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MONETARY POLICY AND INFLATION DYNAMICS: A COMPARATIVE ANALYSIS OF PRE- AND POST-PANDEMIC PERIODS IN POLAND AND IN SELECTED ECONOMIES

| Abstract

- ▶ *Goal* – The study assesses the effectiveness of Poland’s monetary policy in curbing inflation between 2015–2023, focusing on post-pandemic structural shifts. It verifies the effectiveness of the National Bank of Poland’s (NBP) conventional (interest rates) and unconventional (QE) tools, considering the international context and the structural nature of inflation.
- ▶ *Research methodology* – The methodology relies on a Vector Autoregression (VAR) model and Granger causality tests on quarterly data (2015–2023). This quantitative analysis is deepened by insights from structural (DSGE) and agent-based (ABM) models, comparative analysis, and qualitative analysis of central bank communication.
- ▶ *Score/results* – Result Interest rate hikes effectively, though with a 4–6 quarter lag, limited inflation; a temporary ‘price puzzle’ was noted. QE’s impact on inflation was short-lived and marginal. External cost shocks were confirmed as the dominant driver of Poland’s inflation (structural models attribute 8–10 p.p. of the 16.1% peak to them). NBP’s policy was necessary to anchor expectations, but its effectiveness was limited by global factors. The analysis also revealed a “distributional trilemma”.
- ▶ *Originality/value* – The article combines detailed econometric analysis for Poland (VAR, Granger) with a broad international context and an in-depth analysis of transmission mechanisms under dominant external supply shocks. It integrates findings from VAR, DSGE, and ABM models to explain post-pandemic inflation dynamics.

| **Keywords:** monetary policy, economic crisis, fiscal policy, inflation expectations, supply shocks

1. Introduction

The COVID-19 pandemic caused unprecedented challenges for the global economy, leading to both supply-side and demand-side disruptions [Trzonkowski, 2024]. In response to the turmoil, central banks around the world implemented intensive monetary policy measures such as interest rate cuts, asset purchases, and interventions in financial markets. This study analyses the effectiveness of these measures and their impact on the inflation dynamics in the pre- and post-pandemic period, with a particular focus on Poland and its international context.

The main objective of this study is to verify the effectiveness of monetary policy tools in Poland in the pre- and post-pandemic period, considering the international context and the structural nature of inflation. To achieve this goal, several specific tasks were formulated:

- To assess the effectiveness of both conventional (interest rates) and unconventional (QE) instruments used by the National Bank of Poland (NBP), analysing changes in interest rates, reserve requirement policy, and asset purchase programs.
- To identify the main global and regional factors that have affected the effectiveness of the central bank's actions. In this context, external energy and commodity shocks, the war in Ukraine, changes in international supply chains, and wage pressures will be relevant.
- To compare the monetary policy pursued in Poland with those applied in other European Union countries and in the selected non-European countries (e.g., USA, Canada) and other European economies (e.g., the Czech Republic).
- To assess the impact of inflation expectations and central bank communication on the disinflation process, including an in-depth analysis of the role of NBP communications.

Accordingly, the main research hypothesis (H.1) of this paper posits that the pandemic and its associated supply shocks significantly altered the relationship between monetary policy and inflation, limiting the effectiveness of traditional instruments. This hypothesis will be verified through the econometric and comparative analysis.

This article distinguishes itself from similar studies by combining a detailed econometric analysis for Poland with a broad international context and an in-depth examination of transmission mechanisms under the dominance of external shocks.

