CEE Economics

Housing market: short and long-term prospects

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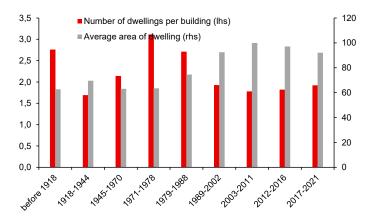
The number of available dwellings in Poland is still lower than the number of households, so there is still a housing shortage. The quality of the existing housing stock, especially that built before 1989, is also a problem. Poland is at the forefront of EU countries in terms of overcrowding and low in terms of the number of chambers per person. Bringing the standard of living in pre-1989 dwellings up to the standard of newer dwellings, understood only through the prism of the area per person, would require the construction of over 2.5 million dwellings. On the other hand, reaching the EU average in terms of the number of rooms per person would require the construction of 20 million rooms, which translates into several million dwellings. Therefore, it should be concluded that structural demand for housing in Poland will continue in the coming years. Demographic changes, in particular the decline in the Polish population, will mitigate this problem, but according to the forecasts of GUS, the number of households will grow until 2030, and the existing housing stock will not turn out to be excessively large for at least 30 years.

In the short term, for the coming quarters, we expect an increase in the supply of dwellings related to elevated housing market construction activity at the turn of 2023 and 2024. At the same time, demand will remain weakened in the face of poor financial availability of housing and the likely withdrawal of the government from the borrower support programme. In our opinion, this will translate into a downward correction of real estate prices. However, we do not assume that it will be significant.

Initial state - housing stock too small and of too poor quality

According to the results of the latest census, in 2021 there were 6.2 million inhabited buildings in Poland, with 13.4 million inhabited dwellings. The total number of dwellings – including those uninhabited – was 15.3 million. The number of inhabited dwellings is therefore still lower than the number of households (15.2 million in the Eurostat definition). Note that uninhabited dwellings are not necessarily premises that could easily cover this gap – they can be located in depopulating areas, of insufficient quality, or used for other purposes. Therefore, we believe that we can still talk about a housing shortage. However, this is not the only challenge regarding the existing housing stock in Poland – the quality and area of existing apartments is also a problem.

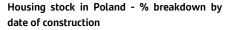
Parameters of buildings and dwellings by date of construction

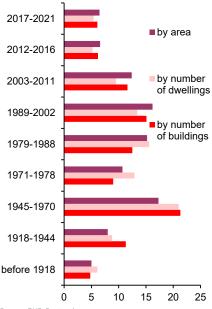


Source: GUS, Santander

Almost 65% of existing dwellings in Poland were built before 1989, and a significant proportion of dwellings built in this period are of lower quality, which is visible in the higher density of dwellings

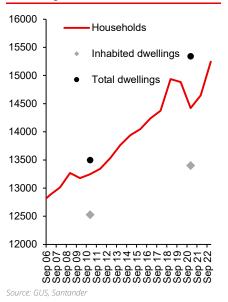
31 October 2024





Source: GUS, Santander

Number of households in Poland vs number of dwellings in censuses, thousand



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per building and the lower average dwelling area. Of course, it is not the age of the building itself that is crucial (e.g. <u>in Italy or France</u>, more than 20% of apartments are located in buildings over a hundred years old), but rather the fact that in the times of communist Poland, buildings were built in low standard.

For example, in buildings built after 1989, the average number of dwellings is 1.9 and the average dwelling area is 95.2 m^2 . On the other hand, in those from the period 1971-1978, it is 3.1 dwellings per building and 63.5 m^2 per dwelling, respectively. This phenomenon applies primarily to cities and prefabricated buildings, of which there are about 60 thousand in Poland and about 4 million people live in them. Apartments in this type of construction are characterized by small area, too few rooms, poor acoustics and ventilation, and wear and tear of installations. Over time, the problem may also be that these are under-insulated apartments, with poor thermal insulation, which may lead to them not meeting energy standards and, consequently, to complications in their sale and rent, and perhaps also to penalty fees. On the other hand, <u>according to Eurostat research</u>, in Poland serious problems related to the low quality of apartments, such as a leaking roof, mold, inability to heat, lack of a bathroom, etc. are relatively rare.

Bringing the standard of living in pre-1989 dwellings up to the standard of newer dwellings, understood only through the prism of the area per person, would require the construction of over 2.5 million new dwellings.

