits in the context of a high excess liquidity of the banking sector.

## 2.6. Earnings

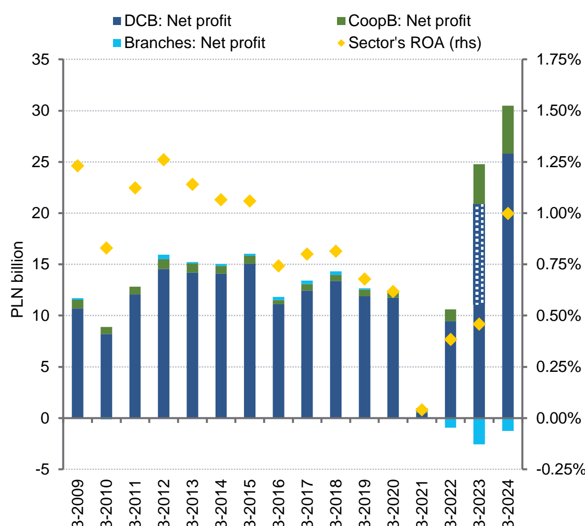
**Despite record high earnings in nominal terms, the banking sector's profitability has still not reached the levels recorded in 2011-2014.** In March 2024, the sector's net profit for the preceding 12 months was historically high (see Figure 2.41). However, it should be taken into account that the Polish banking sector continues to develop and its balance sheet total is increasing (see Figure 2.42). Relative to the level of assets, the sector's average earnings were significantly lower than in 2011-2014, although their major increase has been recorded recently. In relation to capital, the domestic sector's profits approached their record high after 2008.[59] It is worth pointing out that cooperative banks' profits were many times higher than on average before 2022 (accordingly, their share in the total earnings of the banking sector has increased significantly, see Figure 2.41), while the profitability of their assets exceeded historical highs (see Figure 2.49).

**The return on equity of the domestic banking sector remains lower compared to non-bank financial institutions as well as banking sectors of other countries in the region.** In 2023, ROE of domestic banks exceeded the level recorded by non-financial corporations for the first time since 2015 (see Figure 2.44). Non-bank financial institutions continued to be more profitable on average than banks, although the difference has decreased. ROE of the Polish banking sector has approached the median for banking sectors of EU countries, but the ratios still significantly diverge from values recorded among the new EU Member States (see Figure 2.43).

[58] The long-term funding ratio would be calculated as the ratio of the sum of: the excess of own funds over capital requirements with buffers, debt instruments, subordinated loans and items classified as MREL, senior non preferred or subordinated debt instruments not classified as MREL or own funds and covered bonds to retail housing loans. Banks faced with a problem of adequate demand for their debt instruments could attempt to increase their excess capital by reducing lending, for example, to enterprises.

[59] The faster growth of ROE compared to ROA in recent years results mainly from the fact that these ratios are calculated for partially diverse groups of banks – in particular, ROE excludes branches of credit institutions (not holding separated equity) that incurred aggregate losses related to the charges to provisions for legal risk of FX housing loans (see Figure 2.41).

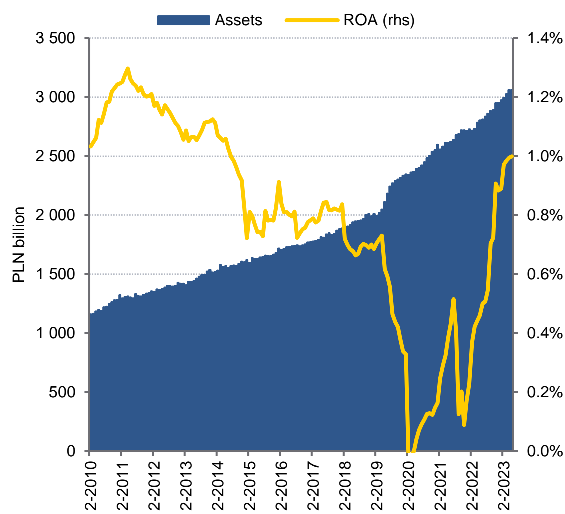
**Figure 2.41.** Net profit for the preceding 12M and ROA of the banking sector at the end of March 2024




Notes: DCB – domestic commercial banks, CoopB – cooperative banks, Branches – branches of credit institutions. The section of the bar with a pattern shows the estimate of additional profit for DCB in the second half of 2022 in the absence of statutory loan repayment holidays.

*Source: NBP.*

**Figure 2.42.** Assets and return on assets of the banking sector




Note: ROA – annualised data.

*Source: NBP.*

**The net interest margin (NIM is the primary source of banks' earnings and recently also the main driver of their profitability growth.** The share of interest income in the sector's net income from banking activity approached 80% (see Figure 2.45), and for cooperative banks it even reached 90%. The significance of net interest income for banks' profitability has increased in the period of higher interest rates. A slow decline in NIM associated with the NBP interest rate cuts in September and October 2023 and potential further changes expected by financial market participants (see Figure 1.5) could be expected in the coming quarters.[60] Moreover, costs of the new statutory loan repayment holiday scheme may reduce net interest income. Besides, net interest income will be undermined by the issues of debt instruments eligible to cover the MREL, since the interest rate on such instruments is significantly higher than the interest rate on customer deposits.[61] However, funding cost pressures will be mitigated

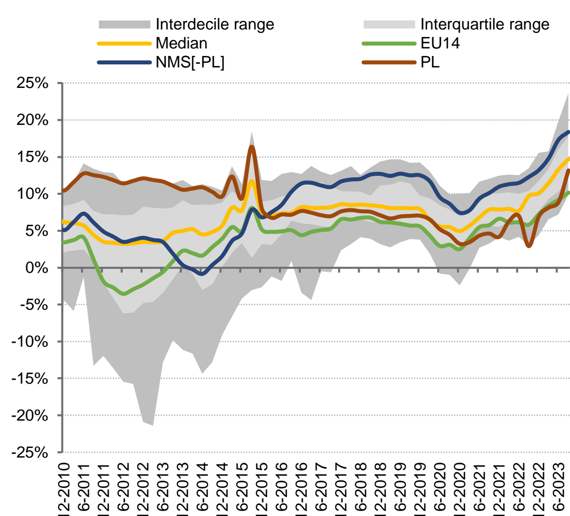
[60] For some banks, the decline in NIM may be limited by the strategies they employ to hedge a part of their interest income against the impact of interest rate changes through derivative transactions.

[61] Non-financial sector current deposits, as the major source of funding for banks (see Chapter 2.5), usually do not bear interest, while interest rates on new non-financial sector term deposits most frequently remain well below the level of money market rates. The interest rates on non-preferred bonds issued by Polish banks to date to cover the MREL significantly exceed money market rates (often by a few percentage points).

by a negative funding gap (see Table 2.2) and the associated low level of the competition for customer deposits between banks.

**A continued increase in the costs of legal risk has an adverse effect on banks' profitability, while the costs of credit risk have declined over the past 12 months.** These costs and the prospects of their developments are presented in more detail in Chapters 2.4 and 2.2.

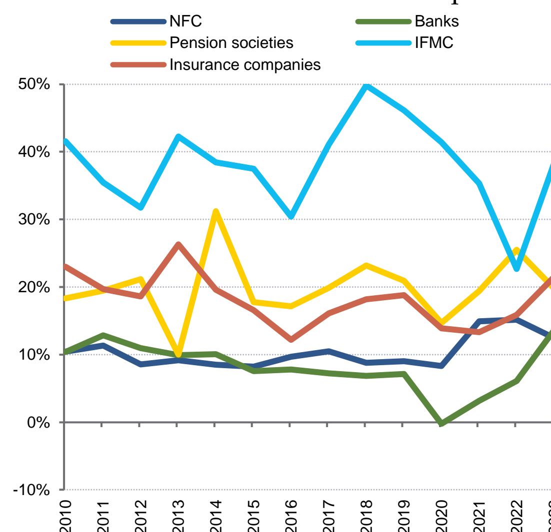
**Figure 2.43.** Distribution of ROE for the banking sectors of EU countries




Notes: Annualised data. EU14 – average ROE for the 14 EU member states before the 2004 enlargement. NMS[-PL] – average ROE for CEE countries that joined the EU in 2004 or later (excluding Poland).

*Source: Own calculations based on ECB data.*

**Figure 2.44.** ROE of domestic banks, other financial institutions and non-financial corporations




Notes: Annualised data. IFMC – investment fund management companies.

*Source: Own calculations based on NBP, UKNF and Statistics Poland data.*

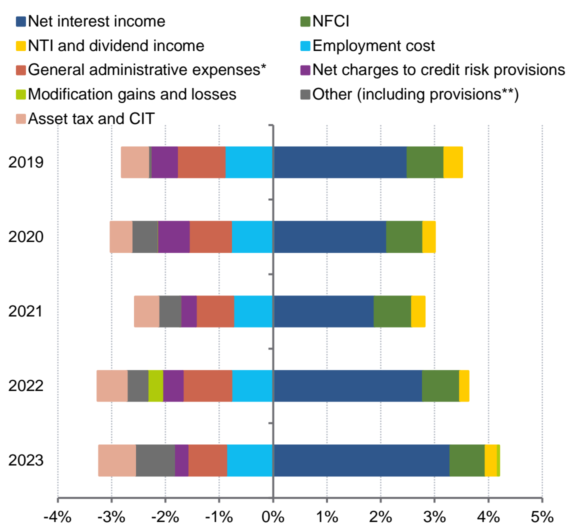
**The banking sector's operating costs have been relatively stable and cost efficiency ratios have improved significantly, although they are likely to deteriorate in the upcoming period.** The C/I ratio has declined by 9.5 p.p. y/y to the level of 42% (see Table 2.2). The main driver of this change was an increase in the net income from banking activity. Nevertheless, the cost-to-asset and assets-per-employee ratios also indicate the improvement in the banks' cost efficiency. Employee costs were 19% higher. The rise in these costs resulted not only from inflation and a growth in nominal wages in the economy, but probably also from the need to retain highly skilled workers. During this period, the increase in employee costs was offset by a decrease in contributions to the BFG[62] and lack of contributions to the Polish Commercial Banks' Protection Scheme (SOBK).[63] A continued rise of wages in the

[62] After the resolution of Getin Noble Bank S.A. was supported with SOBK funds, the target level of the BFG deposit guarantee fund was reduced. Under the BFG Council decision, in 2023 banks did not pay any contribution to the deposit guarantee fund (see Resolution No. 3/2023 of the Council of the Bank Guarantee Fund of 27 February 2023 *on the non-collection of contributions to the banks' guarantee fund for 2023*, available at the www.bfg.pl website).

[63] In June 2022, commercial banks contributed 3.4 billion zlotys to the Commercial Bank Protection Scheme.

banking sector can be expected in the coming quarters, with the stable or increasing burden of other administrative costs. Moreover, the relaxed conditions for granting support from the bank-financed Borrower Support Fund, which came into force in 2024, may require an increase in the Fund's resources with a certain delay. The re-instatement of the contribution to the deposit guarantee fund can be expected from 2025.

**Figure 2.45.** Structure of banking sector's earnings (items of P&L account in relation to average assets)



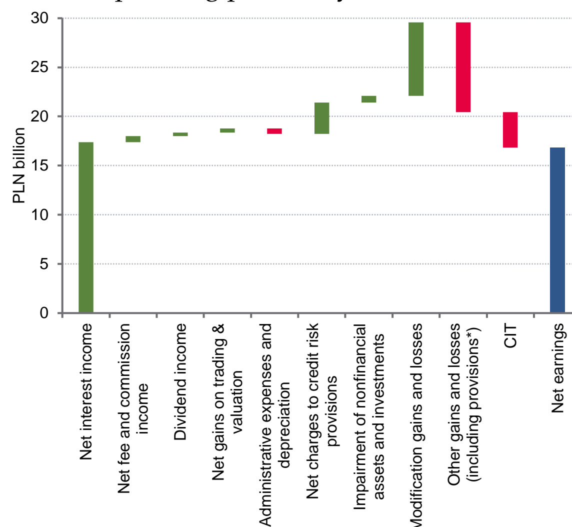

* General administrative expenses (less tax on certain financial institutions) and depreciation.

** including provisions for legal risk of FX housing loans – except for banks which recognised them jointly with the provisions for credit risk.

Notes: NFCI – net fee and commission income, NTI – net trading income.

*Source: NBP.*

**Figure 2.46.** Change in net earnings of the banking sector and decomposition of the change – amounts for 12 months until March 2024 against the corresponding period a year earlier




* including provisions for legal risk of FX housing loans – except for banks which recognised them jointly with the provisions for credit risk.

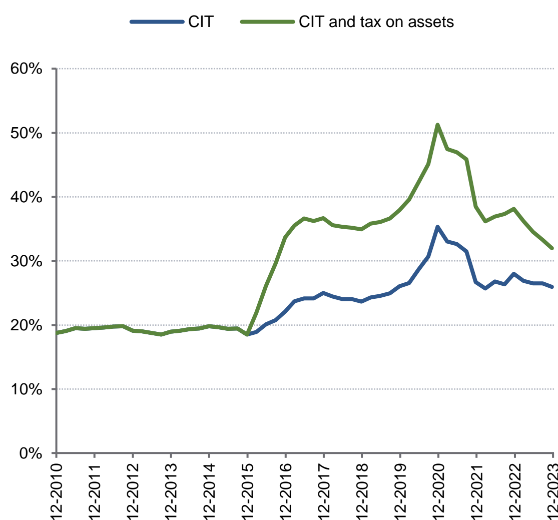
Notes: The height of green and red bars indicates a change in the amount of relevant P&L item of the banking sector. A negative change in cost items indicates an increase in costs, which translates into lower earnings. Some of the decomposition items, in particular, "Modification gains and losses" (comprising the majority of loan repayment holiday costs) and "Other gains and losses (including provisions)" may take both positive and negative values, so it can only be inferred from the figure whether a change in this item had a positive or negative effect on the earnings.

*Source: NBP.*

**The banks' earnings are relatively more strongly affected by taxes compared to other entities, which undermines the banks' profitability.** The effective CIT rate of almost 26% in 2023 is significantly higher than for other sectors (see Figure 2.48), as some the costs of banks are not recognised in the calculation of taxable income (the so-called permanent differences). This applies, in particular, to the provisions for legal risk, although banks may reduce taxable income for 2022-2024 by the equivalent of housing

loans redemption to customers (e.g. when settlements are concluded).[64] In addition, the majority of the banking sector (as measured by its share of assets) pays a tax on certain financial institutions (the so-called tax on assets) which is also not included in the CIT account. At the end of 2023, the total effective rate of the tax on assets and CIT in banks can be estimated at 32% (see Figure 2.47).

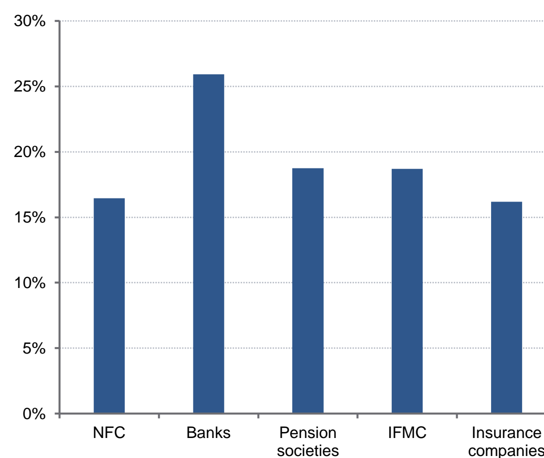
**Figure 2.47.** Effective rate of CIT and tax on assets at banks




Notes: Annualised data. Estimate for banks with positive net earnings in the period of 12 months.

*Source: NBP.*

**Figure 2.48.** Effective CIT rate of banks, other financial institutions and non-financial corporations in 2023




Notes: Estimate for entities with positive net earnings. IFMC – investment fund management companies.

*Source: Estimates based on NBP, UKNF and Statistics Poland data.*

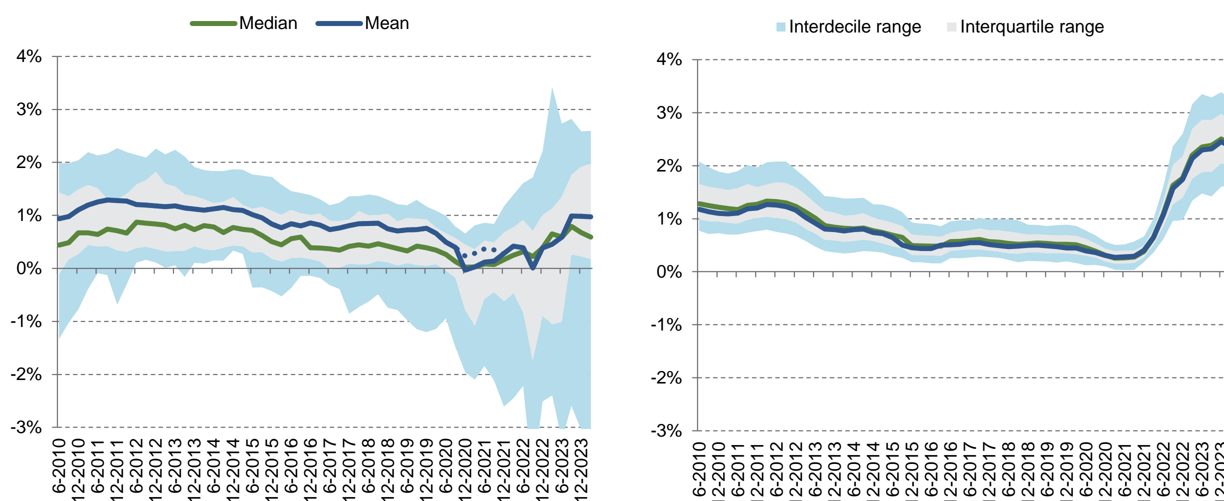
**The profitability of individual commercial banks is highly diversified (unlike cooperative banks), particularly due to costs of the legal risk of FX loans.** The diversification of commercial banks in terms of ROA has decreased in the period of 12 months until March 2024, but can still be assessed as high, especially compared to cooperative banks (see Figure 2.49). This may result from much greater homogeneity of cooperative banks in terms of types of profitability-related risk exposures – their performance is more dependent on the level of interest rates, which, under the circumstances where those rates are expected to fall and with a relatively high burden of operating costs, may aggravate the situation of these entities even more.[65] The number and asset share of banks with negative profitability

[64] The terms of this reduction are defined in Regulation of the Minister of Finance of 11 March 2022 on the waiver of income tax on certain income (revenue) related to a mortgage loan granted for residential purposes (consolidated text – Journal of Laws 2024, item 102).

[65] At the same time, cooperative banks – due to the size and structure of their balance sheets – have so far been negligibly affected by the costs that have most severely reduced the profitability of commercial banks in recent years: they have

decreased (13 banks with a share of 1.5% in March 2024 compared to 19 banks with a share of 15% in March 2023), but the amount of their losses were similar (ca. 9 billion zlotys). The losses were mainly borne by some banks with large portfolios of FX housing loans. In entities that discontinued their activities and focused on servicing this portfolio, these losses often significantly affect the capital, which may require the support of the owners. On the other hand, in commercial banks also engaged in other activities, especially universal banks, the impact of losses on the value of own funds was relatively insignificant.

**Figure 2.49.** Return on assets in domestic commercial banks (left-hand panel) and cooperative banks (right-hand panel)




Notes: Annualised data. The dashed line presents the value of the ratio excluding the change in the PKO BP earnings for 2020 as a result of the decision to offer settlements to borrowers with FX housing loans.

*Source: NBP.*

## 2.7. Capital adequacy

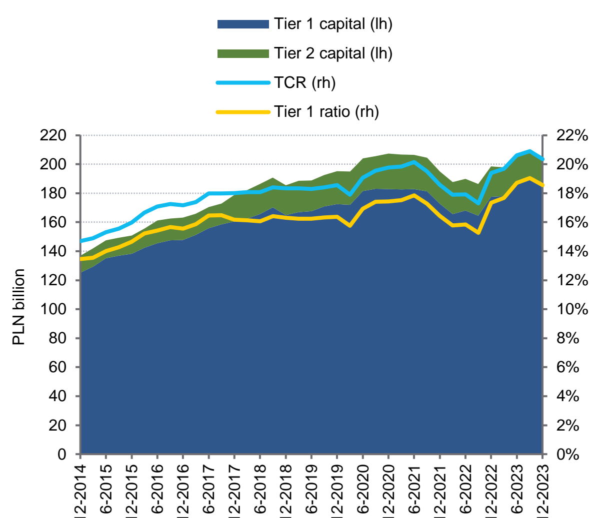
**The average capital adequacy ratios of the banking sector remained stable and reflected high level of solvency (see Figure 2.50).** On the one hand, the allocation of a significant part of current profits to the reserve capital and favourable changes in the valuation of Treasury securities recognised in the capital adequacy account had a positive impact on the level of own funds in the second half of 2023 (see Figure 2.51). On the other hand, following a period of relatively low dividend payments, in 2023 banks paid dividends from current and previous years' profits[66], which translated into a decline in retained earnings (see Figure 2.52). As a result of an overlap of the aforementioned processes, the level

paid no tax on certain financial institutions, they have no FX housing loans and the associated legal risk, their portfolios of zloty housing loans and the associated loan repayment holiday costs were insignificant. In addition, cooperative banks that participate in IPS have a relatively high coverage of impaired loans by provisions. These factors can have a positive impact on their future profitability.

[66] Dividend payments must meet the conditions set out in the annual KNF stance on dividend policy.

of the sector's own funds has not changed markedly compared to June 2023. At the same time, the total risk exposure amount (TREA) has increased slightly, mainly in cooperative banks, as a result of a growth in credit exposures.

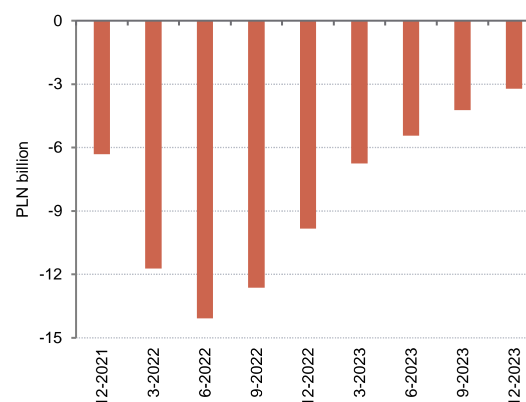
**Figure 2.50.** Own funds and capital adequacy ratios




Note: BGK excluded.

