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Stimulating the Housing Market: the Case of Poland's '2% Safe Mortgage' Policy

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Abstract: *This study examines the impact of Poland's '2% Safe Mortgage' policy on dwelling price inflation in both the primary and secondary markets. Using quarterly data from Q2 2011 to Q4 2024 for the seven largest cities in Poland and a VAR model with forecast scenarios, the analysis finds that the policy had a measurable effect on price dynamics. In the primary market, the credit shock led to an additional increase in dwelling price inflation of approximately 6.7 percentage points by the third quarter. In the secondary market, the effect was stronger, reaching around 7.4 percentage points compared to a no-policy scenario. A significant share of price growth was also driven by indirect factors, including expectations of further increases. The analysis shows the importance of well-designed government policy in shaping housing market outcomes and mitigating unintended price pressures.*

Keywords: housing market; dwelling price inflation; mortgage credits; VAR model; Poland.

Volume 12 | Issue 2 | 2025 | 167-183
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Introduction

In 2023, the Polish government introduced the '2% Safe Mortgage' (SM) policy – a housing loan subsidy scheme aimed at facilitating first-time home ownership (Sejm RP 2021). The programme operated for only half a year, during which the state subsidised approximately 91,000 mortgages. The total projected cost of the programme for the public budget is estimated at 15.4 billion PLN over the course of the subsidy period (Czerniak & Kroszka 2024: 25). The SM initiative represents a notable example of a demand-side housing policy aligned with a neoliberal approach to housing as a 'growth strategy' (Reisenbichler 2020). Similar policies have been implemented in various countries over the past few decades, including the United Kingdom (Carozzi et al. 2024; Hilber & Schoni 2022), the United States (Arundel & Ronald 2021; Hembre 2018), Germany (Krolage 2023), Croatia (Fernández & Bežovan 2023; Kunovac & Zilic 2022), and Denmark (Gruber et al. 2021). In Poland, prior demand-side programmes include *Rodzina na Swoim* and *Mieszkanie dla Młodych* (Czerniak & Kroszka 2024; Radzimski 2014).

Adopting a political economy perspective on housing policy, this study examines the impact of the SM programme on dwelling price inflation in both the primary and secondary housing markets. Using quarterly time-series data for Poland's seven largest cities, we applied a Vector Autoregression (VAR) model alongside scenario-based forecasting to assess the effects of the intervention. Our analysis indicates that the SM policy exerted both direct and indirect influences on the housing market. A key contextual factor was the short duration of the programme – its entire fiscal impulse was concentrated within six months.

In the primary market, the direct effect of credit expansion led to an additional increase in dwelling price inflation of 6.7 pp by the third quarter. In the secondary market, the impact was even more pronounced, with prices increasing by approximately 7.4 percentage points relative to a counterfactual scenario without the intervention.

These findings contribute to the growing body of evidence on the consequences of demand-side housing policies and, more broadly, on the implications of neoliberal housing strategies centred on promoting property ownership (Arundel & Ronald 2021; Fikse & Aalbers 2021; Schelkle 2012).

Literature review

Housing is a basic human need that shapes well-being, equality of opportunity, and access to jobs and public services (Stirling et al. 2023; Van Bortel & Gruis 2019). Decades of homeownership growth – driven by economic expansion, easy credit, and neoliberal policies – were disrupted by the Global Financial Crisis, which exposed the speculative nature of housing markets (Aalbers 2016; Andrews et al. 2011; Arundel & Ronald 2021; Hilber & Schoni 2022). Scholars now speak of a Global Urban Housing Affordability Crisis, where housing costs outpace wages and produce far-reaching economic, social, and spatial effects (Crowe & Rowley 2024; Galster & Ok Lee 2021; Licchetta et al. 2025; Wetzstein 2017).

Governments shape housing markets through various policy tools and regulatory mechanisms, such as urban planning systems, taxation and fiscal policies, rent control measures, housing subsidies, and the direct provision and construction of public housing (Byrne 2024; Hochstenbach 2023; Kunovac & Zilic 2022; Marques Pereira 2024; Vidal et al. 2024; Vogelpohl & Buchholz 2017; Wijburg 2021; Zhao & Liu 2023). In recent years, across a variety of political systems, there has been an observable trend toward increasing marketisation and the dominance of neoliberal thinking in housing policy (Gingrich 2011;

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

Howells & Olesen 2025; Kadi et al. 2021; Schelkle 2012; Sitaraman & Serkin 2025). This shift has been reflected in the widespread commodification of housing segments, deregulation of housing markets, reductions in public housing investment, and a growing preference for private actors and market-based solutions in the provision of affordable housing. From a political and democratic perspective, there has been a noticeable reduction in the influence of citizens and their elected representatives, with decision-making increasingly dominated by real estate and financial capital (Kadi et al. 2021). Neoliberal housing policies typically manifest through various fiscal instruments, including subsidies, tax exemptions, mortgage interest deductions, and capital gains exclusions. Collectively, these measures promote homeownership and further reinforce the role of housing as a financial asset (Fernández & Bežovan 2023: 51; Hembre 2018).

There is a growing body of literature showing that, generally, the neoliberal approach to housing policy is ineffective from many perspectives (Arundel & Ronald 2021; Reisenbichler 2020). First, demand-side support policies in the housing market tend to drive up overall price levels, thereby worsening affordability. Second, such policies exacerbate social and economic inequalities by disadvantaging those unable to purchase property via credit, forcing them to rely on the often less secure and more expensive rental market. Third, these measures divert investment away from the productive sectors of the economy and channel it into the real estate market, undermining overall economic competitiveness. Fourth, they heighten economic vulnerability: housing's commodification and integration with capital markets amplify volatility, and shocks quickly spill over to construction, banking, and retail – as seen in the 2008 Global Financial Crisis.