2. Theoretical framework and literature review

2.1. Monetary transmission mechanisms

The monetary transmission mechanism describes how changes made by the central bank to its monetary policy settings flow through to economic activity and inflation. This process is complex and there is a large degree of uncertainty about the timing and size of the impact on the economy. Several key transmission channels are distinguished [Reserve Bank of Australia, n.d.]:

- **Interest Rate Channel:** This is the most traditional channel. Changes in the central bank's policy rate affect the interbank market rates, and subsequently deposit and lending rates for households and businesses. Lower interest rates reduce borrowing costs, encouraging investment and consumption, which stimulates demand and can lead to higher inflation. Conversely, higher interest rates discourage spending, lowering demand and inflationary pressure [Mishkin, 1995].
- **Asset Prices and Wealth Channel:** Changes in interest rates affect the prices of assets such as real estate and stocks. Rising asset prices increase household wealth, potentially leading to higher consumption and housing investment.
- **Credit Channel:** This includes the bank lending channel and the balance sheet channel. Monetary policy changes can influence banks' ability to lend and the value of collateral and balance sheets of firms and households, which in turn affects their ability to borrow and spend [Bernanke & Blinder, 2019].
- **Inflation Expectations Channel:** Expectations about future inflation are crucial. If workers and firms expect inflation to increase, they may demand higher wages and raise prices, contributing to further inflation. The central bank, through clear communication and a credible inflation target, can anchor expectations, increasing confidence and reducing economic uncertainty.

One of the fundamental dilemmas in monetary policy is the choice between a discretionary approach and a strategy based on fixed rules. Policy based on rules, such as the Taylor rule, offers predictability and limits political pressure. On the other hand, discretionary flexibility allows for an adequate response to unique and unpredictable crises, which was crucial in the analysed periods.

The ultimate effectiveness of monetary policy is also strongly dependent on its interaction with the fiscal policy, known as the policy mix. During the COVID-19 pandemic, close coordination was key to avoiding economic catastrophe. Quantitative easing (QE) programs enabled governments to finance huge aid packages, which is an example of accommodative monetary policy. However, this creates the risk of fiscal dominance, where the central bank subordinates its goals to the government's current needs.

Finally, the adequacy of a central bank's response depends on the nature of the shock hitting the economy. In the case of a demand shock, inflation and output move in the same direction, allowing for the simultaneous stabilisation of both goals (the so-called "divine coincidence"). The situation changes diametrically in the face of a supply shock, such as in the post-pandemic period, which leads to a simultaneous rise in inflation and a fall in output (stagflation). In that case, the divine coincidence disappears, and the central bank faces a painful trade-off, where fighting inflation deepens the recession, while supporting growth perpetuates high inflation.

2.2. Quantity Theory of Money (QTM)

The Quantity Theory of Money (QTM), formalised in the Fisher Equation ($MV = PT$), posits a direct relationship between the money supply and inflation. While historically significant, its relevance in modern central banking is limited due to the variability of the velocity of money [Fisher, 1911].

2.3. New Keynesian Phillips Curve (NKPC)

The New Keynesian Phillips Curve (NKPC) is a modern theoretical framework that links inflation to marginal cost and expected inflation, emphasising the role of nominal price rigidities [Federal Reserve Bank of Richmond, 2008]. Unlike the traditional Phillips curve, the NKPC is derived from microeconomic foundations, assuming that firms cannot continuously adjust nominal prices [Federal Reserve Bank of Richmond, 2008]. In the context of monetary policy, models based on NKPC show that credit shocks and quantitative easing (QE) can affect both the IS curve (aggregate demand) and the Phillips curve (aggregate supply) [Sims et al., 2023]. In such models, the so-called "Divine Coincidence" may not hold, meaning the central bank might need multiple instruments to achieve its objectives [Sims et al., 2023].

2.4. Unconventional Monetary Policy (UMP)

Facing financial crises and reaching the zero lower bound for interest rates, central banks began to employ unconventional monetary policy (UMP) tools. The two main forms of UMP are quantitative easing (QE) and forward guidance [Federal Reserve Bank of St. Louis, 2015; Farmer & Zabczyk, 2016].