*Source: NBP*

**Figure 2.51.** Accumulated other comprehensive income (AOCI) after adjusting for the prudential filter




Note: Excluding BGK, after taking into account the prudential filter in the form of the provision for cash flow hedging instruments – it is positive if the cash flow hedging instruments have a negative valuation (i.e. if they reduce capital).

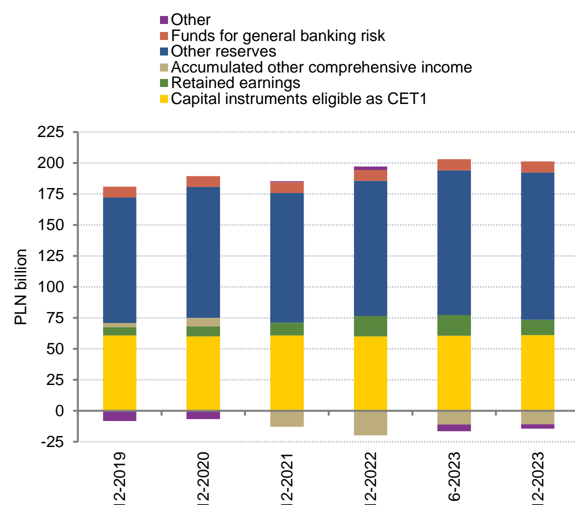
*Source: NBP*

**The bank's own funds have well exceeded capital requirements in the risk-based and the leverage regimes.** Common Equity Tier 1 (CET1) surplus over Pillar 1, Pillar 2 and the combined buffer requirements remained at approx. PLN 86 bn, i.e. approx. 8.5% of the total risk exposure amount (TREA) (see Figure 2.53). The vast majority of banks report CET1 surpluses over 6% of their total risk exposure amount (see Figure 2.54). These surpluses can be used, among others, to expand lending, to absorb costs resulting from unexpected shocks or to meet the requirements laid down in other, parallel prudential regimes, i.e. the leverage and resolution frameworks. A potential gradual introduction of macroprudential capital buffers, as announced by the FSC-M, would not result in a decline of these surpluses to the extent that could limit bank lending. The sector's leverage ratio also remained at a safe level, well above the required minimum, and amounted on average to approx. 8% as of end of December 2023. In the case of the Polish banking sector, the risk-based capital requirements framework generates higher capital needs than the leverage regime, reflecting the banks' conservative approach to the application of risk weights.

**Banks have reduced their use of CET1 surplus to meet the MREL.** In the second half of 2023, banks continued to increase their funding via eligible liabilities, both by issuing debt instruments and taking up subordinated loans (see Figure 2.55). From a financial stability perspective, this tendency should be

assessed positively, as allocating CET1 surpluses, after meeting the risk-based regime requirements, to cover the MREL recapitalisation amount (MREL-RCA)[67] restricts their use for other purposes, such as lending activity.

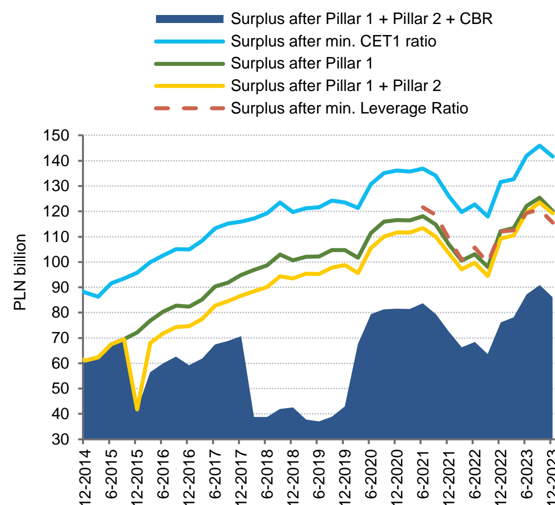
**Figure 2.52.** Selected CET1 items




Note: BGK excluded.

*Source: NBP.*

**Figure 2.53.** CET1 surplus after fulfilling selected capital requirements




Note: BGK excluded.

*Source: NBP.*

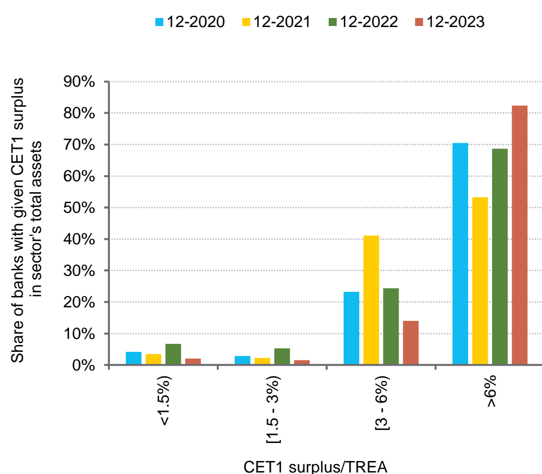
**Funding via eligible liabilities has risen substantially across the sector, however, substantial differences among banks persists.** Since December 2022, the value of eligible liabilities has increased almost four times, however, it should be noted that the starting point was relatively low (see Figure 2.56). There is a high entity concentration, however material discrepancies remain in terms of MREL-RCA coverage among the issuers of these instruments. In terms of value, 93% of eligible liabilities are on the balance sheets of eight banks, while the MREL-RCA coverage levels for this group range from approx. 25% to 95%. The banks' announcements of further issuances should be assessed positively from the financial stability perspective, as the high coverage of MREL-RCA by eligible instruments fosters effectiveness of potential resolution actions and as such limits their costs for the banking sector as a whole.

**The vast majority of the sector meets the MREL and the combined buffer requirement in addition to MREL**. The fully-loaded MREL applies since 31 December 2023. As of end 2023, all banks met the minimum requirement in relation to the TREA (MREL-TREA), while two banks failed to meet it in relation to the total exposure measure (MREL-TEM).[68] Capital surpluses after fulfilling the combined

[67] In the case of banks for which the resolution strategy does not assume ordinary insolvency, the MREL consists of two components – for loss absorption (LAA) and recapitalisation (RCA). The loss absorption amount corresponds to the amount of Pillar I and Pillar II requirements of the risk-based regime and is met solely with own funds. On the other hand, the recapitalisation amount, can be met with both own funds and eligible liabilities.
[68] https://biznes.pap.pl/pl/news/pap/info/3559591,wszystkie-banki-spelniaja-wymogi-mrel-trea---tomaszewski--bfg.

buffer requirement when considered in addition to the MREL-TREA (CBR-M) increased in the second half of 2023 and – across the sector – amounted to approx. PLN 43 bn, i.e. approx. 4% of the TREA, which mainly resulted from an increase in the scale of funding via eligible liabilities.

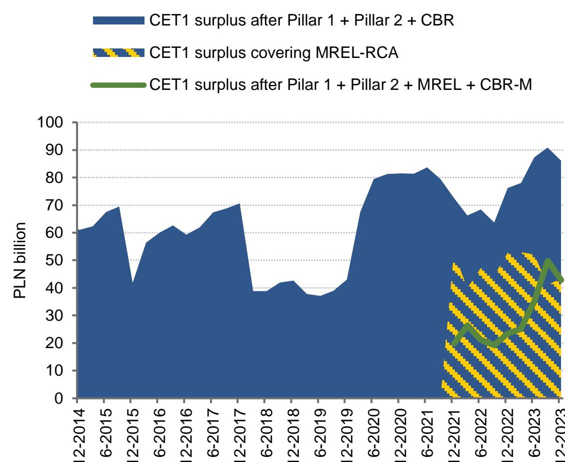
**Figure 2.54.** Distribution of CET1 surpluses after fulfilling the Pillar I and II and combined buffer requirements




Note: BGK excluded.

*Source: NBP, BFG, banks' current reports.*

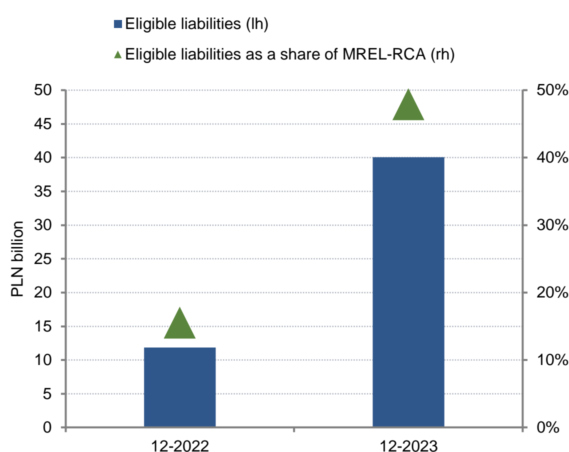
**Figure 2.55.** Share of CET1 surplus covering MREL




Note: BGK excluded.

*Source: NBP, BFG, banks' current reports.*

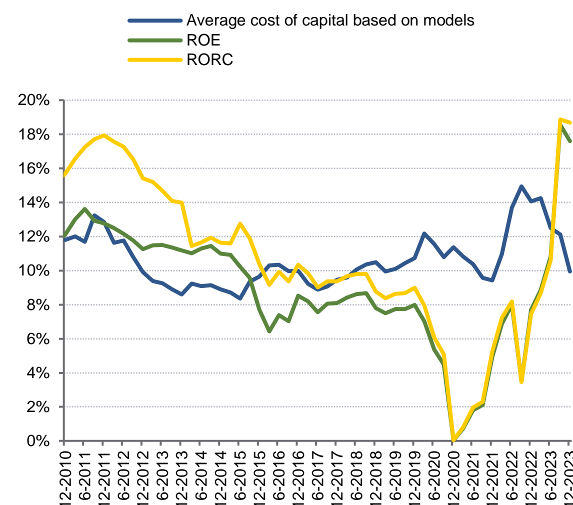
**Figure 2.56.** Eligible liabilities and MREL-RCA coverage




Note: BGK excluded.

*Source: NBP, BFG, banks' current reports.*

**Figure 2.57.** Estimated cost of capital of WSE-listed banks against profitability




*Source: NBP estimates based on NBP data, Bloomberg and Refinitiv.*

**The prospects for growth of own funds will continue to depend mainly on the banks' ability to generate profits.** The estimated average cost of equity of banks in the second half of 2023 continued to follow its downward trend and fell below ROE for the first time since 2018, partly as a result of reduction in the risk-free rate and a strong increase in the banks' stock market prices (see Figure 2.57). The improvement in the banks' market ratings could foster raising capital through share issuance, however, in the absence of structural capital shortfalls, it does not appear that banks will move in this direction in the near future. Irrespective of the amelioration in market sentiment, the potential for further increase of capital surpluses, in the medium term, will continue to be determined primarily by banks' capacity to generate profits and the propensity to ascribe them to own funds.

## 2.8. Stress tests

***Top-down stress tests were conducted to assess the resilience of domestic commercial banks[69] to an impact of adverse macroeconomic and market shocks and the costs of legal risk of FX housing loans. Two scenarios of economic developments over the period from the beginning of 2024 to the end of 2026 were considered. The stress tests and other analyses described in this chapter aim at identifying and assessing sensitive areas of banking sector activity. Therefore, the results of the stress tests conducted should not be treated as a forecast of the situation of the banking sector.***

### Main assumptions adopted in the stress tests

The analysis was carried out for two scenarios – the **reference** scenario and the **adverse** scenario. The central path of the NBP macroeconomic projection from "Inflation Report, March 2024", prepared under the assumption of fixed interest rates and an extension of the anti-inflationary protection measures for food and energy prices was used as the **reference scenario**. The **adverse scenario** was developed on the basis of the model used for the NBP macroeconomic projections and the historical developments of macroeconomic variables for periods of financial downturns in other countries. The paths of selected macroeconomic variables in both scenarios are presented in Table 2.1. The reference scenario foresees a moderate real GDP growth (almost 4% on average per year) with a limited demand for labour and real wage growth, while the adverse scenario assumes a drop in real GDP in the first two years of the projection. In addition, the adverse scenario assumes that an increase in risk aversion could result in: (i) a lasting depreciation of the zloty by 30%; and (ii) an immediate increase in the credit spread of Treasury bonds by 300 basis points (gradually decreasing in subsequent quarters of the simulation to 120 basis points at the end of 2026).

[69] Banks active at the end of 2023, excluding BGK and VeloBank. The analysis covered 27 commercial banks with a combined share of 72% in the banking sector's assets at the end of 2023.

Projections from the VECM model[70], performed under a reference or adverse scenario, were used to determine the paths of possible lending growth for each bank. The possible growth rate of other assets was determined as half the nominal GDP growth rate. It has been assumed that a bank can only expand lending and increase volume of other asset portfolios until its capital levels allow it to cover the Pillar 1 and Pillar 2 capital requirements, the MREL-RCA requirement at the fully-loaded level (covered only with capital and retained earnings[71] – apart from eligible liabilities issued before the end of 2023) and the combined buffer requirement (CBR-M).[72] It has been assumed that undistributed profits and new profits generated in subsequent years of the analysis increase own funds after payment of the dividend determined on the basis of *The KNF stance on dividend policy in 2024*.[73]

**Table 2.1.** Major economic indicators in the macroeconomic scenarios considered

| Scenario | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|
| **GDP (y/y, %)** | | | | |
| Reference | 0.2 | 3.5 | 4.2 | 3.3 |
| Adverse | 0.2 | -0.1 | -1.4 | 0.1 |
| **CPI (y/y, %)** | | | | |
| Reference | 11.4 | 3.0 | 3.4 | 2.9 |
| Adverse | 11.4 | 4.9 | 5.9 | 3.1 |
| **Employment (y/y, %)** | | | | |
| Reference | 0.7 | 0.3 | 0.0 | -0.2 |
| Adverse | 0.7 | -0.3 | -1.4 | -1.4 |
| **Real wages (y/y, %)** | | | | |
| Reference | 1.2 | 8.3 | 3.5 | 3.6 |
| Adverse | 1.2 | 5.2 | 0.9 | 1.2 |

*Source: NBP estimates based on GUS data.*

The future charges for legal risk were estimated assuming that 35% of customers still repaying loans, who have not yet entered into litigation or reached a settlement with the bank, will enter into a settlement and that the remaining active loan agreements in Swiss franc and 40% of the loans repaid are deemed null and void. In the adverse scenario, an additional growth in the value of these provisions was assumed due to an increase in the share of repaid loans subject to litigation and additional customer claims (including, on account of interest for default). **The estimate of legal risk costs included**

[70] A decrease in the value of the loan portfolio was also admitted, if indicated by the projection from the VECM model. The model is described in Annex to Chapter 6 of "Rozwój system finansowego w Polsce w 2020 r." [Financial System in Poland 2020], NBP, Warsaw, 2021 (https://nbp.pl/wp-content/uploads/2022/10/fsd_2020.pdf).

[71] According to law, banks may cover the MREL-RCA requirement with available excess of own funds, with retained earnings, by increasing own funds with funds raised from investors (including by issuing subordinated debt instruments) or by drawing additional eligible liabilities.

[72] Excluding the MREL RCA in banks with the SPE strategy.

[73] https://www.knf.gov.pl/knf/pl/komponenty/img/Stanowisko_KNF_ws_polityki_dywidendowej_w_2024_roku_87266.pdf [KNF stance on the dividend policy in 2024]

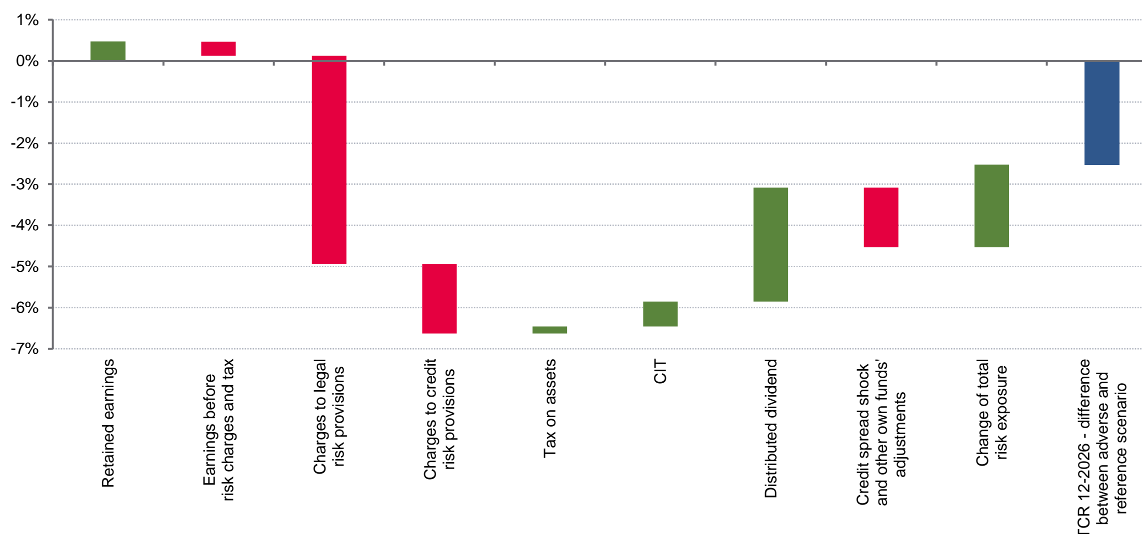
**in both stress test scenarios should not be considered as a forecast or as the most likely option, but only as an assumption for simulation** (more on the legal risk of FX housing loans, see Chapter 2.4).

**In both scenarios, banks were additionally charged with extended loan repayment holiday costs in 2024.** In the adverse scenario, it was assumed that all eligible borrowers would benefit from the holidays, while in the reference scenario the participation shares from the first program were used. It was also assumed that contributions to the BFG deposit guarantee fund would be reinstated in 2025, while there will be no additional contributions to the Borrower Support Fund.

*Stress test results*

**The materialisation of the assumed adverse scenario would negatively affect the situation of the banks analysed primarily through the high legal risk costs of FX housing loans, as well as through credit losses and depreciation of Treasury bonds** (see Figure 2.58). Charges to provisions for the legal risk would be more than three times higher than in the reference scenario and banks would have to increase the provisions already created by 125% (compared to the end of 2023). At the same time, due to the economic slowdown foreseen in the adverse scenario, credit losses would be almost 50% higher than in the reference scenario. On the other hand, net interest margins would be similar in both scenarios due to the assumed fixed NBP interest rates in the analysis horizon.

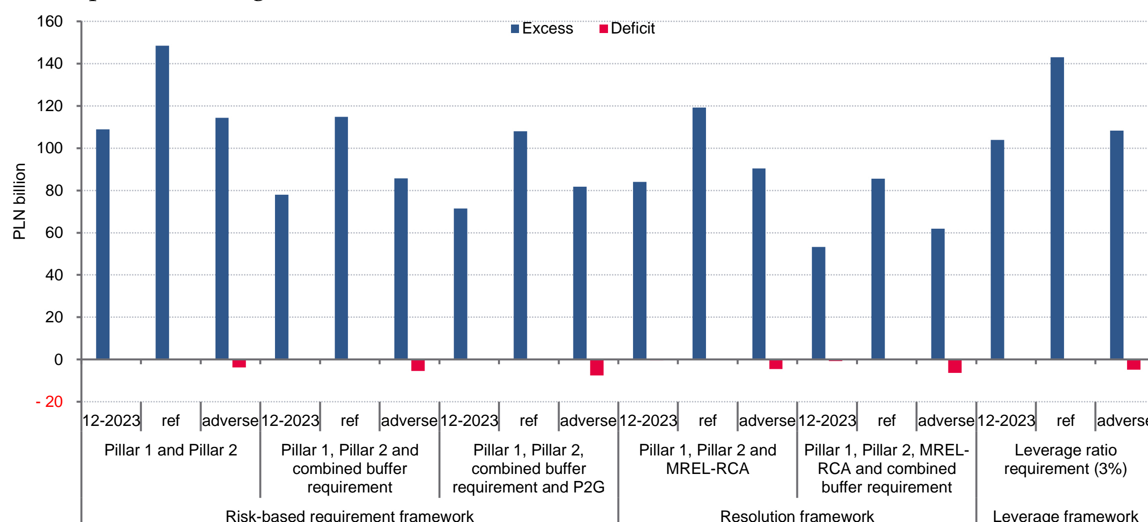
**Figure 2.58.** Difference in the total capital ratio of the analysed group of banks at the end of the adverse and reference scenario and decomposition of this difference




Notes: The blue bar indicates the difference between the total capital ratio of 27 banks analysed at the end of the adverse and reference scenarios. Green bars indicate factors increasing the average total capital ratio in the adverse scenario compared to the reference scenario, while red bars mark factors affecting its decrease. The impact of these factors is presented in percentage points. “Retained earnings” is an increase in banks' capital by the undistributed profit (as of the end of 2023) generated before the simulation period, arising from the adopted assumptions. “Earnings before risk charges and tax” is equivalent to net income from banking activity, less, among others, operating costs. “Tax on assets” is the estimated amount of the tax on certain financial institutions that banks would pay during the simulation period. It is assumed that a bank that records a loss in two consecutive quarters shall be subject to the recovery plan, which relieves it from paying tax for the rest of the projection period. The “Change of total risk exposure” mainly results from changes in the balance sheet total and structure of assets (including granting new loans and changes in the value of FX housing loans).

*Source: NBP.*

**Figure 2.59.** Total excess and deficit of Common Equity Tier 1 capital of the analysed group of banks at the end of 2023 and at the end of the simulation period (2026) after meeting the requirements applicable in different prudential regulation frameworks




Notes: Excess and deficits for 27 banks analysed. For the MREL RCA requirement (calculated on stand-alone data), the surplus and shortfall figures as at the end of 2023 refer to the estimated coverage of the target requirement, taking into account eligible liabilities. In the (reference and adverse) scenarios, the MREL RCA requirement of the banks analysed was assumed to be covered by capital alone (with the exception of eligible liabilities already issued). Only in the case of subsidiary banks owned by groups applying the SPE resolution strategy, the MREL requirement was allowed to be covered by new issues of eligible liabilities.