Policies focused on owner-occupied housing: examples

A growing body of research is examining demand-side housing policies targeting owner-occupied markets. In the United States, the First-Time Homebuyer Credit (2008–2010) – a $20 billion federal stimulus – increased home sales by about 2% and prices by 1–5%, but reduced the supply of affordable homes for non-participants, particularly renters, and its effects largely dissipated after it expired (Berger et al. 2020; Biehl 2018; Hembre 2018). The United Kingdom's Help to Buy Equity Loan (introduced in 2013) similarly raised property prices – by roughly 6% in London – without meaningfully expanding supply, boosting developer margins and landowner gains instead (Carozzi et al. 2024; Hilber & Schoni 2022). In Denmark, tax subsidies had no effect on homeownership rates but increased the size and value of purchased homes; their reduction significantly lowered home size, appraised values, and mortgage interest expenses (Gruber et al. 2021; Hilber & Schoni 2022). Overall, mortgage interest deductions distort housing demand and leverage at the intensive margin while failing to promote ownership at the extensive margin.

Poland's *Rodzina na swoim* subsidy programme, designed to stimulate residential construction and support homebuyers, has been found to have limited effectiveness in increasing housing supply. During the policy implementation period, the number of housing permits decreased, and housing prices remained relatively high. The subsidy may have inadvertently slowed the decline in housing prices, disproportionately benefiting large cities and well-developed provinces over peripheral regions. Moreover, a significant portion of government support was directed toward relatively expensive housing, limiting the programme's impact on affordability for lower-income groups (Radzimski 2014: 491)

In Bavaria, Germany, housing subsidies intended to support homebuyers have been fully capitalised into the prices of single-family homes. Importantly, subsidy recipients do not necessarily benefit directly from these programmes because the increased prices affect all

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
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buyers, including those who do not receive subsidies. This price capitalisation means that non-recipient households face higher housing costs without the compensatory benefits of subsidies, highlighting a regressive distributional effect of such policies (Krolage 2023).

Croatia's housing loan subsidies drove lasting price increases, especially for flats in the most developed municipalities, which received over 60% of the aid. Analysis of subsidy implementation rules, including maximum amounts and unit price caps, reveals that residential units receiving more subsidies experienced more pronounced increases in price. Consequently, the housing loan subsidy failed to meet its goals, making housing less affordable and not effectively promoting homeownership (Kunovac & Zilic 2022: 2).

Overall, these international cases demonstrate that demand-side housing subsidies often inflate housing prices without substantially increasing supply or improving affordability for lower income groups. Instead, they tend to benefit existing property owners and developers, highlighting the need for more balanced policies that address supply constraints and directly target affordability.

Empirical strategy and data

This study aims to estimate the impact of the Polish SM policy on dwelling price inflation in both the primary and secondary markets. In this study, we focused on the seven largest cities in accordance with the Bank of Poland methodology. The data used for the analysis in this study is quarterly time series data ranging from Q2 2011 to Q4 2024[1] obtained from several sources (Table 1 briefly describes all the variables and sources used for the analysis and Figure 1 provides time series plot of the variables). All the variables are used in real terms; that is, we have deflated them using the CPI index. To gain deeper insight into the association between dwelling price inflation and other variables in Poland, we use the Vector Autoregression model and forecast scenarios method. Although many potential factors influence dwelling price inflation, we choose to include only several that are well-documented in empirical studies (see, e.g., Augustyniak et al. 2014; Égert & Mihaljek 2007; Jud & Winkler 2002; Leszczyński & Olszewski 2017), as we are limited by a relatively low number of observations. We do not include the interest rate, although it is recommended to do so, as the final model had worse properties and the overall results were similar to the to the data set finally used.

[1] The Bank of Poland provides quarterly data on dwelling prices with a one month shift, i.e. Q1 is computed as data from December of the previous year, plus January and February; Q2 uses data for March – May etc. Thus, we manually constructed a new quarterly CPI index, as well as the other variables used here, computing them from monthly data to maintain a consistency of periods.

Critical Housing Analysis
Volume 12 | Issue 2 | 2025 | 167-183
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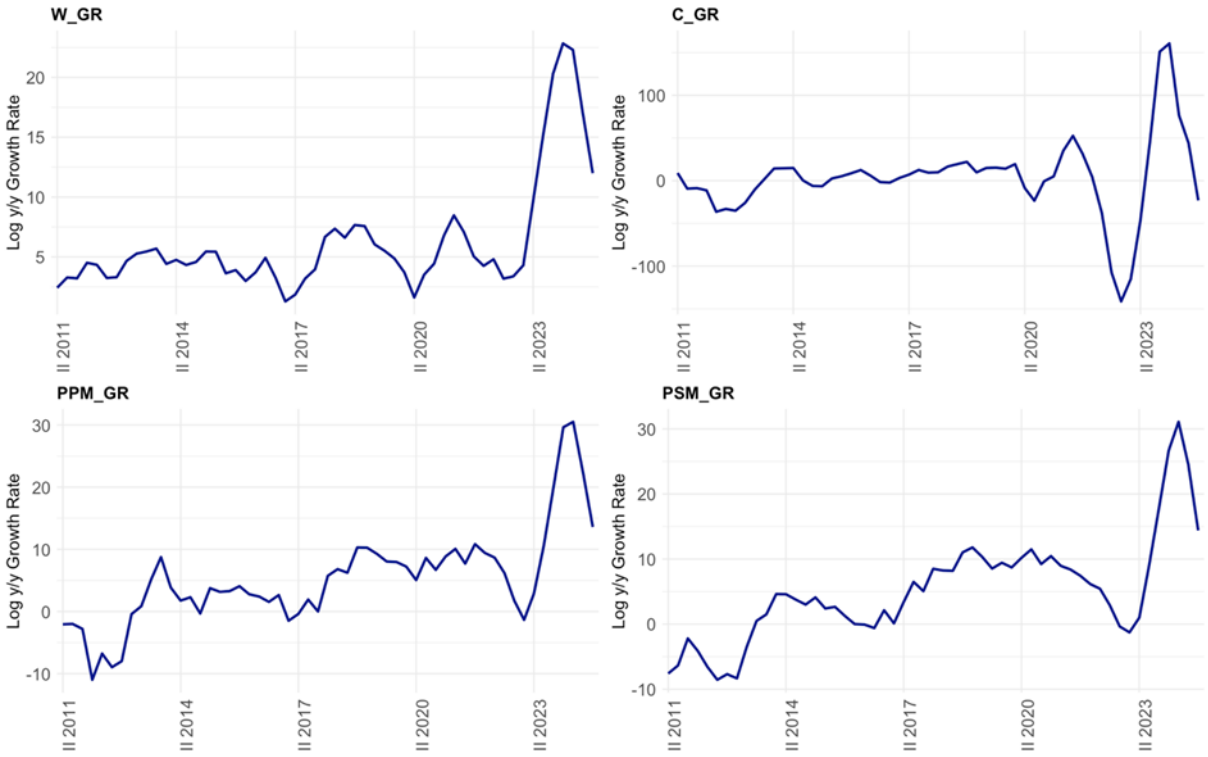
Table 1: Description of the variables

