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Inflation, Monetary Policy, and Systemic Risks: Global Insights from the Post-Crisis Era

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ABSTRACT: The dynamics of inflation and monetary policy between 2008 and 2025 have been shaped by unprecedented global crises, including the financial crisis, the COVID-19 pandemic, and recurrent energy and commodity shocks. This study aims to synthesize global lessons on how inflation evolves under these conditions and how central banks have responded with both conventional and unconventional policies. The methodology employed a structured narrative review, drawing from Scopus, Google Scholar, Web of Science, JSTOR, and complementary databases. Keywords such as "inflation dynamics," "monetary policy," "COVID-19," "supply shock," and "economic recovery" guided the search. Inclusion criteria focused on peer-reviewed studies addressing the intersection of inflation and policy during the designated period. The results highlight four key themes. First, external shocks such as energy and food price volatility strongly influence inflation, with greater vulnerability observed in open economies. Second, monetary policy effectiveness varies: advanced economies relied on interest rate adjustments and unconventional tools, while developing economies faced structural limits in transmission. Third, fiscal-monetary coordination enhanced stability, whereas uncoordinated responses fueled uncertainty and inflationary persistence. Finally, public attention and expectations significantly shaped inflation outcomes, limiting the scope of communication strategies. The discussion situates these findings within broader systemic factors including globalization, market structures, and geopolitical risks, underscoring the need for adaptive and credible policy frameworks. This study concludes that future resilience requires strengthening central bank independence, improving coordination, and integrating global risk analysis. Such measures are critical for sustaining price stability in an era of persistent global volatility.

Keywords: Inflation Dynamics, Monetary Policy, Supply Shocks, Fiscal-Monetary Coordination, Global Economic Volatility, Inflation Expectations, Economic Recovery.



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INTRODUCTION

The global financial crisis of 2008 and the COVID-19 pandemic were turning points in the trajectory of inflation dynamics and monetary policy. These crises altered inflation behavior and forced central banks to reconsider both conventional and unconventional stabilization tools. Following the 2008 crisis, central banks across advanced economies rapidly lowered interest rates to near-zero levels and introduced large-scale asset purchases, known as quantitative easing, to

restore liquidity and stimulate economic recovery (Pham et al., 2024; Pečiulis & Vasiliauskaitė, 2024). The COVID-19 pandemic presented an additional layer of complexity by generating both deflationary and inflationary pressures simultaneously. Lockdowns, mobility restrictions, and declining energy demand initially suppressed prices, but the subsequent reopening of economies unleashed pent-up demand, supply chain bottlenecks, and energy price shocks that drove inflation to levels unseen in decades (Marangoz, 2025; Asadollah et al., 2024). These developments reveal the profound interplay between external shocks, structural changes, and the evolution of monetary policy frameworks.

Scholarly research has emphasized that central banks' responses during these crises represented a paradigm shift in monetary policy management. Beyond merely stabilizing prices, central banks increasingly prioritized anchoring inflation expectations, mitigating volatility, and safeguarding economic recovery (Albahouth, 2025). In Europe and North America, inflation-targeting frameworks required recalibration to balance the competing pressures of inflation control and growth promotion (Hu & Zhang, 2021). The role of unconventional instruments expanded significantly, with policies such as forward guidance and targeted liquidity injections designed to circumvent the constraints imposed by the effective lower bound. At the same time, these measures sparked debates regarding their long-term effectiveness and unintended consequences, including financial market distortions and asset price inflation (Ayyoub, 2024). Thus, the interplay between inflation dynamics and monetary policy since 2008 represents not only an empirical challenge but also a conceptual rethinking of monetary orthodoxy.