*Source: NBP.*

**Even if the adverse scenario materialised, the total excess of capital could increase (see Figure 2.59) due to the retention of a part of the undistributed profits[74] and of the profits earned over the simulation period, as well as due to a decrease in risk exposure (see Figure 2.58).** In particular:

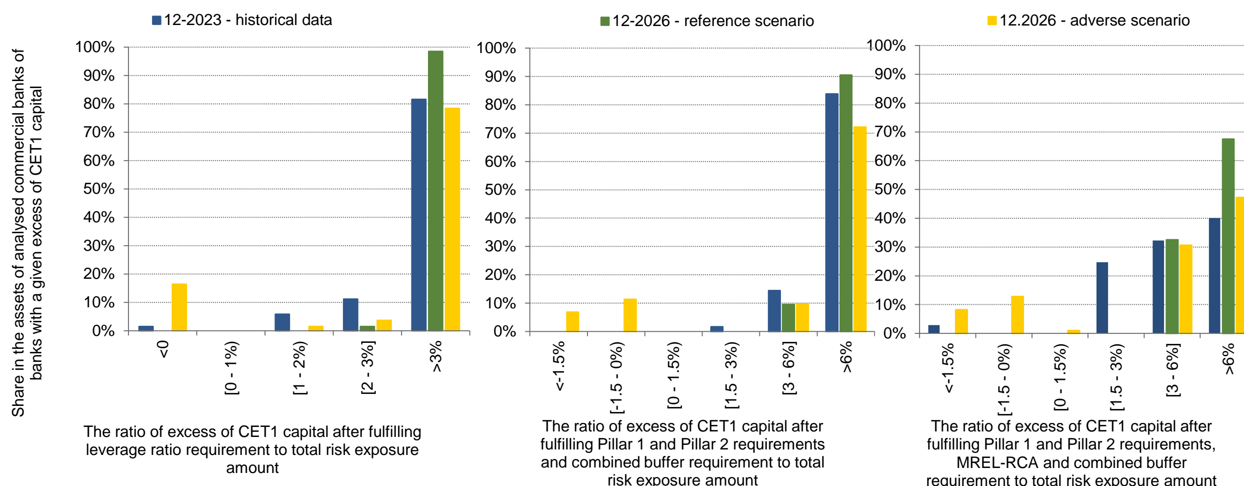
- **part of the profit would strengthen the banks' capital.** Under the assumption that the rules of *The KNF stance on dividend policy in 2024* are applied throughout the simulation period, over a half of the undistributed profit earned before the analysis period and the profit earned during the simulation period would be allocated to increasing regulatory funds (in the reference scenario, almost a half, however, the profit in the simulation period would be much higher),

- **capital requirements would decrease as a result of a decline in the total risk exposure amount (TREA).** Portfolio-specific lending projections indicate that consumer and corporate loan indebtedness would decrease despite the excess of capital available at banks, while the growth in zloty housing loans would be minor (in the reference scenario, all portfolios would grow). The conversion of FX housing loans into zloty loans combined with the redemption of

[74] As at the end of 2023.

a significant part of the loan (in the case of a settlement)[75] or their removal from the balance sheet (in the case of the annulment of the loan agreement) would also diminish the risk exposure.

**Figure 2.60.** Distribution of assets of the analysed commercial banks by excess Common Equity Tier 1 capital after the fulfilment of the leverage requirement (left-hand panel), Pillar I and II requirements and the combined buffer requirement (middle panel) and Pillar I and II requirements, MREL-RCA and the combined buffer requirement (right-hand panel)




Notes: See Figure 2.59.

*Source: NBP.*

**If the shock scenario materialised, some banks would cease to meet the capital requirements as a result of covering the losses incurred (especially those arising from legal risk costs) with capital, while at the end of the reference scenario all banks analysed would meet the capital requirements.** In the adverse scenario as at the end of 2026 (see Figures 2.59 and 2.60):

- commercial banks with a total share of 5% in the sector's assets would fail to meet the Pillar 1 and Pillar 2 capital requirements and the total Common Equity Tier 1 capital shortfall would amount to approx. 3.7 billion zlotys,
- commercial banks with a total share of 15% in the sector's assets would fail to meet the Pillar 1 and Pillar 2 capital standards, the target MREL-RCA requirement and the combined buffer

[75] In such a case, in addition to diminishing the exposure resulting from the redemption of a part of the loan, a reduction in the risk weight in the standardised method (used by most of the banks analysed) also occurs – in accordance with the regulation of the Minister of Development and Finance of 25 May 2017 *on higher risk weights for exposures secured by mortgage on real estate* (Journal of Laws 2023, item 1751), FX loans secured by a mortgage on residential real estate are, in principle, assigned a risk weight of 150%, that the bank may reduce subject to offering settlements to borrowers and creating the relevant provisions. On the other hand, in accordance with the CRR, a risk weight of 35% applies to the part of exposures in zloty effectively secured by a mortgage on residential real estate.

requirement, with the total Common Equity Tier 1 capital deficit amounting to approx. 6.4 billion zlotys,

- banks with a 12% share in the sector's assets would fail to meet the leverage ratio requirements, while the associated capital shortfall would amount to 4.9 billion zlotys.

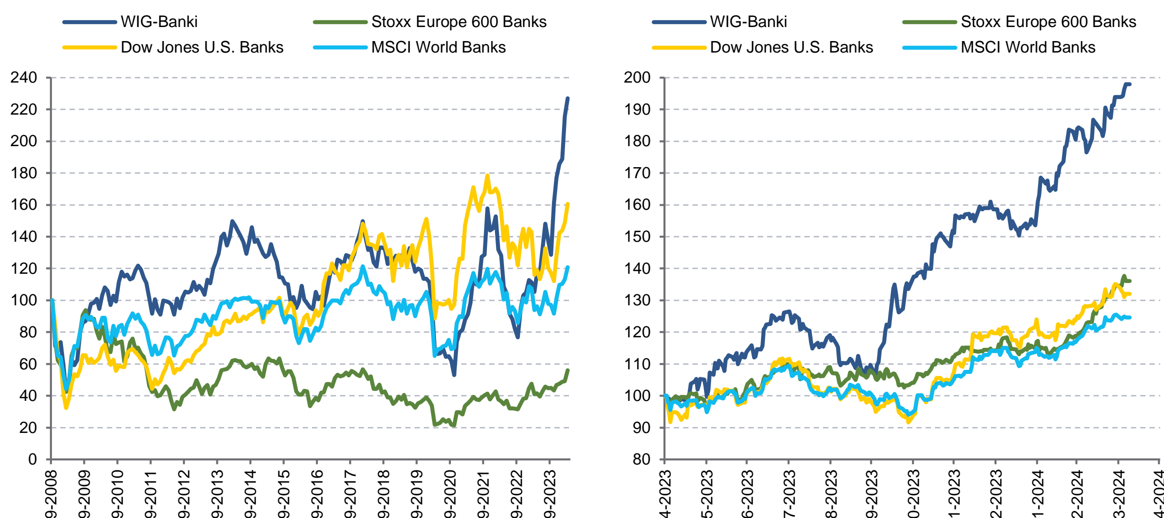
**The simulation results indicate that in order to enhance the efficiency of the resolution process, increase excess of capital and improve the long-term lending outlook, it would be useful to meet the MREL-RCA requirement by issuing eligible debt instruments.** Covering the target MREL-RCA level with capital in the simulation (without new debt issuance) would result in the reduction of excess of capital. In the period under analysis, this would not have a major impact on financial stability, due to high bank profits in the reference scenario and a decline in loan demand in the adverse scenario. On the other hand, over the longer horizon, should the economic growth return to higher levels and the creditworthiness of real sector entities improve, too low excess capital after meeting the MREL-RCA requirement and the combined buffer requirement could become a constraint on lending expansion.

## 2.9. Market assessment of banks

**Domestic factors had a favourable impact, much more severely than in previous periods, on the valuation of Polish banks, increasing their advantage over European banks in terms of the value of the "price to book value" ratio (see Figure 2.61 and Figure 2.62).** Higher earnings of banks than expected for the fourth quarter of 2023, a possibility of dividend payments and the EC declaration on the release of European aid funds for Poland were the fundamental reasons for the growth in banks' quotations, including banks holding significant FX loan portfolios. The prices of Polish banks' shares were also affected by global factors, among others due to the high importance of foreign investors in the Polish market.[76] Growing investors' expectations regarding interest rate cuts by the Federal Reserve and ECB reinforced the upward trend in global markets and contributed to an increase in share prices on the WSE. The deterioration in sentiment and short-lived declines in banks' share prices in January 2024 was triggered by the intensification of geopolitical risk related to the situation in the Middle East and in Ukraine.

[76] In 2023, the share of foreign investors in trading on the WSE Main Market amounted to 65% – Press release of the WSE of 28 March 2024, available at: https://www.gpw.pl/pl-ri-komunikaty-prasowe?ph_main_01_start=show&cmn_id=115205&title=Udzia%C5%82+inwestor%C3%B3w+w+obrotach+instrumentami+finansowymi++na+GPW+w+2023+r.

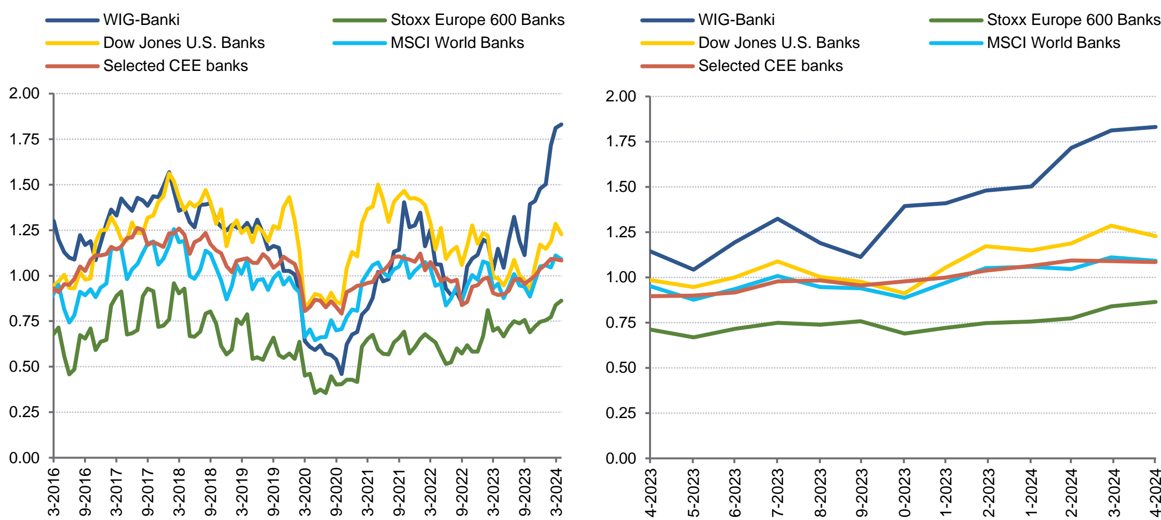
**Figure 2.61.** Prices of stock indices of selected groups of banks after the outbreak of the global financial crisis (left-hand panel) and in the last 12 months (right-hand panel)




Note: Prices of indices scaled to 100 as at 15 September 2008 and 30 April 2023 on the left and right-hand panels, respectively.

*Source: NBP calculations based on Refinitiv data.*

**Figure 2.62.** The "price-to-book-value" ratio for selected groups of banks since 31 March 2016 (left-hand panel) and in the last 12 months (right-hand panel)




Note: Selected CEE banks – the arithmetic mean of the "price to book value" ratio for the ten largest listed banks in CEE countries, excluding Poland.

*Source: NBP calculations based on Bloomberg data.*

**Rating agencies have raised or affirmed individual ratings for banks and the Polish banking system.** The agencies positively assessed the profitability and liquidity of the banks surveyed.[77] They emphasized that access to low-cost domestic deposits allows banks to increase interest margins and net profits, providing an opportunity to improve their capital endowment. Raising the outlook to stable from negative for the Polish banking sector, Moody's agency stressed that the progress in resolving the issue of the FX loan portfolio and the improving macroeconomic environment, as well as the extension of the loan repayment holiday, will support timely loan repayment. In the agency's opinion, the issuance of additional instruments by large banks under the MREL redemption or conversion mechanism has also contributed to raising the rating of the banking system stability.

[77] S&P and Fitch agencies upgraded the rating outlook of Bank Pekao SA and Alior Bank to positive, respectively. The agencies confirmed the following long-term ratings: Fitch – for BNP Paribas Bank Polska at A+ and BOŚ at BB-, and Moody's – for PKO BP and ING Bank Śląski at A2.

## 2.10. Selected indicators describing the situation of the banking sector

**Table 2.2.** Banking Sector

| in % | 12-2022 | 3-2023 | 6-2023 | 9-2023 | 12-2023 |
|---|---|---|---|---|---|
| Return on assets (ROA) * | 0.37 | 0.46 | 0.54 | 0.91 | 0.97 |
| Return on Tier 1 capital (RORC) * | 6.1 | 7.4 | 9.2 | 14.7 | 14.1 |
| Return on accounting capital (ROE) * | 6.1 | 7.4 | 9.2 | 14.1 | 13.0 |
| Net interest margin (NIM) * | 2.78 | 2.95 | 2.98 | 3.18 | 3.30 |
| The share of net interest income in net income from banking activity * | 76.7 | 77.4 | 77.2 | 78.2 | 79.0 |
| The share of net noninterest income in net income from banking activity * | 23.3 | 22.6 | 22.8 | 21.8 | 21.0 |
| Operating costs to net income from banking activity (CTI) * | 52.0 | 49.7 | 46.4 | 43.4 | 42.4 |
| Net charges to credit risk provisions to net income from banking activity * | 10.3 | 9.7 | 9.4 | 7.5 | 5.9 |
| Loan growth rates (y/y) | | | | | |
| - nonfinancial sector | 0.0 | -1.1 | -1.9 | -2.3 | 0.3 |
| - households | -4.3 | -5.0 | -4.2 | -2.5 | 0.3 |
| - consumer loans | -1.7 | -1.2 | 0.4 | 2.4 | 4.1 |
| - housing loans | -4.1 | -5.7 | -5.4 | -4.2 | -1.0 |
| - enterprises | 9.5 | 7.3 | 2.7 | -1.9 | 0.5 |
| Impaired loan ratios | | | | | |
| - nonfinancial sector | 5.6 | 5.5 | 5.6 | 5.7 | 5.4 |
| - households | 5.1 | 5.2 | 5.3 | 5.4 | 5.1 |
| - consumer loans | 8.7 | 8.8 | 8.7 | 8.8 | 8.1 |
| - housing loans | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 |
| - enterprises | 6.5 | 6.0 | 6.2 | 6.3 | 6.2 |
| Net charges to credit risk provisions to net value of loans * | | | | | |
| - nonfinancial sector | 0.72 | 0.73 | 0.75 | 0.63 | 0.58 |
| - households | 0.79 | 0.79 | 0.80 | 0.65 | 0.59 |
| - consumer loans | 2.10 | 2.07 | 2.05 | 1.91 | 1.60 |
| - housing loans | 0.15 | 0.16 | 0.14 | -0.05 | -0.03 |
| - enterprises | 0.62 | 0.64 | 0.69 | 0.61 | 0.57 |
| Funding gap | -22.7 | -25.1 | -27.0 | -29.0 | -27.5 |
| Total capital ratio | 19.4 | 19.7 | 20.6 | 20.9 | 20.3 |
| Tier 1 capital ratio | 17.4 | 17.7 | 18.7 | 19.0 | 18.6 |
| Core Equity Tier 1 capital ratio | 17.4 | 17.7 | 18.7 | 19.0 | 18.5 |
| Financial leverage (multiple) | 12.4 | 12.7 | 12.1 | 12.4 | 13.0 |
| Leverage ratio according to CRDIV/CRR | 8.0 | 7.9 | 8.2 | 8.0 | 7.7 |

Notes: Annualized data are marked with an asterisk. Capital ratios and returns on equity calculated for domestic banks excluding BGK. The growth rate of loans calculated using only transactional changes.

*Source: NBP*.

**Table 2.3.** Domestic commercial banks

| in % | 12-2022 | 3-2023 | 6-2023 | 9-2023 | 12-2023 |
|---|---|---|---|---|---|
| Return on assets (ROA) * | 0.38 | 0.45 | 0.59 | 0.99 | 0.93 |
| Return on Tier 1 capital (RORC) * | 4.6 | 5.6 | 7.4 | 13.4 | 12.6 |
| Return on accounting capital (ROE) * | 4.7 | 5.7 | 7.5 | 13.0 | 11.8 |
| Net interest margin (NIM) * | 2.66 | 2.81 | 2.82 | 3.04 | 3.18 |
| The share of net interest income in net income from banking activity * | 75.9 | 76.7 | 76.5 | 77.6 | 78.6 |
| The share of net noninterest income in net income from banking activity * | 24.07 | 23.33 | 23.49 | 22.41 | 21.42 |
| Operating costs to net income from banking activity (CTI) * | 48.8 | 46.7 | 42.7 | 39.3 | 38.6 |
| Net charges to credit risk provisions to net income from banking activity * | 10.40 | 9.82 | 9.53 | 7.61 | 6.00 |
| Loan growth rates (y/y) | | | | | |
| - nonfinancial sector | -0.4 | -1.4 | -1.8 | -2.5 | -1.3 |
| - households | -4.8 | -5.6 | -4.6 | -3.3 | -2.5 |
| - consumer loans | -3.3 | -2.9 | -1.1 | 0.8 | 1.6 |
| - housing loans | -4.4 | -5.9 | -5.4 | -4.1 | -2.6 |
| - enterprises | 10.5 | 8.3 | 4.4 | -0.7 | 1.4 |
| Impaired loan ratios | | | | | |
| - nonfinancial sector | 5.5 | 5.4 | 5.6 | 5.7 | 5.4 |
| - households | 5.0 | 5.2 | 5.3 | 5.4 | 5.1 |
| - consumer loans | 9.0 | 9.1 | 9.0 | 9.1 | 8.4 |
| - housing loans | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 |
| - enterprises | 6.4 | 5.9 | 6.1 | 6.2 | 6.2 |
| Net charges to credit risk provisions to net value of loans * | | | | | |
| - nonfinancial sector | 0.69 | 0.70 | 0.72 | 0.61 | 0.57 |
| - households | 0.79 | 0.80 | 0.79 | 0.66 | 0.62 |
| - consumer loans | 2.17 | 2.14 | 2.12 | 1.97 | 1.67 |
| - housing loans | 0.20 | 0.22 | 0.16 | -0.02 | -0.01 |
| - enterprises | 0.50 | 0.52 | 0.60 | 0.54 | 0.51 |
| Funding gap | -21.0 | -23.6 | -25.9 | -27.8 | -26.1 |
| LCR | 180.9 | 199.6 | 208.3 | 219.5 | 233.0 |
| Total capital ratio | 19.4 | 19.7 | 20.4 | 20.8 | 20.3 |
| Tier 1 capital ratio | 17.3 | 17.6 | 18.4 | 18.8 | 18.4 |
| Core Equity Tier 1 capital ratio | 17.3 | 17.6 | 18.4 | 18.8 | 18.4 |
| Financial leverage (multiple) | 12.3 | 12.5 | 12.2 | 12.4 | 13.0 |
| Leverage ratio according to CRDIV/CRR | 7.9 | 7.8 | 8.0 | 7.9 | 7.5 |

Notes: Annualized data are marked with an asterisk. Capital ratios and returns on equity calculated for domestic commercial banks excluding BGK, LCR additionally excluding the associating banks. The growth rate of loans after adjusting for foreign exchange rate changes.

*Source: NBP*.

**Table 2.4.** Cooperative banks

| in % | 12-2022 | 3-2023 | 6-2023 | 9-2023 | 12-2023 |
|---|---|---|---|---|---|
| Return on assets (ROA) * | 1.74 | 2.14 | 2.30 | 2.32 | 2.45 |
| Return on Tier 1 capital (RORC) * | 24.0 | 29.1 | 30.0 | 29.7 | 30.9 |
| Return on accounting capital (ROE) * | 20.8 | 24.2 | 24.7 | 24.0 | 24.6 |
| Net interest margin (NIM) * | 5.00 | 5.56 | 5.71 | 5.64 | 5.50 |
| The share of net interest income in net income from banking activity * | 88.3 | 89.4 | 89.8 | 90.0 | 89.9 |
| The share of net noninterest income in net income from banking activity * | 11.74 | 10.64 | 10.22 | 9.98 | 10.11 |
| Operating costs to net income from banking activity (CTI) * | 46.7 | 43.7 | 43.5 | 44.3 | 41.4 |
| Net charges to credit risk provisions to net income from banking activity * | 13.13 | 11.89 | 10.27 | 8.47 | 7.02 |
| Loan growth rates (y/y) | | | | | |
| - nonfinancial sector | -4.2 | -4.8 | -3.7 | 0.5 | 5.4 |
| - households | -6.1 | -6.9 | -5.6 | 0.3 | 7.7 |
| - consumer loans | -6.6 | -3.6 | -0.3 | 2.9 | 3.7 |
| - housing loans | 0.3 | -3.7 | -4.3 | -4.3 | -2.6 |
| - enterprises | 0.8 | 0.8 | 1.2 | 0.9 | -0.2 |
| Impaired loan ratios | | | | | |
| - nonfinancial sector | 8.3 | 8.3 | 8.1 | 7.6 | 7.2 |
| - households | 5.3 | 5.3 | 5.3 | 5.0 | 4.7 |
| - consumer loans | 5.0 | 4.9 | 4.8 | 4.6 | 4.5 |
| - housing loans | 1.1 | 1.1 | 1.3 | 1.3 | 1.3 |
| - enterprises | 15.9 | 15.7 | 14.9 | 14.4 | 14.2 |
| Net charges to credit risk provisions to net value of loans * | | | | | |
| - nonfinancial sector | 1.99 | 2.02 | 1.81 | 1.48 | 1.20 |
| - households | 1.34 | 1.31 | 1.16 | 0.96 | 0.73 |
| - consumer loans | 0.96 | 1.08 | 1.11 | 1.02 | 0.76 |
| - housing loans | 0.17 | 0.18 | 0.20 | 0.18 | 0.24 |
| - enterprises | 3.87 | 4.00 | 3.59 | 2.88 | 2.49 |
| Funding gap | -82.8 | -83.2 | -81.0 | -85.5 | -85.3 |
| Unconsolidated LCR | 491.8 | 531.0 | 507.2 | 524.6 | 457.5 |
| Consolidated LCR | 314.7 | 355.5 | 363.6 | 355.6 | 355.9 |
| Total capital ratio | 19.1 | 19.7 | 23.3 | 22.6 | 20.7 |
| Tier 1 capital ratio | 18.6 | 19.2 | 22.8 | 22.2 | 20.4 |
| Core Equity Tier 1 capital ratio | 18.6 | 19.2 | 22.8 | 22.2 | 20.4 |
| Financial leverage (multiple) | 13.9 | 13.5 | 11.4 | 12.1 | 12.7 |
| Leverage ratio according to CRDIV/CRR | 8.6 | 9.0 | 10.6 | 10.1 | 9.6 |

Notes: Annualized data are marked with an asterisk. Unconsolidated LCR – data for cooperative banks which must comply with the LCR standard on an unconsolidated basis. Consolidated LCR – data for cooperative banks that were permitted to comply with the LCR standard on a consolidated basis and for the associating banks.