However, it is not only the poor quality of pre-1989 housing that is a problem, but also the overall size of the housing stock compared to the population. In Poland there are 1.1 rooms per person, compared to 1.6 on average in the European Union. In terms of this statistic, Poland ranks last in the EU ex aequo with Romania and Slovakia. Reaching the EU average would therefore require the construction of 20 million rooms, which translates into several million apartments.

The small size of the housing stock has its consequences. Poland is at the forefront of the EU countries in terms of the overcrowding rate, with a result of 33.9% compared to the EU average of 16.8% and the average for the euro zone of 13.6%. <u>This indicator</u> assumes that there should be at least one room in a dwelling, plus one room for each couple living in it, for a single person over 18 years of age or for two children. An apartment that does not meet these conditions is considered overcrowded. At the same time, this statistic remains in a downward trend in the case of Poland, and only half of the EU countries have managed to do so.

On the other hand, dwellings with too many rooms are considered under-occupied dwellings, and the logical consequence is that there are very few such dwellings in Poland compared to international comparison (Poland: 17.1%, EU: 33.3%, euro zone 36.8%).

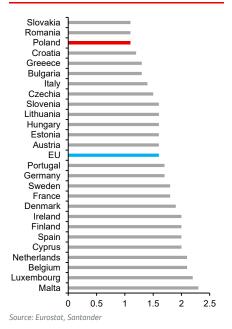
Therefore, it can be concluded that the number of dwellings in Poland is not sufficient, and many of the existing ones are too small, both in terms of area and number of rooms, and in addition, they were built in a rather low quality. In our opinion, catching up with European standards would require the construction of several million apartments, which means that the structural demand for apartments in Poland will continue in the coming years.

Uninhabited dwellings

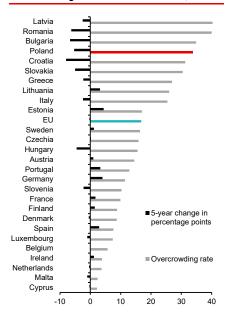
The 2021 housing census showed a clear increase in the number of unoccupied dwellings – to almost 2 million from 1 million in the 2011 census. So maybe the number of dwellings in Poland is actually sufficient and there is no shortage? Here we are trying to address this question with a major caveat that the <u>last publication prepared by GUS</u> on uninhabited dwellings is dated 2003 (and covers data for 2002), so there is no up-to-date information on this issue.

Nevertheless, the 2003 publication specified the number of uninhabited dwellings at 760k, of which 128k were used for temporary residence, and 126k were intended for demolition or abandoned. Therefore, these flats should not be counted as part of the available stock. 493k dwellings (65%) were suitable for living. Out of these suitable for living, half were newly built or under renovation. We assume that these apartments are subject to market trading, or someone plans to live in them, so they should actually be counted as a full-fledged housing stock. By contrast, the status of the remaining half of the habitable dwellings is less obvious. According to the definition of the GUS, these are in the process of changing tenants, i.e. intended for sale or for renting, serving other functions, uninhabited due to court proceedings, due to administrative and legal formalities, as well as constituting the housing reserve of municipalities. In our opinion, it is reasonable to assume that

Number of rooms per inhabitant in the EU



Overcrowding rate in the EU countries, %



Source: Eurostat, Santander

about 50% of uninhabited dwellings can actually be counted as a stock. At the same time, it is not reasonable to assume that all available dwellings will be inhabited, like it is not reasonable to expect unemployment to fall to zero.

According to <u>the GUS comment</u> on the number of uninhabited dwellings in 2021, the largest percentage of such dwellings was registered in municipalities where the population has fallen the most and in those with the highest share of tourist industry. Therefore, in our opinion, the increase in the number of unoccupied dwellings in relation to the other censuses can be explained as the effects of:

- Internal migrations, especially to large urban centres and their surroundings, resulting in an increase in the number of abandoned dwellings in peripheral areas,
- 2) Increase in tourist traffic and greater popularity of short-term apartment rentals,
- 3) An increase in the wealth of Poles and a greater number of private holiday apartments.

In our opinion, these factors mean that in 2021 the share of unoccupied dwellings that could be included in the housing stock was lower than in 2002.

