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# One Global Shock, Many Inflation Paths: Explaining Post-COVID Inflation Divergence

Patrick A. Imam and Tigran Poghosyan

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One Global Shock, Many Inflation Paths:  
Explaining Post-COVID Inflation Divergence**Prepared by Patrick A. Imam and Tigran Poghosyan\***Authorized for distribution by Ali Alich  
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**ABSTRACT:** This paper investigates why the post-COVID inflation surge, though globally synchronized, led to widely divergent outcomes across countries. Using cross-country regressions for 130 economies and local projections methods for 70 advanced and emerging markets, we analyze the structural, institutional, and policy determinants of post-pandemic inflation dynamics. The results indicate that historical inflation and the scale of domestic energy price shocks account for most of the cross-country variation in cumulative post-COVID inflation. In contrast, many frequently cited country-specific, macroeconomic fundamentals and institutional features exhibit limited power to explain cross-country variation. The association between post-COVID inflation and domestic policy responses is also weak, although endogeneity complicates a clear causal interpretation. The analysis further reveals that pass-through from energy prices to headline inflation intensified markedly in the post-COVID period, particularly in emerging markets, in non-inflation-targeting regimes, and in countries that did not expand fossil fuel subsidies. These findings highlight the asymmetric transmission of supply shocks and underscore the importance of credibility, historical inflation experience, and energy policy design in shaping inflation persistence. Strengthening central bank credibility and anchoring expectations may be essential to bolster resilience against future global supply disruptions.

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WORKING PAPERS

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# I. Introduction

The global surge in inflation that followed the COVID-19 pandemic represents one of the most striking macroeconomic developments of the past decade. After years of persistently low inflation and historically low interest rates (Coeuré, 2019; IMF, 2016), owing in part to credible monetary policy regimes and improved fiscal frameworks in many emerging markets during the 2010s (BIS, 2019; IMF, 2025), headline inflation rose sharply across advanced, emerging, and lower-income economies. While the shock was global in scope, its magnitude and persistence varied widely across countries. Some economies experienced transitory and moderate price increases, whereas others faced prolonged and historically large inflationary pressures. Better understanding of these cross-country differences is essential for identifying underlying vulnerabilities, assessing the effectiveness of policy responses, and drawing lessons for inflation management in an era of repeated supply-driven global shocks.

A growing body of research attributes the post-pandemic inflation surge to a combination of global supply shocks, domestic demand conditions, and policy responses (see IMF, 2022; Gagnon and Kamin, 2025 and references therein). Sharp increases in energy and food prices, unprecedented logistics bottlenecks, and widespread supply-chain disruptions exerted strong upward pressure on prices globally. At the same time, many governments implemented large-scale fiscal stimulus and central banks maintained accommodative monetary policy well into the recovery phase, supporting rapid recoveries in domestic demand. Yet, common global factors cannot fully explain the substantial heterogeneity in inflation outcomes.<sup>1</sup> Countries with similar exposures to commodity markets, comparable pandemic trajectories, or broadly similar macroeconomic policy frameworks often experienced markedly different inflation trajectories.

This paper examines why the post-COVID inflation surge triggered by global shocks was considerably larger in some countries than in others, and how changes in energy prices propagated to headline inflation. First, using a cross-country panel covering 2015–2024, we assess the relative contributions of supply shocks, macroeconomic conditions, institutional characteristics, and policy responses to cross-country differences in post-COVID inflation. The results point to two dominant factors explaining the bulk of cross-country variation in inflation outcomes, namely the historical inflation and the magnitude of the domestic energy price shock. In contrast, other structural factors are not robustly associated with inflation variation during this period.

Second, we estimate the pass-through from energy prices to headline inflation using local projections for a broad sample of advanced and emerging economies. This approach allows us to trace the second-round effects of supply shocks and explore their heterogeneity. The evidence reveals that the inflation pass-through has become more pronounced in the post-pandemic period, particularly in non-inflation targeting regime countries, in emerging markets, and in countries that have relied less on fossil fuel subsidies to counter the impact of supply shocks.

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<sup>1</sup> Recent commentary suggests that the initial inflation impulse following the COVID-19 shock and Russia's invasion of Ukraine may have overwhelmed even strong institutional anchors. The U.S. Federal Reserve's response was further shaped and constrained by a commitment to average inflation targeting and a belief that inflation would prove transitory, justifying temporary overshooting to compensate for previous overshoots, features not uniformly shared across other countries (see Blinder, 2026). More broadly, Gagnon and Kamin (2025) argue that traditional predictors of inflation, such as central bank independence and well-anchored expectations, lost some explanatory power amid the scale and simultaneity of these global shocks. This reinforces the importance of a cross-country perspective. While institutions remain important, their influence may operate through more nuance channels, such as historical inflation experience than typically assumed, particularly under conditions of systemic disruption.

The analysis contributes to the literature in several ways. First, it provides systematic cross-country evidence on the structural and macroeconomic drivers of the post-pandemic inflation spike, complementing country-level case studies and narrative accounts. Second, it evaluates the interactions between country-specific factors and transmission of supply-shocks, highlighting how structural characteristics and policy choices of countries shaped the inflationary effects of common global shocks.

The findings have important policy implications. As economies confront recurring global supply shocks, driven by geopolitical tensions, deglobalization, and climate-related disruptions, understanding the sources of cross-country inflation heterogeneity is crucial for designing more resilient policy frameworks. This paper provides evidence-based guidance on how countries can better manage the inflationary consequences of global shocks and strengthen price stability in an increasingly volatile global economy.

The rest of this paper is structured as follows. Section 2 reviews the relevant literature. Section 3 presents key stylized facts. Section 4 conducts cross-sectional regression analysis to assess the impact of inflation determinants and uses local projections to study pass-through from energy prices to inflation. Section 5 concludes and draws policy lessons. Given the cross-country scope and reduced-form approach, the paper documents empirical regularities which should not be interpreted in a causal sense.

## II. Literature review

The post-pandemic inflation surge has generated a large literature studying both the scale of the shock and its challenge to existing macroeconomic frameworks. Early contributions focused primarily on identifying the sources of inflation, emphasizing the global nature of the episode and the dominant role of supply-side disturbances. As inflation outcomes began to diverge across countries, however, attention increasingly shifted toward understanding why inflation proved persistent in some countries but faded relatively quickly in others.

A natural starting point in the literature is the recognition that the inflation surge was triggered by forces that were largely common across countries. The IMF's World Economic Outlook (2022, Chapter 2) documents how pandemic-related supply disruptions, the rapid rebound in demand, and the sharp increase in energy and food prices pushed inflation up across advanced and emerging economies. Subsequent assessments, including IMF (2024, Chapter 2), reinforce this diagnosis while highlighting that the contribution of energy prices and supply bottlenecks evolved differently across countries as the episode unfolded. Policy-oriented researchers (e.g., English and others, 2024) similarly emphasize that central banks were initially confronted with an inflation shock dominated by supply-side forces rather than excess demand. While this literature helps explain the timing and global synchronization of the shock, it does not explain the substantial cross-country variation in the persistence of inflation dynamics once the common shock occurred.

This divergence has motivated a growing body of cross-country literature examining differences in inflation outcomes. Gagnon and Kamin (2025) show that post-pandemic inflation outcomes are strongly correlated with countries' past inflation histories. Their finding that "lived experience" dominates formal institutions, such as inflation targeting, central bank independence, or exchange rate regimes, has been influential in reshaping how economists think about credibility and anchoring. Related work by Gagnon and Rose (2024) reaches similar conclusions regarding the limited explanatory power of regime classifications after accounting for global shocks. These papers establish a powerful empirical regularity

that inflation history matters, but they are inherently reduced form. They explain *which* countries had higher inflation, but not *how* a common shock translated dynamically into persistent differences in inflation.

Understanding that distinction requires shifting attention from outcomes to transmission. A growing literature studies how commodity price shocks propagate into domestic inflation and wages, often using local projection methods. Baba and Lee (2022) is one of the first propagation papers estimating the pass-through of oil shocks to wages and core inflation in European economies. They find that second-round effects (SREs) exist but are modest on average, and that their magnitude depends on the prevailing inflation environment. Case studies, including De Jonghe and others (2025), reinforce the substantial heterogeneity in transmission across countries. This literature makes clear that SREs are conditional rather than mechanical, but it leaves open why some economies experience strong and persistent propagation while others do not.

Insights from the literature on expectations formation help bridge this gap. Coibion and Gorodnichenko (2015) document gradual updating and disagreement in expectations, in contrast to full-information models and consistent with information rigidities. Their earlier work (Coibion and Gorodnichenko, 2012) documents systematic disagreement and delayed updating in survey forecasts following macroeconomic shocks. In the post-pandemic context, this suggests that countries with high historical inflation may have experienced faster expectation drift, contributing to persistence. Thus, inflation history shapes how agents process new price movements, how quickly expectations adjust, and whether relative-price shocks are perceived as temporary or as signals of broader inflationary pressure. Consequently, inflation history affects not the level of inflation directly, but the slope of transmission from shocks to inflation over time.

The role of macroeconomic policy further complicates this picture. A growing literature examines how monetary and fiscal policy responses shaped inflation dynamics during the post-pandemic episode. Dynan and Elmendorf (2024) argue that much of the initial inflation surge was difficult to offset through conventional monetary tightening, given its supply-driven nature, and that policy was more effective in influencing the speed of disinflation than in preventing the initial rise. Reifschneider (2024) similarly emphasizes that tightening primarily affects medium-term inflation dynamics, underscoring the importance of expectations and credibility in containing persistence. Fiscal policy also features prominently in this discussion. The IMF (2022, 2024) documents the widespread use of energy price subsidies and other cost-of-living measures, particularly in Europe, and highlights their role in dampening headline inflation and pass-through in the short run. Related studies by Hsu (2024) and Fatás (2024) explore how fiscal credibility, governance, and institutional quality interact with inflation outcomes, though they generally stop short of analyzing transmission dynamics.