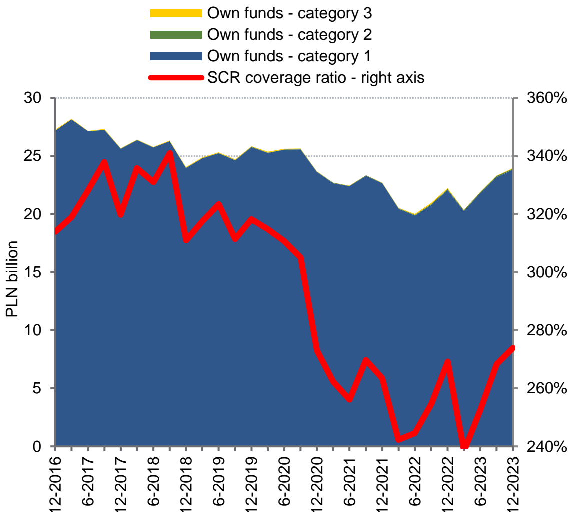
*Source: NBP.*

# 3. Main risk areas in the non-banking sector

## 3.1. Insurance companies[78]

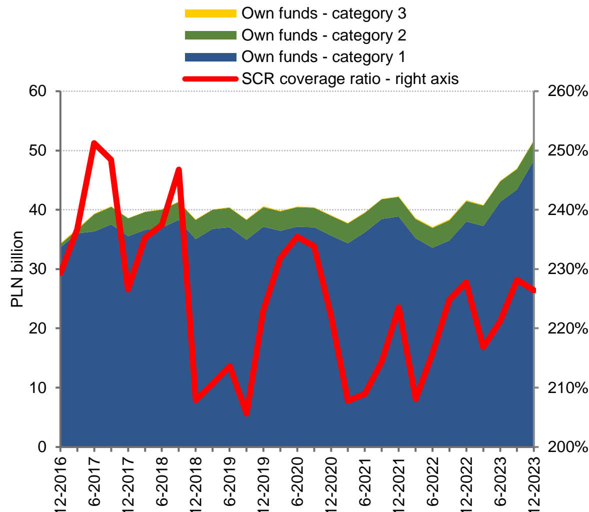
**After a temporary decline in the first half of 2023, in the second half of the year the solvency ratio of the insurance sector increased slightly to the level observed at the end of 2022.** In life insurance, the coverage of the solvency capital requirement with eligible own funds was 274%, 21 percentage points higher than at the end of June 2023 and 5 percentage points higher than at the end of 2022. The non-life insurance ratio reached 226%, which represents an increase of 5 percentage points compared to the end of the first half of 2023. Life insurance companies have recorded their highest solvency ratio since the end of 2020, when increased mortality and market shocks reduced it below 300% (see Figure 3.1). Non-life insurance also recorded one of the highest ratios in the last three years, however, with much lower volatility of this parameter (see Figure 3.2). Despite the improvement in the second half of 2023, the solvency ratio for the sector as a whole stood at 240% at the end of 2023 and was still lower than the EEA average of 262%.[79]

**Figure 3.1.** Own funds and the SCR coverage ratio – life insurance




*Source: UKNF.*

**Figure 3.2.** Own funds and the SCR coverage ratio – non-life insurance




*Source: UKNF.*

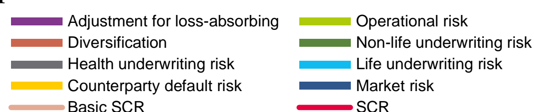
**All insurance companies demonstrated sufficient solvency ratios.** Each domestic entity had own funds above the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR). Only five companies recorded a solvency ratio below 150%. The highest number of life insurance companies (more than two-thirds) recorded this parameter at a level of 100-200%. These entities represented almost 60% of the balance sheet total of the whole life insurance. More than one third of the assets were held by companies with the highest solvency ratios (exceeding 300%). Over the recent years, this ratio

[78] The analysis has been prepared on data for the fourth quarter of 2023 according to data available until 31 March 2024.
[79] EIOPA data as at the end of the third quarter of 2023.

has been averaged, with the assets of companies with a 200-300% ratio increasing while the share of entities with the lowest and the highest requirements coverage ratio decreased. On the other hand, in non-life insurance, as many as 16 entities recorded this parameter at a level of 100-200%, with 65% of assets accumulated in 12 institutions with a 200-300% ratio.

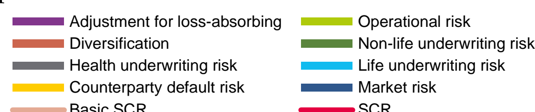
**The improvement in the solvency ratio was possible due to higher value of own funds.** Life insurance companies held own funds of almost 24 billion zlotys at the end of 2023, 1.7 billion zlotys more than at the end of 2022. In non-life insurance, the growth in this category was 25% over the year, from 41.6 billion zlotys to 51.8 billion zlotys. In life insurance and non-life insurance, higher capital resulted from the increase in the excess of assets over liabilities, greater than the increase in financial result. It resulted from differences in valuation according to statutory reporting and for solvency purposes. This was accompanied by a disproportionately low increase in funds allocated for future dividend payments. The prevalence of non-life insurance over life insurance has steadily increased. As at the end of 2023, it amounted to 27.8 billion zlotys, compared to only 7.1 billion zlotys at the end of 2016.

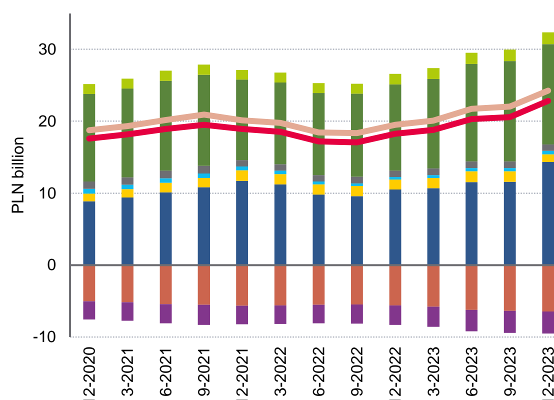
**Figure 3.3.** Structure of the Solvency Capital Requirement – life insurance



*Source: UKNF.*

**Figure 3.4.** Structure of the Solvency Capital Requirement – non-life insurance



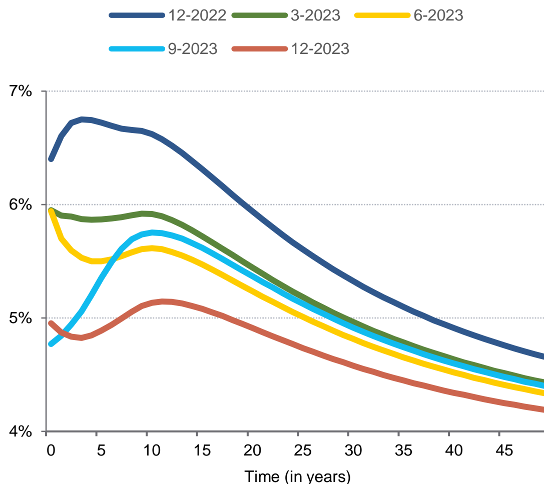

*Source: UKNF.*

**The underwriting risk played a dominant role in the solvency capital requirement of life insurance companies.** However, its main source were the potential lapses of insurance agreements by customers and, to a lesser extent, biometric events such as mortality or morbidity. Domestic life insurance companies, unlike those active in Western Europe, did not take longevity risk of any significant scale. As at the end of 2023, the underwriting risk requirement amounted to 7.5 billion zlotys, while for market risk, the second most significant module of the SCR, it was more than twice lower. The lapse risk submodule accounted for more than a half of the non-diversified capital requirement for the life underwriting risk and it was almost three times higher than due to the mortality risk. The requirement for the lapse submodule indicates the risk of losing future profits and fees associated with maintaining the insurance. The higher underwriting risk charge resulting from an increase in the extent of activity, with

premiums collected in 2023 being 6% higher than in the previous year. The life insurance solvency capital requirement increased by 0.5 billion zlotys in 2023, to 8.7 billion zlotys at the end of the year (see Figure 3.3).

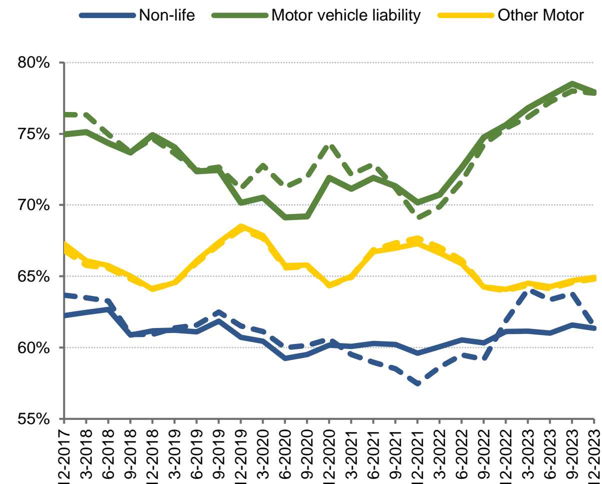
**The growth of the market and underwriting risk in 2023 affected the higher level of the solvency capital requirement of non-life insurance.** The largest component of the SCR was the market risk module (14.3 billion zlotys), which exceeded the underwriting risk requirement. Such situation was previously observed at the end of 2021 (see Figure 3.4), which was then associated with the transition of one company from the standard formula to an internal model. The market risk requirement at the end of 2023 was as much as 3.8 billion zlotys higher than at the end of 2022, which resulted from the higher market value of banks' shares and its impact on the market risk concentration submodule, as well as equity risk. On the contrary, the growth in the underwriting risk in non-life insurance mainly affected the first half of the year and was mainly related to elevated levels of the catastrophe risk. Indeed, in 2023, non-life insurance companies reduced their expenditure on reinsurance cover for catastrophe losses, resulting in higher deductible payments by insurance companies in the event of an extremely adverse event. If companies failed to transfer the underwriting risk, the requirement due to the cat risk in non-life insurance would reach much higher levels.

**Figure 3.5.** Term structure of the risk-free rate




*Source: EIOPA.*

**Figure 3.6.** Loss ratio in selected business lines of non-life insurance




Note: The solid line marks the indicators on a net basis while the dashed line shows indicators on a gross basis.

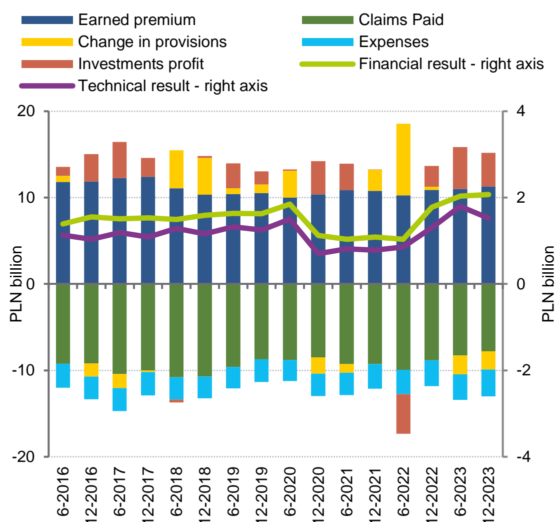
*Source: UKNF.*

**The interest rate cuts in the second half of 2023 affected the term structure of the risk-free rate.** The downward trend in interest rates, initiated at the end of 2022, continued in the second half of 2023. In tenors of one to 10 years, they decreased by approx. 0.7 percentage points (see Figure 3.5). Nevertheless, the SCR due to interest rate risk has not changed significantly. In accordance with the standard formula of the Solvency II methodology, a decrease in interest rates should imply a lower capital requirement

on this account, however, this was offset by an increase in the excess of assets over liabilities and an extension of the duration of bonds. Indeed, the prospects of achieving the highest yields have encouraged insurance companies to invest in instruments with longer maturities.

**The investment activity contributed to a record high profit of the insurance sector in 2023 (9.5 billion zlotys).** This result was 67% higher than in 2022, of which the insurance companies earned 5.7 billion zlotys in the first half of 2023, the level corresponding to the whole 2022 (see Figure 3.7 and Figure 3.8). Life insurance companies generated profits of 3.3 billion zlotys and non-life insurance companies – 6.2 billion zlotys. The profits well above the average of the largest entities determined the growth of the sector's financial result. Only three companies in each of life insurance and non-life insurance recorded a loss in 2023, the total value of which did not exceed 0.2 billion zlotys. In investment activity, both realised gains, including interest and dividends received and unrealised gains resulting from an increase in the valuation of investments, have increased.

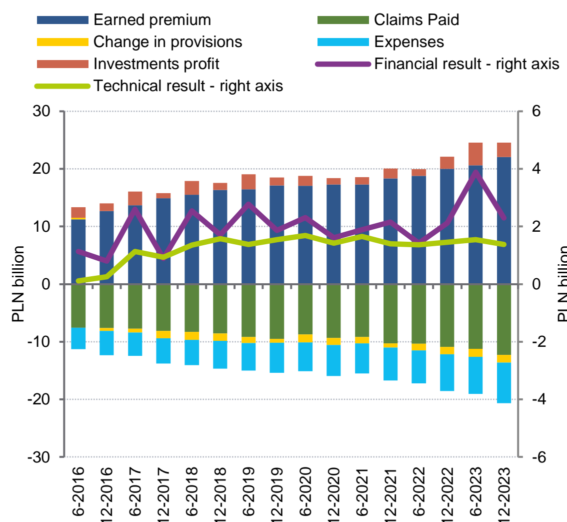
**Figure 3.7.** Selected items of the income statement account in the half year – life insurance




Note: data according to the statutory reporting.

*Source: UKNF.*

**Figure 3.8.** Selected items of the income statement account in the half year – non-life insurance




Note: data according to statutory reporting.

*Source: UKNF.*

**The insurance sector has seen a systematic improvement in profitability.** In 2023, the ROE in life insurance reached a record high of 30%, while in non-life insurance it reached 19%. This meant an almost twofold increase compared to 2016. While 2023 was heavily affected by investment activity in terms of changes in efficiency, the continued improvement in this indicator in recent years may be indicative of an increasingly low level of competition in the sector, resulting in insurance companies charging their customers excessively for premiums in relation to claims and benefits paid. In 2023, this relationship in life insurance recorded one of the highest levels ever observed.

**In 2023, life insurance companies generated the highest technical profit of 4.1 billion zlotys, 1.3 billion zlotys more than in 2022.** This increase was mainly driven by the life insurance class, which generated a profit of more than 1.4 billion zlotys (0.3 billion zlotys in 2022). In this part of the business, companies collected 0.6 billion zlotys more in premiums than in the previous year, accompanied by a simultaneous decrease in benefits paid. The lower payouts resulted from the return of the number of deaths to pre-pandemic COVID-19 levels.[80] However, the improvement in profitability of this group of insurance was driven, to a larger extent, by improved investment performance. Sickness and accident insurance continued to record the highest share in the technical result of life insurance. They generated a profit of over 2 billion zlotys, almost half of the technical result of the entire life insurance. Despite only a 35% share in premiums, it has been the most profitable group for insurance companies for years and at the same time, the most costly for customers.

**The marked increase in premiums has not significantly changed the technical result of non-life insurance.** In fact, claims and the cost of insurance activity grew proportionally to the growth in revenue. In 2023, the companies generated the technical profit of 2.9 billion zlotys, only 0.1 billion zlotys more than in 2022. For the first time since 2016, these entities incurred a loss in the most significant insurance group – motor third party liability of 0.1 billion zlotys, while a minor profit of 0.25 billion zlotys was recorded in 2022. The increase in claims and operating costs continued to be higher than premium revenue. Like in 2022, the auto casco (AC) insurance had the largest impact on the technical result of non-life insurance. The companies earned 0.9 billion zlotys in this segment in 2023, as in 2022. Contrary to the compulsory motor insurance, in voluntary AC insurance the growth in claims and costs was proportional to the premium collected. Due to the fact that motor third-party liability and AC insurance are often sold jointly, the lower profitability of third-party liability does not pose risk to the profitability of the companies. On the other hand, sickness and accident insurance, demonstrated the highest profitability, with approx. 30% of the premiums earned representing the profit of the companies.

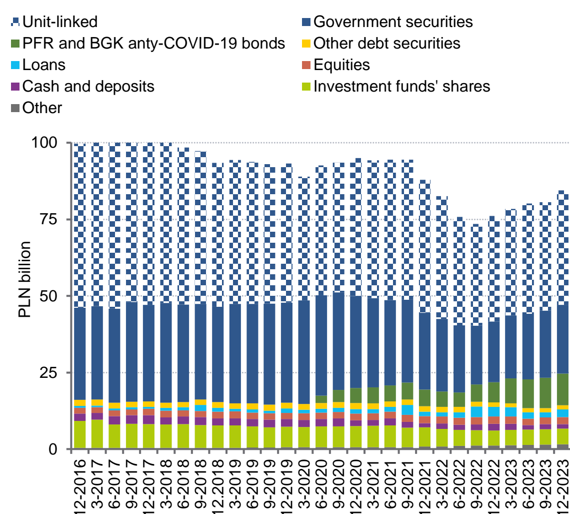
**In 2023, claims in motor third-party liability insurance increased and was significantly higher than in other non-life insurance.** At the end of 2023, the loss ratio in this Class increased by 2.4 percentage points (to 77.8%), while it remained stable at 61.4% for non-life insurance as a whole (see Figure 3.6). It was possible due to increased premiums in other non-life insurance classes. Premiums in motor third-party liability have also increased, however, the pace of their change was almost twice as low as the rate of claims. Taking costs into account, compulsory motor insurance was unprofitable and recorded a negative technical result. Companies unchangeably compensated losses on motor third-party liability insurance with profits gained from voluntary AC insurance. In 2023, the COR ratio for non-life insurance, which measures the ratio of claims paid and costs to premium earned, deteriorated slightly (up to 94.1%), but the efficiency of the companies remained at a safe level.

**High profitability in some insurance groups may limit the availability of cover products for households.** Significant profits of insurance companies confirm the profitability of their activity, but in a

[80] According to Statistics Poland, 398 thousand people died in Poland in 2023, a figure slightly lower than the average for 2015-2019.

sustainable sector they should also translate into capital security. To achieve this objective, profits must be retained within the entity, which cannot be observed particularly in life insurance. Domestic insurance companies significantly outperform European companies in terms of the ratio of profit to premiums collected. While in the EEA this figure amounted to 5.4%[81], in Poland it reached 12%, including almost 14% for life insurance. In earlier periods, the ratio was also more than double the European averages. In particular, high profitability can be seen in health insurance of the life insurance sector and in sickness and accident insurance of non-life insurance. High price of insurance cover may be a barrier to some customers preventing its purchasing. In fact, consolidation of the insurance sector is not conducive to reducing cost of premiums. Since 2020, the domestic insurance sector has lost seven entities (3 in life insurance and 4 in non-life insurance). Moreover, a merger of three life insurance and two non-life insurance companies is scheduled in 2024. While mergers have a positive impact on solvency through the use of synergies, less competition usually leads to higher costs for policyholders and reduced access to insurance.

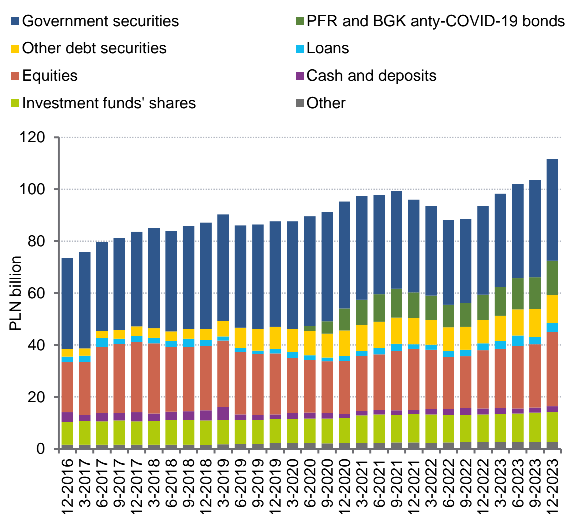
**Figure 3.9.** Investments and unit-linked assets – life insurance




Note: Government securities include securities issued or guaranteed by governments, central banks and supranational institutions, without PFR and BGK bonds for the COVID-19 Response Fund.

*Source: UKNF.*

**Figure 3.10.** Investments – non-life insurance




Note: Government securities include securities issued or guaranteed by governments, central banks and supranational institutions, without PFR and BGK bonds for the COVID-19 Response Fund.