Variable	Description	Source
Dwelling Inflation in the Primary Market (PPM_{GR}) Dwelling Inflation in the Secondary Market (PSM_{GR})	The variable is computed as the year-over-year logarithmic growth rate of transaction prices expressed in PLN/1 sqm. The variable is a mean of prices in 7. largest cities: Gdańsk, Gdynia, Kraków, Łódź, Poznań, Warszawa and Wrocław (%, real terms).	Bank of Poland
Mortgage Credit Growth Rate (C_{GR})	The variable is computed as the year-over-year logarithmic growth rate of the mortgage loans value in PLN granted by financial entities (%, real terms).	BIK (Credit Information Bureau)
Wages Growth Rate (W_{GR})	The variable is computed as the year-over-year logarithmic growth rate of the average monthly gross salary in PLN in the enterprise sector (%, real terms).	Statistics Poland

Source: Authors' elaboration; data accessed on 19 February 2025.

Figure 1: Time series plot



Source: Authors' elaboration; data accessed on 19 February 2025.

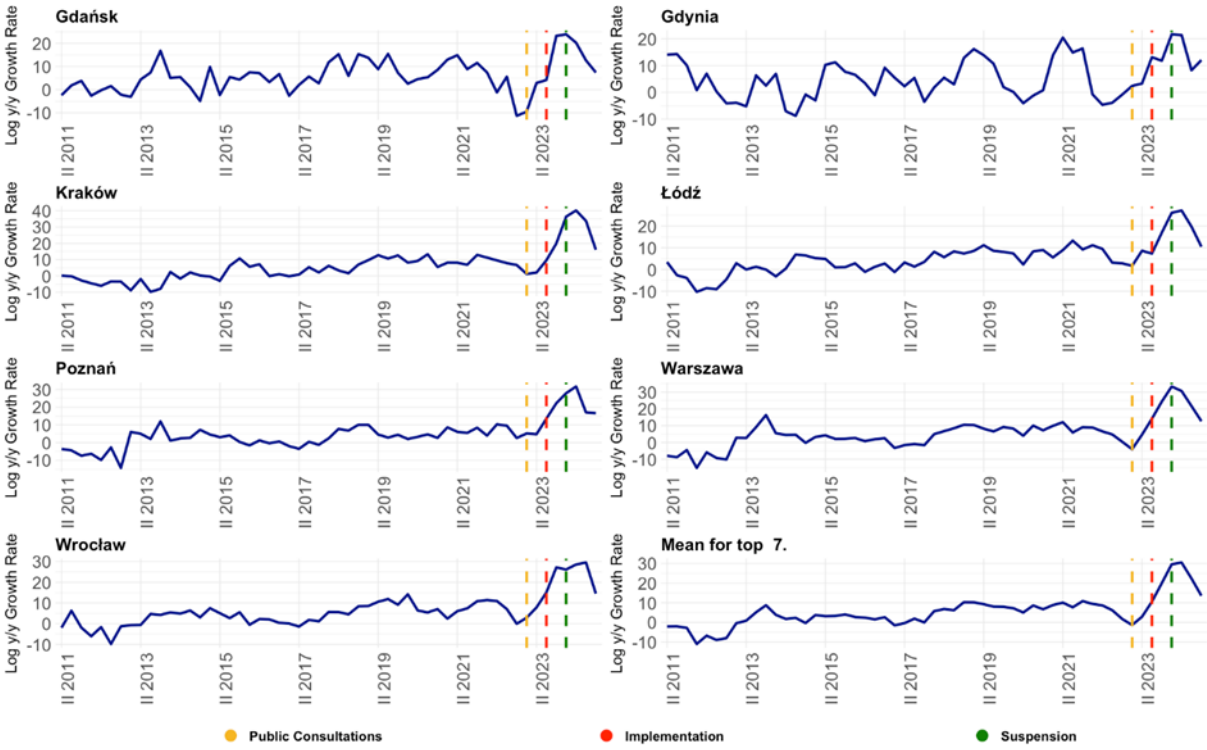
Figures 2 and 3 illustrate the price dynamics in the primary and secondary markets across various cities. The data indicate that the markets in the individual cities exhibited diverse characteristics. For instance, the primary markets in Gdańsk and Gdynia experienced relatively high and sustained volatility throughout the entire period. In contrast, price dynamics in other cities remained relatively stable for most of the time until 2023.

Critical Housing Analysis
Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

From the perspective of this study, a key event has occurred in recent years. In December 2022, an SM policy proposal was submitted for public consultation. Subsequently, on 1 July 2023, it was implemented, and the first mortgage loans under the programme were issued. The policy was suspended on 1 January 2024. During this period, there was a significant real increase in the total value of granted loans; however, the number of issued loans did not increase substantially. In Q3 2023, the real value of newly granted loans increased by approximately 46.69% y/y, while their number grew by only about 16.59% y/y. In Q4 2023, the real value surged by approximately 151.04% y/y, while the number of loans increased by only 3.20% y/y. The dynamics of the number of granted mortgage loans did not deviate significantly from the patterns observed in previous years.

Simultaneously, this period witnessed a substantial rise in housing prices, with the most pronounced increase occurring in Kraków, where both primary and secondary market prices surged by approximately 40% y/y.