Finally, recent work revisits the persistence of inflation. Stracca (2025) argues that prolonged low inflation before COVID obscured how much institutions and memory matter in rate but large shocks. Blanchard and Bernanke (2023, 2024) likewise emphasize that the central risk in the post-pandemic episode was not the initial supply shock itself, but the possibility that it would amplify into generalized inflation through wages and expectations. These contributions all underscore the central importance of SREs in determining whether supply-driven inflation remains transitory or becomes persistent.

Together, these contributions highlight the substantial progress in documenting both the sources of post-pandemic inflation and the heterogeneity of outcomes across countries. What remains less well understood is why similar supply shocks produced such different inflation dynamics. They stop short of integrating these channels into a unified transmission mechanism. This paper addresses that gap by

shifting the analytical focus from inflation levels to inflation propagation. We reinterpret inflation history not as a mechanical predictor of inflation, but as a conditioning state variable that governs how energy shocks feed into broader price dynamics. By combining cross-country evidence with local projections, we show that differences in post-pandemic inflation persistence reflect differences in transmission, through expectations, wage-price dynamics, and policy buffers, rather than differences in the size of the initial shock. This mechanism-based perspective complements existing reduced-form findings while offering a more precise explanation of why supply-driven inflation becomes persistent in some economies but not in others.

### III. Stylized Facts: Post-COVID Inflation Surge

The post-COVID inflation surge unfolded amid two large and successive global shocks: the pandemic's economic disruptions and the commodity-price spike triggered by Russia's invasion of Ukraine. These combined shocks generated a rare combination of supply-side constraints, demand imbalances, and cost-push pressures that reverberated across countries.

In the decade preceding the pandemic, global inflation was historically low and stable. Headline inflation in advanced economies hovered close to or below central bank targets, while many emerging markets saw declining and better-anchored inflation expectations. This stability was abruptly disrupted in the post-COVID period, as headline inflation rose sharply and synchronously across regions, reaching multidecade highs by late 2022, marking one of the broadest and fastest global inflation accelerations on record.

The initial leg of the post-pandemic inflation surge was driven by a complex interaction of supply disruptions and rapid demand normalization:

- On the *supply* side, factory closures, labor shortages, and lockdown-related restrictions created severe bottlenecks in global production networks. Shipping delays, surging freight costs rose and shortages of intermediate inputs led to broad-based supply constraints.
- On the *demand* side, fiscal transfers and accommodative monetary policy, combined with rapid reopening, fueled a strong rebound in consumption. In advanced economies, fiscal transfers boosted household balance sheets, while low interest rates stimulated credit growth. The resulting surge in demand for durable goods collided with constrained supply, producing sharp price increases in tradable goods and contributing to the early phase of global inflation.

The geopolitical shock triggered by Russia's invasion of Ukraine in early 2022 triggered a second round of inflationary pressures (Imam and Poghosyan, 2025). Energy market volatility surged as disruptions in oil, natural gas, and refined product supplies transmitted quickly to domestic fuel and electricity prices. Global food prices also spiked due to reduced grain and fertilizer exports, with disproportionate effects on food-import-dependent economies.

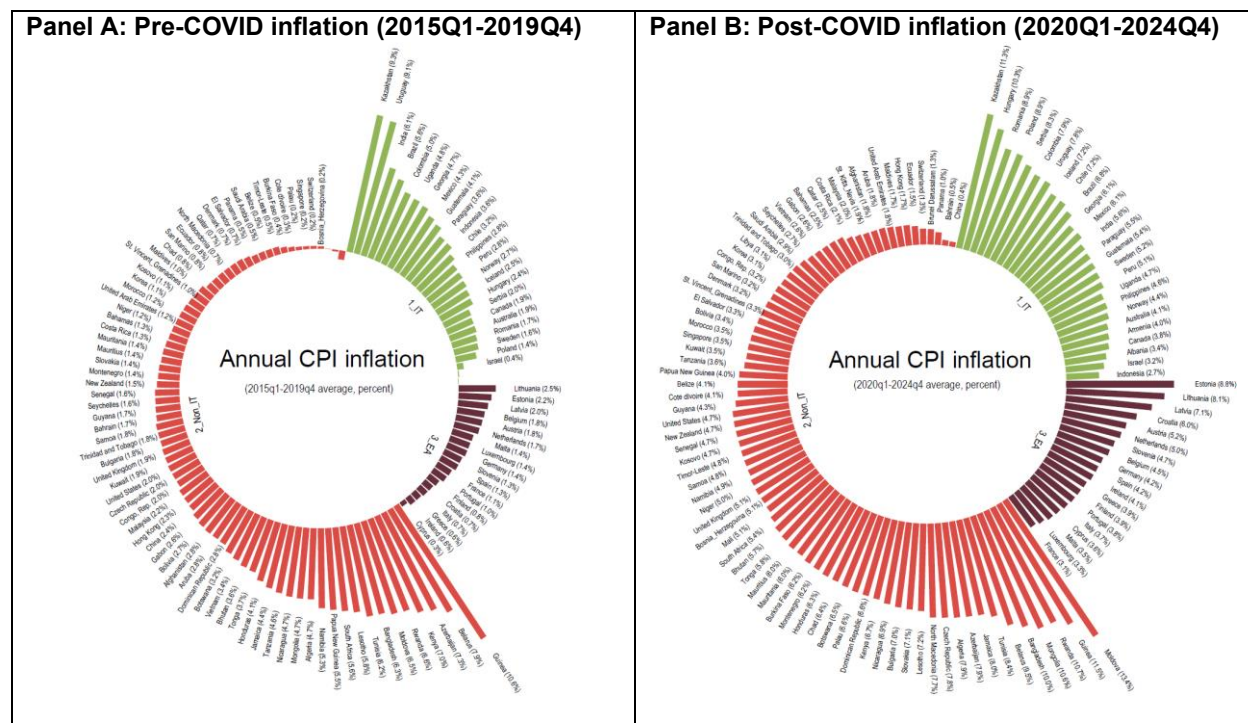
These commodity-price shocks had widespread and rapid pass-through to domestic inflation. Energy-importing economies, economies with limited fiscal space to cushion price increases, and countries with weaker exchange rates faced particularly large and persistent price surges. As a result, the inflation impulse from the global energy-price shock was both larger and more uneven across countries than the initial post-COVID increase.

Although inflation rose globally post-COVID, the magnitude and persistence varied widely. Some countries saw short-lived spike peaking in 2021–22, while others faced prolonged and historically elevated inflation.

Figure [1] presents average annual CPI inflation during a 5-year period before (2015Q1-2019Q4) and after (2020Q1-2024Q4) the pandemic, revealing a substantial rise in annual inflation across countries post-pandemic. In the pre-COVID period, most countries recorded single digit annual inflation, well below 3 percent, including non-IT countries and, especially, Euro Area countries. Post-COVID, inflation surged even in historically low-inflation advanced economies and IT countries. This sharp divergence highlights the global and unprecedented nature of the shock and motivates inquiry on the drivers of cross-country differences.

Figure [2] maps the post-COVID inflation around the world, revealing regional clusters of high and low post-COVID inflation. These regional patterns likely reflect differences in exposure to the underlying shocks as well as variation in how those shocks propagated domestically. The Asia-Pacific region has experienced a relatively modest inflation compared to other regions, as was highlighted in Fatás (2024). By contrast, Eastern European countries have been hit harder by high inflation due to their energy supply links with Russia, both through physical supply disruptions and sharp increases in import costs. In these countries, the combination of higher energy intensity and more limited scope to buffer the shock amplified the transmission to headline inflation, contributing to persistently higher inflation outcomes.

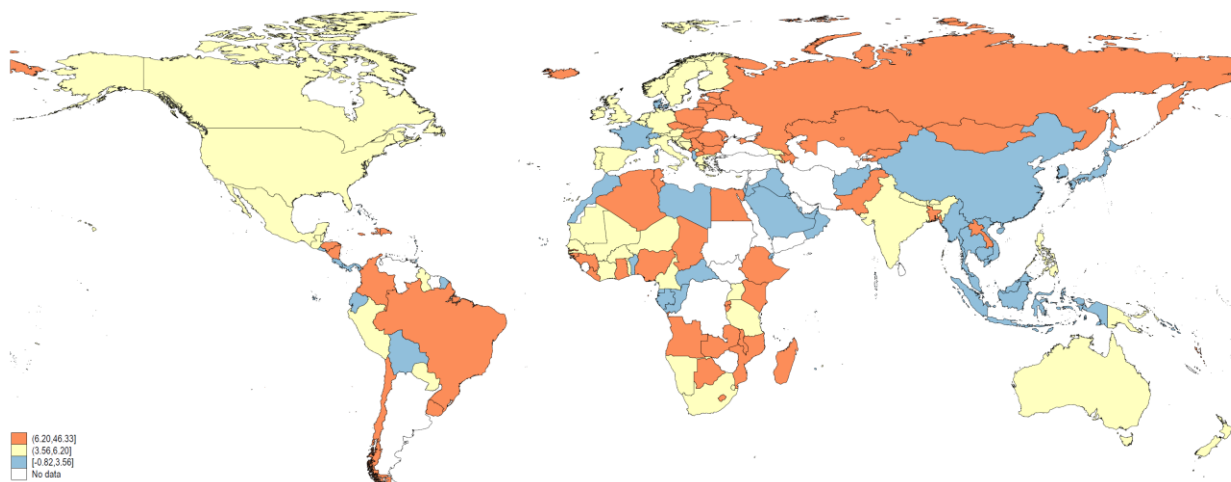
Figure [1]. Average annual CPI inflation: Pre- and post-COVID



Source: World Bank’s global inflation dataset (Ha and others, 2023), authors’ calculations.

Note: Reported is the average annual inflation over respective periods. IT refers to inflation targeting countries, non-IT refers to countries not targeting inflation, and EA refers to Euro Area countries.