Long-term forecasts: the number of households will increase despite the population decline

In the previous section, we stated that the size of the housing stock in Poland is too small in relation to the population. However, the Polish population has been decreasing for years, and forecasts assume that this process will continue, or even intensify significantly. <u>According to the forecast of the GUS</u>, by 2060 the population of Poland will decrease by 6.7 million people compared to 2023. The scale of the projected depopulation is large even compared to EU countries facing the same problem. A smaller population naturally means less demand for housing.

In particular, for a number of years, the number of people aged 25-34 has been declining consistently and quite quickly (170-200 thousand per year), and this is the age cohort that usually creates new households and enters the housing market. In our opinion, the decreases, even though becoming less pronounced, will continue in this age group for another decade. However, it turns out that the number of households in Poland was able to climb higher over the recent year despite the declining population of the 25-34 cohort.

We would look for explanation in another long-term phenomenon that should be taken into account when assessing housing demand, which is the decrease in the average size of a household due to the growing share of single-person households. The share of households made up of only one working adult increased from 5% in 2006 to 16% in 2023. As a result of the decreasing average household size, depopulation reduces the demand for housing to a lesser extent than it might seem at first glance – the decline in the number of household size in Poland is relatively fast compared to the EU – as recently as 2006, the index was at 3.0 and was the third highest among the current EU countries, while in 2023 it was at 2.4, which gave Poland the eighth place. During this period, a faster decline was recorded only in two EU countries.

Average sizes of households in other EU countries confirm that there is still some upward potential for household size in Poland: the EU average is at 2.2, in France the slow downward trend has reached 2.1 and in the Netherlands 2.0. Germany and Austria are roughly stable at 2.0 and 2.2, respectively.

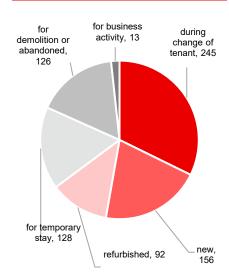
What is more, the persistently low fertility rate in Poland may also have an impact on the real estate market, as there is less incentive to change housing due to family growth. The falling fertility rate is also the reason why the effect of the growing share of single-person households will ultimately succumb to the effect of depopulation and the number of households will start to fall. According to the GUS forecast formulated in 2016, the change in the direction of the trend in the number of households will take place around 2030.

These demographic forecasts include the impact of migration, so it is difficult to dismiss the indicated risks by saying that increased net migration will change the described demographic perspective of Poland.

From a purely demographic point of view and from a long-term perspective, it can be concluded that the structural housing demand will be supported by the growing number of households in Poland until the end of the decade, after which the current depopulation trend will prevail, but so far it is

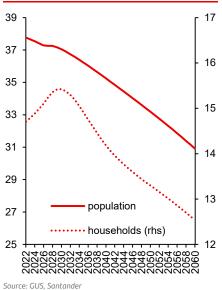
Breakdown of uninhabited dwellings, thousands

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Source: GUS, Santander

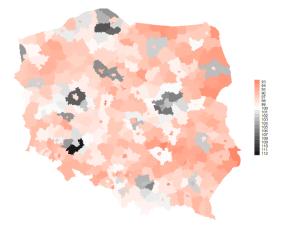
Forecast of Poland's population and number of households according to GUS, mn





compensated by changes in the structure of households. Therefore, if we assume that there is a shortage of 2-3 million flats in Poland, the current stock may turn out to be excessive only in more than 30 years.

Forecast of population changes by powiats in 2023 (2024 = 100)



Source: GUS, Santander

Not only changes in the population and number of households will be important for the housing market, but also internal migration. According to the forecasts of the GUS, in the coming years the population in large urban centres and in the surrounding districts – e.g. in Warsaw, Wrocław, Tri-City, Poznań, Kraków, Bydgoszcz, and Toruń – will grow. The GUS assumes that by 2030, the largest population increases will take place in Warsaw city (50 thousand), Poznań powiat (36 thousand), Wrocław powiat (23 thousand), and Kraków city (23 thousand). By 2060 – in Poznań powiat (74 thousand), Wrocław powiat (63 thousand), Kartuzy powiat (37 thousand) and Wołomin powiat (31 thousand). Population declines will be particularly noticeable in the border areas in the east and north. This means an increase in housing needs in large cities despite the general population decline.