Figure 2: Real price inflation of dwellings in the primary market

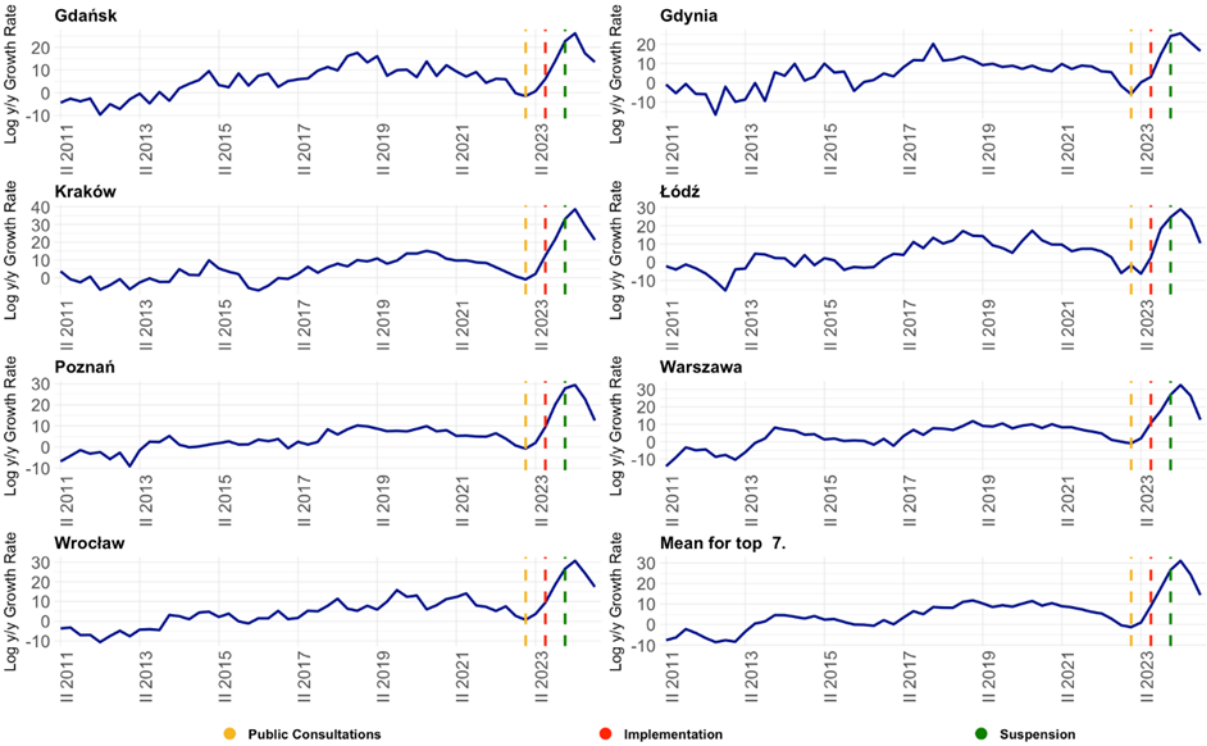


Source: Authors' elaboration; data accessed on 19 February 2025.

To examine the impact of the SM policy on dwelling price inflation in Poland, we employ two methods. First, we construct a VAR model and conduct impulse response functions and their cumulative versions. The IRF and CIRF provide direct insights into the dynamics of the dwelling market following a shock in any of the model's equations. However, this approach has inherent limitations because it assumes that shocks can occur at any point within the observed period. As shown in Figure 1, the dynamics of dwelling price inflation cannot be characterised by stable variance. While variance remains stable for most of the analysed period, a structural shift occurs following the implementation of the SM policy. Consequently, the IRF may underestimate the true response, as it implicitly assumes that the variance of dwelling price inflation remains stable throughout the process.

Critical Housing Analysis
Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

Figure 3: Real price inflation of dwellings in the secondary market



Source: Authors' elaboration; data accessed on 19 February 2025.

To address this limitation, we extended our analysis by constructing an additional VAR model using a shorter sample period and developing forecast scenarios ('What-if'). We defined two scenarios:

a) No shock in any equation – this scenario allows us to estimate how dwelling price inflation might have evolved in the absence of the SM policy. Without the policy, there would be no demand-side pressure originating from the credit equation, no significant expectation formation, and no influence from additional factors.

b) Shock only in the credit equation – this scenario enables us to assess the extent to which demand-side pressure generated directly by the programme contributes to dwelling price inflation and whether this effect dominates over other factors, such as market expectations.

The general equation of the VAR model can be written as:

$$Y_t = A_1 Y_{t-1} + A_2 Y_{t-2} + \cdots + A_p Y_{t-p} + DX_t + \varepsilon_t \quad (1)$$

where Y_t is a vector of endogenous variables, A_1, …, A_p are matrices of lag coefficients, X_t is a vector of exogenous variables, D is a matrix of coefficients for exogenous variables, and $\mathcal{E}_t$ is a vector of error terms. After constructing several models for the analysed growth rates, the companion matrices did not have all the eigenvalues inside the unit circle. Therefore, a model was built for the first differences. Therefore, $Y_t = \begin{Bmatrix} \Delta W_{GR} \\ \Delta C_{GR} \\ \Delta PPM_{GR} \\ \Delta PSM_{GR} \end{Bmatrix}$ and we use the Cholesky

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

decomposition for IRF and CIRF analysis. The vector of exogenous variables takes a value of 1 in the credit variable equation in Q3 2023 and -1 in Q2 2024. All other entries were filled with 0.

As we are not employing a VEC model, CIRF function could be interpreted as if the reaction after the shock occurs was on the level of the variable, i.e. PPM_{GR} and PSM_{GR}. The 90% confidence intervals around the point estimates of the IRF and CIRF are based on the bootstrap method, with the number of replications set to 1000.

The properties of the residuals were verified using several statistical tests. To check the compliance of the residuals with the normal distribution, we use Łominicki-Jarque-Bera and Mardia's tests. We use the Portmanteau test to check for autocorrelation between the residuals and the multivariate ARCH-LM test to check for any ARCH effect.

Results and discussion

This section presents the results from our study, and they are presented in the following order. First, we present the results of the VAR model and the impulse response functions. Second, we extend the analysis by conducting forecasting scenarios. Third, we discuss our results.