The measurement of inflation and its relevance to economic stability remains central to understanding these dynamics. Key indicators such as the Consumer Price Index (CPI) and Producer Price Index (PPI) provide critical insights into the evolution of household living costs and producer pricing behavior (Nasir et al., 2020). Interest rates serve as a fundamental policy variable and a signal of market confidence in central banks' capacity to manage inflation (Binner et al., 2025). Inflation targeting, widely adopted in advanced economies, has had to adapt to the volatility introduced by exogenous shocks and the interconnectedness of global markets. Indeed, inflation dynamics have often reflected not only domestic demand and supply conditions but also external forces, including energy price volatility, geopolitical conflicts, and global trade disruptions (Cabral & Nicolau, 2020). This has heightened the importance of maintaining credible policy frameworks while recognizing the limitations of domestic monetary measures in mitigating globally driven inflationary pressures.

Recent literature has identified structural supply-side disturbances as dominant drivers of postcrisis inflation dynamics. Global energy market fluctuations, food price shocks, and supply chain disruptions have repeatedly generated inflationary surges that proved resistant to conventional policy levers (Kuzheliev et al., 2020). The pandemic exemplified these challenges, as production shutdowns in one region cascaded across global value chains, amplifying price pressures even in relatively insulated economies. Policymakers and scholars alike argue that monetary policy must be increasingly adaptive, integrating forward-looking risk assessments and flexible intervention strategies to address these multidimensional challenges (Cabral & Nicolau, 2020). The recognition of these vulnerabilities underscores the urgency of developing comprehensive frameworks that link domestic monetary decisions with global supply dynamics. Central banks face persistent challenges in sustaining price stability under conditions of uncertainty. One of the most pressing difficulties lies in managing inflation expectations during episodes of heightened market volatility. For instance, sudden spikes in energy prices exert immediate upward pressure on production costs and consumer prices, triggering supply-side inflationary shocks (Asadollah et al., 2024; Akram & Mumtaz, 2018). This places central banks in a policy dilemma: raising interest rates may help curb inflation but risks dampening already fragile economic growth (Stylianou et al., 2024; Finck & Tillmann, 2022). Conversely, maintaining accommodative stances could exacerbate inflationary persistence and undermine policy credibility. Moreover, at or near the zero-lower bound, conventional monetary instruments lose potency, forcing reliance on unconventional measures such as quantitative easing. While effective in stabilizing financial markets, these tools introduce uncertainties about long-term inflationary consequences and distributional impacts (Ouattara et al., 2024; Pandey & Jessica, 2020).

Another significant challenge lies in the interaction between monetary and fiscal policies. Expansionary fiscal measures, particularly those adopted during the pandemic, played an essential role in supporting aggregate demand and cushioning economic fallout. However, fiscal expansions also complicated the inflationary landscape, as they risked fueling demand-pull pressures while monetary authorities struggled to manage supply-driven price spikes (Stylianou et al., 2024; Freitas, 2024). The delicate balance between fiscal stimulus and monetary restraint highlights the systemic complexity of modern policy environments. Effective coordination between these domains remains critical for navigating episodes of crisis-driven inflation and ensuring sustainable economic recovery.

Despite substantial research progress, notable gaps persist in the literature on supply-shock-driven inflation and the efficacy of monetary responses. Existing models often fall short of capturing the intricate interactions between external shocks and domestic policy measures, particularly under rapidly shifting global conditions (Akram & Mumtaz, 2018; Cateau, 2017). The limitations of static or linear models in explaining nonlinear and regime-dependent inflationary dynamics leave policymakers with an incomplete understanding of how best to adapt. Moreover, insufficient attention has been paid to the institutional and structural dimensions of policy adaptation, including how central banks can strengthen resilience in the face of repeated global crises (Pandey & Jessica, 2020; Chin, 2022). Bridging these gaps requires the development of more sophisticated, data-rich models capable of integrating fiscal, monetary, and global variables.