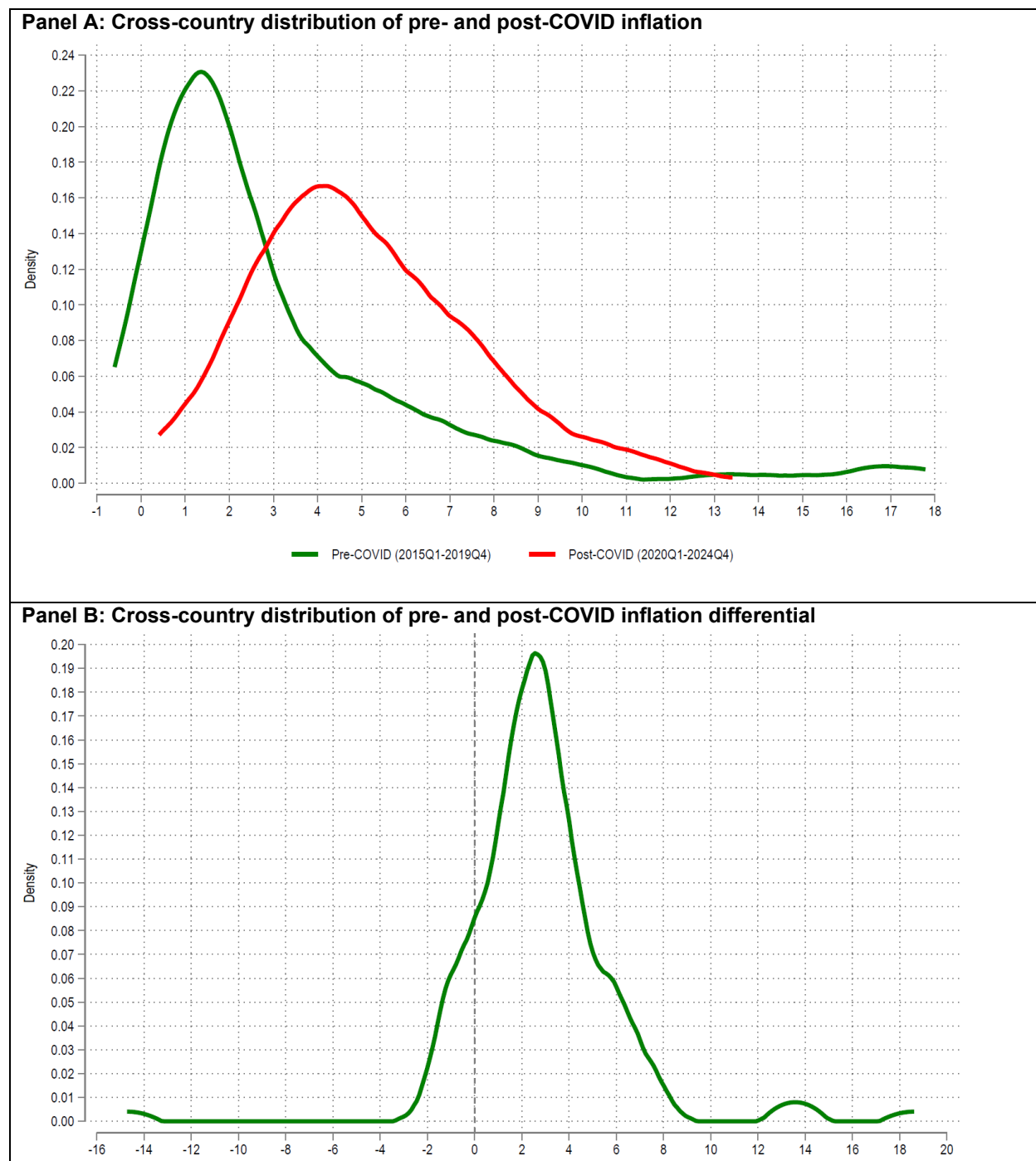
Figure [2]. Post-COVID CPI inflation around the world



Source: World Bank’s global inflation dataset (Ha and others, 2023), authors’ calculations.

Note: The boundaries, colors, denominations, and any other information shown on the maps do not imply, on the part of the IMF, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

Figure [3]. Distribution of CPI inflation



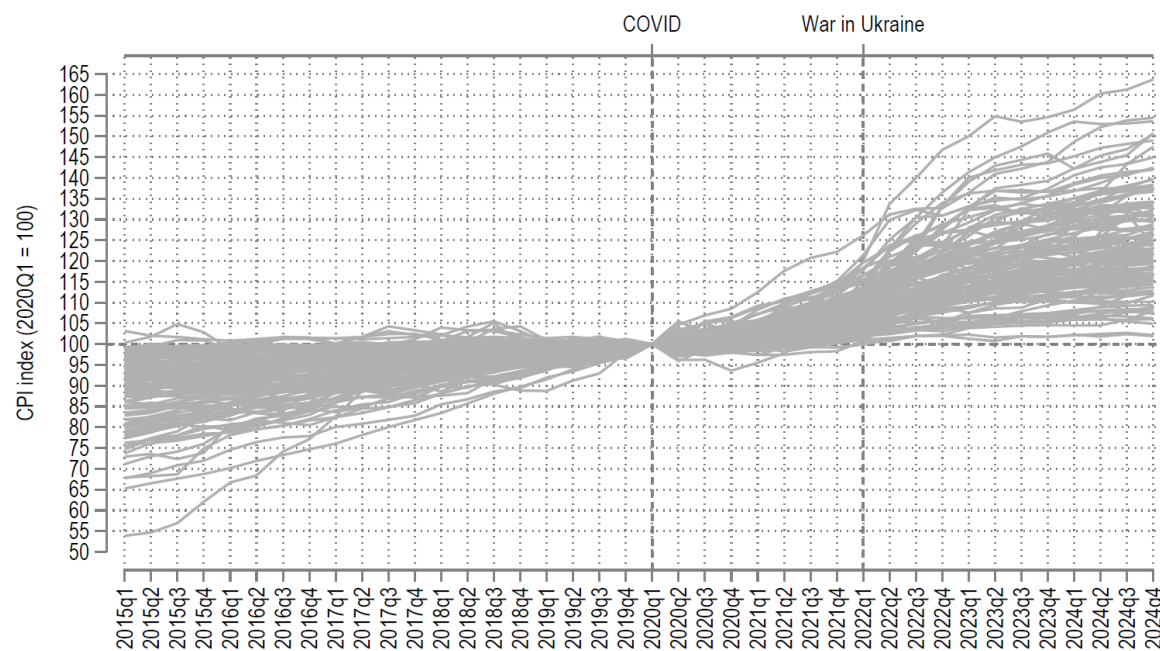
Source: World Bank's global inflation dataset (Ha and others, 2023), authors' calculations.

Note: Reported is the Epanechnikov kernel distribution. Outlier observations exceeding 20 percent in absolute terms are not included.

Figure [3] presents the cross-country distribution of average annual CPI inflation pre- and post-COVID periods (Panel A) and the cross-country distribution of inflation differentials between the two periods (Panel B). The kernel densities reveal a marked upward shift in the global inflation distribution after the pandemic. Before COVID, most countries clustered tightly around low inflation rates, typically between 1 and 4 percent, with a thin right tail. After COVID, the entire distribution shifts rightward and flattens, indicating both higher average inflation and greater cross-country dispersion. The second figure plots the kernel distribution of the difference between post- and pre-COVID inflation and confirms this upward movement. In most countries, inflation rose sharply, with the distribution of the differential centered well above zero and exhibiting a long right tail. These patterns underscore that the post-pandemic inflation surge was not only global in scope but also highly uneven, with some countries experiencing exceptionally large increases relative to their historical norms.

Persistently high post-COVID inflation has produced a large price differential across countries over time. Figure [4] illustrates the non-uniform impact of post-COVID inflation across 130 countries, revealing a striking price level differential over time. In only a small set of countries price levels rose by 10-15 percent over the 5-year period after the pandemic, which would correspond to a 2-3 percent average annual inflation. In most other countries, the increase exceeded 15 percent and surpassed 60 percent in some countries. This striking divergence suggests that while global factors like supply chain disruptions and commodity price spikes contributed to widespread inflation, country-specific factors played a key role in shaping price level outcomes across the world.

Figure [4]. Dynamics of price levels



Source: World Bank's global inflation dataset (Ha and others, 2023), authors' calculations.

Note: Reported is the dynamics of the CPI index normalized at 100 in 2020Q1 for 130 countries.

## IV. Empirical analysis

We adopt a two-step empirical strategy to investigate the drivers of the global inflation surge. First, we estimate cross-country regressions using a sample of 130 economies to quantify how country-specific features, fundamental factors, institutional characteristics, and policy variables are associated with average annual inflation in the post-COVID period. Second, we apply a local projections framework to measure the pass-through from energy price shocks to headline inflation as a proxy for second-round effects from supply shocks and examine how this pass-through changed before and after the pandemic, as well as across different groups of countries.

The empirical analysis in this section relies on cross-country reduced-form regressions and is designed to document robust empirical regularities rather than to establish causal relationships. Many of the variables considered, including institutional features and policy measures, are jointly determined with inflation outcomes and may proxy for unobserved country characteristics. Accordingly, the estimated coefficients should be interpreted as conditional correlations rather than structural parameters.

### A. Cross-country analysis

In this section, we analyze long-term determinants of average annual inflation in a cross-section of 130 countries. The baseline regression takes the following form:

$$\pi_i^{Post-COVID} = \alpha + \beta \pi_i^{Pre-COVID} + \gamma X_i + \varepsilon_i \quad (1)$$

where  $i$  denotes countries,  $\pi^{Post-COVID}$  is the average annual post-COVID inflation over the period 2020Q1-2024Q4,  $\pi^{Pre-COVID}$  is the average annual pre-COVID inflation over the period 2015Q1-2019Q4,  $X$  is a vector of inflation determinants, such as country-specific features, fundamental factors, institutional characteristics, and policy variables, and  $\varepsilon$  is the i.i.d. error term. The coefficients of interest are  $\beta$  and  $\gamma$ , which measure the association of post-COVID inflation with its pre-COVID level and respective determinants.