The information criteria suggest either six lags (Akaike, Hannan-Quinn) or one lag (Schwarz), but six lags would be excessive and reduce the sample considerably. Since the VAR(1) model did not sufficiently meet the residual assumptions, we ultimately employed a VAR(2) model, which was both stable (higher-order lags led to at least one eigenvalue of the companion matrix, satisfying $|\lambda_i| > 0.9$) and adequately met the required assumptions. The Łomnicki-Jarque-Bera (p-value = 0.191) and Mardia's (skewness and kurtosis; p-value = 0.594 and p-value = 0.790, respectively) tests confirmed the compliance of the residuals with the normal distribution. The residuals do not exhibit autocorrelation, as indicated by the results of the Portmanteau test up to 10 lags (p-value = 0.151). The ARCH effects are also non-existent in such a specification (the p-value for the ARCH-LM statistics up to 5 lags is higher than 0.05).

Before proceeding further, it is worth noting the exogenous dummy variable included in the model. In Equations 1, 3, and 4, the parameter for this variable was statistically insignificant. However, the situation is different for Equation 2, which corresponds to the credit variable. In this case, the parameter estimate was statistically significant (p = 0.004). The estimated value of this parameter is 50.963 and will be used to rescale the obtained IRF and CIRF functions so that they illustrate the impact on dwelling price inflation if a shock of this magnitude occurs in the credit equation.

Figure 4 shows the IRF and CIRF functions in which we employed shock in credit equation with a magnitude of 50.963. Analysing the IRF functions, it can be observed that the immediate response to the shock is close to zero in both cases. Dwelling inflation in both markets builds up until the third quarter after the shock occurs, with the fastest increase happening two quarters after the shock. From the fourth quarter onward, a period of correction and stabilisation begins. The responses to the shock are statistically significant in the initial periods. Examining the CIRF functions, it is evident that the responses reach their peak amplitude in the third period after the shock. Compared to a scenario where no shock occurs, dwelling price inflation is approximately 6.744 percentage points higher in the primary market and 7.405 percentage points higher in the secondary market by the third quarter.

Critical Housing Analysis
Volume 12 | Issue 2 | 2025 | 167-183
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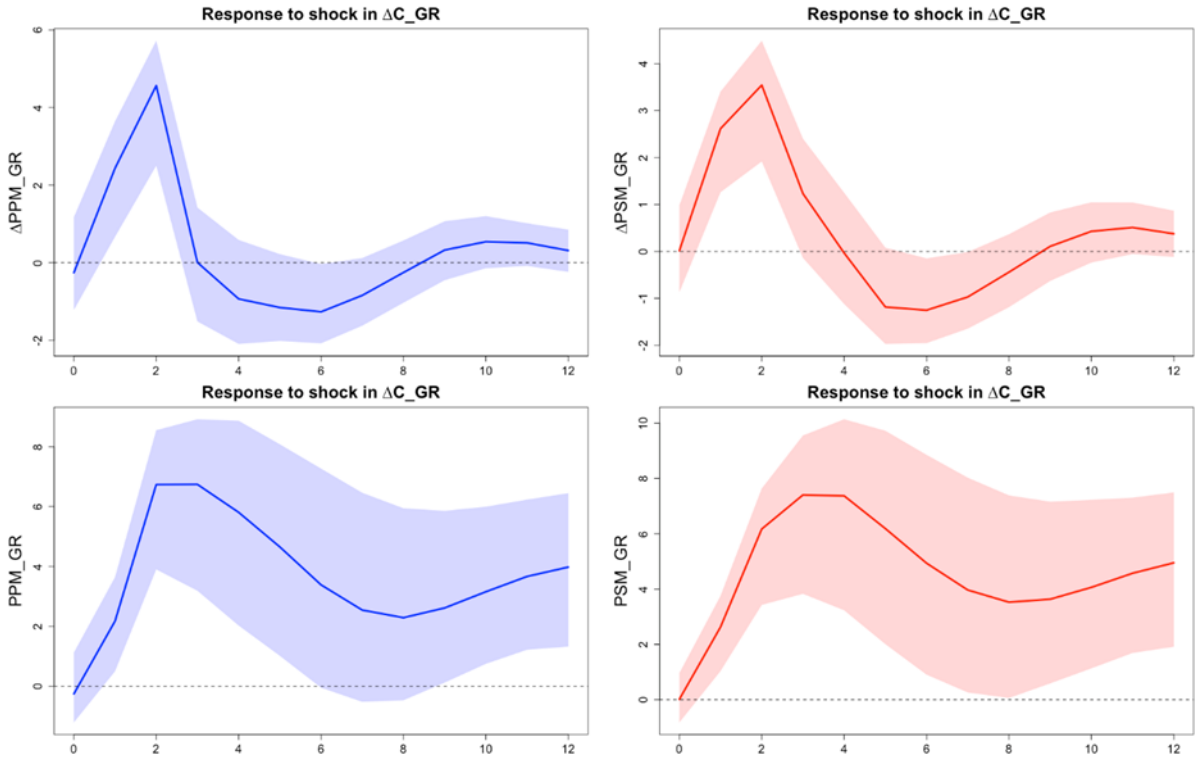
Figure 4: IRF and CIRF functions in response to a shock in the credit equation



Note: The intervals are 90% bootstrapped confidence intervals. The number of bootstrap replications is 1000.
Source: Authors' elaboration; data accessed 19 February 2025.

When comparing these results to the actual observed values, they appear relatively small or potentially underestimated. One explanation is that the model does not account for other variables that could play a crucial role, such as approximations of market expectations or sentiment in the construction sector. Another one, as we argued earlier, is— the relatively stable variance during most of the observed period, except in Q3 2023 and beyond. Therefore, we extend this analysis by incorporating forecast scenario analysis.

To conduct the forecast scenario analysis, we estimate another VAR model using a shorter data set, which ends at Q2 2023 instead of Q4 2024. We employ a VAR(2) model, without any exogenous variable, because 1) it turns out to be stable, 2) it meets the residual term assumptions, and 3) it is consistent with the model that uses a longer data set. The next step is to conduct a forecast, based on the shock matrices from the VAR model and two scenarios – one without any new shock and one that includes a shock in the credit equation with a magnitude of 50.963.

Figure 5 presents three plots for both primary and secondary market dwelling inflation: actual data; a forecast without any additional shock – the baseline; and one with a shock in the credit equation. The trajectory in the scenario assuming no additional shock follows a pattern similar to previously observed paths. The amplitude of the growth rate in this scenario would be approximately 11.38% for the primary market and 6.88% for the secondary market.