The primary objective of this narrative review is to synthesize global evidence on inflation dynamics and monetary policy responses between 2008 and 2025. Specifically, the study aims to identify the key drivers of inflation, examine how central banks across advanced and emerging economies adapted their policy toolkits, and assess the broader macroeconomic implications of these responses. By analyzing inflationary patterns across different crises—including the financial crisis of 2008, the COVID-19 pandemic, and subsequent energy shocks—this review seeks to uncover recurring themes and structural lessons. In doing so, it highlights both the strengths and limitations of conventional and unconventional monetary strategies (Jordá & Nechio, 2023; Bajra et al., 2024). Furthermore, the review emphasizes the interconnectedness of monetary, fiscal, and external forces, offering a holistic lens through which to understand inflation dynamics in the modern global economy.

The scope of this review encompasses a diverse range of regional experiences, acknowledging the heterogeneity of inflationary outcomes and policy responses. In Europe and North America, central banks often pursued tighter monetary policies to anchor expectations, particularly in the wake of post-pandemic supply chain disruptions (Bajra et al., 2024; Bertella et al., 2015). In contrast, many Asian and African economies confronted more severe external vulnerabilities, including reliance on energy imports and susceptibility to political instability (Strong, 2025; Abbas, 2024). These differences underscore the necessity of context-specific approaches, where structural conditions and institutional capacity determine the effectiveness of monetary interventions. By examining regional variations alongside global trends, this review provides a nuanced understanding of how inflation and policy responses evolve under diverse economic conditions.

Ultimately, this review contributes to academic and policy debates by offering a systematic evaluation of inflation dynamics across one of the most turbulent periods in recent economic history. It consolidates empirical findings and theoretical insights into a coherent framework that informs both scholarly discourse and practical policymaking. By focusing on the period from 2008 to 2025, the study situates contemporary inflation challenges within a historical continuum, offering lessons that extend beyond immediate crises. In doing so, it seeks to advance understanding of how monetary policy can be optimized to balance the dual imperatives of price stability and economic resilience in an increasingly uncertain global environment.

METHOD

The methodological framework of this study was designed to ensure a comprehensive, systematic, and critical synthesis of the literature related to inflation dynamics and monetary policy from 2008 to 2025. The methodology encompasses the identification of relevant databases, formulation of search strategies using targeted keywords, application of inclusion and exclusion criteria, and careful selection and evaluation of studies. These steps were crucial in establishing a robust foundation for the narrative review while adhering to established academic standards of rigor and transparency.

The initial step involved identifying the most appropriate databases to provide comprehensive coverage of the topic. Scopus was selected as the primary database given its reputation for indexing high-quality peer-reviewed articles across economics, finance, and related disciplines. Its advanced filtering tools, including subject area restriction, document type selection, and time frame specification, allowed for precise searches relevant to the period under investigation. In addition to Scopus, Google Scholar was utilized to broaden the scope by including diverse publication types, such as working papers, conference proceedings, and doctoral theses, which often provide valuable insights not always indexed in traditional databases. Web of Science was also integrated into the search process, primarily to track citation networks and analyze influential works that shaped academic debates on monetary policy responses to inflation shocks. To supplement these sources, JSTOR provided access to older publications that offered valuable historical context and conceptual underpinnings of inflation theory, while PubMed was occasionally consulted for interdisciplinary studies linking monetary policy, inflation, and health economics, especially in the wake of the COVID-19 pandemic.

The search strategy was constructed around a combination of targeted keywords and Boolean operators to capture relevant literature comprehensively. Key terms included "inflation dynamics," "monetary policy," "post-crisis," "COVID-19," "supply shock," and "economic recovery." These keywords were deliberately chosen to reflect both thematic and contextual dimensions of the research. For instance, the phrase "inflation dynamics" ensured the inclusion of studies analyzing behavioral patterns and determinants of inflation, while "monetary policy" narrowed the scope to central bank responses. Terms such as "post-crisis" and "COVID-19" were critical for isolating literature focused on specific historical events that shaped monetary interventions. Similarly, "supply shock" and "economic recovery" expanded the search to studies examining structural disruptions and their implications for stabilization efforts. Boolean combinations, such as "inflation dynamics" AND "COVID-19" AND "monetary policy," were applied to refine searches, ensuring that retrieved articles explicitly addressed the intersection of these key concepts. The search was restricted to works published between 2008 and 2025 to maintain temporal relevance.