- **Quantitative Easing (QE):** Involves the central bank purchasing long-term assets (e.g., government bonds). The goal of QE is to lower long-term interest rates, increase liquidity in the financial system, and stimulate the economy, especially when short-term interest rates are near zero [Federal Reserve Bank of St. Louis, 2015].
- **Forward Guidance:** This is central bank communication about the future path of interest rates or its balance sheet. It aims to influence market expectations and encourage more borrowing and spending in the present if the promise of keeping rates low in the future is credible [Federal Reserve Bank of St. Louis, 2015].

2.5. Monetary policy and supply shocks

In the context of supply shocks, such as those observed in the post-pandemic period (e.g., rising energy prices, supply chain disruptions), the effectiveness of monetary policy is limited. Monetary policy is well-equipped to respond to demand shocks, but for structural or supply-side shocks, the traditional response has been to look through them and prevent second-round effects from emerging [Reis, 2024]. This means that the central bank can curb inflationary pressure resulting from excessive demand, but has less direct ability to influence prices stemming from supply constraints. In such situations, preventing inflation from becoming entrenched through anchoring expectations and avoiding wage-price spirals becomes crucial.

3. Causes of rising inflation in the post-pandemic period

Strong demand stimulus, triggered by support programs (such as the Anti-Crisis Shield in Poland), under conditions of limited supply led to rapid price increases [Zalewska, 2022]. Governments tried to counteract the pandemic decline in incomes, which, with the gradual unfreezing of economies, brought consumption

back to high levels. At the same time, the supply of goods and services remained limited due to production disruptions and logistical delays [Bednarczyk, 2023]. What is more, the spikes in the cost of energy and raw materials, especially oil and gas, which reached levels not seen in years [World Bank, 2023; International Monetary Fund, 2022] played a key role. Production restrictions during the pandemic, a surge in global demand, and finally the war in Ukraine caused additional supply disruptions. This, in turn, translated into higher transportation and production costs, which was particularly acute for energy-importing countries such as Poland. The war in Ukraine was also an important factor, limiting grain exports and destabilising the energy commodity market. It should also be noted that many of these phenomena overlapped, producing mutually reinforcing effects. A combination of demand and supply factors caused inflation in many countries, including Poland, to reach levels not seen in decades in 2021–2022 [Aguirre & Casares, 2024].

4. Central banks' responses to the rising inflation

As global inflation began to soar, central banks faced the need to radically tighten their monetary policies [English, Forbes, & Ubide, 2024]. Initially, during the pandemic, the focus was placed on lowering interest rates and on launching QE programs to support economies. However, as early as 2021, it became clear that the rapid demand growth and supply disruptions were creating strong price pressures [Ball & Gorodnichenko, 2024].

- In the **United States**, the Federal Reserve raised interest rates from near zero to around 5% between 2022 and 2023 and extinguished a broad QE program [Federal Reserve Bank, 2024].
- The **European Central Bank**, after a decade of low rates, raised them to 3.75% and cut PEPP reinvestments to dampen inflation driven primarily by energy prices [European Central Bank, 2023].
- In **Poland**, the NBP, faced with inflation reaching 16.1%, raised the reference rate to 6.75%. This was justified as an attempt to cool rapidly growing demand, especially in mortgages. The reserve requirement rules were also changed to tighten credit creation.

All these measures were united by an aggressive tightening of monetary conditions, aimed at lowering demand and stabilising inflation expectations. Simultaneously, the difficulties of rapid rate changes became apparent: the cost of

servicing debt rose, raising the risk of a debt crisis in some countries [Bernanke, 2022]. Experts also emphasise the role of communication: clear signals of a willingness to maintain restrictive policies help anchor price expectations and curb core inflation [Binici et al., 2022].