Critical Housing Analysis
Volume 12 | Issue 2 | 2025 | 167-183
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https://doi.org/10.13060/23362839.2025.12.2.595

Figure 5: Plots of forecast scenarios

Source: Authors' elaboration; data accessed on 19 February 2025.

In contrast, the trajectory in the scenario assuming a shock in the credit equation deviates noticeably from the baseline forecast. The amplitude of the growth rates in this case reaches approximately 17.42% for the primary market and 12.12% for the secondary market. However, these values remain significantly below the actual observed figures. The differences between the baseline forecast and the scenario with a shock are comparable to the values obtained from the CIRF functions. This suggests that the previously estimated model provided a reasonably accurate approximation of the actual and direct response to a shock in the credit equation. We believe that the estimates obtained from the two methods used provide an accurate representation of the situation. First, the response of variables in the IRF and CIRF functions, as well as the results obtained in the scenario-based forecast, reflect only the direct reaction of variables to the introduction of the SM policy and the demand mechanism it created. These shock responses do not account for other unobserved or unspecified factors in the model, such as market expectations regarding further price increases or attitudes in the construction sector.

Second, as we have already pointed out, the significant increase in the total value of newly issued loans did not correspond to an equivalent rise in the number of loans – the increase in the number of loans was significantly smaller. This suggests that there must have been a mechanism keeping the number of loans relatively low while allowing them to be issued for significantly larger sums. One possible explanation for this is market expectations of rising prices. This does not imply a significantly greater number of buyers actively seeking to purchase dwellings but rather a belief among property sellers that, regardless of valuation, they would find buyers with sufficient capital – an expectation reinforced by government policy.

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

Another explanation could be the lower supply of the dwellings in 2023 compared to previous periods. However, this does not seem to be accurate, as the growth rate of the number of dwellings per 1000 citizens in the top seven cities in 2023 is comparable to previous and even larger than the 2011–2022 mean. Table 2 provides deeper insight into this statistic divided by city. However, as argued in the PKO Bank Polski's Research Reports (see e.g. Grabowiecka-Łaszek et al. 2023; 2024), the supply of new housing in the primary market declined as a result of a decrease in the number of newly initiated residential projects between Q1 2022 and Q2 2023. Nevertheless, if this factor were the key driver, the trajectory of price growth in the primary market would have differed significantly from that of the secondary market.

We would like to mention the immigration factor, which could also affect the dwelling price inflation. After the war started in Ukraine – caused by Russian aggression – many refugees from Ukraine emigrated to neighbouring countries, including Poland. According to UNHCR (2025), as of 11 February 2025, there were approximately 992 643 Ukrainian refugees in Poland. This could be seen as a significant factor affecting the supply of dwellings and thus also price inflation. Nevertheless, the war started in 2022, and until Q3 2023 dwelling price inflation remained at a level comparable with previous periods. Moreover, in Q1 2023 the growth rates of dwelling prices in both markets were negative. Głuszak and Trojanek (2024) investigated the reaction of the housing market in Poland's five largest cities to the arrival of refugees from Ukraine. They estimated that an increase of 1 percentage point in a city's population caused by the inflow of refugees led to 0.23–0.26% increase in apartment prices. Their estimates, however, are mostly statistically insignificant and the impact of the inflow of refugees on house prices should be interpreted as relatively week. According to the BGK report, Ukrainian citizens accounted for only 2.7% of the buyers of apartments purchased in 2023 (Umiński et al. 2025). Ukrainian refugees were also only a minor factor in explaining rent price growth (Czerniak 2024). Thus, the Ukrainian emigration does not seem to be a significant factor.

Table 2: Log growth rates of the supply of dwellings (in %)

Time	Gdańsk	Gdynia	Kraków	Łódź	Poznań	Warszawa	Wrocław	Mean for top 7.
2019	2.157	1.218	2.231	1.928	2.148	1.447	3.049	2.025
2020	-0.020	1.830	4.299	2.130	5.196	-0.306	1.444	2.082
2021	2.443	1.920	1.326	2.122	2.035	1.218	2.082	1.878
2022	2.784	1.522	2.243	2.499	2.414	1.484	2.414	2.194
2023	2.135	1.777	1.668	2.318	2.019	1.479	2.165	1.937
2011-2022 mean	**2.040**	**1.308**	**2.130**	**1.640**	**2.119**	**1.089**	**2.189**	**1.788**

Note: Dwelling supply is computed as number of dwellings *per* 1000 citizens. This statistic does not include immigrants temporarily residing in Poland.
Source: Authors' elaboration; based on Statistics Poland – LOCAL DATA BANK; data accessed on 10 March 2025.

The SM policy generated strong market expectations, which were responsible for a substantial share of housing price inflation in both the primary and secondary markets. In Q4 2023 the share of mortgages taken with the support of this policy was about 61% (Grabowiecka-Łaszek et al. 2023). In the case of the secondary market, the effect unrelated to the direct demand mechanism accounted for a relatively larger portion of the price

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

increase. It is also worth noting that despite the suspension of the policy at the beginning of Q1 2024, housing prices continued to rise at a high rate throughout Q2 2024 before starting to slow down. However, as of Q1 2025, there has been no price correction in either market. This may be due to recurring discussions in the public debate about potentially reactivating the programme under a modified name and with revised participation rules, which further fuels market expectations.

Another factor is the relatively weaker response from dwelling inflation in the secondary market. It was indeed stronger compared to the primary market, but relatively lower when compared by the share of actual figures. In 2023, 45.7% of dwellings were sold in the primary market, and 54.3% in the secondary market (Statistics Poland 2024). However, the inflation of dwelling prices in the secondary market was relatively more sensitive to the shock in the credit equation, as this study showed. It is often indicated that the secondary market tends to follow the trends observed in the primary market. This would have been a reasonable explanation if the primary market had played a key role in the housing market in Poland, which turned out not to be the case. In our view, one of the factors that may have significantly contributed to the increase in dwelling prices in the secondary market is the purchase of properties with cash for investment purposes. In such cases, the buyers do not use support from the SM policy, yet this still represents a strong demand stimulus. This hypothesis is also supported by market publications and real estate analyses in Poland (see, e.g., Grabowiecka-Łaszek et al. 2023; 2024).