The next stage involved defining inclusion and exclusion criteria to guide the selection of studies. Articles were included if they were peer-reviewed, published in English, and directly addressed inflation, monetary policy, or their interaction during the specified time frame. Studies presenting empirical data, theoretical models, or policy analyses relevant to inflationary trends and central bank responses were prioritized. Both single-country case studies and cross-country comparative analyses were considered to capture regional diversity and provide a global perspective. Conversely, studies that did not focus on the economic implications of inflation or monetary policy, such as purely technical financial modeling papers without macroeconomic relevance, were excluded. Publications outside the target period or those lacking sufficient methodological rigor, such as opinion pieces without empirical or theoretical grounding, were also omitted from the review.

The review included a range of study designs to capture the multifaceted nature of the topic. Quantitative research, including econometric analyses of inflationary trends, time-series models, and panel data studies, provided empirical evidence of causal relationships between monetary policy and inflation dynamics. Qualitative analyses, including policy reviews and theoretical discussions, offered interpretative frameworks to understand broader institutional and systemic dynamics. In addition, mixed-methods studies were incorporated where available, as they provided a balanced perspective by combining statistical evidence with qualitative insights. Specific types of studies considered included randomized trials of policy simulations, though these were rare in monetary economics, as well as cohort and case studies of particular national experiences with inflation management. The inclusion of diverse research methodologies allowed for triangulation of evidence, thereby strengthening the validity of the review.

The process of literature selection followed a structured, multi-phase approach to ensure rigor and minimize bias. The initial search yielded a large pool of articles, which were screened first by titles and abstracts to eliminate clearly irrelevant works. Articles passing this stage were then assessed through a full-text review to evaluate their methodological quality, relevance, and contribution to the research questions. The evaluation criteria included clarity of research objectives, appropriateness of analytical methods, transparency in reporting data sources, and the robustness

of conclusions. When necessary, citation tracking was employed to identify additional key studies cited frequently within the reviewed literature, thereby ensuring that influential works were not overlooked. To further validate the selection process, duplicates across databases were removed, and attention was paid to ensure that diverse perspectives from different regions and schools of thought were represented.

The data extraction process involved systematically categorizing information from each included study according to thematic relevance. Themes included the drivers of inflation, the evolution of monetary policy responses, the impact of crises such as the global financial crisis and the COVID-19 pandemic, the role of supply shocks, and the interrelationship between monetary and fiscal policies. Empirical findings, theoretical arguments, and policy recommendations were coded and synthesized to identify recurring patterns, divergences, and gaps in the literature. This thematic organization facilitated a coherent narrative that linked diverse studies into a unified framework while preserving the integrity of individual contributions.

Finally, the evaluation process emphasized both the quality and diversity of the included literature. Articles were critically appraised not only for methodological soundness but also for their contextual relevance to the evolving global economic landscape. Particular attention was given to ensuring balanced representation across advanced and emerging economies, recognizing that the dynamics of inflation and monetary policy often differ significantly depending on structural characteristics, institutional capacity, and exposure to external shocks. This comprehensive methodological approach provided the foundation for a robust and nuanced narrative review, enabling the study to contribute meaningfully to scholarly discourse and policy debates surrounding inflation dynamics and monetary policy between 2008 and 2025.

RESULT AND DISCUSSION

The results of this narrative review highlight the complex interplay between external shocks, domestic structural factors, and monetary policy interventions in shaping inflation dynamics between 2008 and 2025. The findings are organized around four major themes identified in the literature: the role of external factors in inflation, the effectiveness of monetary policy tools, the interaction between monetary and fiscal policies, and the role of public perception and inflation expectations. Together, these themes provide a multidimensional picture of inflationary behavior and the challenges of designing effective monetary responses in an increasingly interconnected world economy.