*Source: UKNF.*

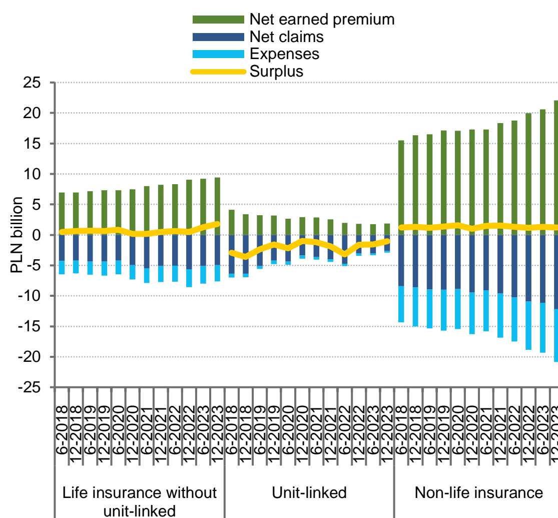
**Insurance companies have increased their exposure to debt securities issued or guaranteed by the State Treasury.** In 2023, their value in the life insurance portfolio (excluding unit-linked assets) increased by 6.4 billion zlotys, to 32.8 billion zlotys (see Figure 3.9). Particularly, the exposure of life insurance companies to bonds issued by PFR and BGK for the COVID-19 Response Fund rose from 6.6 billion zlotys to 10.4 billion zlotys. The change in the valuation of these instruments was twice as high

[81] Data concerning groups as at the end of the second quarter of 2023 (median) – Insurance Risk Dashboard, EIOPA, February 2024.

as that of the Treasury bond portfolio, although the nominal value of this portfolio was twice as low. The value of Treasury bonds and guaranteed bonds has also grown significantly in non-life insurance (by 8.6 billion zlotys), to 53.6 billion zlotys at the end of 2023 (see Figure 3.10). This was associated with both an increase in the valuation of Treasury debt securities and the purchase of these bonds by the companies. The value of domestic Treasury securities in non-life insurance deposits increased by 4.4 billion zlotys, to 36.7 billion zlotys, and for the aforementioned BGK and PFR bonds by 3.0 billion zlotys, to 12.7 billion zlotys.

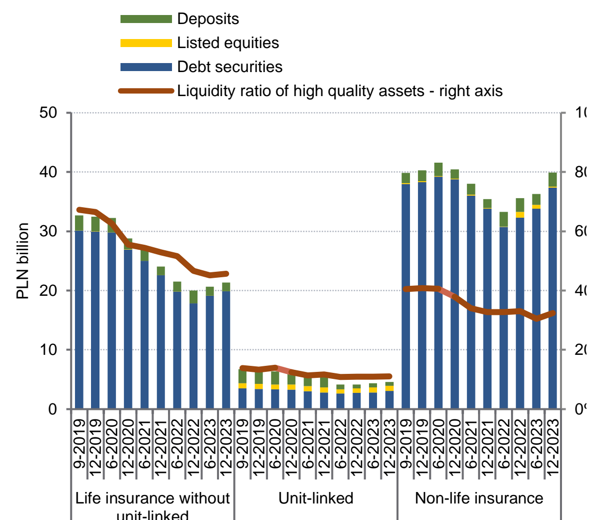
**The exposure of the insurance sector to domestic investment funds also grew, mainly due to an increase in the valuation of units of open-ended investment funds in unit-linked (UFK) assets.** Almost 82% of the unit-linked assets were held in investment funds' shares. Exposure of unit-linked insurance to investment in closed-ended funds' shares fell to 1.4 billion zlotys at the end of 2023 and accounted for less than 5% of total assets. In the case of other investments in life and non-life insurance, the exposure to investment funds has slightly increased (to 14.8 billion zlotys). Insurance companies invested mainly in open-ended AIFs and closed-ended funds. In non-life insurance, shares of closed-ended funds accounted for 85% of the exposure, through which companies gained exposure to the real estate market, debt or corporate bonds. In 2023, the value of investments in foreign investment funds' shares slightly decreased.

**Figure 3.11.** Premium earned, claims, costs and surplus funds in the half-year period




*Source: UKNF.*

**Figure 3.12.** Structure of high quality liquid assets of the insurance sector




Notes: The methodology of determining the liquidity ratios is described in the footnote earlier in this chapter.

*Source: UKNF.*

**The extent of funding of domestic non-financial corporations by the insurance sector was limited.** Its value increased to 3.3 billion zlotys at the end of 2023, mainly due to an increase in non-life insurance companies' receivables from loans granted (0.9 billion zlotys). Despite this, domestic corporate debt securities accounted for nearly 60% of the total exposure. At the end of 2023, investments of insurance

companies still included more foreign corporate bonds than domestic bonds. The extent of exposure to the domestic banking sector (excluding the equity portfolio) increased by 6.8%, to 7.1 billion zlotys at the end of 2023, driven by the purchase of banks' debt securities by non-life insurance companies. The level of deposits, on the other hand, dropped slightly and the share of covered bonds in the sector's assets remained negligible. The value of investments of the insurance sector in foreign bank instruments amounted to 2.8 billion zlotys and was mainly generated by non-life insurance companies.

**The liquidity position of the life insurance (excluding UFK) sector has improved.** The excess of current operating revenue over expenditure has increased more than three times (see Figure 3.11). This was possible due to an increase in premiums, with a significant decline of claims and expenses. Moreover, life insurance companies (excluding UFK) demonstrated the highest level of high quality asset liquidity ratio[82], which amounted to 46% (see Figure 3.12). In non-life insurance, the level of liquid assets fluctuated around 32%. Non-life insurance companies maintained the surplus of premiums over claims at a level similar to the previous year, consequently, their liquidity position has not changed. The increase in premiums earned offset the growth in the value of payouts and expenses. Unit-linked assets continued to remain the least liquid (the ratio of high-quality liquid assets stood at 11%).

**Net outflow of funds continued to be observed in unit-linked insurance.** In this group, premiums have been decreasing steadily over the years. Claims and expenses also decreased in 2023. Consequently, the shortfall in premiums over payouts slowed down. Surrenders, i.e. withdrawals from the insurance agreement, continued to dominate the payouts, while claims paid as a result of contractual insurance events did not exceed 10% of all payouts. A number of products still remained at the phase-out stage as a result of the product intervention carried out by the supervision authority in 2021.[83]

**The high share of expected profits included in future premiums (EPIFP) in life insurance and the lack of a regulatory restriction on the double gearing of capital in non-life insurance pose a risk to the solvency of the insurance sector in the event of shocks.** The capital raised by the inclusion of profits on future premiums in own funds has a limited loss coverage capacity as it may only absorb the effects of materialisation of the risk of insurance agreement lapses. Nevertheless, it is included in the highest category of own funds. At the end of September 2023, the value of the EPIFP in life insurance amounted to 11.1 billion zlotys (1.0 billion zlotys more than at the end of 2022), accounting for 48% of own funds eligible for SCR coverage. In non-life insurance, the figure was at a significantly lower level

[82] The liquidity ratio of high quality assets measures the share of high quality liquid assets in the funds' total assets. The following assets have been classified as high-quality liquid assets: deposits and cash, securities issued by the central government, debt securities of central banks and shares listed on organised markets (excluding shares of financial institutions) recognised at half of their value.

[83] The KNF announcement regarding prohibitions on the marketing, distribution and sale of insurance investment products – life insurance contracts if linked to an insurance assets:
https://www.knf.gov.pl/knf/pl/komponenty/img/Komunikat_KNF_dot_interwencji_produktowej_UFK.pdf.

(approx. 4%), consequently, the figure for the sector as a whole reached 19% and was significantly higher than in the EEA countries - 2.7%.[84] On the other hand, the lack of deduction of participations in other financial institutions from own funds lead to the double gearing of capital by the subsidiary and the parent company, generating a risk of transferring losses from one entity to the other. The value of non-life companies' participations in other insurance companies and banks amounted to 26.5 billion zlotys at the end of 2023. Taking into account the risks arising from these two factors would result in a decline in the solvency ratio of the entire domestic insurance sector from 240% to 175%. In case of life insurance, the elimination of EPIFP would result in a decrease in the solvency ratio from 274% to 207%, with some entities failing to meet capital requirements. On the other hand, reducing double gearing in non-life insurance would result in a decrease in the solvency ratio from 226% to 162%.

## 3.2. Investment funds[85]

**In 2023, open-ended funds[86] recorded a slight improvement in the liquidity ratio[87], mainly observed in the first half of the year.** In the following months, the liquidity position of the sector remained stable, however, at the end of December the aggregate liquidity ratio of high-quality assets still remained at a level lower than the pre COVID-19 pandemic level (see Figure 3.13 and Figure 3.14). Due to the obligation to redeem units on demand, open-ended funds are the most liquidity risk-sensitive part of the investment fund sector. The conditions under which these entities operated in the period under review helped to improve their liquidity. In fact, throughout the year, almost 24 billion zlotys[88] flowed to those entities on a net basis, most of which (approx. 20 billion zlotys) to debt funds (see Figure 3.15). This, in turn, was associated with a significant increase in their purchases of Treasury bonds, representing the backbone of their most liquid assets. Equity funds and other funds continued to have the lowest share of liquid assets in relation to total assets.

**In 2023, more than a half of the open-ended fund population saw an improvement in the liquidity ratio.** In the first half of the year, the ratio increased in most entities, but in the second half of the year a decrease was observed in the majority of funds. The diversification in the level of this ratio within the sector remained significant (see Figure 3.16), as both entities with very high and extremely low share of the most liquid assets operated within UCITS and open-ended AIFs. Relatively more funds with

[84] Data concerning groups as at the end of the second quarter of 2023 (median) – Insurance Risk Dashboard, EIOPA, February 2024.

[85] The analysis has been prepared based on preliminary unaudited data for 2023.

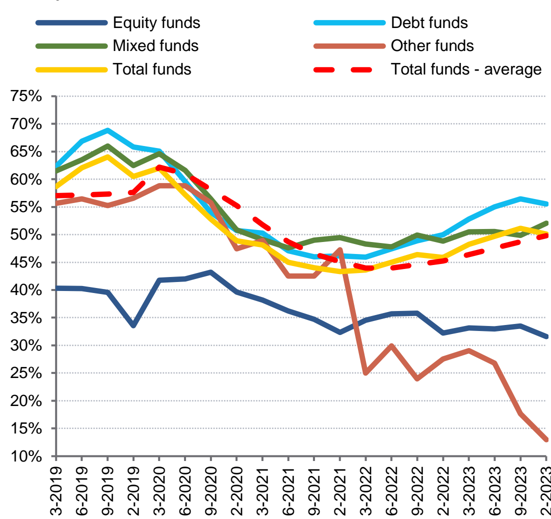
[86] Open-ended funds include UCITS and open-ended alternative investment funds (AIFs).

[87] The liquidity ratio of high-quality assets (hereinafter referred to as the liquidity ratio) measures the share of high-quality liquid assets in total assets of the funds. The following assets have been classified as high-quality liquid assets: bank deposits, debt securities issued by the central government and central banks and shares listed on organised markets (excluding shares of financial institutions) recognised at half of their value.

[88] This compares with the largest outflow of funds from open-ended funds in 2022 (24.2 billion zlotys in net terms).

very low levels of liquid assets were included in the open-ended AIF group – nearly a quarter of the entities in this population had a ratio lower or equal to 10%. These were entities with investment portfolios consisting almost exclusively of foreign investment funds' shares (according to the methodology adopted in this chapter, these instruments are not classified in the category of high-quality liquid assets). More than a half of funds offered pension products, while several others applied the investment rules and restrictions set out for a closed-ended investment fund. The risk of large-scale redemptions in such entities was limited.

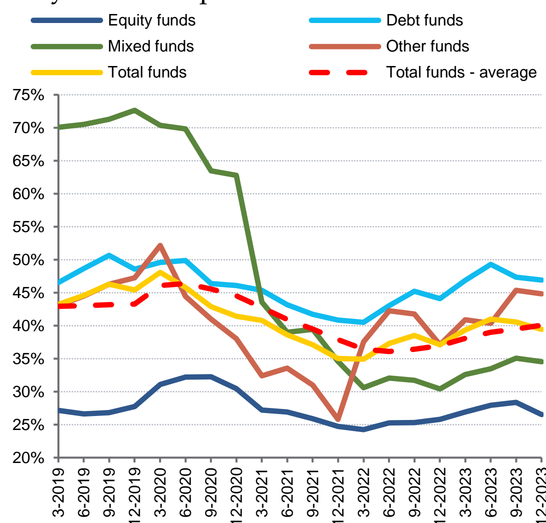
**Figure 3.13.** Liquidity coverage ratio of high quality assets in UCITS




Note: The average shown in the figure is a moving average of the four preceding quarters.

*Source: NBP.*

**Figure 3.14.** Liquidity coverage ratio of high quality assets in open-ended AIFs




Note: The average shown in the figure is a moving average of the four preceding quarters.

*Source: NBP.*

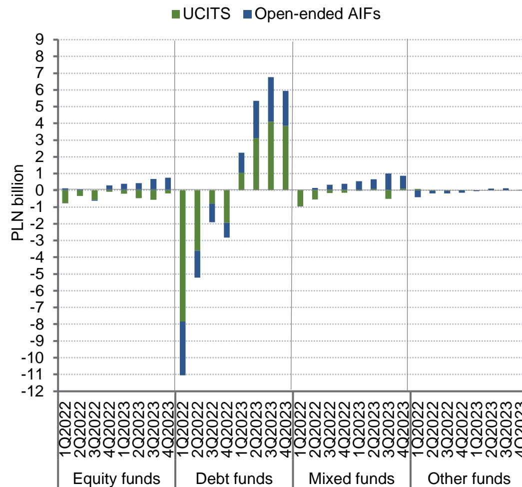
**Low liquidity buffers[89] remained a weakness of open-ended funds.** In 2023, under the conditions of the largest ever observed net inflow of funds to these entities, the total value of their deposits increased by only 0.3 billion zlotys (which accounted for approx. 1.3% in relation to the net inflows). The regulations concerning the operation of investment funds do not specify a minimum value of deposits these entities should keep in bank accounts. They only indicate that in the case of UCITS deposits are intended to enable the funds to meet their current liabilities.[90] Nevertheless, the phenomenon of a systematic disappearance of the funds' deposit base in relation to their assets, observed for several years, is noteworthy. At the end of December 2023 this ratio amounted to only 1.7% in UCITS (i.e. 0.1 percentage point less than a year earlier) and 2% in open-ended AIFs (a decline of 0.8 percentage points). In absolute terms, these were levels twice as low as the pre-pandemic level. The lowest liquidity buffers

[89] I.e. the level of investment fund deposits in banks or credit unions.

[90] Article 109 of the Act of 27 May 2004 on Investment Funds and Alternative Investment Fund Management (Journal of Laws 2023, item 681).

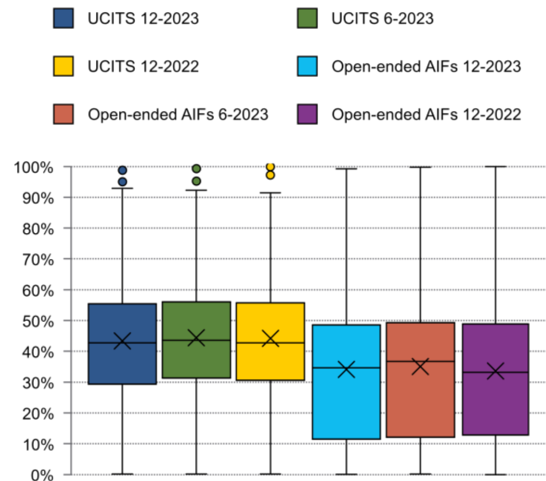
continued to be characteristic of debt funds, where the largest portion of investors' funds was accumulated.

**Figure 3.15.** Balance of inflows to open-ended funds




*Source: NBP.*

**Figure 3.16.** Distribution of the liquidity ratio for open-ended funds




Notes: The edges of the box mark the first and third quartile, a line inside the box marks the median, and a "x" symbol – the average value. The vertical line is determined between the minimum and maximum value, after elimination of outliers, while points outside the line are regarded as outliers. The method of determining the liquidity ratios is described in the footnote earlier in this chapter.

*Source: NBP.*

**In 2023, open-ended funds significantly increased their portfolio of domestic Treasury bonds, while they were most active in this market in the first half of the year.** On an annual basis, the balance of transactions in these instruments amounted to 12.5 billion zlotys (10.2 billion zlotys between January and the end of June). At the end of December, their value in the portfolio of open-ended funds was over 18 billion zlotys higher than at the end of 2022, amounting to 67.4 billion[91] zlotys (see Figure 3.17 and Figure 3.18). The increased demand for government bonds was related to the need to allocate incoming funds (mainly to debt funds). The favourable government bond price movements during the period analysed were also an important factor contributing to the growth of this part of the UCITS and open-ended AIFs portfolio. While in the first half of the year, funds mostly purchased fixed coupon instruments, in the second half of the year the balance of transactions was higher in the case of floating-rate bonds. The observed rebuilding of this portfolio could have been partly related to the approaching maturity of inflation-indexed bonds.[92] At the end of 2023, fixed and floating coupon instruments had

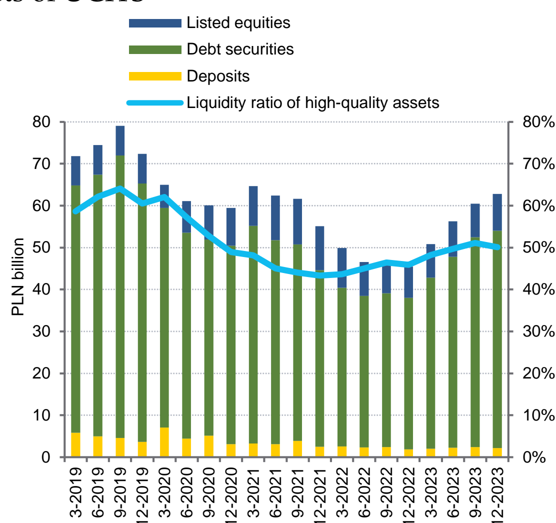
[91] Of which 43.9 billion zlotys for UCITS and 23.5 billion zlotys for open-ended AIFs.

[92] The last series of these bonds available on the market matured in August 2023. At the end of July, their value in the portfolio of open-ended funds amounted to approx. 4 billion zlotys, which accounted for 6% of the total portfolio of domestic Treasury bonds held by these funds.

similar weights in the aggregate portfolio of domestic Treasury bonds managed by open-ended funds.[93] The rising importance of fixed coupon bonds was also accompanied by a change in the duration of this part of the Treasury portfolio (a rise from 3.6 in December 2022 to 4.7 at the end of 2023).

**Links with banks accounted for the most significant part of exposure of the investment funds to financial institutions.** The strength and structure of these links differed in open-ended and closed-ended funds. The largest exposure was recorded for open-ended funds, with debt and equity instruments being the main sources of exposure. Exposure to these instruments accounted for more than 70% of UCITS and open-ended AIFs exposure to the domestic banking sector. In 2023, the value of domestic banks' debt securities in their portfolios rose significantly (by nearly 6 billion zlotys during the year, to 13.2 billion zlotys at the end of 2023).[94] This increase stemmed both from purchase transactions and from favourable price movements of these instruments in the period under review. Subordinated securities constituted a major part of this portfolio. The links between closed-ended funds and the domestic banking sector were formed primarily by purchased receivables and deposits. The two categories jointly accounted for 80% of closed-ended funds' exposure to the domestic banking sector. In 2023, their value in the balance sheet of closed-ended funds increased by 2.3 billion zlotys and accounted for over 60% of the increase in their exposure to the domestic banking sector.

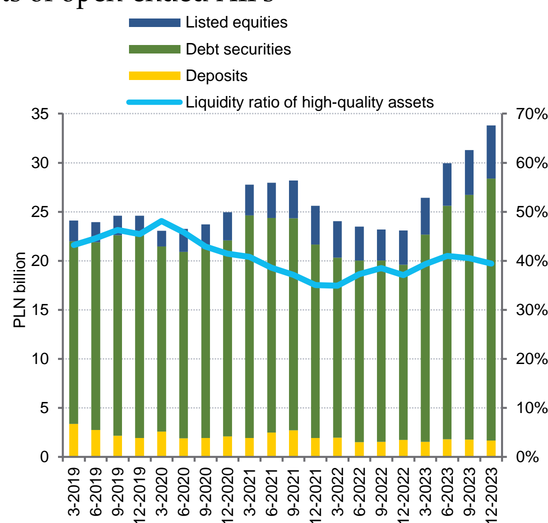
**Figure 3.17.** Structure of high quality liquid assets of UCITS




Notes: The method of determining the liquidity ratios is described in the footnote earlier in this chapter.

*Source: NBP.*

**Figure 3.18.** Structure of high quality liquid assets of open-ended AIFs




Notes: The method of determining the liquidity ratios is described in the footnote earlier in this chapter.

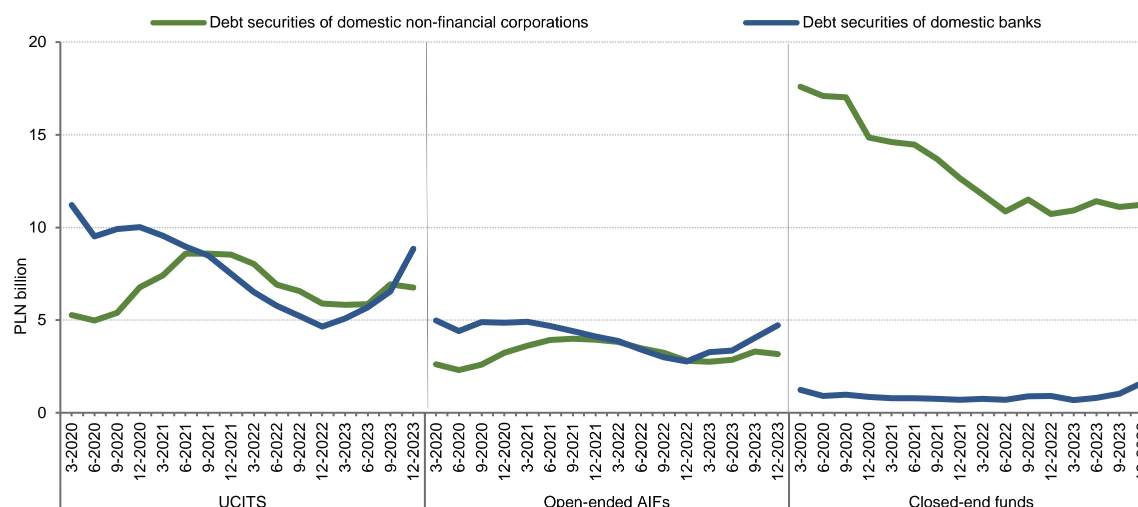
*Source: NBP.*

[93] These shares relate to Treasury bonds issued for the domestic market.

[94] Due to the different characteristics and level of credit risk, bonds issued by BGK for the COVID-19 Response Fund, the National Road Fund and the Armed Forces Support Fund were excluded from the category of "bank debt instruments". The year 2023 was another year when the funds sold bonds on a net basis to the COVID-19 Response Fund (2.1 billion zlotys). The positive balance of transactions referred to other instruments.