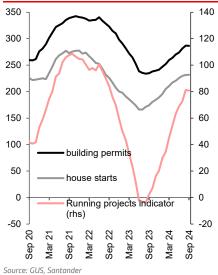
Supply in short-term - likely to increase somewhat

In recent months, the number of dwellings completed has been relatively low – 145 thousand in the first three quarters compared to 160 thousand in the first three quarters of 2023. In our opinion, weaker supply growth was one of the factors supporting price growth.

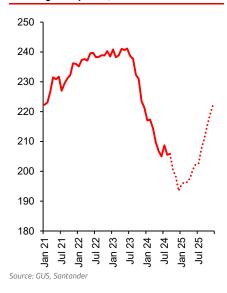
Since mid-2023, there has been a visible rebound in the number of new building permits and construction starts. According to our estimates, finished dwellings enter the market on average about 1.5 years after the start of construction. This means that in the second half of this year, an upward trend in the number of dwellings completed should be setting in. However, in our opinion, it will not be very dynamic – the number of dwellings whose construction started between July 2023 and June 2024 is about 225 thousand – clearly less than in the peak of 2021, when this number approached 280 thousand. Therefore, the number of dwellings completed this year should not exceed 200 thousand. We assume that only in 2025 the upward movement will become slightly more visible, but market activity will remain well below the 2022-2023 level.

Similar conclusions can be drawn based on the plans of developers listed on the stock exchange: in 2024, they plan to complete 12.5 thousand apartments, 3% more than in 2023. A 6% increase is planned for 2025.

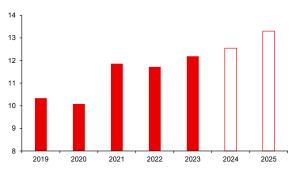
Housing market activity, 12 month sums



Dwellings completed, 12 months sum



Number of dwellings completed by WSE-listed companies (Atal, Develia, Dom Development, Murapol)



Source: companies, Santander

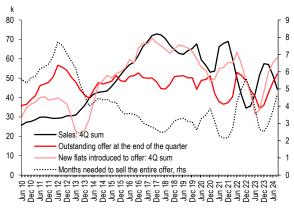
However, note that the housing market in Poland is very diversified and in some of its segments the increase in supply has already begun. For example, JLL's data on the developer market in the six largest Polish cities (Warsaw, Kraków, Wrocław, Tricity, Poznań, Łódź) showed an upswing in new flats already in 4Q2023 and it was actually strong enough to exceed the demand.

Demand - remains moderate

After the marked weakening of housing demand in 2022, caused by a surge in interest rates, the "Safe 2% Loan" programme was introduced in July 2023. This resulted in a clear increase in demand on the housing market. In the six largest Polish cities, the number of apartments sold jumped to 26 thousand in 2H2023 from 17 thousand in 1H2023. The value of housing loans origination increased from PLN 18.3 billion to PLN 40.2 billion. The depletion of the programme funds again resulted in a significant decrease in demand. In the six largest Polish cities, sales in recent quarters were lower than the number of new apartments introduced to the market, which resulted in an increase in the total offer and an extension of the time needed to sell it, which almost doubled: from 2.5 months in 4Q2023. 2023 to 4.7 months in 3Q2024.

The weakening of demand and the low – in our opinion – chances for the current government to introduce the previously announced 0% loan programme are the reasons for the decline in the number of building permits and construction starts in recent months.

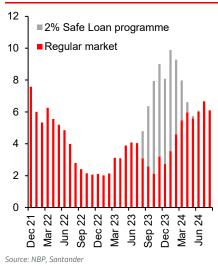
Primary market in the 6 biggest cities

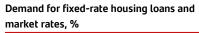


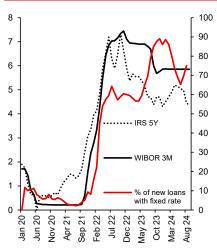
Source: JLL, Santander

In turn, the quarterly NBP credit survey among banks operating in Poland shows that in 2Q2024 there was a weakening of housing loan demand, and credit officers explained that mostly due to the bank customers' negative perception of the prospects of the housing market (importantly, in previous quarters, rapid price growth was cited as a factor stimulating demand for loans). According to the survey, the change in the economic situation of households with large real income increases has played a relatively small role. Changes in the conditions for granting loans had a cooling effect on demand. In the last two editions of the survey, banks also reported quite neutral intentions towards the credit policy in the mortgage loan segment after several quarters of credit policy tightening. Forecasts formulated by banks regarding the demand for mortgage loans in 3Q24 were moderately

Monthly origination of housing loans – within "2% Safe Loan" programme and on regular market terms, PLNbn







Source: NBP, LSEG, EBC, Santander

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negative. With such a subdued attitude of banks and in the event of housing prices calming down, the demand is likely to cool in response to the postponement of the government programme.