The first major theme concerns the role of external factors in driving inflation. Global energy and food price shocks have been consistently cited as critical determinants of inflationary pressures across both advanced and developing economies. In advanced economies such as those in Europe, fluctuations in global energy prices rapidly translated into increases in the Consumer Price Index (CPI), reflecting high dependency on imported commodities. The European energy crisis, particularly following geopolitical conflicts, contributed significantly to inflation by raising production costs and spreading through the entire value chain (Marangoz, 2025; Oliveira & Petrassi, 2014). In developing economies, the effects of such shocks were often mitigated through

government interventions such as subsidies and price controls, which softened immediate inflationary impacts on households. Nevertheless, these measures carried fiscal costs and created long-term inefficiencies (Oliveira & Petrassi, 2014). The contrast between advanced and developing countries highlights how structural conditions, policy choices, and institutional capacity shape inflation outcomes in response to external price volatility.

The level of openness of an economy emerged as another critical determinant of vulnerability to inflationary shocks. Open economies with significant engagement in international trade were more exposed to external shocks, as global energy and food price fluctuations directly influenced import bills, trade balances, and exchange rates. Empirical research suggests that such economies displayed greater inflation volatility due to their reliance on global supply chains and external financing (Değirmen et al., 2023). By contrast, relatively closed economies demonstrated more stable inflationary behavior, shielded by limited exposure to external markets. Yet, this stability often came at the expense of long-term growth opportunities, as insulation from global trade limited access to markets and capital flows. This trade-off underscores the inherent tension between stability and integration in the context of globalization (Oliveira & Petrassi, 2014).

The second theme of the results addresses the effectiveness of monetary policy tools, particularly interest rate adjustments, in managing inflation across diverse contexts. Following the 2008 financial crisis, central banks in advanced economies, including the United States and Europe, relied heavily on interest rate reductions to stimulate demand and support economic recovery. While such measures proved effective in mitigating inflationary risks during periods of sluggish recovery, their impact diminished in environments characterized by structural rigidities and persistent supply-side shocks (Liao et al., 2023). In developing countries, the transmission of monetary policy through interest rates was often weaker. Structural challenges such as underdeveloped financial systems, political interference, and limited institutional credibility reduced the effectiveness of interest rate adjustments. In some cases, reductions in policy rates failed to stimulate borrowing and consumption, undermining their intended effects (Agnello et al., 2019).

As interest rates approached the effective lower bound in several advanced economies, central banks turned increasingly to unconventional policies such as quantitative easing and forward guidance. These measures were designed to inject liquidity, stabilize markets, and influence longer-term interest rates. While they succeeded in preventing deflationary spirals, scholars have raised concerns about their side effects, including financial market distortions, asset bubbles, and distributional consequences (Liao et al., 2023). Thus, the evidence suggests that while monetary policy retained its central role in managing inflation, its effectiveness varied significantly across contexts, reflecting structural differences between advanced and emerging markets.

Differences in monetary responses between advanced and developing economies were also evident in institutional capacity and policy priorities. In advanced economies, independent central banks typically operated with clear inflation targets, enabling decisive interventions when inflation deviated from desired ranges (Zhou, 2021). By contrast, developing economies often faced competing pressures, with central banks balancing inflation control against objectives such as employment creation, growth, and social stability (Daway-Ducanes, 2017). Political influence further constrained monetary authorities, limiting their ability to pursue inflation-targeting

frameworks rigorously. These dynamics highlight the uneven landscape of monetary policymaking, where institutional independence and credibility critically shape policy outcomes (Tsenova, 2012).

The third theme concerns the interaction between monetary and fiscal policies in shaping inflation dynamics. During periods when monetary policy reached its limits, particularly at near-zero interest rates, fiscal policy played a central role in stimulating aggregate demand. Government spending programs, including infrastructure investments and social transfers, provided short-term economic boosts but also introduced inflationary pressures, particularly in contexts where productive capacity was already fully utilized. This phenomenon, often referred to as fiscal dominance, highlighted the risks of inflationary spillovers when fiscal expansion outpaced monetary restraint (Slepov et al., 2017). Empirical evidence suggests that aggressive fiscal interventions during crises such as the COVID-19 pandemic fueled inflationary momentum even as central banks sought to stabilize expectations (Batool et al., 2022).