**The exposure of investment funds to debt instruments issued by domestic enterprises remained relatively limited and was related mainly to closed-end funds.** Compared to the end of 2022, the value of these securities in the funds' portfolios increased by almost 2 billion zlotys, almost entirely resulting from favourable price movements of these instruments. At the end of December, their value in the sector's aggregate portfolio amounted to 21.2 billion zlotys. More than a half of this amount was recorded on the balance sheets of closed-ended funds (see Figure 3.19). Closed-ended funds have consistently reduced this part of their debt portfolio over the past five years, which is evidenced by the negative balance of transactions in these instruments. In 2019-2023, they sold debt securities of domestic companies (on a net basis) amounting to over 7 billion zlotys. Open-ended funds saw the opposite trend – since the beginning of 2019, these entities have acquired debt instruments of domestic enterprises amounting to 3.1 billion zlotys for their portfolios. The ratio of the size of this portfolio to the assets of open-ended funds in this period remained stable at a level of 5-6%.

**Figure 3.19.** Exposure of investment funds to debt securities of domestic banks and enterprises




Note: BGK bonds for the COVID-19 Response Fund, bonds for the National Road Fund and bonds for the Armed Forces Support Fund were excluded from the category of "bank debt securities".

*Source: NBP.*

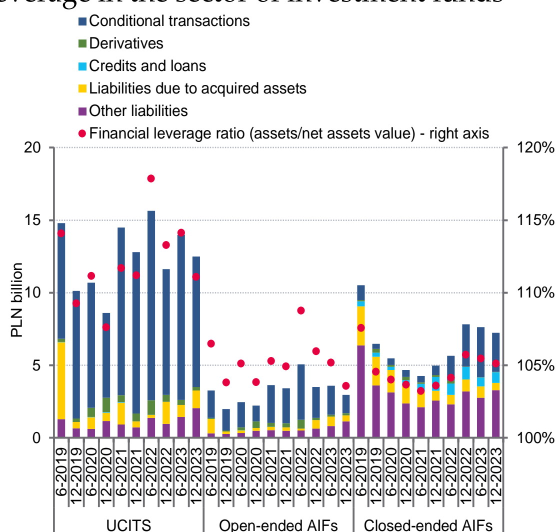
**In the second half of 2023, the leverage ratio[95] in the investment fund sector decreased by 1.5 percentage points amounting to 106.7% at the end of the year.** The domestic sector was characterised by a slightly lower leverage than observed among investment funds of euro area countries.[96] As in previous periods, UCITS demonstrated a higher leverage ratio than other types of funds (see Figure 3.20). Conditional transactions remained the main source of leverage in open-ended funds, accounting for 72% and 43% of total UCITS and open-ended AIFs liabilities, respectively.

[95] The leverage is expressed as the ratio of total assets to net assets of the funds.

[96] The leverage ratio of euro area investment funds as at the end of 2023 amounted to 108.2%. This value was calculated based on ECB data.

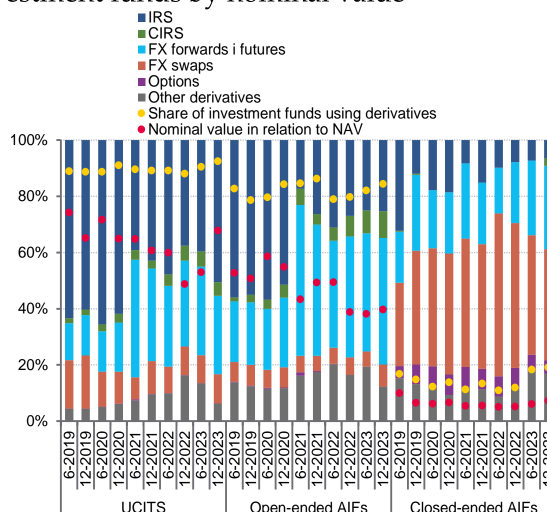
**Open-ended funds demonstrating the highest levels of leverage usually had more liquid assets.**[97] At the same time, the share of bank deposits in assets of the funds with the highest leverage ratios generally remained below the average for this part of the sector. Less than 25% of open-ended funds had a leverage ratio above the average[98], i.e. 111.1% for UCITS and 103.6% for open-ended AIFs, respectively (see Figure 3.22 and Figure 3.23). The total share of entities with a leverage ratio exceeding 120% in the net assets of open-ended funds amounted to 16%. Among these funds, debt funds were most common, with households as the main base of their clients.

**Figure 3.20.** Structure of liabilities and financial leverage in the sector of investment funds




*Source: NBP.*

**Figure 3.21.** Structure of derivatives used by investment funds by nominal value



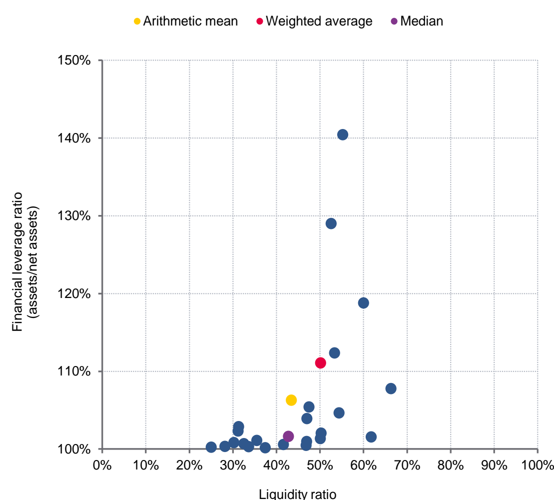

*Source: NBP.*

**In the second half of 2023, entities of the sector increased their exposure to derivatives.** In nominal terms, their value increased by approx. 32 billion zlotys, and UCITS used them more willingly than closed-ended investment funds, as in previous years (see Figure 3.21). These instruments were used by more than 90% of UCITS, almost 85% of open-ended AIFs and about 20% of closed-ended AIFs.[99] The structure of derivatives varied depending on the type of fund. Interest rate swaps (IRS) and FX forward contracts were most significant for open-ended funds, while FX swaps prevailed in closed-ended funds. In principle, entities with the highest synthetic leverage ratios[100], did not use financial leverage above the average. Open-ended funds also included a few entities for which the ratio of the nominal value of

[97] The liquidity of assets was determined by means of a high-quality asset liquidity indicator. The method of calculating the indicator was explained in earlier sections of the chapter.
[98] The average weighted by net asset value of investment funds.
[99] The share measured by net assets of investment funds.
[100] Synthetic leverage was defined as the ratio of the nominal value of derivative instruments to the net assets of an entity.

derivatives to net assets remained at a relatively high level. However, they used these instruments, mainly interest rate swaps, to hedge their positions in debt instruments.[101]

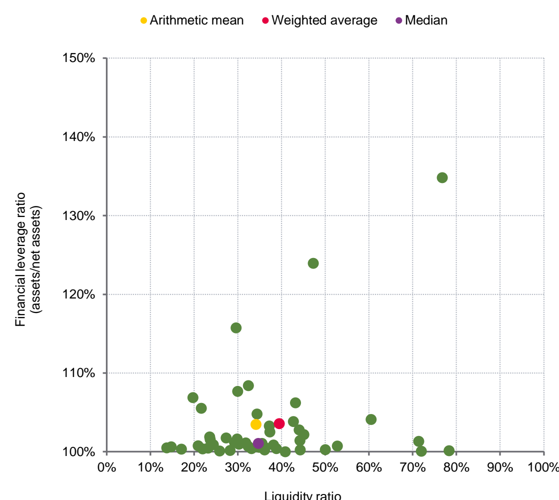
**Figure 3.22.** Distribution of the liquidity and leverage ratio in UCITS at the end of December 2023




Note: The entities are divided into groups by leverage ratio, in descending order. Each blue dot represents the average value of the leverage ratio and the liquidity ratio for a given group (averages weighted by the net asset value of the entities included in each group).

*Source: NBP.*

**Figure 3.23.** Distribution of the liquidity and leverage ratio in open-ended AIFs at the end of December 2023




Note: The entities are divided into groups by leverage ratio, in descending order. Each green dot represents the average value of the leverage ratio and the liquidity ratio for a given group (averages weighted by the net asset value of the entities included in each group).

*Source: NBP.*

[101] The Act on Investment Funds and Management of AIFs defines the conditions to be met by UCITS and open-ended AIFs applying the investment rules and restrictions set out for UCITS to invest in derivatives. One of them is the purpose of concluding the agreement, such as reducing the investment risk or ensuring the efficient management of the fund's investment portfolio (consolidated text, Journal of Laws 2023, item 681).

# 4. Systemic risk assessment[102]

*The assessment of systemic risk in this Report takes into account two aspects of that risk – **cyclical and structural**. **The cyclical risk** stems from periodical changes in its level throughout the financial cycle and is largely tied to the risk of excessive debt growth and excessive leverage, and instability of funding models. **The structural risk** results from interconnectedness across institutions, exposure concentration and from the structure of the financial system's incentives that affect how participants in this system behave.*

**The banking sector remains resilient to the effects of potential shocks materialisation.** Banks display high loss-absorption capacity even in the pessimistic scenarios of macroeconomic stress tests. The legal risk of FX housing loans remains the major source of burdens on banks.

**High nominal profits and the increase in banks' excess capital create space for lending expansion and the build-up of capital buffers for the future**. The banks' high nominal profits earned and retained last year and issued debt instruments eligible for fulfilling the MREL contributed to increasing excess capital in the sector. The size of excess capital creates room for maintaining macroprudential capital buffers without impeding the expansion of lending and absorption of potential losses. This eliminates the risk of credit rationing due to low excess capital levels, which was indicated in the previous issues of the Report.

**Risk related to legal risk and its future costs remains of key importance for financial stability assessment.** The disproportion of sanctions and burdens imposed on banks, observed in recent years, related to borrowers' support and protection as consumers of financial services, negatively affects the conditions in which banks operate. This may not only impinge on the financial condition of the sector, but also on the credit market and, as a result, may reduce the range of financial services offered to customers, especially households.

**Credit risk, market risk, interest rate risk and liquidity risk pose no risks to domestic financial stability for a considerable time.** Two types of exposures with the largest share in banks' assets in Poland, namely, (i) the portfolio of Treasury bonds and State Treasury-guaranteed bonds, and (ii) exposures to the RRE market and its funding, have to be monitored, but do not generate systemic risks.

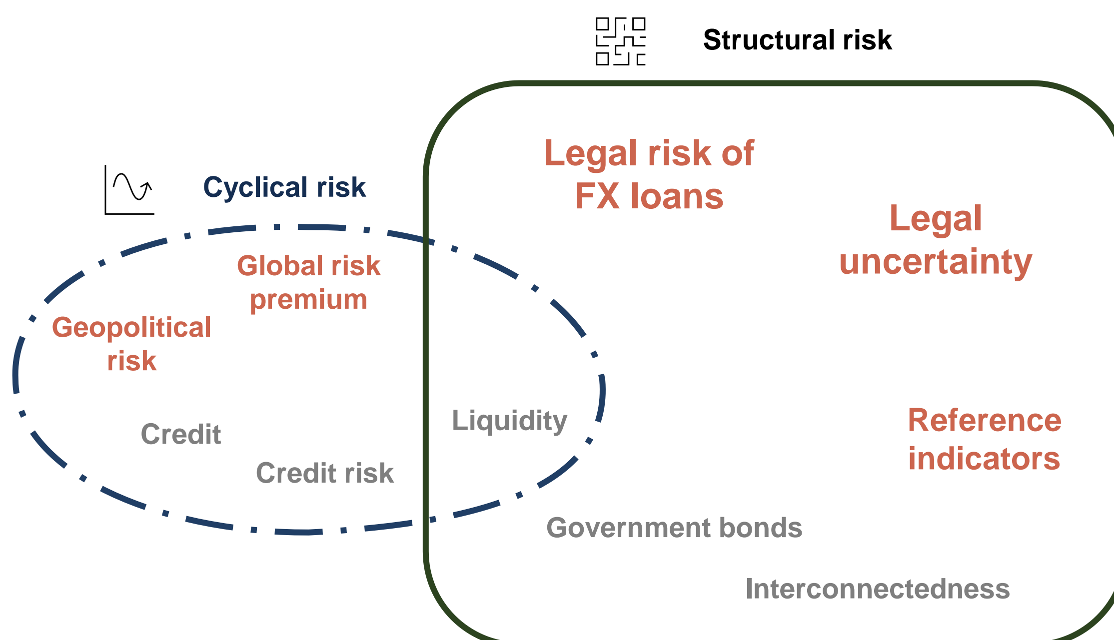
**Liquidity risk is low, which stems not only from the high share of liquid securities in banks' portfolios, but primarily from stable deposits in the Polish banking system.** In view of the specific preferences of depositors (safety, liquidity) and reduced supply of alternative products to bank deposit

[102] Financial stability assessment traditionally focuses on the banking sector because it has the largest impact on the level of systemic risk. This results from the structure of banks' balance-sheets, the lenders' dominant share (75%) in Poland's financial sector assets and their leading role in providing core financial and payment services.
At the present stage of development, Poland's sector of non-bank financial institutions has a limited impact on systemic risk because its business models are traditional and its share in the domestic financial system assets is significantly lower.

holders, the risk of banks' funds flowing out of the whole banking sector (and not individual banks) is low.

**Contagion risk in the Polish financial system, indicated in the previous issues of the Report, has been significantly reduced by the implementation of effective bank resolutions in Poland, what is confirmed by the sale agreement of VeloBank (see Box 4.1).** Stress tests conducted by NBP do not indicate that there are entities in the Polish banking sector that display significant weaknesses and at the same time – given their size and interlinkages – could produce negative external effects for the remaining entities. Financial interlinkages between the banking sector and non-bank financial institutions also remain weak, and risks in the latter are not systemic but only sectoral.

**Chart 4.1.** Systemic risk areas in Poland




Notes: The issues that represent risks or challenges to financial stability are marked in red, and the areas that do not generate such risks are marked in grey.

*Source: NBP.*

**Box 4.1. The resolution processes in Poland – an effective reduction of systemic risk arising from the weaknesses of certain institutions**

*On 29 March 2024, the Bank Guarantee Fund (BFG) communicated that an affiliate of Cerberus Capital Management, L.P. ("Cerberus") had signed a preliminary agreement to acquire 100% of shares of VeloBank S.A.*[103] *This transaction successfully concludes the next stage in the process of resolution of Getin Noble Bank S.A. (GNB).*[104] *The completion of the transaction is expected in mid-2024. Following the closing, VeloBank will cease to be a bridge institution.*

**This transaction ends a specific period in Poland's banking system, when several resolution processes were taken and successfully implemented. At the same time, this did not negatively affect the operation of other banks and the whole financial system. This is an unprecedented experience, both at national and EU level.**

**Four banks of various market shares and legal forms – two commercial banks and two cooperative banks – have been subject to resolution procedures since 2020.** Various resolution tools were applied in these processes: in two cases it was (i) the sale of business, and in another two (ii) a bridge bank, and the asset separation tool was additionally applied in one of the cases. The participation of market actors in the resolution process should be considered exceptional. The commercial banks' protection scheme (System Ochrony Banków Komercyjnych S.A, SOBK)[105] was formed with the aim of supporting the resolution processes implemented by BFG. In the case of one cooperative bank, the cooperative banks' protection scheme (Spółdzielczy System Ochrony, SGB) was involved in the process.

***Getin Noble Bank S.A.***

The resolution of GNB was the first process of this type carried out for a large commercial bank (the sector's 10th bank in terms of balance-sheet total – 43 billion zlotys). It began on 30 September 2022, when BFG took the decision to transfer some of GNB's operations into a bridge institution, Bank BFG S.A., which name was changed to VeloBank S.A. The process was carried out in cooperation with SOBK. Shares and subordinated bonds of GNB were written down. BFG and SOBK provided financial support in the amount of 10.34 billion zlotys (6.87 bn and 3.47 bn zlotys, respectively), to cover the bank losses, recapitalize it and replenish the asset shortfall after the transfer of operations to the bridge bank. The parts of the bank's balance sheet exempted from the transfer (specifically FX-denominated or FX-indexed mortgage loans) remained in GNB under restructuring, the so-called residual entity. On 20 July 2023, the court declared the bankruptcy of the entity. In parallel, as part of preparations for an effective sale of VeloBank S.A., BFG took the decision to apply the resolution tool in the form of separation of property rights. On 27 October 2023, all the property rights and liabilities of VeloBank S.A. attached to the agreements linking the bank with leasing companies (VB Leasing S.A. and VB Leasing spółka akcyjna Automotive S.K.A.) were transferred to Podmiot Zarządzający Aktywami S.A. (asset management company). This entity was established by BFG to manage the property rights transferred, including to sell or liquidate them.

*Idea Bank S.A.*[106]

**Earlier, BFG made the decision to initiate the resolution of Idea Bank S.A.** (from the group of medium-sized banks –balance-sheet total 14.4 billion zlotys). On 31 December 2020, Bank Pekao S.A acquired the separated part of the bank's business. The acquired bank's shares were written down to cover its losses. BFG provided a subsidy in the amount of 193 million zlotys to the acquiring bank to cover the remaining capital gap and covered all acquired assets with a loss guarantee. The liabilities and assets not taken over remained with Idea Bank S.A. under restructuring, i.e. in the so-called residual entity. The bankruptcy of the entity was announced by the court on 26 July 2022.

*Cooperative banks*

**In 2020, the resolution of two cooperative banks was carried out:** Podkarpacki Bank Spółdzielczy w Sanoku (Poland's second largest cooperative bank with its balance-sheet total amounting to 2.8 billion zlotys) and Bank Spółdzielczy w Przemkowie (a small cooperative bank with a balance-sheet total of 170 million zlotys). The resolution of **Podkarpacki Bank Spółdzielczy w Sanoku** (PBS), initiated on 15 January 2020, was the first resolution proceeding in Poland. BFG applied the bridge bank tool, created **Bank Nowy BFG S.A.** and equipped it with an initial capital of 100 million zlotys. The separated business of PBS, including all its deposits of retail businesses, microfirms and small and medium-sized enterprises (SMEs), was transferred to the bridge bank. To cover the losses of the entity under resolution, members' shares and subordinated bonds and some liabilities towards local government units and large enterprises were written down. On 27 October 2021, the majority stake (72%) of Bank Nowy BFG S.A. was acquired by Wielkopolski Bank Spółdzielczy, operating under the brand of neoBANK.

The resolution of **Bank Spółdzielczy w Przemkowie** began on 30 April 2020. The bank's business and liabilities (with some exemptions) were acquired by SGB-Bank S.A. The shares of members of the bank and subordinated debt were written down to cover the losses. The transaction was financially supported by the cooperative banks' protection scheme (Spółdzielczy System Ochrony, SGB) and BFG (a BFG subsidy to SGB-Bank S.A. in the amount of 81.7 million zlotys).

*Resolution tools*

**BFG applied various tools in the implementation of the resolution process.** In the case of GNB and PBS it was a bridge bank tool. In the case of Idea Bank and Bank Spółdzielczy w Przemkowie the sale of business tool was applied, and it included all client deposits and almost all assets. In the case of

[103] A final acquisition is expected to occur in mid-2024 and is subject to Cerberus obtaining all necessary regulatory approvals and to the clarification of potential equity participations of the EBRD and the IFC in the Bank.
[104] A detailed description of the process can be found in *Financial Stability Report*, December 2022, pp. 61-63.
[105] Regulations on the scheme are elaborated in *Financial Stability Report*, June 2022, pp. 53-56.
[106] The process is described in detail in *Financial Stability Report*, June 2021, pp. 59-60.

GNB, the asset separation tool was also applied. At the same time, the write-down tool was exercised in each of the cases. According to the resolution principle that bank losses must be primarily covered by their owners, shares and subordinated bonds were written down in the first place.

***Objectives of the resolution***

**The resolution mechanism has effectively protected depositors against the adverse effects of bank failures.** The application of the procedure helped to fully protect deposits of natural persons, micro-firms and SMEs. An alternative solution was to declare bank bankruptcy. In the case of the four banks subject to the resolution, this would have resulted in the payment of guaranteed deposits in the amount of over 50 billion zlotys.

**The procedures implemented did not cause any direct negative consequences for other financial institutions and the financial sector and ensured the continuity of providing banking services to the customer.** Only in the case of PBS, were services to clients suspended during the 2-day transition period. In the remaining cases, the bank's business was uninterrupted. Transactions and operations were executed on an ongoing basis, and all bank products were active. What is important, actions taken by BFG were accompanied by an extensive communication policy. **During the preparation phase for the resolution, solutions were sought to avoid the write-down of deposits not subject to the BFG statutory guarantees.** It has to be pointed out that the principles of the EU state aid framework set the value of a write-down before funding under the resolution fund is made available. This means that if the loss is high and there are no other eligible instruments, deposits that are not guaranteed can also be written down. Deposit protection was particularly important from the point of view of maintaining the stability of the Polish banking sector which is financed mainly with these liabilities. In the case of GNB, the largest of the four banks subject to resolution, financial support from the commercial banks' protection scheme was used. Whereas, in the case of Bank Spółdzielczy w Przemkowie, the funding from the cooperative banks' protection scheme of SGB was provided.

**The resolution process is strictly regulated and requires the involvement of EU institutions.** The resolution must be notified with the European Commission and the European Banking Authority. The former announced that the support provided under the resolution process was compliant with the provisions on the granting of state aid.[107]

**The resolution tools applied in the Polish banking system ensured that the assumed resolution objectives were achieved.** Above all, the application of the tools reduced the systemic consequences resulting from the need to remove from the market the institutions not complying with the minimum regulatory requirements, thus being a proper solution for banks at risk of bankruptcy. It also ensured

[107] An individual consent of the European Commission (EC) was required only in the case of GNB. In the case of the remaining banks, it was possible to provide BFG support under the applicable aid schemes which had been approved by the Commission. In the case of Idea Bank and the two cooperative banks *Resolution scheme for cooperative banks and small commercial banks* was approved in 2016. Therefore, three resolution procedures had to be only notified with the EC.

the continuation of the critical functions of banks under resolution. It protected bank depositors against losses, also mostly those not guaranteed. It also protected taxpayers against the potential need to bailout the banks with public funds.

## 4.1. Structural risk: *elevated but poses no threat to financial stability*

The structural dimension of systemic risk has been the main area of challenge to Poland's financial system for a considerable time. The dimension's major component is legal risk related to FX housing loans. However, broad regulatory instability, including one related to consumer protection on the financial market, has recently gained in importance.