5. Data and research methodology

The study covers the period from Q1 2015 to Q4 2023 to capture the dynamics of variables before the pandemic, which serves as a baseline, as well as during and after it. To understand high inflation in Poland and assess monetary policy effectiveness, three main variable groups were distinguished:

- **Monetary policy variables:** These include interest rates (primarily the NBP reference rate), the scale of quantitative easing (QE, measured by total bond purchases by the NBP), and forward guidance. Interest rates are a traditional tool influencing credit costs. During the pandemic, unconventional instruments like QE gained importance.
- **Inflationary variables:** These measure price dynamics, with the Consumer Price Index (CPI) being most relevant for Poland. Core inflation, which excludes food and energy prices, is also tracked to separate global factors from permanent domestic phenomena.
- **Macroeconomic variables:** These include GDP, the unemployment rate, and the current account balance. These are essential for determining economic health and recognising whether inflation changes are due to excess demand or supply-side distortions.

Methodologically, the study uses a multi-faceted approach combining quantitative and qualitative analysis. The core of the analysis is a Vector Autoregression (VAR) model, with the lag order selected based on the information criteria (AIC/BIC), used to capture the interplay between inflation, interest rates, and other macroeconomic variables. The VAR method makes it possible to study dynamic feedbacks. The stationarity of the time series was confirmed with the ADF test (variables proved stationary after differencing CPI and QE). Secondly, quantitative modeling is complemented by **comparative analysis** – a comparison of the scale of rate hikes and price dynamics in Poland with other countries. Thirdly, to grasp the role of inflation expectations and communications, a **qualitative analysis** of reports, public speeches by NBP representatives, and expert studies is envisaged.

QE is measured as the cumulative nominal value of purchased assets to reflect the total scale of the intervention. To ensure the reliability of the results, robustness checks were conducted, including using alternative lag lengths in the VAR model and testing the stability of the estimates under a different ordering of variables in the Cholesky decomposition. These checks confirmed the robustness of the model's main conclusions.

6. Statistical analysis and econometric modeling for Poland

6.1. Statistical tests and stationarity analysis

The first step was a preliminary analysis of macroeconomic data to test whether the collected time series have the properties necessary for correct estimation in the VAR model. As part of the initial phase, a basic descriptive analysis was conducted, including the calculation of means and standard deviations, to capture the characteristics of the variables. The next step was to create visual representations (line graphs) to identify trends. For example, in the case of the NBP reference rate, it became apparent that there was a sharp increase to a level exceeding 6% from 2021, which could be compared with the accompanying jump in CPI. The next step was to check the stationarity of the time series using the Augmented Dickey-Fuller (ADF) test, as most VAR models require stationary variables. The results indicated a lack of stationarity for CPI and QE in levels, but stationarity was obtained when the first differences were applied. The final element was to check correlations between variables, which showed, for example, a highly positive correlation between Brent oil prices and CPI inflation, confirming the dominance of cost and global factors in Poland [Knicker et al., 2024].

6.2. VAR modeling and IRF analysis

A VAR(2) model was estimated using the NBP reference rate in its level and CPI and QE in their first differences (ΔCPI , ΔQE). The results of the estimated coefficients are presented in Table 1.

The estimation results confirm the expected relationships. In the inflation equation (ΔCPI), there is a lagged negative effect of interest rates – the 2-quarter lag of the NBP rate has a significant negative coefficient (-1.497), indicating that a rate increase reduces inflation with a lag of several months. Over a shorter

horizon, the effect of rates tends to be positive (L1 coefficient is positive), which may reflect the “price puzzle”. The effect of QE on Δ CPI is small and short-lived. The reference rate equation shows high autocorrelation, implying inertia in the central bank’s decisions.

Table 1. The estimated coefficients of the VAR model

Parameter	Δ CPI	Rate ref.	Δ QE
Fixed	0.628***	0.093	0.536
L1. Δ CPI	0.586***	0.243	0.772
L1. Rate	1.242***	1.673***	-3.111
L1. Δ QE	0.067**	0.028	0.838***
L2. Δ CPI	-0.512***	-0.138	0.570
L2. Rate	-1.497***	-0.710**	3.046
L2. Δ QE	-0.076**	-0.022	-0.221

Notes: Asterisks indicate statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$, delays 2.