We do not see any prospects for a clear strengthening of demand in the housing market in the short term – although the increase in the disposable incomes will remain at a solid level in 2025, it will also be clearly slower than in 2024. We also do not assume that the decline in NBP rates will have a significant impact on demand – interest rate cuts in Poland have been priced in by the market for a long time: 5-year IRS rates have been below WIBOR since the beginning of 2023. This means that interest rate cuts are already priced into fixed-rate loans, which account for the lion's share of the new mortgage market. We currently assume that at the end of 2025, WIBOR rates will be 120 basis points lower than at the end of 2024, and 5Y IRS rates will be 95 points lower. If we assume that the current breakdown of demand for loans remains unchanged, this would mean a decrease in average interest rates by about 1 percentage point.

If the MPC started to cut rates faster than the market assumes, in our opinion, it would be due to disappointing economic data, which would not necessarily mean an impulse for an increase in demand for housing.

Prices - correction after a strong increase?

Despite the structural shortage of flats that has persisted for years, prices on the housing market have not been systematically rising in recent decades. After a very strong increase in 2006-2008, until 2017 housing prices in Poland grew slower than the overall consumer price level (CPI) and only in 2018 an upward trend appeared.

In our view, this is linked to the fact that demand has been blocked by the affordability of housing and the high proportion of households that do not have sufficient income or access to financing. According to the <u>research of Adam Czerniak</u>, in the years 2010-2022, this problem affected on average 40% of households in Poland. Sudden increases in demand and prices therefore occur during periods of increased financial availability of housing.

The jump in demand and prices in 2006-2008 was therefore related to the development of the credit market and a strong increase in wages. The increase after 2017 resulted from a stronger increase in disposable income (social benefits, wage growth), low interest rates during the pandemic and the introduction of a support programme for borrowers (Safe Loan 2%).

It should be borne in mind that the housing market in Poland is heterogeneous. In the 17 largest cities monitored by the NBP, the range of price volatility was very large – e.g. in Gdynia, average prices have increased by 70% since 2007, and in Olsztyn by 160%. In smaller towns, the housing market is often completely illiquid, which is related to low housing mobility. According to the HFCS survey, Poles use a given apartment for almost 30 years compared to 15-20 years in France, Germany or the Netherlands. As a result, only half of the apartments that are supposedly on the market actually appear on the market at all and can be bought or rented. In Western European countries, this rate exceeds 70%. The remaining half of the flats changing hands in Poland are inherited, offered as a gift or built for own use.

In a situation where there are no new factors increasing the availability of housing, we assume stabilization or a slight weakening of demand with a likely increase in supply, in our opinion leading to a downside correction of prices. There is already anecdotal evidence that this is indeed happening, although it is not yet visible in the data published by official institutions.

Affordability of apartments lowest in years

Due to the rapid increase in housing prices in recent quarters, the financial availability of apartments, calculated as the number of square meters that can be bought for an average wage, has been decreasing. Flats were the cheapest compared to average wages in 1Q19, when the annual average wage in the national economy could buy 8.8 square meters at the average price on the primary market in the 17 largest cities. Since 2020, this availability has been decreasing and in 2Q24 amounted to 7.3 square meters, comparable to the level in 2014.

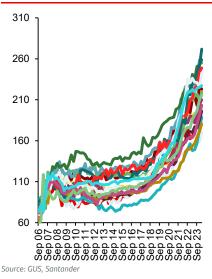
The decline in the financial availability of housing in recent times becomes even more visible when changes in interest rates, and therefore the cost of financing via a mortgage loan, are taken into account. According to our calculations, the loan instalment for a 60-metre apartment (fixed

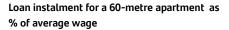
Housing prices in Poland, deflated with CPI