Coordination between monetary and fiscal policies emerged as a crucial determinant of inflation outcomes. Studies emphasize that aligned policy frameworks, where fiscal and monetary authorities shared consistent objectives, achieved superior outcomes in terms of price stability and recovery (Poloz, 2016). Conversely, uncoordinated approaches introduced uncertainty, destabilized expectations, and amplified inflationary risks. For example, countries that successfully synchronized fiscal and monetary responses during the 2008 financial crisis demonstrated faster and more stable recoveries than those that pursued fragmented strategies (Bora et al., 2020). These findings reinforce the importance of policy coherence and institutional dialogue in managing inflation under conditions of systemic stress.

The final theme highlights the role of public perception and inflation expectations in shaping policy effectiveness. Research increasingly underscores that inflation dynamics are not solely the result of economic fundamentals but also of how households and firms perceive and react to policy measures. Public attention to inflation, as measured through proxies such as Google Trends, has been shown to influence expectations and, consequently, consumption and investment behavior. Elevated public concern about inflation often leads to upward revisions in inflation expectations, which can become self-fulfilling and limit the effectiveness of monetary communication strategies (Kaur, 2022). In such contexts, central banks face the dual challenge of designing effective policy interventions while simultaneously managing narratives to anchor expectations.

The interplay between monetary policy and external factors further complicates the formation of expectations. While central banks exert significant influence through interest rates and communication strategies, external shocks such as energy price hikes and supply chain disruptions often dominate public perceptions. Evidence from India illustrates that inflation expectations are shaped more strongly by global commodity prices than by domestic monetary policy, indicating the limits of policy influence in globally integrated markets (Domínguez & Gomis-Porqueras, 2019). Similarly, studies of advanced economies reveal that public expectations respond disproportionately to salient external shocks, underscoring the importance of transparent communication and credibility in maintaining control over inflation trajectories (Papadamou et al., 2017; Tariq et al., 2024).

Taken together, these results demonstrate that inflation dynamics between 2008 and 2025 were shaped by a convergence of global shocks, structural domestic conditions, and the evolving practice of monetary policy. External factors such as energy and food price volatility exerted pervasive effects, amplified in open economies and mitigated to varying degrees by government interventions. Monetary policy tools remained central but displayed uneven effectiveness across contexts, constrained by structural limitations in developing economies and by the challenges of the zero-lower bound in advanced economies. Fiscal policy played an indispensable but double-edged role, stimulating recovery while introducing inflationary risks when uncoordinated with monetary strategies. Finally, the role of public perception and expectations highlighted the critical importance of communication, credibility, and global awareness in shaping inflation outcomes. By integrating these dimensions, the review provides a comprehensive understanding of the multifaceted challenges faced by policymakers in navigating inflationary dynamics during one of the most volatile periods in recent history.

The findings of this review confirm and extend existing scholarship on the dual influence of external and domestic factors in shaping inflationary outcomes. Previous research has frequently emphasized the significance of external shocks, such as surges in global energy prices, in driving inflationary pressures across both advanced and emerging markets. Kaur (2022) demonstrates that energy shocks, combined with criticism of central bank responses during times of crisis, often fuel inflationary surges that extend beyond their immediate origins. Consistent with this perspective, the results of this study suggest that while external shocks remain critical triggers of inflation, domestic responses, particularly the alignment of fiscal and monetary policies, are equally consequential in determining the persistence and trajectory of inflation. Earlier analyses that placed disproportionate emphasis on external dynamics overlooked the complexity of how domestic institutions either exacerbate or mitigate global pressures. By recognizing the intricate integration between global price shocks and policy responses at the national level, this research enriches our understanding of inflation in a deeply globalized economic order.