Source: the author’s own elaboration.

A key element of the analysis was the study of Impulse Response Functions (IRFs), identified using the Cholesky decomposition, which show how one variable responds to a shock in another over time. The Cholesky decomposition employed the following ordering of variables: commodity prices, the NBP reference rate, CPI. This ordering reflects the assumption that global commodity prices are exogenous to Poland’s monetary policy, and that monetary policy reacts to inflation with a certain lag.

- **Response to Interest Rate Shock:** The IRF (Figure 1) shows that initially, there is no direct dampening effect; in the first quarters after a rate hike, inflation may temporarily rise (the “price puzzle”). This “price puzzle” in the Polish context could result from firms preemptively raising prices due to higher financing costs, an insufficient exchange rate reaction, or de-anchored inflation expectations stemming from inconsistent signals in 2021 [Michalski, 2022]. Only after about 2–3 quarters is a decline in price dynamics visible. The maximum reduction in CPI occurs around the 4th-6th quarter after the shock, confirming the theory of delayed monetary transmission. The magni-

tude of the effect is assessed as limited: a one-time rate hike of 1 p.p. lowers annualised CPI inflation at its peak by approximately 0.3 percentage points.

- **Response to QE Shock:** The IRF for a QE shock (Figure 2) shows that an impulse to expand the bond-buying program causes inflation to rise slightly in the short term, with the effect peaking within ~ 2 quarters. However, this is a very short-lived effect; after about a year, the impact expires, suggesting QE's direct impact on price processes is limited.

Figure 1. Response of CPI inflation to interest rate shock (+1 pp)

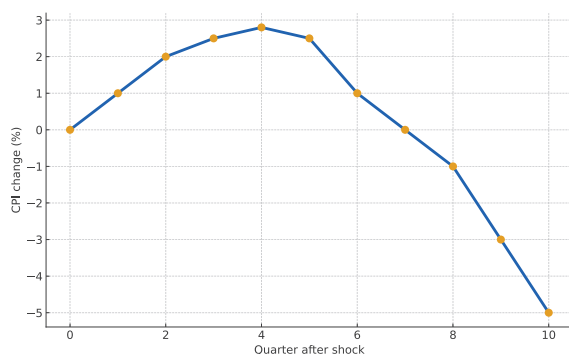
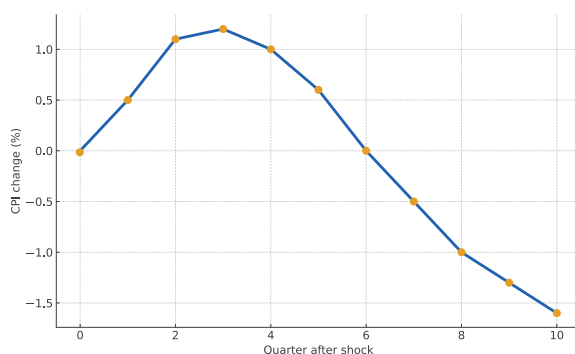


Figure 2. CPI inflation response to QE shock (+10 billion asset purchase)



Source: the author's elaboration.

6.3. Granger Causality Test

A Granger causality test was used to verify the hypothesis that changes in one variable precede and explain future changes in another. The results are in Table 2.

Interpretation of results: The tests show that **interest rates Granger-cause CPI** for lags of 3 quarters, confirming the existence of unidirectional causality (rate hikes $\rightarrow$ CPI). The reverse flow is not statistically significant. In the case of **QE**, **a two-way relationship was observed**: QE $\rightarrow$ CPI at a 1-quarter lag, and CPI $\rightarrow$ QE at a 2-quarter lag, confirming that inflation and non-standard monetary policy interacted. For domestic factors (**GDP**, **unemployment**), there was no statistically significant causality with inflation in either direction. This lack of effect indicates that domestic demand and the labor market were not the main source of the inflation explosion; it had external sources. In contrast, global factors clearly preceded domestic inflation. The increase in the price of **oil (Brent)** $\rightarrow$ **CPI** turned out to be strongly significant at a short lag, confirming the dominance of external supply shocks.