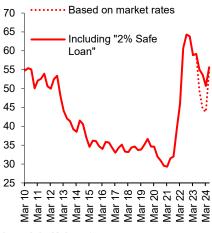




Prices in 17 Polish cities, 2007=100



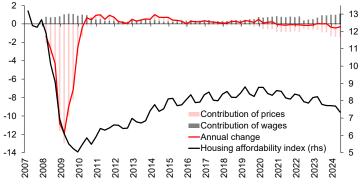




Source: GUS, NBP, Santander

instalments) increased from about 30% of the average salary in 1Q21 to 64% in 3Q22. Currently, it stands at about 55%, which is comparable to the level seen in 2010. The "Safe Loan 2%" programme temporarily reduced this value to c.45%. In our view, the decline in the financial availability of housing recently was a significant factor behind the decline in demand, which was particularly evident in 2022, when the volume of new mortgage loans fell from PLN7.6bn in the last quarter of 2021 to PLN2.1bn in the last quarter of 2022. We assume that with the stabilization of real estate prices, further increase in wages and a slight reduction in interest rates, the financial availability of housing will improve, although it will remain below the levels from 2019-2021.

Affordability of housing - level and change



Source: GUS, NBP, Santander

The effects of financial constraints on house prices - econometric analysis

The relationship between financial constraints and house prices is easy to discern even from raw data. At least since 2010, changes in housing loan rates have been associated with opposing changes in the pace of growth of real house prices, in line with the economic intuition.

6 Growth in the house price index deflated 3Q23 5 4 👂 4Q23 3 1Q24 2Q23 2 with the CPI 1 0 • 3Q22 , C -1 •4Q22 -2 -3 Before the pandemic -4 After the start of the pandemic 1Q23 -5 The period of availability of subsidised mortgage loans -6 2 3 4 5 6 7 8 9 10 Rates on new and renegotiated housing loans

Real house price growth and mortgage loan rates

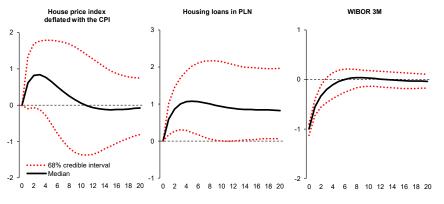
Source: GUS, NBP, Santander

It can also be argued that changes in the pace of price growth have generally been smaller than the corresponding changes in mortgage loan rates. This observation is also supported by the results of a BVAR¹ model, which accounts for the impact of variables other than mortgage loan rates by

¹ The model has been estimated on quarterly data from 1Q10 (i.e. the first date for which the Polish stats office's index of house prices is available) to 4Q19. (i.e. the last quarter before the pandemic). The model includes seven time series, in the following order: index of house prices, real seasonally adjusted GDP, number of dwellings in construction, mortgage loans in PLN, CPI, real wages, and WIBOR 3M. The index of house prices and the value of mortgage loans have been deflated using the CPI. All the series have been included in levels. The model has been

incorporating five additional time series, such as GDP, real wages, or the number of dwellings in construction.

Selected impulse response functions to a monetary policy shock causing a 1 percentage point decline in WIBOR 3M, deviation in % on the vertical axis, quarters after the shock on the horizontal axis

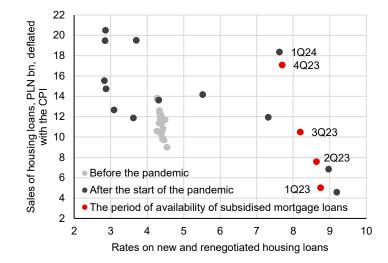


Source: data of the $\,$ GUS and the NBP, calculations of Santander $\,$

According to the results of the model, an expansive monetary policy shock, which leads to a decrease in the WIBOR 3M rate by 1 percentage point, causes an increase in real house prices after one quarter in 81% of simulations. The impulse response functions suggest that the maximal impact on house prices is achieved after 2-3 quarters and its median does not exceed 1%. The results seem to be in line with the observations based on raw data, though it should be underlined that the model results are subject to significant uncertainty.

This relationship between interest rates and real house prices supports our view that the decline in market rates in 2025 will likely not be big enough to cause an increase in house prices, especially with a simultaneous decline in wage growth and an increase in the supply of dwellings. Instead, it should rather be expected that the decline in interest rates may limit the size of the downward correction of house prices.

Sales of housing loans, divided by the CPI, and the mortgage loan rates



Source: GUS, NBP, Santander

based on the equations and the prior used by Uhlig (JME, 2005). The monetary policy shock has been identified using the Cholesky decomposition.

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