The integration of global and domestic dimensions of inflation is also echoed in the work of Niblock and Piergallini (2014), who argue that global uncertainty and the interactions between financial markets and domestic policy frameworks constitute substantial sources of inflationary risk. This review supports such assertions by demonstrating that inflation can no longer be interpreted solely as a domestic phenomenon. Instead, inflation emerges as a global challenge shaped by interdependent systems, in which domestic vulnerabilities amplify the impact of external disruptions. In this sense, inflation must be conceptualized holistically, where domestic and international variables are analyzed together, not in isolation. Such a framework provides a more accurate representation of contemporary macroeconomic dynamics.

The implications of these findings for future monetary policy design are profound. The evidence suggests that monetary policy must evolve toward greater adaptability, incorporating both global and domestic considerations in its frameworks. The conventional approach of responding to inflation primarily through interest rate adjustments appears increasingly insufficient in contexts of recurrent global crises, from the 2008 financial meltdown to the COVID-19 pandemic and beyond. As Tariq et al. (2024) and Poloz (2016) highlight, policy effectiveness depends on coherence and coordination across fiscal and monetary domains. This review emphasizes that central banks cannot operate in isolation but must actively integrate fiscal signals into their policy calculations. Such collaboration ensures that inflationary pressures are addressed comprehensively, balancing short-term stabilization with long-term sustainability.

A key implication is the need for flexible interest rate regimes that can respond dynamically to rapidly changing external conditions. The literature demonstrates that conventional interest rate tools are often insufficient in addressing inflation caused by supply-side disruptions, such as energy shocks, which are not easily managed through domestic demand suppression (Slepov et al., 2017). Under such circumstances, central banks may need to complement conventional measures with unconventional tools, including quantitative easing, forward guidance, or targeted liquidity support, to maintain financial stability and stabilize expectations. Furthermore, adopting a forward-looking orientation that integrates indicators of global commodity trends, capital flows, and geopolitical risks into policy deliberations would allow central banks to better anticipate and respond to inflationary pressures before they become entrenched.

The systemic factors contributing to inflation dynamics warrant particular attention. Globalization represents one of the most significant drivers of interconnected inflationary pressures. As Ullah et al. (2013) observe, increasing global integration has heightened the transmission of supply shocks across borders. Disruptions originating in a single country, whether due to natural disasters, trade disruptions, or political instability, now cascade rapidly through global supply chains, amplifying their inflationary consequences. The COVID-19 pandemic vividly illustrated this reality, as factory shutdowns in Asia translated into price surges in both advanced and developing economies, underscoring the systemic vulnerability inherent in global interdependence.

Market structures constitute another systemic factor that significantly shapes inflationary behavior. Sangweni and Ngalawa (2023) demonstrate that oligopolistic and monopolistic market structures enhance firms' pricing power, enabling them to pass external cost increases onto consumers more aggressively than firms in competitive markets. This review corroborates these findings by showing that in economies dominated by high-markup firms, inflationary pressures persist even in the face of contractionary monetary policies. Such conditions diminish the responsiveness of inflation to policy interventions and highlight the importance of addressing structural issues within domestic markets as part of broader inflation management strategies. By contrast, economies with more competitive structures may display more elastic pricing responses, enhancing the effectiveness of central bank policies.

Geopolitical volatility is yet another systemic factor shaping inflationary outcomes. As Nyoni (2019) and Sangweni & Ngalawa (2023) note, geopolitical tensions often translate into sharp fluctuations in energy and commodity prices, which reverberate across economies. This review highlights that geopolitical conflicts, sanctions, and supply disruptions not only elevate headline inflation but also intensify uncertainty in financial markets, further complicating monetary policy decisions. The European energy crisis exemplifies this phenomenon, where geopolitical conflict-induced price shocks undermined inflation stability and forced central banks into difficult trade-offs between price stability and economic growth. In this sense, inflation is as much a geopolitical issue as it is an economic one, requiring central banks to account for political risks within their strategic frameworks.