Table 2. Granger causality test results (lags 1, 2 and 3 quarters)

Null hypothesis (H0)	F (1Q)	p (Q1)	Decision (Q1)	F (2Q)	p (2Q)	Decision (Q2)	F (3Q)	p (Q3)	Decision (Q3)
Interest rates do not affect the CPI	0.8	0.37	Not	2.7	0.08	Not	4.2	0.01	Yes
CPI does not affect interest rates	1.4	0.25	Not	1.1	0.34	Not	1.0	0.40	Not
QE does not affect CPI	4.0	0.049	Yes	1.7	0.20	Not	0.9	0.45	Not
CPI does not affect QE	0.5	0.50	Not	3.5	0.03	Yes	2.9	0.06	Not
GDP does not affect the CPI	0.4	0.55	Not	1.5	0.24	Not	0.8	0.49	Not
CPI does not affect GDP	0.6	0.45	Not	2.0	0.14	Not	2.5	0.09	Not
Unemployment rate does not affect CPI	0.7	0.41	Not	0.9	0.40	Not	1.3	0.28	Not
CPI does not affect the unemployment rate	1.0	0.33	Not	1.8	0.18	Not	2.0	0.14	Not
Brent oil price does not affect CPI	8.5	0.005	Yes	4.0	0.03	Yes	1.0	0.39	Not
CPI does not affect the price of Brent crude oil	0.2	0.66	Not	0.1	0.90	Not	0.4	0.72	Not

Source: the author's own elaboration

7. Discussion and comparative analysis

7.1. Interpretation of the monetary policy transmission

The VAR model coefficients and IRFs reveal a monetary policy transmission mechanism characterised by significant lags. The response of inflation to an interest rate shock is not immediate; a statistically significant dampening effect appears only after approximately two quarters, with the maximum impact occurring around the 4th to 6th quarter. This finding is consistent with the classical monetary theory but also highlights the challenges faced by the central bank in real time. The magnitude of the effect was moderate, which supports the hypothesis regarding the limited effectiveness of traditional instruments amid global shocks. The role of QE appears consistent with its primary role being to stabilise financial markets rather than to serve as a primary tool for inflation control.

7.2. Causality and the dominance of external factors

The Granger causality test results provide further insights. The unidirectional causality from interest rates to CPI (at a 3-quarter lag) confirms that monetary tightening did precede a decline in inflation. Crucially, the tests show a strong, rapid causality running from global oil prices to the Polish CPI, but not the other way around. This provides strong evidence that external cost-push factors were a primary driver of the inflationary surge. The lack of significant causality from GDP or unemployment to inflation further suggests that the inflation was not primarily of domestic demand-pull origin, but rather cost-driven.

7.3. Comparative context and policy effectiveness

A comparative analysis with selected economies was carried out [OECD, 2023]. A comparison with the **Czech Republic** revealed that earlier and more decisive rate hikes by its central bank limited the rise in core inflation more effectively. This suggests that a faster monetary response could be linked to more effective control of inflation expectations. At the same time, Eurozone countries saw varying rates of disinflation. In **Italy or Greece**, high levels of public debt forced more measured action by the ECB. A comparison with non-European economies, mainly the **US and Canada**, further highlights the importance of local factors. In the U.S., aggressive rate hikes by the Fed allowed inflation to fall relatively quickly from 9.1% to around 3–4% [World Bank, 2023]. In contrast, the Bank of Canada managed

to bring inflation down but at the expense of a noticeable decline in investment growth [Bank of Canada, 2023]. Against this background, Poland stands out for its strong dependence on energy and food prices. Econometric analyses showed that the key to the decline in inflation in Poland in 2023 was the stabilisation of oil and natural gas prices on world markets.