### 4.1.1. Legal risk of FX housing loans: *still high, but effectively managed by banks*

**Legal risk related to FX housing loans remains the main source of risk to the financial condition of banks and banking sector stability.** By the end of 2023, the costs amounted to 75 billion zlotys, of which nearly 60 billion zlotys were provisions, the remaining amounts were already sustained costs no longer shown on banks' balance sheets. The size of future provisions may be substantial, although it is likely to be significantly lower than the provisions created so far.

**The provisioning was spread over time and should be expected to remain such, but in the event of a considerable acceleration of this process, the banking sector would preserve its resilience and report excess capital.** The pace of provisioning will be affected by the possible successive rulings of courts and their approach to resolving disputes, where no consistent line of jurisprudence has been established so far. Assuming that all loans on banks' balance sheets become the subject matter of cases before the court or of a settlement, and around 40% of repaid loans will also go to trial, the banking sector would remain resilient and post excess capital, should legal risk provisions be created over the next two years and, additionally, this would happen amid adverse macro-financial conditions (see Chapter 2.8).

### 4.1.2. Consumer protection on the financial market: *lack of proportionality enhances risk in the system*

**For a considerable time, financial stability assessment in Poland has been increasingly affected by regulatory instability and uncertainty related to the interpretation of provisions on consumer protection**. The fact that loan repayment holidays will resume in 2024 may imply that the banking sector will have to sustain costs up to 4 billion zlotys. On the other hand, financially-distressed borrowers have been able to draw on assistance provided from the Borrower Support Fund for a long time. It was funded from banks' contributions and holds substantial resources. However, due to easy access and a still broad range of addressees (despite restrictive conditions) loan repayment holidays provided for by law will remain a preferred solution for borrowers. This may cause moral hazard to set in, which may result in a bigger risk taken by borrowers in anticipation of protective measures of the state.

**Uncertainty about the direction that the interpretation of consumer protection provisions on the domestic financial market will go is becoming a negative development**. The disproportion of various

types of burdens and sanctions imposed on financial institutions may have a negative impact not only on their costs but also on the predictability of business conditions and, as a result, may limit access to the financial services offered.

### 4.1.3. Benchmark reform on the Polish financial market: *protracted uncertainty over new benchmark*

**No clear declaration about what benchmark will replace WIBOR in the future gives rise to uncertainty and is an additional challenge to the timely completion of the benchmark replacement process**. In March 2024 the Steering Committee of the National Working Group for benchmark reform again commenced a review and analysis of benchmark alternatives to WIBOR.[108] The review includes both WIRON and other possible indices and benchmarks. By the time the ongoing reform of interest rate reference indicators is completed, WIBOR remains the key benchmark on the domestic financial market.

### 4.1.4. Treasury bond portfolio: *low sensitivity despite substantial exposure*

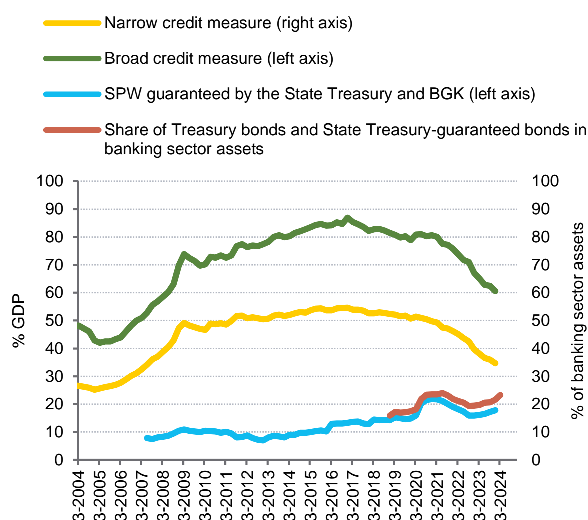
**The several years' decline in the loan to DGP ratio has been accompanied by an increase in the value of Treasury securities in banks' assets**. The share of that portfolio in the assets is again approaching the peak observed in mid-2021 (when it amounted to 24%).

**Banks' sensitivity to changes in bond valuation, related to the growing value of Treasury securities in their assets is, however, limited by the low duration of the portfolio and a substantial share of marked-to-market securities.** The sensitivity of banks' own funds to a hypothetical shock to yields (a 300 bp rise) declined from 13% in the middle of 2021 to slightly over 6% in the middle of 2023 and remains at this level (see Figure 4.2). This was to the largest extent caused by: (i) a reduction of the duration of the bond portfolio by banks, which reduces the sensitivity to interest rate changes and (ii) the declining share of the marked-to-market portfolio in favour of the portfolio measured at amortised cost. Also due to the recent increase in banks' own funds, the lenders can easily amortise the impact of changes in market bond valuation.

**Risk associated with the portfolio of bonds that are not marked to market, which may materialise if the need arises to sell them in order to meet increased obligations, remains insignificant.** The overwhelming majority of banks more than comply with the LCR requirement via marked-to-market bonds and other instruments, e.g. NBP bills. This means that if there is a need to satisfy liquidity needs through the sale of a portfolio of such instruments, this will not impact the level of banks' equity. In the case of other banks with a higher share of securities that are not marked to market, potential losses from the sale of the securities to meet their liquidity LCR requirement would not be substantial. Hence, they would not pose a risk to banking sector stability. Moreover, SPW – irrespective of their accounting method – may serve as collateral in operations on the market and operations with the central bank, which reduces the need to sell them and mitigates the risk of banks' losses should they have increased liquidity needs.

[108] https://www.knf.gov.pl/en/?articleId=88664&p_id=19

**Figure 4.1.** Credit and bond portfolio to GDP ratio

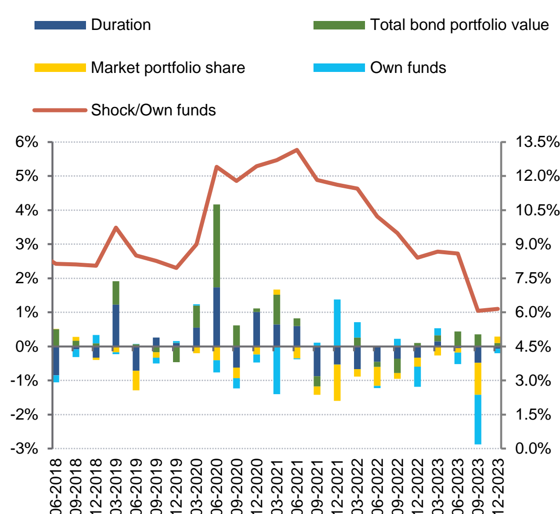



Notes: The ratio calculated on the basis of the narrow credit measure includes debt towards banks and credit unions, while on the basis of the broad credit measure – additionally debt towards other domestic non-monetary entities and foreign entities. The value of bonds are calculated according to their carrying amount. The series prior to 2018 includes no securities guaranteed either by the State Treasury or BGK.

Last observation: For the narrow credit measure, the broad credit measure and the SPW guaranteed by the State Treasury and BGK – fourth quarter of 2023. For the share of Treasury bonds and State Treasury-guaranteed bonds in the banking sector's assets – first quarter of 2024.

*Source: NBP.*

**Figure 4.2.** Sensitivity of own funds to credit risk of SPW and impact of individual factors




Note: The blue line indicates the ratio of a shock to banks' own funds (right-hand scale). Bars show the decomposition of the change of the effect of a 300 bp shock on the value of the SPW portfolio of banks (left-hand scale, %).

*Source: NBP.*

### 4.1.5. Other structural risks

**Climate risk is one of material risks to the economy and the financial system identified globally.** This risk is associated with physical risk and the risk of a transition to a low-carbon economy (see Financial Stability Report, NBP December 2021). As this risk is global and dispersed in the whole financial system, the consequences of its materialisation may be systemic. Although substantial progress has been made in climate risk assessment, the measurement of climate risk remains difficult in view of problems encountered with the identification of bank credit exposures that are sensitive to climate change. The issues and their relevance to Poland's banking sector are discussed in Box 4.2.

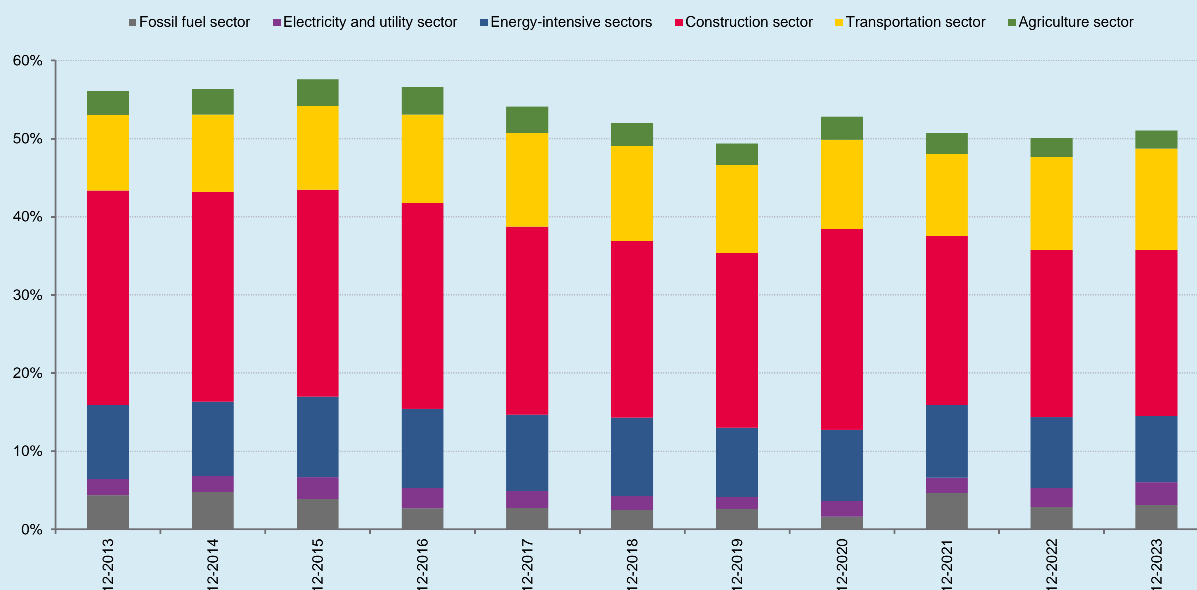
**Box 4.2. Exposure of the banking sector to sectors vulnerable to transition risks related to climate change**

**Climate change and measures aimed at its mitigation may have significant implications for the economy and the stability of the financial sector.** The risk is associated with: (i) exposure to entities with business models that may be at risk due to the need to transition to a low-carbon economy (so-called direct exposures), as well as (ii) the effects of this transition on the economy as a whole (so-called indirect exposures). Stricter regulatory requirements, necessary technological adaptations, and ongoing market changes may increase the cost of operations for carbon-intensive companies, including the necessity to make costly investments, and may reduce demand for their products. The transition risk also concerns households due to their reduced purchasing power (e.g. as a consequence of increased expenditure on energy) and a decline in the value of certain assets (e.g. real estate with a low energy efficiency). Consequently, climate change could significantly affect the stability of the banking sector through its impact on the economic position of debtors and the collateral value securing the loan.

**Banks in Poland are exposed to the transition risk related to climate change due to the high carbon intensity of the Polish economy.** The identification of exposure to companies that may face transition risk is impeded due to limitations in data availability (e.g. extent of direct and indirect emissions, technologies and transformation strategies applied). At present, regulatory efforts at the European Union level are focused on increasing the reporting of ESG data, including mainly environmental data by financial institutions (ESG disclosures under Pillar III[109] and the so-called SFDR[110]) and large enterprises (the so-called CSRD[111] under the EU taxonomy). Full implementation of the legislation will enable more accurate identification of banks' transition risk exposure related to climate change and moreaccurate measurement of climate risk at banks. The box presents three approaches which may be considered as a starting point for the measurement of the exposure of banks in Poland[112] to sectors sensitive to climate change associated with the transition to a low carbon economy.

[109] See: Commission Implementing Regulation (EU) 2022/2453 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks.
[110] See: Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (the so-called SFDR – Sustainable Finance Disclosure Regulation).
[111] See: Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.
[112] Excluding BGK and cooperative banks.

**Figure 4.3.** Banking sector credit exposures to climate policy relevant sectors




Notes: Climate policy relevant sectors have been defined based on the methodology presented by Battiston et al. (2017) as amended[113].

*Source: NBP.*

**The first approach is based on the measurement of banks' credit exposure to so-called climate-policy relevant sectors (CPRS) with the use of data on the so-called large exposures and the statistical classification of economic activity applicable in the European Union (NACE rev. 2)[114].** The exposure of the Polish banking sector to climate-sensitive sectors amounts to approximately PLN 188 billion, which accounts for approximately half of the corporate sector loan portfolio (see Figure 4.3). This share is close to the estimates of the EBA for banks in the EU[115]. The majority of exposures to CPRS relates to sectors characterized by relatively lower exposure to transition risk, including construction (21%) and transportation (13%). The total value of loans to sectors with the largest carbon-footprint, i.e. mining (3%), energy production (3%) and energy-intensive industries (8%), amounts to PLN 53 billion. The volume of exposure to companies operating in the fossil fuel sector has tended slightly downwards over the last ten years, however, it increased significantly after the COVID period. This can be attributed to a recovery in the industry's financial standing as a result of a rise in

[113] https://www.df.uzh.ch/en/people/professor/battiston/projects/CPRS.html.
[114] The methodology allows for the selection of sectors vulnerable to the transition risk based on sectoral data concerning GHG emissions, their role in the supply chain and internal regulations. See Battiston, S., Mandel, A., Monasterolo, I., Schütze, F., & Visentin, G. (2017). A Climate stress-test of the financial system. Nature Climate Change, 7(4), 283–288.
[115] EBA. (2021). Mapping climate risk: Main findings from the EU-wide pilot exercise. Report, EBA/Rep/2021/11, 21 May 2021.

energy commodity prices in the wake of increasing demand for energy generated from conventional sources as a result of Russia's aggression against Ukraine. However, this is contrary to the banks' declarations of withdrawal of financing for clients whose business depends on coal.

**The second approach is based on the calculation of the average carbon intensity indicator of the bank's loan portfolio.** The advantage of this indicator is that it assigns risk in a non-linear manner to the bank's exposure to a particular enterprise based on the carbon intensity of the economic sector in which the debtor operates[116]. As a result, it enables a synthetic measurement of the carbon intensity of the bank's corporate loan portfolio taking into account the changing structure of the portfolio and the carbon intensity of the economic sectors. The average carbon intensity of the loan portfolio as at the end of 2023 stood at approximately 9%[117] and featured significant volatility over the last ten years (see Figure 4.4). The data indicate that, at least at the level of economic sectors, banks have not reduced the carbon intensity of their corporate loan portfolios. In addition, a high variability of this indicator exists between banks, with an interquartile range of 7 p.p. at the end of 2023.

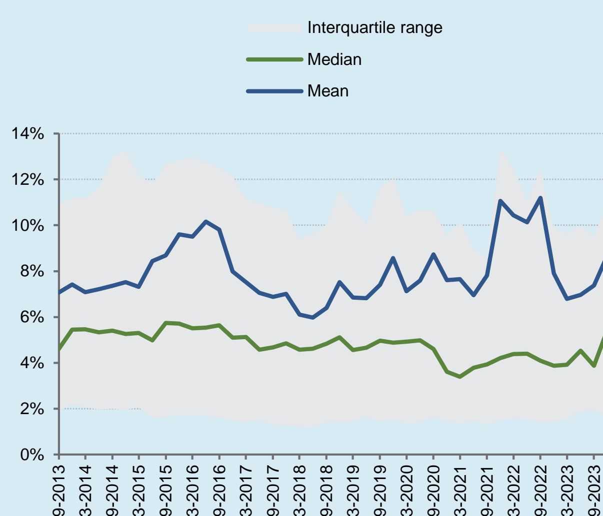
**In the third approach, banks' credit exposure to companies whose greenhouse gas emissions are included in the European Union Emissions Trading System (EU ETS) was measured.** The need to reduce emissions of gases, mainly $CO_2$, by companies operating in sectors included in the EU ETS will entail the need to implement costly investments in environmentally-friendly technologies. Consequently, this may translate into an increase in the level of their debt and the cost of servicing their liabilities. Moreover, companies participating in the EU ETS may experience an increase in operating costs due to rising $CO_2$ emission allowance prices and lower limits on the allocation of free allowances. Due to the aforementioned factors, in the transition phase to a low-carbon economy, these enterprises may generate enhanced credit risk. In Poland, commercial banks have credit exposures to 392 companies included in the CO2 emission trading scheme with a total value of PLN 24 billion (see Figure 4.5), which represents 6.5 % of the value of the loan portfolio for large enterprises. The majority of $CO_2$ emissions of these enterprises results from operations in the area of fuel combustion.

**The Polish banking sector displays a significant credit concentration in carbon-intensive sectors with elevated transition risk.** From the point of view of the financial stability, it is important that banks with high exposure to companies at risk of transition should manage this risk adequately,

[116] By using the data on carbon intensity of production per sector of the Polish economy published by Eurostat.
[117] The indicator is calculated as the ratio of the value of loan weighted by a company's carbon emission (calculated as the debtor's GHG emissions divided by the debtor's total revenues) to the value of that loan. Such a construction is similar to that of a bank's average risk weight; however in this case, the weight used is the standardised carbon intensity ratio, which limits the the ratio to the 0-100% range. Subsequently, a weighted indicator is calculated at a bank or sector level. Due to the unavailability of carbon emission data at a level of all enterprises in banks' portfolios, in a simplified formula, the carbon intensity is calculated at the level of the economic sectors for which Eurostat publishes data.

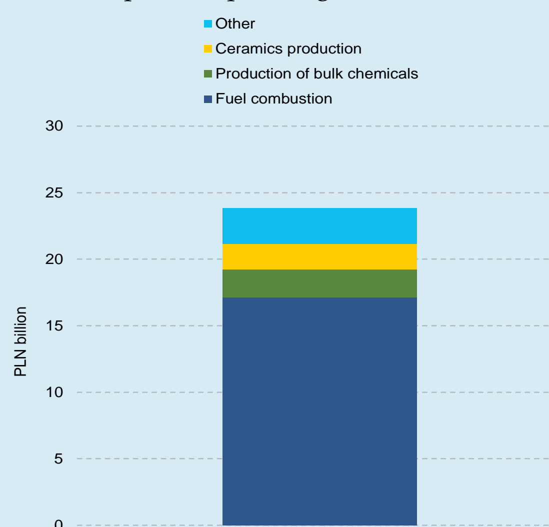
including among other measures creating relevant provisions and capital buffers should the risk materialize. From a systemic point of view, the issue of banks limiting financing offered to carbon-intensive companies for investments aimed at reducing their adverse impact on the environment also remains a potential risk factor. Such circumstances could increase the risk of bankruptcy in sectors significant for the Polish economy and, through direct and indirect channels, deteriorate the quality of assets at banks. In order to mitigate this risk, banks should have access to high quality non-financial data and a comprehensive credit risk assessment system that takes environmental factors into account.

**Figure 4.4.** Weighted average carbon intensity of the corporate loan portfolio




*Source: NBP and Eurostat.*

**Figure 4.5.** Credit exposures of the banking sector to companies operating in the EU ETS

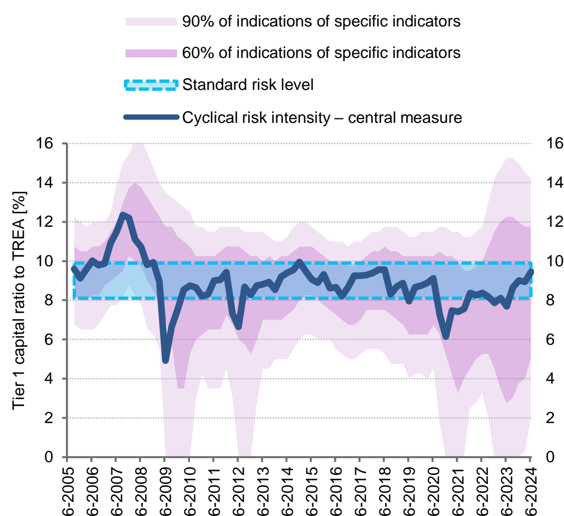



*Source: NBP and EEA.*

**At the same time, it should be emphasized that the analysis at the level of exposure to sectors does not capture significant differences within industries**. The sectoral data does not include important differences in the production process and the technologies applied by companies, therefore failing to reflect their capacity to pollute the environment within individual sectors. Furthermore, this approach does not take into account the purpose of the loan, which is particularly important for achieving the goals of the green transition assuming an increase in the use, and therefore financing, of clean technologies in carbon-intensive companies.

## 4.2. Cyclical risk: *moderate*

**Figure 4.6.** Cyclical risk intensity

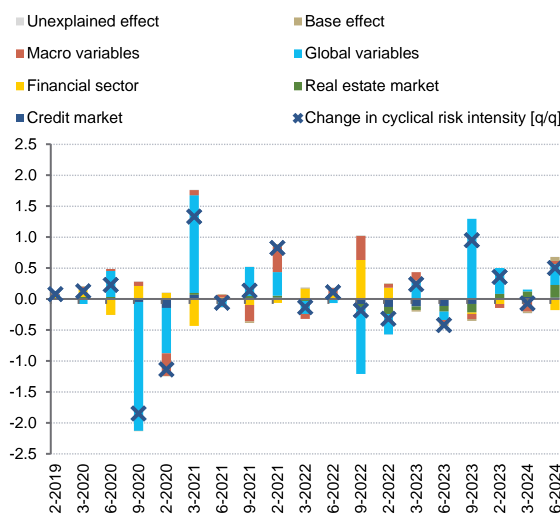



Notes: Measurement of cyclical risk intensity reflects the adequate level of the capital ratio as indicated by the models which would be sufficient to limit the crisis signal resulting from other variables. An increase in an adequate capital ratio should be understood as an increase in cyclical risk intensity, and its decrease as a decrease in cyclical risk intensity.[118]

Purple ribbons marked 60% and 90% denote the ranges in which there are, respectively, 60% and 90% of indications of specific indicators. The broader the ribbons, the greater uncertainty related to the reading of the central measure of cyclical risk intensity.