Concluding remarks

This study estimates the impact of Poland's '2% Safe Mortgage' policy on dwelling price inflation in both the primary and secondary markets, focusing on the seven largest cities using quarterly data from Q2 2011 to Q4 2024. A VAR model and scenario forecasts were applied to ensure comparability.

The results show that the policy had both direct and indirect effects on prices. In the primary market, credit-related factors led to a 6.744 percentage point rise in price inflation by the third quarter. In the secondary market, the impact was even greater – around 7.405 percentage points – compared to a scenario without the policy. Indirect drivers, including expectations of further price increases, also played a significant role.

Limitations of this study include the use of short-run analysis and the limited number of variables. A panel VECM model could improve the analysis by capturing long-term dynamics and incorporating city-level data. The study also used a dummy variable only for the policy's implementation and suspension dates. Extending it to include the consultation phase or lagged effects could enhance accuracy. Future research should consider institutional factors like energy efficiency standards, especially in local market analyses.

The analysis clearly indicates that effective housing market management requires policies focused on stimulating supply rather than merely supporting demand. The neoclassical approach, which assumes market self-regulation, proves insufficient in the face of growing inequalities and the shortage of affordable housing. Only active state intervention – through investment and support for social housing – can adequately address the challenges facing the housing sector, ensuring price stability and greater access to housing for citizens.

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
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Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

References

Aalbers, M. B. 2016. *The Financialization of Housing: A political economy approach*. London: Routledge. https://doi.org/10.4324/9781315668666

Andrews, D., A. Caldera, A. Johansson 2011. 'Housing Markets and Structural Policies in OECD Countries.' *OECD Economics Department Working Papers*. First published online 25 January 2011 https://doi.org/10.1787/5kgk8t2k9vf3-en

Arundel, R., R. Ronald 2021. 'The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality.' *Urban Studies* 58 (6): 1120–1140. https://doi.org/10.1177/0042098019895227

Augustyniak, H., J. Łaszek, K. Olszewski, J. Waszczuk 2014. 'Modelling of cycles in the residential real estate market.' *Kwartalnik Nauk O Przedsiębiorstwie* 31 (2): 63–77. https://doi.org/10.2139/ssrn.2230363

Berger, D., N. Turner, E. Zwick 2020. 'Stimulating Housing Markets.' *The Journal of Finance* 75 (1): 277–321. https://doi.org/10.1111/jofi.12847

Biehl, A. M. 2018. 'The First-Time Homebuyer Tax Incentives: Did They Work?' *Journal of Housing Research* 27 (1): 1–15. https://doi.org/10.1080/10835547.2018.12092138

Byrne, M. 2024. 'Post-neoliberalization and the Irish private rental sector.' *Housing Studies* 39 (7): 1658–1677. https://doi.org/10.1080/02673037.2022.2137474

Carozzi, F., C. A. L. Hilber, X. Yu 2024. 'On the economic impacts of mortgage credit expansion policies: Evidence from help to buy.' *Journal of Urban Economics* 139: 103611. https://doi.org/10.1016/j.jue.2023.103611

Crowe, A., S. Rowley 2024. 'Measuring housing affordability: Scoping the real cost of housing.' *AHURI Final Report*. https://doi.org/10.18408/ahuri8128801

Czerniak, A. 2024. 'The Impact of Ukrainian War Refugees on Rental Prices in Europe: A Panel Data Analysis.' *Critical Housing Analysis* 11 (1): 1–14. https://doi.org/10.13060/23362839.2024.11.1.560

Czerniak, A., J. Kroszka 2024. *Jak rozwiązać problemy mieszkaniowe młodych Polek i Polaków*. Warszawa: Polityka Insight.

Égert, B., D. Mihaljek 2007. 'Determinants of House Prices in Central and Eastern Europe.' *Comparative Economic Studies* 49 (3): 367–388. https://doi.org/10.1057/palgrave.ces.8100221

Fernández, A., G. Bežovan 2023. 'The Role of Mortgage Subsidies in the Croatian Economic Growth Strategy: A Political-Economy Approach to the SSK.' *Critical Housing Analysis* 10 (1): 50–65. https://doi.org/10.13060/23362839.2023.10.1.553

Fikse, E., M. B. Aalbers 2021. 'The really big contradiction: Homeownership discourses in times of financialization.' *Housing Studies* 36 (10): 1600–1617. https://doi.org/10.1080/02673037.2020.1784395

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

Galster, G., K. Ok Lee 2021. 'Introduction to the special issue of the Global crisis in housing affordability.' *International Journal of Urban Sciences* 25 (sup1): 1–6. https://doi.org/10.1080/12265934.2020.1847433

Gingrich, J. R. 2011. *Making Markets in the Welfare State: The Politics of Varying Market Reforms*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511791529

Głuszak, M., R. Trojanek 2024. 'War in Ukraine, the refugee crisis, and the Polish housing market.' *Housing Studies* 40 (5): 1043–1065. https://doi.org/10.1080/02673037.2024.2334822

Grabowiecka-Łaszek, A., P. Krzysztofik, P. Matysiak 2023. *Rynek Mieszkaniowy 1q23*. Warszawa: PKO BP. Retrieved 23 October 2025 from https://www.pkobp.pl/media_files/fb5fad89-30fd-41af-97e1-3c6a379f35fd.pdf?srsltid=AfmBOopsXMPk7rGp7DIUfv8QfdyqWMiitp7oHcn8PvTUMrOl_0yJeXZo

Grabowiecka-Łaszek, A., P. Krzysztofik, P. Matysiak 2024. *Rynek Mieszkaniowy 1q24*. Warszawa: PKO BP. Retrieved 23 October 2025 from https://srm.com.pl/gfx/files/24q4_PKO_BP_rynek_mieszkaniowy_pl.pdf

Gruber, J., A. Jensen, H. Kleven 2021. 'Do People Respond to the Mortgage Interest Deduction? Quasi-Experimental Evidence from Denmark.' *American Economic Journal: Economic Policy* 13 (2): 273–303. https://doi.org/10.1257/pol.20170366

Hembre, E. 2018. 'An examination of the first-time homebuyer tax credit.' *Regional Science and Urban Economics* 73: 196–216. https://doi.org/10.1016/j.regsciurbeco.2018.10.002

Hilber, C. A. L., O. Schoni 2022. *Housing policy and affordable housing*. London: Centre for Economic Performance, LSE.