Table [1] presents estimation results of cross-country regressions. Pre-COVID inflation shows a consistently positive and statistically significant association with post-COVID inflation, in line with the findings of Gagnon and Kamin (2025). This suggests that countries with a history of higher inflation experienced sharper price increases following the post-COVID supply shocks.<sup>2</sup> Conversely, in countries with a recent history of low and stable inflation, wage and price setters were more likely to interpret shocks as temporary, helping to contain the feedback loop. There is no statistically significant association between the level of development, inflation targeting regime, and exchange rate pegging regime and post-COVID inflation. This indicates that the supply shocks have affected all countries, regardless of their level of development status and monetary policy regimes. Finally, expenditure and revenue rules show no

<sup>2</sup> To check whether strong positive association between historical and post-COVID inflation reflects persistent cross-country differences in inflation regimes rather than specific post-COVID features, we have run a robustness check using the 2015Q1-2019Q4 average inflation as a dependent variable and 2010Q1-2014Q4 average inflation as control variable (see Annex I). The coefficient of historical inflation is roughly two times smaller in these regressions, confirming that the post-COVID association reported in Table 1 is unusually strong.

significant association with post-COVID inflation, whereas the presence of balanced budget and debt rules are positively associated with post-COVID inflation.

**Table [1]. Estimation results: The impact of country-specific characteristics**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Pre-COVID inflation	1.198*** (0.244)	1.205*** (0.251)	1.016*** (0.211)	0.897*** (0.052)	0.890*** (0.057)	0.893*** (0.058)	0.895*** (0.057)	0.880*** (0.046)
IT dummy	0.011 (0.963)							-0.431 (1.047)
AE dummy		0.283 (0.534)						0.525 (0.537)
Exchange rate peg dummy			-1.098 (1.031)					-0.806 (0.985)
Expenditure rule dummy				0.024 (0.721)				0.747 (0.723)
Revenue rule dummy					-0.702 (0.572)			-2.626*** (0.732)
Balanced budget rule dummy						1.150* (0.662)		1.336 (0.967)
Debt rule dummy							1.665*** (0.478)	1.915*** (0.607)
Constant	2.751*** (0.599)	2.671*** (0.719)	3.325*** (0.761)	3.321*** (0.604)	3.472*** (0.308)	2.326*** (0.570)	1.956*** (0.322)	0.682 (1.086)
Observations	130	130	84	90	90	90	90	56
R-squared	0.542	0.543	0.506	0.568	0.571	0.574	0.585	0.758
Adjusted R-squared	0.535	0.535	0.494	0.558	0.561	0.564	0.576	0.716

Source: World Bank's global inflation dataset (Ha and others, 2023), IMF fiscal rules database, AREAER, WEO, and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the OLS estimator. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

This positive association should be interpreted with caution. One possible interpretation is that such rules may be associated with a more limited use of discretionary fiscal measures during the shock, potentially allowing a greater pass-through of external price pressures to domestic inflation. However, the reduced-form framework does not permit identification of this mechanism. The estimated coefficient may instead capture underlying cross-country differences correlated both with the adoption of fiscal rules and with post-COVID inflation outcomes. Accordingly, the results should not be interpreted as evidence that fiscal rules constrained fiscal space or directly contributed to higher inflation.

Table [2] presents estimation results for fundamental factors. Headline inflation is significantly and positively associated with energy price inflation, reflecting the central role of energy-related supply shocks in driving post-COVID inflation through first- and second-round effects. Together, pre-COVID inflation and post-COVID energy inflation explain about 85 percent of variation in the post-COVID inflation (R squared = 0.846), indicating a strong joint explanatory power.

Table [2]. Estimation results: The impact of fundamental factors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Pre-COVID inflation	0.984*** (0.180)	1.237*** (0.236)	1.230*** (0.241)	1.056*** (0.250)	1.090*** (0.243)	1.212*** (0.252)	1.211*** (0.249)	1.309*** (0.359)	0.546 (0.428)
Post-COVID energy inflation	0.470*** (0.080)								0.482*** (0.074)
Post-COVID real GDP growth		-0.308 (0.258)							-0.298 (0.273)
Change in FX reserves/GDP ratio			-0.134 (0.092)						-0.013 (0.023)
Post-COVID trade openness				-0.008 (0.005)					-0.004 (0.004)
Pre-COVID life expectancy					-0.149** (0.072)				-0.053 (0.080)
Post-COVID share of >65 population						0.025 (0.050)			-0.089* (0.048)
Post-COVID REER growth							0.437 (0.362)		0.347 (0.236)
Pre-COVID inflation volatility								-0.108 (0.298)	0.053 (0.174)
Constant	0.588 (0.452)	3.422*** (0.802)	2.886*** (0.663)	3.707*** (0.858)	14.130** (5.792)	2.436** (1.051)	2.408*** (0.710)	2.905*** (0.791)	7.086 (6.012)
Observations	104	129	122	121	127	130	124	130	88
R-squared	0.846	0.565	0.575	0.514	0.560	0.543	0.576	0.546	0.870
Adjusted R-squared	0.843	0.558	0.568	0.506	0.553	0.536	0.569	0.539	0.856

Source: World Bank's global inflation dataset (Ha and others, 2023), WEO, WDI, and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the OLS estimator. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Another variable exhibiting a significant association with the post-COVID inflation is the pre-COVID life expectancy, suggesting that countries with higher longevity of their population have managed to experience lower inflationary pressures. This relationship, however, should be interpreted with caution. Although life expectancy enters significantly, it likely proxies for a wide range of underlying country characteristics that are not directly observed in the regression, such as levels of development, policy credibility, and other structural features correlated with both longevity and inflation outcomes. Given the reduced-form nature of the specification and the scope for omitted variables, the coefficient should not be interpreted as evidence that life expectancy exerts a causal influence on inflation dynamics. Rather, it is best viewed as a summary correlate of deeper structural differences across countries. The negative association is consistent with the view that economies with stronger structural fundamentals may experience more muted inflation transmission following large supply shocks, although this mechanism is not directly identified. By contrast, other fundamentals, such as real GDP growth, foreign exchange reserves, trade openness, demographic structure, real exchange rate growth, and inflation volatility, are not statistically significant. This suggests that, once initial inflation conditions and the size of the energy shock are accounted for, broader macroeconomic factors are not systematically related to cross-country

Table [3]. Estimation results: The impact of institutional factors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Pre-COVID inflation	1.184*** (0.244)	1.228*** (0.253)	1.368*** (0.415)	1.201*** (0.240)	1.205*** (0.251)	1.202*** (0.252)	1.197*** (0.247)	1.210*** (0.250)	1.196*** (0.260)	1.190*** (0.257)	1.168*** (0.245)	1.178*** (0.238)	1.158*** (0.245)	1.192*** (0.237)	1.619*** (0.432)
Post-COVID rule of law index	-0.178 (0.486)														1.664 (1.242)
Post-COVID CB independence index		2.107 (3.680)													5.911*** (2.082)
Pre-COVID trade union density rate			-0.015 (0.016)												-0.027 (0.019)
Post-COVID political stability index				0.036 (0.657)											0.903 (1.328)
Post-COVID liberal democracy index					0.486 (1.866)										4.810 (8.812)
Post-COVID freedom of expression index						0.580 (2.421)									4.078 (4.070)
Post-COVID clean election index							-0.036 (1.841)								-2.272 (4.846)
Post-COVID legislative constraints index								1.352 (1.574)							-2.154 (3.235)
Post-COVID range of consultation index									-0.041 (0.462)						-0.541 (0.736)
Post-COVID engaged society index										-0.137 (0.559)					0.298 (0.790)
Post-COVID public goods index											-0.599 (0.563)				-0.423 (0.641)
Post-COVID public administration index												-0.178 (0.349)			-1.128 (0.837)
Post-COVID public corruption index													1.672 (1.518)		0.676 (3.149)
Post-COVID electoral regime index														1.701* (0.948)	0.318 (0.683)
Constant	2.833*** (0.676)	1.251 (2.797)	2.526** (1.046)	2.742*** (0.617)	2.555* (1.318)	2.382 (2.145)	2.829* (1.552)	1.899 (1.459)	2.854*** (1.090)	2.980** (1.167)	3.452*** (0.915)	3.003*** (0.769)	2.298*** (0.609)	1.802** (0.717)	-3.935 (3.304)
Observations	130	111	86	130	120	120	120	120	120	120	120	120	120	120	78
R-squared	0.543	0.550	0.514	0.542	0.539	0.539	0.538	0.541	0.538	0.539	0.545	0.540	0.542	0.550	0.640
Adjusted R-squared	0.536	0.541	0.502	0.535	0.531	0.531	0.531	0.533	0.531	0.531	0.537	0.532	0.534	0.543	0.552

Source: World Bank's global inflation dataset (Ha and others, 2023), V-DEM, Romelli (2023), and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the OLS estimator. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table [3] presents estimation results for institutional factors. Most indicators, including institutional factors related to rule of law, political stability, governance, corruption, public administration, democracy are not significantly associated with post-COVID inflation, with the exception of electoral regime index. These findings should be interpreted with caution. The lack of statistically significant coefficients does not imply that institutions are unimportant for inflation dynamics; rather, conditional on common supply shocks and pre-existing inflation, cross-country variation in institutional indicators is not strongly correlated with inflation outcomes in this sample. This may reflect measurement limitations, the reduced-form nature of the specification, or the fact that institutional features operate through channels, such as expectations formation and policy credibility, not directly captured in the regression. The significance of the electoral regime index likely reflects indirect channels, including differences in the timing and political economy of policy responses, rather than a direct effect on price formation. Likewise, the absence of a significant association for central bank independence should not be read as evidence of ineffective monetary frameworks, but rather as consistent with the view that large, globally synchronized supply shocks dominated cross-country institutional differences in shaping short-run inflation outcomes.