*Source: NBP.*

**Figure 4.7.** Decomposition of changes in cyclical risk intensity readings




Notes: The figure shows the impact of specific variables[119] on the changes in the level of the reading of the central measure of cyclical risk intensity presented in Figure 4.6. The last current reading in the second quarter of 2024 is based on data for the end of the fourth quarter of 2023.

*Source: NBP.*

**Cyclical risk is moderate and poses no risk to financial stability in Poland.** The slight increase in cyclical risk intensity in the last four quarters results primarily from low risk prices on global markets,

[118] For more information, see *Methodology for setting the countercylical capital buffer*, Financial Stability Committee, March 2024 (https://nbp.pl/wp-content/uploads/2024/05/Metodyka-kalibracji-bufora-antycyklicznego_EN.pdf).

[119] The list of indicators which make up each of the categories shown in the figure: (i) credit market – broad credit aggregate for the private non-financial sector, broad credit aggregate to GDP, narrow credit aggregate for the private non-financial sector, narrow credit aggregate to GDP, DSR for the private non-financial sector, broad credit aggregate for households, broad credit aggregate for non-financial corporations; (ii) real estate market – real estate prices to rental cost, real estate price index, real estate prices to income, value added of the real estate market to the sum of value added in a given year; (iii) base effect – value of the Tier 1 capital ratio to TREA in the last year; (iv) financial sector – value added of the financial market to the sum of value added; (v) global variables – VIX – Volatility Index of Chicago Board Options Exchange; (vi) macro variables – balance of current account to GDP, GDP, broad money aggregate, M3 money aggregate, the government debt to GDP, value added of the public sector to the sum of value added in a given year.

and not from excessive credit growth in Poland (see Figure 4.7). Cyclical risk intensity is measured using the model that pools information from many indicators. In addition to the central measure of cyclical risk intensity (navy blue line – Figure 4.6), this helps to measure the dispersion of readings of risk intensity flowing from specific indicators (purple ribbons – Figure 4.6).

**Lending to the non-financial sector should grow gradually but over the next two years its growth rate should remain moderate**. The low rate of lending growth in recent years was primarily the result of demand-side factors. Despite the anticipated return of lending growth to its multi-annual average, the loan to GDP ratio is expected to fall further (see Figure 4.1).

**The moderate cyclical risk intensity is, however, accompanied by uncertainty related to cyclical risk intensity.** At the same time, in March 2024 the FSC-M adopted a new strategy on the application of the countercyclical capital buffer (CCyB). Its important component is the so-called neutral rate for the countercyclical capital buffer (PNR CCyB) that is intended to hedge the financial system against risks that are difficult to foresee in models or unforeseeable (for more information see Box 4.3).

## Box 4.3. Positive neutral rate for the countercyclical capital buffer

**In March 2024, the Financial Stability Committee (FSC) adopted a new *Strategy on the application of the countercyclical capital buffer in Poland*.**[120] This document contains the Committee's new approach to the application of the CCyB, which is the result of work on the development of macroprudential policy instruments.

**An important element of the new strategy is the possibility of applying the positive neutral rate of the countercyclical capital buffer (PNR CCyB)**, which could be released in the event of an unexpected shock which is difficult to predict (e.g. such as the Covid-19 pandemic). In addition, this buffer hedges against the so-called model risk, as not all risk factors can be correctly and timely identified by warning models for crises.

**The Committee notes that the new approach is implemented at a time where no signals have emerged of excessive lending growth, and that the loan to GDP ratio is falling. The positive neutral rate for the CCyB is supposed to apply during most of the financial cycle**, and also when the parameters analysed indicate the occurrence of standard cyclical risk intensity. Such a solution reduces the risk of a too-late and wrong identification of risk. **In the FSC's opinion, this will enable to strengthen the resilience of the banking sector and prepare it for a potential crisis situation as a consequence of the materialisation of risks that are difficult to foresee or unforeseeable (such as, e.g. the pandemic).**

[120] Resolution No 72/2024 of the Financial Stability Committee of 22 March 2024 on the adoption of a strategy on the application of the macroprudential capital buffer (in Polish only).

On the basis of the analyses performed, the Committee recognised that from the point of view of the responsiveness of the macroprudential policy to the materialisation of cyclical systemic risk as well as average uncertainty related to the measurement of cyclical risk intensity, the desired neutral rate of the countercyclical buffer should amount to 2%. The Committee said that reaching the target rate should be a gradual process: the first step would be to set the buffer at the rate of 1%, and then in the next step – to raise it to 2%.

The Committee's release of the new strategy on the application of the countercyclical capital buffer in Poland and the announcement of a sufficiently long period for reaching the target buffer rates gives banks enough time to adjust. At the same time, banks have substantial capital surpluses over the regulatory and supervisory requirements, therefore following the potential implementation of the PNR CCyB banks would not be required to raise new capital on the market, and it would be only advisable to retain the capital already accumulated.

The decisions of the Financial Stability Committee in its macroprudential supervision capacity (FSC-M) are in line with actions observed in other countries. In the course of work on the development of macroprudential policy, the Basel Committee on Banking Supervision[121], the European Systemic Risk Board (ESRB)[122] and the European Central Bank (ECB)[123] suggested that national macroprudential authorities should consider the rationale for establishing the buffers that could be released in the event of the materialisation of unidentifiable risks.[124] The Basel Committee, the ESRB and the ECB recognized that the CCyB was the most appropriate instrument in order to achieve that objective. This is

[121] "The Committee supports and sees benefits in the ability of authorities to set a positive cycle-neutral CCyB rate on a voluntary basis." (a quote from Basel Committee on Banking Supervision (2022), *Newsletter on positive cycle-neutral countercyclical capital buffer rates*).

[122] The European Systemic Risk Board recommends increasing releasable buffers in order to improve the effectiveness of macroprudential measures (capital buffers). This can be achieved by (i) activating a CCyB early in the financial cycle, (ii) setting a positive neutral rate for the CCyB or the SyRB (see ESRB. (2022). Review of the EU macroprudential framework for the banking sector: A concept note.).

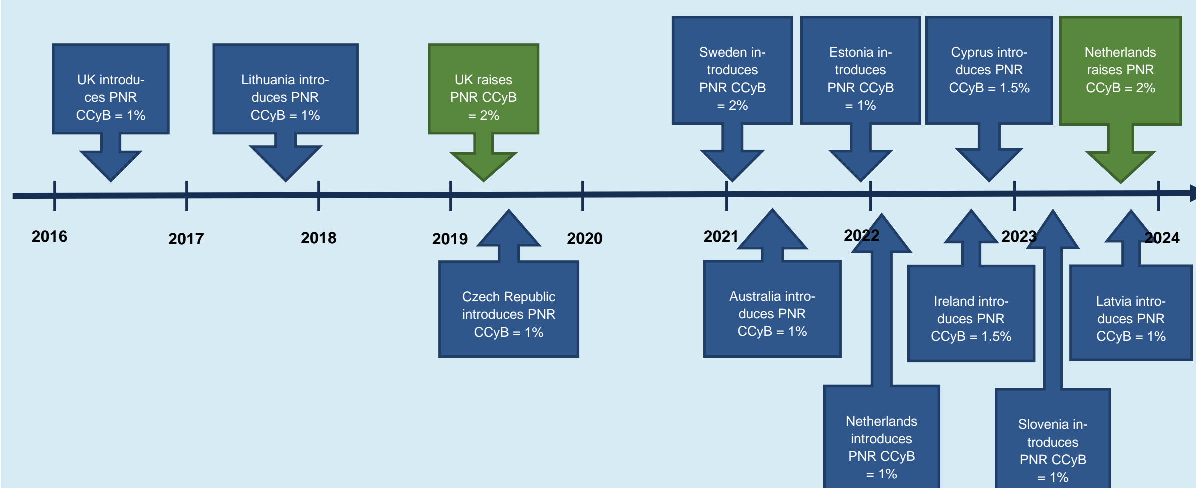
[123] Drawing on experience from the coronavirus (Covid-19) pandemic, the European Central Bank explains explicitly why a positive neutral rate is needed to enhance the effectiveness of the current macroprudential framework (see Behn, M., Pereira, A., Pirovano, M., & Testa, A. (2023). A positive neutral rate for the countercyclical capital buffer–state of play in the banking union. Macroprudential Bulletin, 21).

[124] Such recommendations are also issued by the International Monetary Fund, e.g. the IMF told Finland to consider introducing the positive rate of CCyB to better prepare for an unexpected economic downturn (see IMF (2023). Finland: Financial sector assessment program technical note on macroprudential policy framework and tools (IMF Country Report No. 23/63). International Monetary Fund.

equivalent to a modification of international practice when determining the level of the countercyclical buffer by moving away from the mechanistic approach of tying the level of the countercyclical buffer with the value of credit provided to a given economy in favour of a more holistic approach to the measurement of cyclical risk intensity.

**The use of a PNR CCyB is becoming increasingly common internationally (see Diagram 4.2)**. The United Kingdom was the first country to declare its application, and until the outbreak of the Covid-19 pandemic, a PNR CCyB was applied by two more countries: Lithuania and the Czech Republic. As a result of experience gained during the pandemic, the application of a n CCyB was announced by eight more countries: Sweden, Australia, Estonia, the Netherlands, Ireland, Cyprus, Slovenia and Latvia. On the other hand, Denmark and Norway follow the approach that features an activation of the CCyB early in the financial cycle. This approach amounts to an implementation of the main demand behind the PNR CCyB, i.e. to establish a positive rate for the buffer applicable during most of the financial cycle, without openly declaring such a policy.

**Diagram 4.2.** Country-specific application of a PNR CCyB



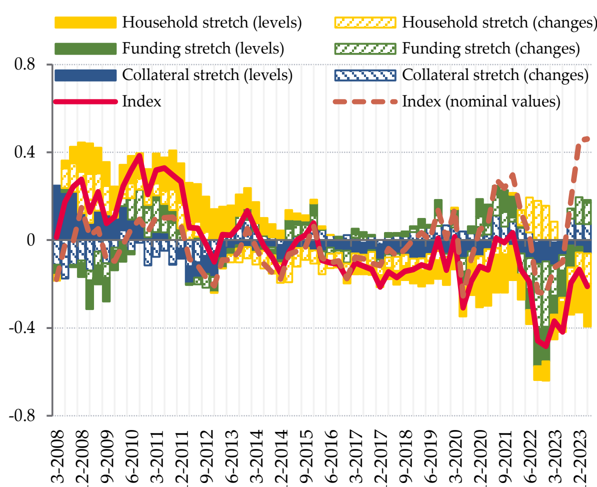

*Source: ESRB, BIS, national authorities' websites.*

Various approaches are applied to calibrate the PNR CCyB. These include, among others, historical loss analysis, stress test models, impact assessments of buffer release during a pandemic, financial cycle indicators and expert assessments. **In Poland, the calibration of the PNR CCyB is based on early warning models for banking crises.**[125] The relevance of individual factors and calibration methods varies across countries. However, the final outcome itself in the form of the set PNR CCyB is quite similar and usually ranges between 1% and 2%.

[125] A detailed description of the model can be found in: Financial Stability Committee (2024), *Methodology for setting the countercyclical capital buffer*.

### 4.2.1. Risk associated with residential real estate funding: *low*

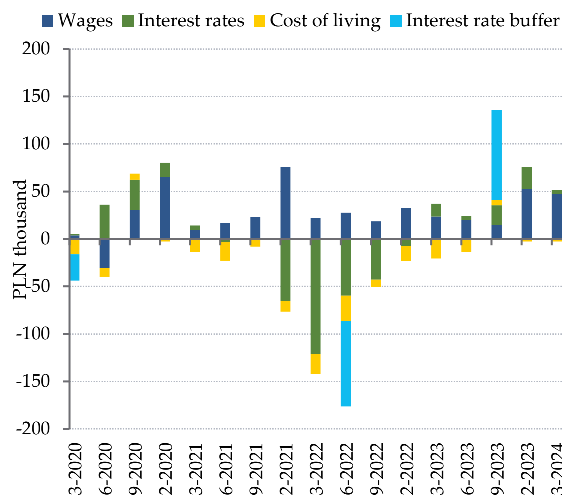
**Figure 4.8.**Tensions in the residential real estate market




Notes: A regular impact assessment of residential real estate market developments on financial stability takes into account three aspects: (i) price developments on the real estate market (collateral stretch), (ii) banks' policy regarding funding real estate purchases (funding stretch), (iii) the level of household debt and the capacity of households to repay mortgages (household stretch). The variables are standardised by z-score transformation. The index, marked with a red line, averages information on the levels and dynamics of changes in a set of variables that are material for an assessment of overall stress on the real estate market. All variables are converted to real values by adjusting for GDP, average wage or wage fund in the economy. Bars illustrate the relative impact of each of the variables on the overall index. The index not adjusted for inflation is marked with a dashed line.

*Source: Own calculations based on data from NBP and Statistics Poland.*

**Figure 4.9.** Decomposition of the change in creditworthiness for a given household (PLN thousand, q/q)




Notes to the figure: Decomposition of the change in maximum creditworthiness for a household comprised of 3 members at the following assumptions: 1) two members having average wages in the economy 2) the cost of living at the minimum subsistence level, increased by 10%, 3) max DSTI and interest rate buffer compliant with Recommendation S and 4) LTV at the level of 80%.

*Source: Own calculations based on data from NBP, Statistics Poland and (Institute of Labour and Social Affairs (IPiSS).*

**Banks' exposure to the RRE market does not indicate that systemic risk is building up.** Due to its substantial share in the sector's loan total, this risk is monitored on a regular basis. The index that aggregates a series of variables used for risk assessment on the residential real estate market ran below zero (see Figure 4.8). This means that the variables included in the index, in real terms, (i.e. after taking into account for wages or GDP) were, on average, below their long-term averages, which signals low stress. Residential real estate prices were rising, in nominal terms, such that the value of bank collateral did not decrease, and the real size of growth does not imply that its value is at risk of a significant correction in the future. As far as RRE funding is concerned, lending expansion should be supported by households' growing creditworthiness, which is largely due to rising wages in the economy (see Figure 4.9). Lending should also be supported by the Polish government's announced programme "#na Start" to subsidise mortgage loans. Due to its design, the risk of triggering excessive lending and

excessive debt among households seems to be low, although the programme's impact on the residential market can only be assessed after its final shape is known.

**At the same time, there are no signs that banks are easing their lending standards in a way that may put financial stability at risk**. The estimated scale of problems that households may have with debt servicing and with the resulting loan losses for banks does not generate systemic risk. Due to low unemployment, the forecasted increase in real wages in the economy and stabilisation of expectations over interest rate changes, the share of impaired loans is not expected to rise significantly.

# Glossary

**Annualised data** – in the case of data on flows – the value of flow in the preceding 12 months; in the case of data on balance (stock) – the average value of balance in the preceding 12 months.

**Auto casco (AC) insurance** – comprehensive auto insurance of land vehicles, excluding track vehicles, covering damage in automobiles or land vehicles lacking own drive – Class 3 of the non-life insurance sector according to the Act on Insurance Activity.

**Banking sector** – all domestically incorporated commercial banks and cooperative banks as well as branches of foreign credit institutions active in Poland.

**Basic solvency capital requirement** – the capital solvency requirement without taking into account the capital requirement for operational risk and the adjustment for the loss-absorbing capacity of technical provisions and deferred taxes.

**Combined Operating Ratio (COR)** – the ratio of claims paid, costs and expenses to premium earned.

**Commercial banks** – domestic commercial banks and branches of credit institutions.

**Consumer loans** – loans granted to natural persons for personal use in the consumption of goods and services (including overdrafts and credit card loans).

**Credit losses** – in banks applying the IFRS – the balance of provisions created or (-) released for expected credit losses (until the end of 2017, charges to provisions for impaired loans); in banks applying the PSR – the balance of specific provisions created or released. Credit losses also include net income on write-downs of a financial asset in the amount of the difference between the value of the financial assets written down and the value of provision/specific provision as well as recovery of assets written down earlier.

**Debt service to income (DSTI)** – the ratio of a monthly value of all loan instalments to the net monthly income of a household**.**

**Debt-to-Income ratio (DTI)** – the ratio of a client's debt to its annual income.

**Domestic commercial banks** – domestically incorporated banks operating in the legal form of a joint-stock company or a state bank.

**Expected profits included in future premiums (EPIFP)** – the difference between the technical provisions without a risk margin and the technical provisions without a risk margin under the assumption that the premiums relating to existing insurance and reinsurance contracts that are expected to be received in the future are not received for any reasons other than the insured event occurred, regardless of the legal or contractual rights of the policyholder to discontinue the policy.

**Housing loans** – loans on residential real estate for households.

**Institutional Protection Scheme (IPS)** – an agreement of associating and cooperative banks associated with them (IPS-CB) established under the Act of 7 December 2000 on the Functioning of Cooperative

Banks, their Associations and Associating Banks (i.e. Journal of Laws of 2022, item 456, as amended). The functioning of IPSs is aimed at providing liquidity and solvency to all participants in an IPS at terms laid down in the said act and in IPS agreements, in particular by granting loans, bank guarantees and sureties.

**Interquartile range** – the difference between the value of the third quartile and the value of the first quartile in the distribution of a variable.

**Large enterprises** – enterprises that employ more than 250 persons.

**Loan-to-Income (LTI)** – the ratio of the value of a housing loan at origination to the borrower's net total annual income.

**Loan-to-Value (LTV)** – the ratio of the value of the housing loan granted to the value of property.

**Loss ratio** – the ratio of claims and benefits paid, increased by changes in the amount of provisions, to premium earned.

**Motor third party liability insurance –** third party liability insurance for land vehicles with own drive – Class 10 of the non-insurance life sector according to the Act on Insurance Activity.

National Working Group for benchmark reform (NWG) – working group appointed in connection with the reform of benchmarks in Poland, involving the transition from WIBOR to a new, near risk-free rate alternative benchmark (https://www.knf.gov.pl/en/MARKET/Activities_of_the_National_Working_Group_for_benchmark_reform).

**Net income from banking activity** – the sum of net interest income and net non-interest income.

**Net interest margin** – the ratio of net interest income over a given period to the average balance sheet total in that period.

**Non-interest income** – the sum of fee and commission income, revenue from dividends, income on valuation of instruments measured at fair value, gains/losses from the derecognition of financial instruments other than instruments measured at fair value through profit and loss, and foreign exchange rate differences.

**Operating costs** – the sum of a bank's general expenses and amortisation.

**Own funds of insurance undertaking** – the sum of basic own funds which include the excess of assets over liabilities and subordinated liabilities, and ancillary own funds which comprise unpaid share capital or initial fund that has not been called up, letters of credit and guarantees and also any other legally binding commitments received by insurance undertakings (or reinsurance undertakings).

**Return on Equity (ROE)** – the ratio of net income to equity.

**Small and medium-sized enterprises** – enterprises that employ fewer than 250 persons.

**Solvency Capital Requirement (SCR)** – corresponds to the Value-at-Risk of the basic own funds of an insurance or reinsurance undertaking subject to a confidence level of 99.5% over a one-year period.

**SRISK (*systemic risk*) –** market-based estimate of undercapitalization which measures the capital shortfall of a bank conditional on a severe market decline. It may be interpreted as a market-based stress test.

**Systemic risk** – the risk of disruption in the functioning of the financial system, which if materialised, interferes with the functioning of the financial system and the national economy as a whole (Article 4(15) of the Act of 5 August 2015 on Macroprudential Supervision of the Financial System and Crisis Management).

**Technical provisions** – the amount of liabilities arising from insurance contracts.

**Vector Error Correction Model (VECM)** – the model which belongs to multi-dimensional time series models, used to identify relationships that occur in variables and indicators observed over time.

# Abbreviations

| | |
|---|---|
| AIF | Alternative investment fund |
| AOCI | Accumulated Other Comprehensive Income |
| AT1 | Additional Tier 1 |
| BFG | Bank Guarantee Fund |
| BGK | Bank Gospodarstwa Krajowego |
| BIK | Credit Information Bureau |
| CBR | Combined Buffer Requirement |
| CBR-M | Combined Buffer Requirement in addition to MREL |
| CEE | Central and Eastern Europe |
| CET1 | Common Equity Tier I |
| CHF | Swiss franc |
| CJEU | Court of Justice of the European Union |
| COR | Combined Operating Ratio |
| COVID-19 | Coronavirus Disease 2019 |
| CRE | commercial real estate |
| DTI | Debt to Income Ratio |
| EBA | European Banking Authority |
| EC | European Commission |
| ECB | European Central Bank |
| EEA | European Economic Area |
| EIOPA | European Insurance and Occupational Pensions Authority |

| | |
|---|---|
| EU | European Union |
| EU ETS | EU Emissions Trading System |
| EUR | Euro |
| FWK | Borrower Support Fund |
| GDP | Gross Domestic Product |
| GUS | Statistics Poland |
| HH | Households |
| IFRS | International Financial Reporting Standards |
| IMF | International Monetary Fund |
| IPS | Institutional Protection Scheme |
| KNF | Polish Financial Supervision Authority |
| LCR | Liquidity Coverage Ratio |
| LTI | Loan to Income Ratio |
| LTV | Loan to Value Ratio |
| MCR | Minimum Capital Requirement |
| MREL | Minimum Requirement for Own Funds and Eligible Liabilities |
| MREL-RCA | MREL Recapitalisation Amount |
| NBP | Narodowy Bank Polski |
| NFC | Non-financial Corporations |
| NPL | non-performing loan |
| NSFR | Net Stable Funding Ratio |
| NWG | National Working Group for benchmark reform |
| PAS | Polish Accounting Standards |

| | |
|---|---|
| PFR | Polish Development Fund |
| ROA | Return on Assets |
| ROE | Return on Equity |
| RORC | Return on regulatory capital |
| SCR | Solvency Capital Requirement |
| SOBK | Polish Commercial Banks' Protection System |
| SP | State Treasury |
| SPE | Single Point of Entry |
| SPW | Treasury securities |
| TCR | Total Capital Ratio |
| TEM | Total Exposure Measure |
| TREA | Total Risk Exposure Amount |
| UCITS | Undertaking for Collective Investment in Transferable Securities |
| UFK | Unit-linked insurance |
| UKNF | Office of the Polish Financial Supervision Authority |
| USA | United States of America |
| WIBOR | Warsaw Interbank Offered Rate |
| WIRON | Warsaw Interest Rate Overnight |
| WSE | Warsaw Stock Exchange |

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