Hochstenbach, C. 2023. 'Balancing Accumulation and Affordability: How Dutch Housing Politics Moved from Private-Rental Liberalization to Regulation.' *Housing, Theory and Society* 40 (4): 503–529. https://doi.org/10.1080/14036096.2023.2218863

Howells, M., K. Olesen 2025. 'The neoliberalization of housing policy and social housing provision in the Nordics: Convergence or continued variegation?' *Housing Studies*: 1–20. https://doi.org/10.1080/02673037.2025.2456510

Jud, D., D. Winkler 2002. 'The Dynamics of Metropolitan Housing Prices.' *Journal of Real Estate Research, American Real Estate Society* 23(1–2): 29–46.

Kadi, J., L. Vollmer, S. Stein 2021. 'Post-neoliberal housing policy? Disentangling recent reforms in New York, Berlin and Vienna.' *European Urban and Regional Studies* 28 (4): 353–374. https://doi.org/10.1177/09697764211003626

Krolage, C. 2023. 'The effect of real estate purchase subsidies on property prices.' *International Tax and Public Finance* 30 (1): 215–246. https://doi.org/10.1007/s10797-022-09726-0

Kunovac, D., I. Zilic 2022. 'The effect of housing loan subsidies on affordability: Evidence from Croatia.' *Journal of Housing Economics* 55, 101808. https://doi.org/10.1016/j.jhe.2021.101808

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

Leszczyński, R., K. Olszewski 2017. 'An analysis of the primary and secondary housing market in Poland: Evidence from the 17 largest cities.' *Baltic Journal of Economics* 17 (2): 136–151. https://doi.org/10.1080/1406099X.2017.1344482

Licchetta, M., Martins, V. D., B. Vašíček 2025. 'Selected Macroeconomic and Social Aspects of Housing Affordability.' *Intereconomics* 60 (2): 101–106. https://doi.org/10.2478/ie-2025-0020

Marques Pereira, S. 2024. 'Portuguese Reactions to the Housing Crisis: Is It Possible to Move from the Residualisation to Post-neoliberalisation of Housing Policies?' *Critical Housing Analysis* 11 (2): 204–215. https://doi.org/10.13060/23362839.2024.11.2.578

Radzimski, A. 2014. 'Subsidized mortgage loans and housing affordability in Poland.' *GeoJournal* 79 (4): 467–494. https://doi.org/10.1007/s10708-014-9533-2

Reisenbichler, A. 2020. 'Housing Finance Between Social Welfare and Growth Strategies.' Pp. 320–347 in A. Hassel, B. Palier (eds.) *Growth and Welfare in Advanced Capitalist Economies: How Have Growth Regimes Evolved?* Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198866176.001.0010

Schelkle, W. 2012. 'A Crisis of What? Mortgage Credit Markets and the Social Policy of Promoting Homeownership in the United States and in Europe.' *Politics & Society* 40 (1): 59–80. https://doi.org/10.1177/0032329211434690

Sejm RP 2021. *Ustawa z Dnia 1 Października 2021 r. O Rodzinnym Kredycie Mieszkaniowym i Bezpiecznym Kredycie 2%.* Warszawa: Dz.U.2024.1724.

Sitaraman, G., C. Serkin 2025. 'Post-Neoliberal Housing Policy.' *University of Pennsylvania Law Review* (in press). First published online 6 May 2025. https://doi.org/10.2139/ssrn.5227899

Statistics Poland 2024. *Real estate sales in 2023*. Retrieved 18 April 2025, from Statistics of Poland website https://stat.gov.pl/en/topics/municipal-infrastructure/municipal-infrastructure/real-estate-sales-in-2023,2,16.html

Stirling, P., Gallent, N., A. Purves 2023. 'The assetisation of housing: A macroeconomic resource.' *European Urban and Regional Studies* 30 (1): 15–35. https://doi.org/10.1177/09697764221082621

Umiński, P., Samołyk, O., Piłat, A., M. Walewski 2025. *Wpływ napływu migrantów z Ukrainy na polską gospodarkę: Podsumowanie stanu wiedzy*. Warszawa: Bank Gospodarstwa Krajowego.

UNHCR 2025. *Ukraine Refugee Situation | Poland* (Dataset). Retrieved 11 Febuary 2025 from https://data.unhcr.org/en/situations/ukraine/location/10781

Van Bortel, G., V. Gruis 2019. 'Innovative Arrangements between Public and Private Actors in Affordable Housing Provision: Examples from Austria, England and Italy.' *Urban Science* 3 (2): 52. https://doi.org/10.3390/urbansci3020052

Volume 12 | Issue 2 | 2025 | 167-183
Available online at www.housing-critical.com
https://doi.org/10.13060/23362839.2025.12.2.595

Vidal, L., Gil, J., M. A. Martínez 2024. 'Accommodating 'generation rent': Unsettling dominant discourses on rental housing reform in Catalonia and Spain.' *Urban Studies* 61 (11): 2060–2079. https://doi.org/10.1177/00420980241228438

Vogelpohl, A., T. Buchholz 2017. 'Breaking With Neoliberalization by Restricting The Housing Market: Novel Urban Policies and the Case of Hamburg.' *International Journal of Urban and Regional Research* 41 (2): 266–281. https://doi.org/10.1111/1468-2427.12490

Wetzstein, S. 2017. 'The global urban housing affordability crisis.' *Urban Studies* 54 (14): 3159–3177. https://doi.org/10.1177/0042098017711649

Wijburg, G. 2021. 'The governance of affordable housing in post-crisis Amsterdam and Miami.' *Geoforum* 119: 30–42. https://doi.org/10.1016/j.geoforum.2020.12.013

Zhao, C., F. Liu 2023. 'Impact of housing policies on the real estate market — Systematic literature review.' *Heliyon* 9 (10): e20704. https://doi.org/10.1016/j.heliyon.2023.e20704