These findings raise an important issue. Institutional strength may matter more for inflation persistence rather than for the initial shock. When shocks are large and globally synchronized, even highly credible institutions may be unable to fully shield domestic inflation from external pressures. In such settings, expectations anchoring and central bank credibility likely play a greater role in containing second-round effects and facilitating disinflation than in averting the initial spike. This distinction is important for interpreting our results. Institutional features appear more strongly correlated with cumulative price-level increases rather than with the onset of the inflation shock.

Table [4] presents estimation results for policy variables. We find no significant association with changes in policy rates, public debt ratio and real effective exchange rate appreciation, suggesting that conventional policy adjustment (monetary, fiscal, and exchange rate) had limited power to explain cross country variation in post-COVID inflation outcomes. These results should be interpreted with caution, given possible endogeneity between inflation and macro-financial policies. Counterintuitively, frequent macroprudential tightening and FX interventions are positively and significantly associated with inflation. This likely reflects endogeneity, as high credit growth and exchange rate depreciation fueling inflation may have prompted tightening macroprudential actions and exchange rate interventions.

By contrast, a significant and negative association between the relative size of fossil fuel subsidies as a share of GDP and inflation suggests that countries that increased such subsidies above their historical averages experienced more moderate inflation.

Annex [I] presents a range of robustness checks using robust estimator that downweights observations with larger absolute residuals using iterative weighted least squares (Andersen, 2008) and quantile regressions. The results remain qualitatively similar.<sup>3</sup>

Overall, these findings suggest that short-run policy adjustments played a secondary role relative to the interaction between large supply shocks and pre-existing domestic conditions, even though some of these slow-moving factors may still influence inflation outcomes indirectly via their association with the pre-pandemic inflation. The lack of robust association with monetary and fiscal policy changes reinforces the view that post-COVID inflation was largely driven by factors outside the immediate control of macroeconomic policy. At the same time, the counterintuitive positive association between macroprudential tightening, foreign exchange intervention, and inflation underscores the difficulty of interpreting policy coefficients in a reduced-form setting, where policy actions are often responses to inflationary pressures rather than its drivers.

The negative link between fossil fuel subsidies and inflation points to a more direct channel through which policy may have influenced inflation dynamics, by dampening the pass-through of energy price shocks to consumer prices. While these measures appear to have helped contain inflation during the post-COVID period, they involve fiscal costs and distributional implications that should be taken into account. Overall, the policy findings support the broader conclusion of the paper: cross-country differences in inflation outcomes were associated less with discretionary policy moves and more with how supply shocks propagated through domestic prices, conditional on the initial inflation environments and available policy buffers.

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<sup>3</sup> We have also run cross-sectional regressions using pre-COVID variables as determinants of post-COVID inflation to reduce endogeneity risks. The results remain qualitatively unchanged and can be shared upon request.

Table [4]. Estimation results: The impact of policies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Pre-COVID inflation	1.086*** (0.225)	1.320*** (0.298)	1.338*** (0.257)	1.218*** (0.246)	1.223*** (0.252)	1.026*** (0.211)	1.238*** (0.252)
Change in central bank policy rate	0.377 (0.239)						0.448* (0.253)
Change in macroprudential instruments		1.518** (0.632)					0.705 (0.636)
Change in Debt/GDP ratio			0.016 (0.039)				-0.029 (0.076)
Change in fossil fuel subsidies in % of GDP				-0.736* (0.432)			-0.489 (0.462)
Change in average REER appreciation					0.309 (0.212)		-0.333 (0.199)
Post-COVID FX interventions in % of GDP						1.186* (0.692)	-0.468 (1.567)
Constant	2.564*** (0.541)	3.248*** (0.738)	2.264*** (0.637)	2.958*** (0.627)	2.500*** (0.700)	2.645*** (0.605)	3.314*** (1.214)
Observations	86	105	127	120	124	85	54
R-squared	0.625	0.609	0.617	0.553	0.580	0.504	0.750
Adjusted R-squared	0.616	0.601	0.611	0.545	0.573	0.492	0.712

Source: World Bank's global inflation dataset (Ha and others, 2023), WEO, WDI, IMF iMapp, Adler and others. (2024), and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the OLS estimator. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## B. Dynamic analysis of pass-through from energy prices to inflation

This section examines the pass-through from energy prices to inflation, focusing on differences between the pre-COVID and post-COVID periods, as well as across country groups. Due to data limitations, the analysis focuses on a sample of 70 advanced and emerging economics for the period 2015Q1-2024Q4, out of which 33 are IT countries and 37 are non-IT countries.

To motivate the analysis, we begin with an event study analysis for energy price inflation for IT and non-IT countries over the sample period, following the methodology of Imam and Poghosyan (2025). The event study regression takes the following form:

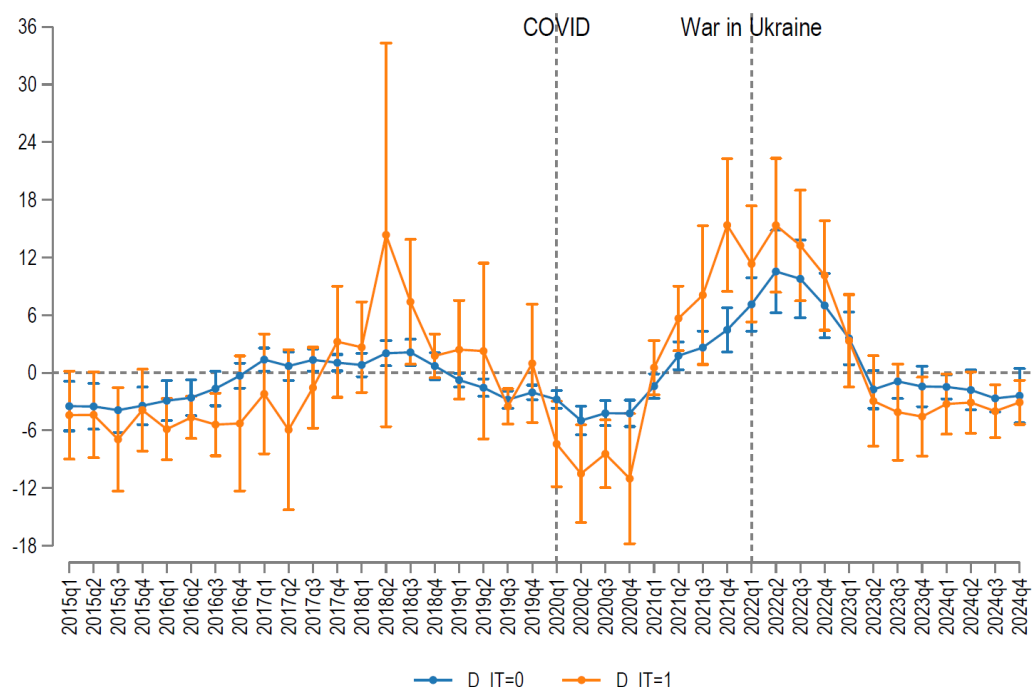
$$\pi_{it}^{energy} = \alpha_t + \beta_t * D_{IT_i} + \lambda_i + \varepsilon_{it} \quad (2)$$

where  $i$  denotes countries,  $t$  denotes quarters,  $\pi^{energy}$  is the y/y quarterly growth in energy inflation index,  $D_{IT_i}$  is the dummy equal 1 for IT countries,  $\lambda$  is the country fixed effects<sup>4</sup>, and  $\varepsilon$  is the error term. Coefficient  $\alpha$  shows the average energy inflation in non-IT countries in quarter  $t$ , while the sum of coefficients ( $\alpha + \beta$ ) shows the average energy inflation in IT countries in quarter  $t$ .

As shown in Figure [5], energy inflation first dipped during the COVID pandemic but rebounded sharply and reached a peak following the Russia's invasion of Ukraine. Interestingly, average inflation levels in each quarter do not differ markedly between IT and non-IT countries, making them suitable for comparative pass-through analysis.

<sup>4</sup> In the regression, we demean the dependent variable to avoid collinearity with the IT dummy while controlling for fixed effects.

Figure [5]. Event study analysis: Evolution of energy price inflation in IT and non-IT countries



Note: Reported are the coefficients  $\alpha$  (non-IT countries,  $D\_IT=0$ ) and  $\alpha + \beta$  (IT countries,  $D\_IT=1$ ) from the regression and their 95% confidence intervals based on robust standard errors.

Let's now turn to the analysis of pass-through from energy prices to headline inflation. The first specification assesses the pass-through for the total sample using the following specification:

$$y_{i,t+h} - y_{i,t-1} = \beta^h \Delta x_{i,t} + \sum_{k=1}^4 \delta^k \Delta y_{i,t-k} + \gamma_i^h + \rho_t^h + \varepsilon_{i,t+h} \quad (3)$$

where  $y$  is the log of consumer price index,  $x$  is the log of energy price index,  $i$  denotes countries,  $t$  denotes time in quarters,  $h$  denotes local projection horizon,  $\gamma$  and  $\rho$  are country and time fixed effects,  $\varepsilon$  is the error term. Country fixed effects control for country-specific unobserved heterogeneity, while time fixed effects control for global common factors affecting inflation in all countries simultaneously.<sup>5</sup> The coefficient of interest is  $\beta^h$ , denotes the impact of 1 percent change in energy prices on cumulative CPI inflation over the horizon  $h$ .