The results also underline the limitations of existing policy models in capturing the nonlinear and systemic nature of inflation. Traditional models, often built on assumptions of linear relationships between monetary instruments and inflation outcomes, fail to account for the complex feedback loops and global spillovers characteristic of the modern economy (Cateau, 2017; Akram &

Mumtaz, 2018). This methodological gap creates significant challenges for policymakers, who must navigate environments where inflationary dynamics can shift rapidly and unpredictably. As Chin (2022) argues, central banks require more sophisticated models that incorporate uncertainty, global interdependence, and regime changes. Such tools would enhance predictive capacity and inform more effective and timely interventions.

Potential solutions to these challenges involve both institutional and methodological reforms. Institutionally, strengthening central bank independence while enhancing coordination with fiscal authorities can provide the credibility and coherence necessary to anchor expectations and stabilize prices. The literature repeatedly emphasizes that credibility plays a decisive role in shaping inflation expectations, which, in turn, affect real economic behavior (Papadamou et al., 2017). Central banks with strong reputations and transparent communication strategies are better positioned to manage expectations, even during episodes of external turbulence. In contrast, weak or politically constrained central banks often exacerbate inflationary volatility by undermining confidence. Therefore, reforms aimed at bolstering institutional independence, transparency, and accountability are crucial for improving monetary policy effectiveness.

Methodologically, future research must advance beyond traditional econometric models toward more integrated, data-rich approaches capable of capturing complex dynamics. This includes incorporating real-time indicators such as household expectations measured through digital platforms, global supply chain monitoring, and energy market analytics. As demonstrated by the growing use of Google Trends data to gauge public attention to inflation (Kaur, 2022), integrating unconventional data sources can provide valuable insights into expectation formation and enhance the timeliness of policy responses. Similarly, greater use of machine learning techniques and scenario-based modeling may allow for more accurate simulations of potential inflationary trajectories under varying external and domestic conditions.

The limitations of the existing literature highlight the need for further exploration in several areas. First, there is insufficient empirical analysis of how fiscal and monetary coordination operates in practice, particularly in developing economies where institutional capacities are weaker. While evidence suggests that coordinated strategies yield better inflation outcomes (Poloz, 2016), more case-specific research is needed to identify the mechanisms that enable or hinder such coordination. Second, the impact of geopolitical volatility on inflation remains underexplored, despite mounting evidence that political risks are increasingly central to inflationary dynamics. Finally, greater attention must be paid to structural market features, including the concentration of corporate power, and how these interact with monetary transmission mechanisms. Addressing these gaps would significantly enrich scholarly understanding and inform more effective policymaking.

CONCLUSION

This study has examined the dynamics of inflation and the evolving role of monetary policy from 2008 to 2025, focusing on the intersection of external shocks, domestic structures, and institutional responses. The findings underscore that inflationary pressures are shaped by a combination of global disruptions—such as energy price volatility, food market instability, and geopolitical

tensions—and domestic policy frameworks, including fiscal interventions and monetary governance. Evidence from advanced economies highlights the rapid transmission of external shocks into domestic inflation, while developing economies demonstrate moderated effects through subsidies and controls, albeit at the cost of fiscal sustainability. The results also confirm the uneven effectiveness of monetary policy: while interest rate adjustments remain central in advanced economies, their impact is constrained in emerging markets with weaker transmission mechanisms.

The discussion further reveals that systemic factors such as globalization, market concentration, and geopolitical volatility amplify inflationary risks and complicate policy responses. Coordination between monetary and fiscal policies emerges as a critical determinant of stabilization success, while public perception and expectations exert increasing influence on policy credibility and effectiveness. These findings emphasize the urgency of adaptive, coordinated, and transparent monetary frameworks to navigate persistent inflationary challenges.

Policy interventions should prioritize enhancing central bank independence, strengthening fiscal-monetary coordination, and developing forward-looking tools that integrate global risk indicators. Future research should focus on refining models that capture nonlinear dynamics, the impact of geopolitical shocks, and the role of structural market conditions. Advancing such approaches is essential for crafting resilient policies capable of addressing the complexities of inflation in a highly interconnected world.

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