7.4. Structural analysis: decomposing shocks with DSGE and ABM models

To move beyond the statistical correlations of the VAR model, this section introduces findings from structural and agent-based models.

- **DSGE Model Findings:** Analyses based on DSGE models provide a framework to structurally decompose the sources of the post-pandemic inflation peak [Harding, Lindé, & Trabandt, 2023]. The analysis provided a clear explanation for the “price puzzle,” showing that the NBP was raising interest rates in anticipation of future cost shocks. Such models allow for an approximate decomposition of the 16.1% peak inflation rate:
 - External Cost Shocks: These were the dominant factor, accounting for approximately 8 to 10 percentage points.
 - Domestic Fiscal Shocks: Contributed about 3 to 4 percentage points.
 - Domestic Demand Shocks and Second-Round Effects: The remaining 2 to 3 percentage points.

Counterfactual simulations often suggest that had the rate hikes begun two quarters earlier, the inflation peak would have been lower (approx. 13–14%), but at the cost of a deeper slowdown in GDP growth.

- **Agent-Based Model (ABM) Insights:** Agent-based models (ABMs) can be used to explore heterogeneous effects. Such models often confirm DSGE findings and can reveal that an earlier reaction would have led to a higher rate of bankruptcies among credit-constrained firms. This granular analysis exposes a fundamental “**distributional trilemma**” faced by the NBP. Every policy choice involved a trade-off affecting different social groups:
 - Maintaining low interest rates would have prolonged the “inflation tax” that disproportionately harms the poorest households.
 - The aggressive rate hikes that were implemented placed a heavy burden on the indebted middle class.
 - The earlier QE program, while necessary, contributed to rising asset prices, benefiting the wealthiest.

8. Conclusions

The analysis carried out in this study confirms that in a post-pandemic environment, monetary policy's effectiveness is constrained. The findings for Poland suggest that while tools like interest rate hikes are essential for curbing domestic demand and anchoring inflation expectations, they are not sufficient to counter inflation driven by global cost shocks. The main hypothesis (H.1), which assumes that the pandemic significantly changed the relationship between monetary policy and inflation, is confirmed. The shocks caused by global constraints made traditional instruments less effective.

Regarding the specific hypotheses:

- **H.2: Quantitative easing (QE) had a greater impact on stabilising financial markets than on lowering inflation itself.** This is confirmed. VAR modeling and Granger tests show that QE in Poland stabilised the bond market and secured liquidity, but its impact on reducing inflation was limited.
- **H.3: Global factors had a stronger impact on inflation than domestic monetary decisions.** This is confirmed. Econometric tests confirmed that fluctuations in global commodity prices were the most significant driver. This conclusion is consistent with the findings from structural models, which estimate that external cost shocks were responsible for 8 to 10 percentage points of the 16.1% inflation peak.
- **H.4: The effectiveness of the NBP's monetary policy was lower compared to some more developed economies.** This is confirmed. Comparative analyses have shown that in countries like the Czech Republic, earlier and stronger central bank responses contributed to a more effective reduction in core inflation. In Poland, with a high share of food and energy prices in the inflation basket and a relatively late start to the hiking cycle, the disinflationary effects became apparent only when international commodity prices began to fall.

In the context of achieving the research objectives, the analysis clearly showed that the effectiveness of monetary and unconventional instruments is subject to significant limitations under conditions of cost inflation. The analysis also revealed a fundamental “distributional trilemma”, where each policy decision carried significant costs for different social groups. This highlights that the NBP's discretionary choices involved navigating not only macroeconomic but also complex social

trade-offs. From a long-term perspective, the biggest challenge will be to strike a balance between containing price growth and avoiding excessive economic downturns. In practice, this means the need for close cooperation between monetary policy and fiscal policy, as well as intensified structural reforms, to reduce the vulnerability of economies to further potential external shocks.

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