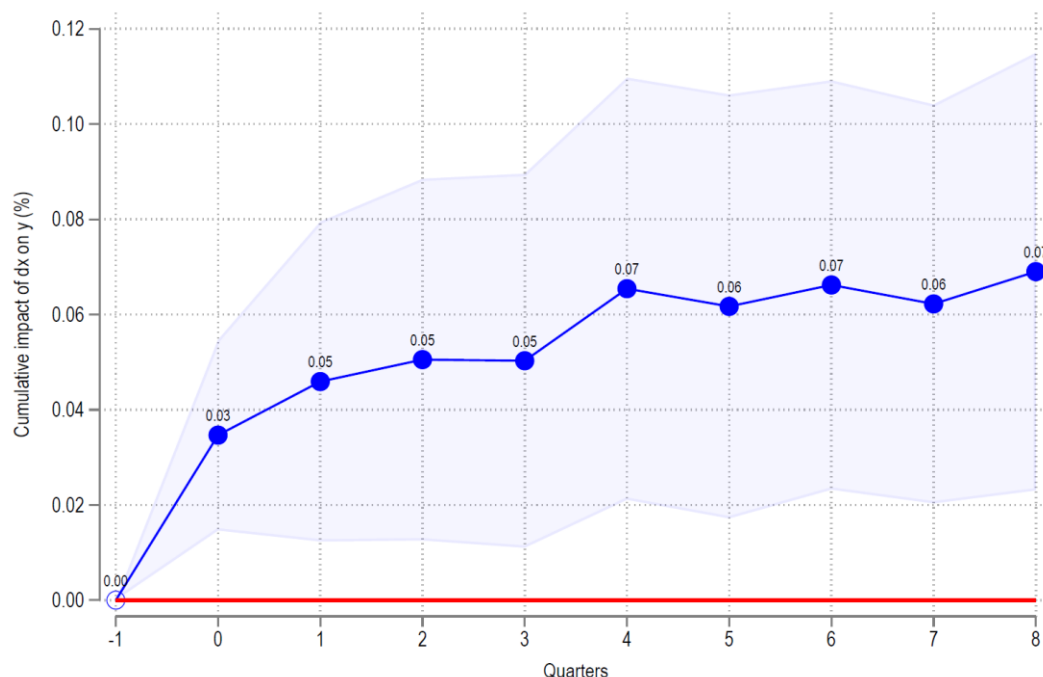
Figure [6] shows that the cumulative elasticity is 0.07 over 8 quarters and statistically significant, indicating a statistically significant pass-through from energy prices to inflation in the total sample.<sup>6</sup> To assess the importance of SREs, we estimate the same regression using core inflation as the dependent variable. Given the importance of energy prices for headline inflation, especially in periods of heightened volatility, it can be informative to assess their impact on core inflation that does not include energy prices. The results presented in Annex [II] show smaller and less significant pass-through, suggesting limited

<sup>5</sup> Unlike Baba and Lee (2022), we are using country-specific measures of energy price inflation rather than global energy price indices, which allows us to control for common factors when assessing the energy price pass-through and its second-round effects.

<sup>6</sup> The pass-through coefficients are estimated conditional on accounting country-specific unobserved heterogeneity (country fixed effects) and common shocks (time fixed effects). Exclusion of fixed effects would roughly double the pass-through.

second-round effects. However, these results should be interpreted with caution given limited data availability on core inflation (only about 40 countries included in the regression).

Figure [6]. Energy price pass-through: Total sample



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The line denotes point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance.

We then estimate energy pass-through in the pre-COVID and post-COVID periods separately, given that the post-COVID period was marked by a relatively larger energy price shock. The empirical specification takes the following form:

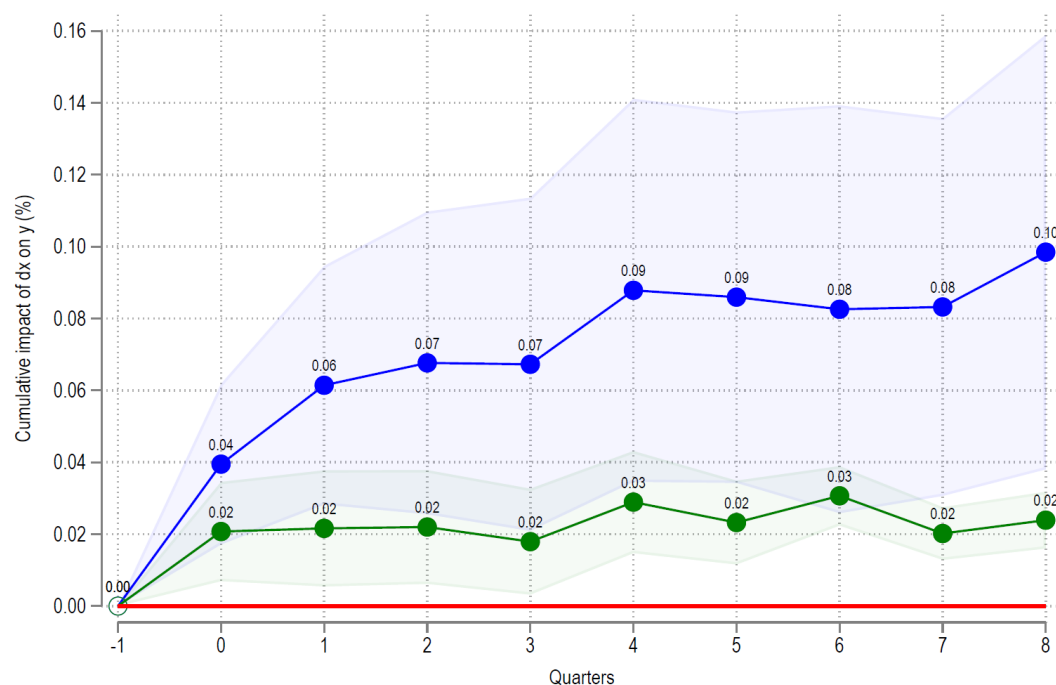
$$y_{i,t+h} - y_{i,t-1} = \beta_1^h (\Delta x_{i,t} * D_{POST}) + \beta_2^h (\Delta x_{i,t} * [1 - D_{POST}]) + \sum_{k=1}^4 \delta^k \Delta y_{i,t-k} + \gamma_i^h + \rho_t^h + \varepsilon_{i,t+h} \quad (4)$$

where  $y$  is the log of consumer price index,  $x$  is the log of energy price index,  $i$  denotes countries,  $t$  denotes time in quarters,  $h$  denotes local projection horizon,  $\gamma$  and  $\rho$  are country and time fixed effects,  $\varepsilon$  is the error term.  $D_{POST}$  is the dummy variable for the 2020Q1 – 2024Q4 period.

The coefficients of interest are  $\beta_1^h$  and  $\beta_2^h$  which denote the impact of 1 percent change in energy prices on cumulative CPI inflation over the horizon  $h$  in post-COVID and pre-COVID periods, respectively.

Figure [7] presents the results. Cumulative elasticity varies across time periods. It is 0.1 and significant for the post-COVID period and 0.02 for the pre-COVID period. As expected, the impact is larger in the post-COVID period marked by large energy supply shocks.

Figure [7]. Energy price pass-through: Pre- versus post-COVID period



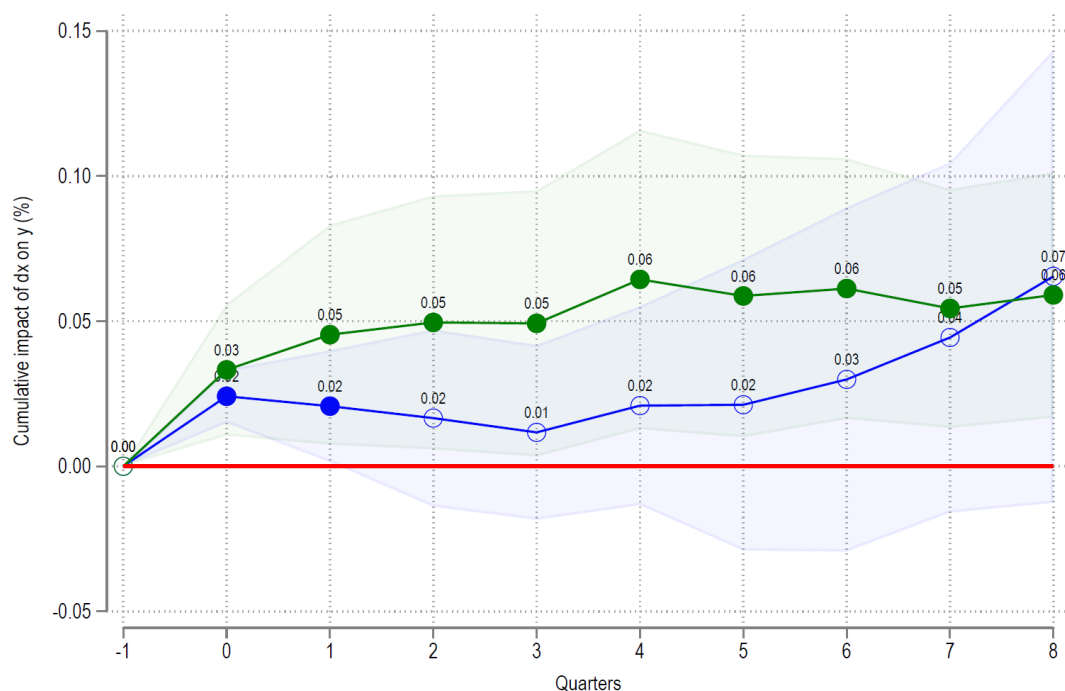
Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Blue line refers to post-COVID period, while green line refers to pre-COVID period.

We also test whether the pass-through varies across country groups using the following empirical specification:

$$y_{i,t+h} - y_{i,t-1} = \beta_1^h (\Delta x_{i,t} * D) + \beta_2^h (\Delta x_{i,t} * [1 - D]) + \sum_{k=1}^4 \delta^k \Delta y_{i,t-k} + \gamma_i^h + \rho_t^h + \varepsilon_{i,t+h} \quad (5)$$

where  $y$  is the log of consumer price index,  $x$  is the log of energy price index,  $i$  denotes countries,  $t$  denotes time in quarters,  $h$  denotes local projection horizon,  $\gamma$  and  $\rho$  are country and time fixed effects,  $\varepsilon$  is the error term.  $D$  is the dummy variable defining country groups (advanced versus emerging economies, IT versus non-IT countries, and observations with relatively higher fossil fuel subsidies versus observations with lower subsidies).

Figure [8]. Energy price pass-through: Advanced versus emerging economies



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Blue line refers to advanced economies, while green line refers to emerging economies.

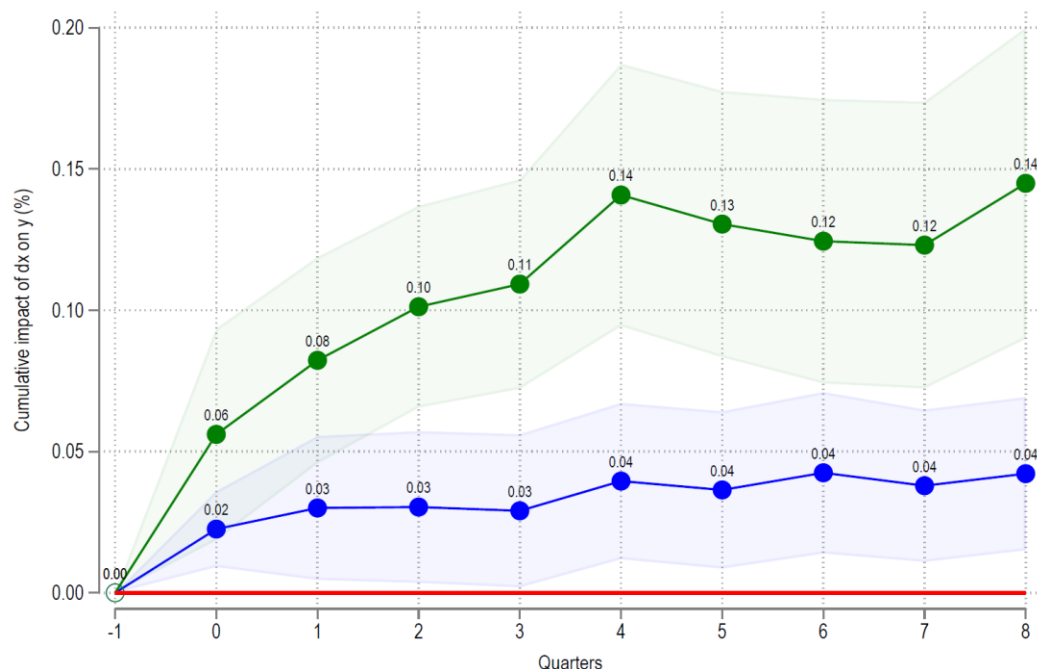
Figure [8] presents the results for advanced versus emerging economies. We find that the cumulative elasticity varies across country groups. It is 0.06 and significant for emerging economies and mostly insignificant for advanced economies. This suggests that energy price shocks have propagated to headline inflation faster in emerging economies compared to advanced countries. This difference should be interpreted as evidence of heterogeneous transmission rather than as identifying specific mechanisms. The higher pass-through in emerging economies is consistent with a range of structural and policy-related factors discussed in the literature, including higher energy weights in consumption baskets, more frequent price adjustment, and greater prevalence of indexation, all of which can amplify transmission. Differences in policy frameworks and macroeconomic environments, such as the use of price-smoothing measures or the degree of expectations anchoring, may also contribute. However, the empirical specification does not allow these channels to be disentangled, and the results should therefore be viewed as documenting systematic cross-country differences in pass-through rather than establishing their underlying drivers.

More broadly, this divergence between emerging and advanced economies aligns with earlier cross-sectional findings, which emphasize the role of inflation history and institutional credibility in mediating the speed and magnitude of supply shock propagation to headline inflation.

Figure [9] compares the results for IT versus non-IT countries. The cumulative elasticity varies across monetary policy regimes. It is 0.04 and significant for IT countries and 0.14 for non-IT countries. As expected, IT countries exhibit lower pass-through, reflecting stronger anchoring of inflation

expectations and clearer nominal reference point for price and wage setters<sup>7</sup>. However, the fact that elasticity remains positive and statistically significant even among IT countries underscores that inflation targeting does not fully insulate economies from large supply-driven shocks. Instead, the regime appears to moderate the speed and magnitude of pass-through, reducing the scope for second-round effects without eliminating them altogether.

**Figure [9]. Energy price pass-through: IT versus non-IT countries**

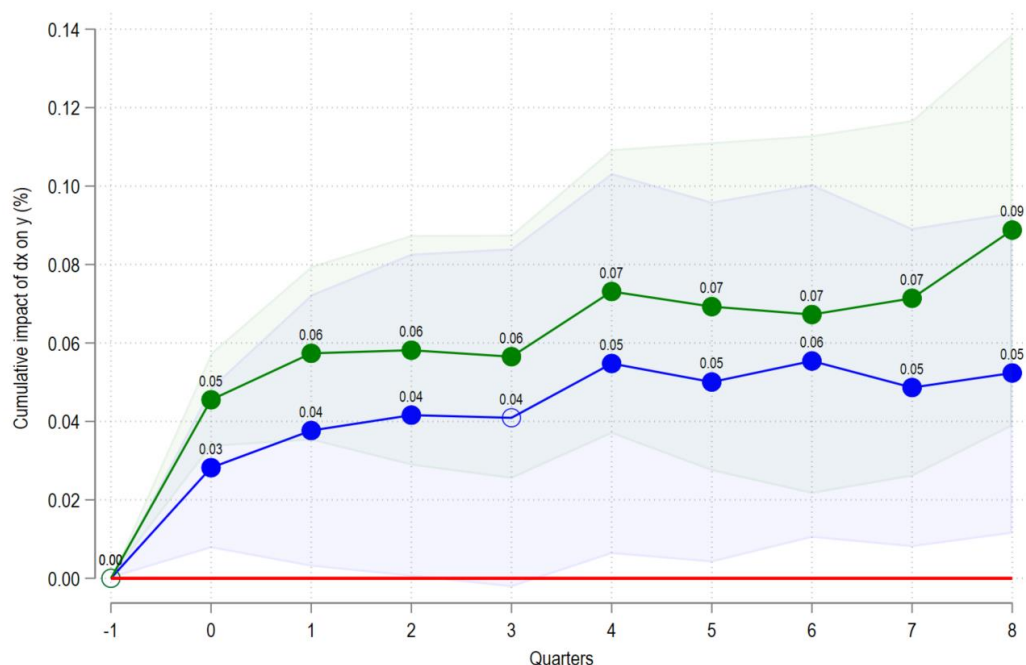


Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Blue line refers to IT countries, while green line refers to non-IT countries.

Figure [10] presents the results assessing the role of fossil fuel subsidies. Data is divided into two groups: observations during which country-specific median fossil fuel subsidies as a share of GDP exceeded overall median in the sample, and observations during which country-specific median subsidies were below overall median in the sample. The estimated cumulative elasticity varies across these two groups. The elasticity is 0.05 and statistically significant in countries where median subsidies were above overall median, compared to 0.09 in countries where median subsidies were below overall median, suggesting that relatively higher subsidies helped attenuate the transmission of energy price shocks to inflation. These findings are consistent with Amaglobeli and others (2023), who document cross-country subsidy responses to post-COVID shocks and outline best practices on subsidy implementation that account for policy tradeoffs. The results also echo Fatás (2024), who argues that greater reliance on subsidies helped emerging economies in Asia contain inflation in the post-COVID period. Yet, countries need to factor in fiscal costs and distributional aspects of subsidies which can constrain their implementation depending on country-specific circumstances.

<sup>7</sup> CBI and expectations anchoring may matter more for moderating second-round effects than preventing the initial impulse of inflation during large global shocks. Our interpretation of institutional indicators reflects this view, focusing on their role in shaping persistence rather than shock exposure.

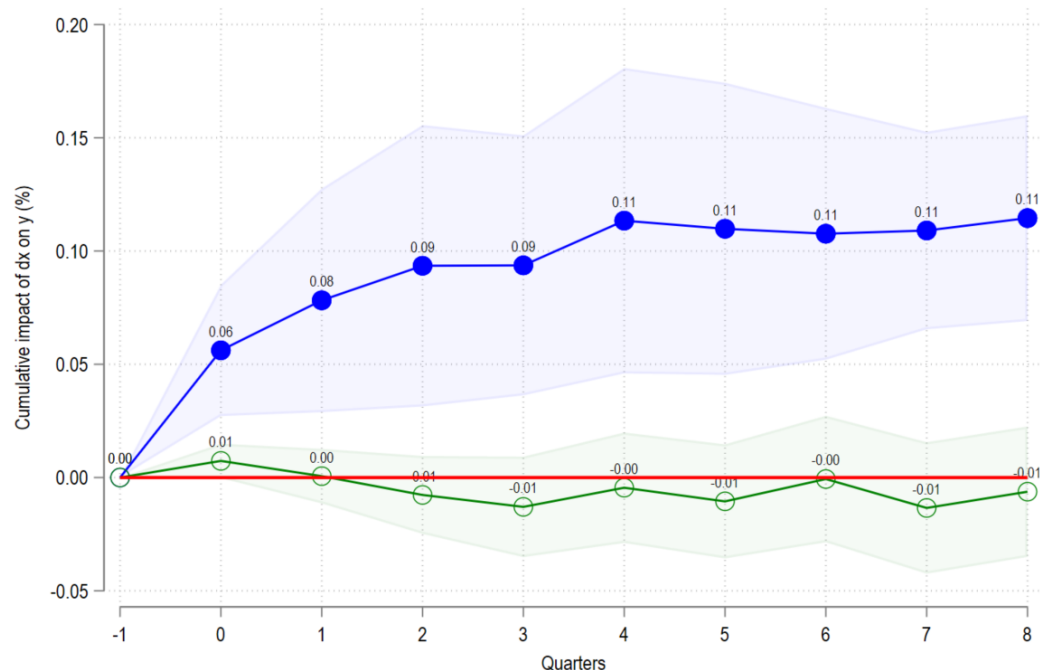
Figure [10]. Energy price pass-through: The role of fossil fuel subsidies



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Blue line refers to countries with relatively higher fossil fuel subsidies, while green line refers to countries with relatively lower fossil fuel subsidies as a share of GDP.

Figure [11] examines the asymmetric pass-through of positive versus negative energy price shocks. We estimate separate pass-through effects for positive and negative price changes in energy prices. The results reveal a clear asymmetry: headline inflation reacts significantly to positive price changes peaking at 0.11, while the impact of negative changes is small and statistically insignificant. This asymmetric effect can be explained by price rigidity, which may have contributed to the persistent cross-country differences in inflationary dynamics. In countries more strongly exposed to energy price hikes, consumer prices rose more sharply and did not fully reverse when energy prices eased. This may have contributed to the widening of cross-country distribution of price indices at the end of the post-COVID sample (see Figure [4]).

Figure [11]. Energy price pass-through: Asymmetric effect of positive and negative energy price changes



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Blue line refers to the pass-through from positive changes in energy prices, while green line refers to the pass-through from negative changes in energy prices.

Finally, we test whether the pass-through varies across country groups in the pre-COVID and post-COVID period using the following empirical specification:

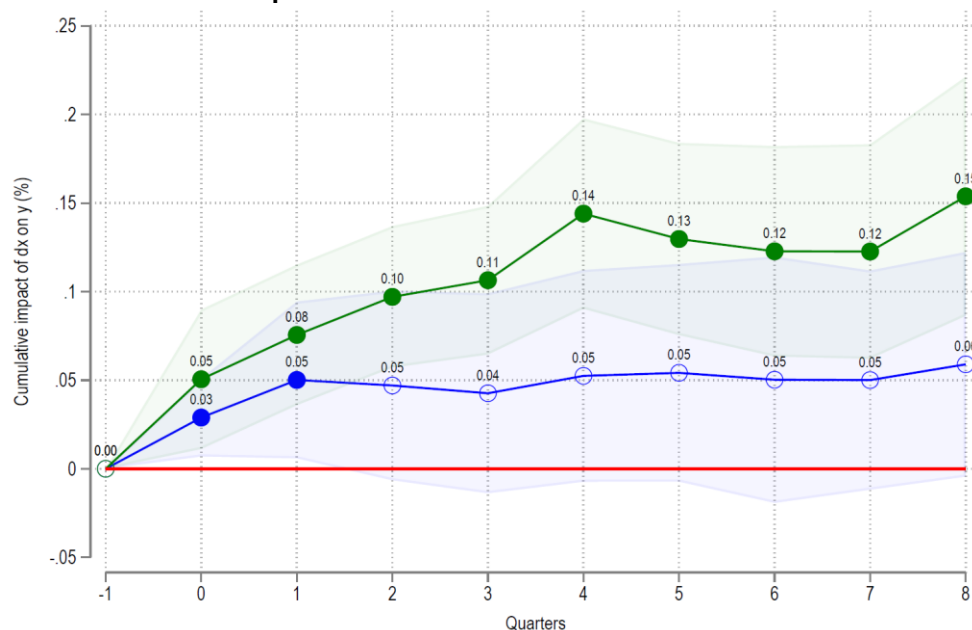
$$\begin{aligned}
 y_{i,t+h} - y_{i,t-1} = & \beta_1^h (\Delta x_{i,t} * D_{POST} * D_{IT}) + \beta_2^h (\Delta x_{i,t} * D_{POST} * [1 - D_{IT}]) + \\
 & + \beta_3^h (\Delta x_{i,t} * [1 - D_{POST}] * D_{IT}) + \beta_4^h (\Delta x_{i,t} * [1 - D_{POST}] * [1 - D_{IT}]) + \\
 & + \sum_{k=1}^4 \delta^h \Delta y_{i,t-k} + \gamma_i^h + \rho_t^h + \varepsilon_{i,t+h}
 \end{aligned} \tag{6}$$

where  $y$  is the log of consumer price index,  $x$  is the log of energy price index,  $i$  denotes countries,  $t$  denotes time in quarters,  $h$  denotes local projection horizon,  $\gamma$  and  $\rho$  are country and time fixed effects,  $\varepsilon$  is the error term.  $D_{IT}$  is the dummy variable for IT countries and  $D_{POST}$  is the dummy variable for the 2020Q1 – 2024Q4 period.

The coefficients of interest are  $\beta_1^h$ ,  $\beta_2^h$ ,  $\beta_3^h$ , and  $\beta_4^h$  which denote the impact of 1 percent change in energy prices on cumulative CPI inflation over the horizon  $h$  in post-COVID period for IT countries, post-COVID period for non-IT countries, pre-COVID period for IT countries, and pre-COVID period for non-IT countries, respectively.

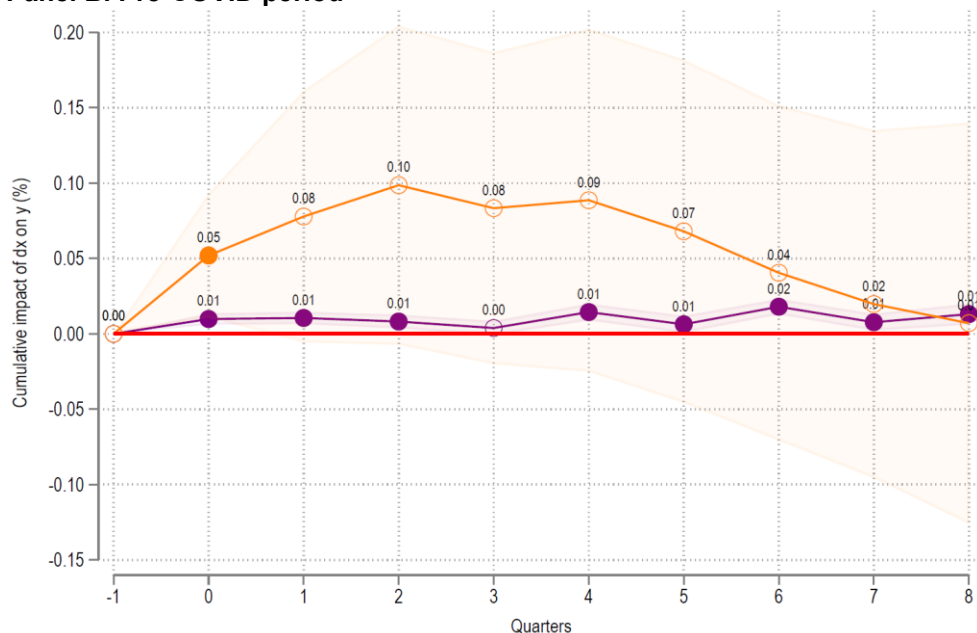
Figure [12]. Energy price pass-through: IT versus non-IT countries during pre- versus post-COVID period

**Panel A. Post-COVID period**



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Blue line refers to IT countries, while green line refers to non-IT countries.

**Panel B. Pre-COVID period**



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on CPI inflation. The lines denote point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance. Purple line refers to IT countries, while orange line refers to non-IT countries.

Figure [12] shows the estimation results. The cumulative elasticity varies across monetary policy regimes and time periods. In the post-COVID period (panel A), it is 0.15 and significant for non-IT countries and insignificant for IT countries. Similarly, in the pre-COVID period (panel B), it is 0.01 and significant for IT countries and insignificant for non-IT countries. As expected, the impact is larger in non-IT countries and in the post-COVID period marked by large energy supply shocks.

## V. Conclusions

The post-COVID inflation surge represents a globally synchronized yet highly heterogeneous inflationary episode in recent macroeconomic history. This paper investigates why countries exposed to similar global shocks, ranging from pandemic-related supply disruptions to the energy and food price spikes following Russia's invasion of Ukraine, experienced sharply divergent inflation outcomes. Using a combination of cross-country regressions across 130 economies and a dynamic analysis of energy price pass-through for 70 advanced and emerging markets, the paper provides new evidence on the association of structural, institutional, and policy determinants with this heterogeneity.

Three key findings emerge. First, pre-pandemic inflation levels and the scale of the energy price shock explain most of the cross-country variation in post-COVID inflation (85 percent). Countries that entered the pandemic with lower inflation saw smaller price increases, while those with historically higher inflation experienced far greater price surges. Similarly, domestic energy prices were strong and consistent drivers of headline inflation outcomes. In contrast, many commonly cited factors, such as development level, monetary regime, trade openness, reserve accumulation, or governance, show no statistically significant association with inflation outcomes. However, some of these slow-moving factors may still influence inflation outcomes indirectly via their association with pre-pandemic inflation.

Second, the strength of supply-shock transmission to domestic prices has intensified in the post-COVID period. Local projection estimates indicate that the pass-through from energy prices to headline inflation has roughly tripled in the post-pandemic period relative to the pre-COVID years. This heightened sensitivity reflects both the exceptional scale of recent global supply shocks and the erosion of some inflation-dampening forces that prevailed during the 2010s. The pass-through is systematically larger in emerging markets, in economies without inflation-targeting frameworks (pointing to weaker expectations anchoring in these countries), and in countries that have made less use on fossil fuel subsidies to counter the impact of supply shocks.

Third, policy and institutional variables exert a more nuanced role. While indicators of governance quality, central bank independence, and macro-financial policies generally exhibit no direct statistical association with post-COVID inflation, some variables become relevant when interacted with supply shocks. Countries that had relatively higher fossil fuel subsidies are associated with lower inflation, reflecting the mechanical dampening of energy price shocks, though at the expense of fiscal strain and potential long-term inefficiencies.<sup>8</sup> This relationship, however, should not be interpreted as causal, given

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<sup>8</sup> The case of Switzerland illustrates this point vividly. Despite facing similar external shocks, inflation there remained well below peers. One reason may be the structure of its CPI basket, where a large share of prices, such as health, housing, and energy, are administratively regulated. This suggests that not only institutional credibility but also the design of price-setting mechanisms can cushion pass-through. Similarly, as our analysis shows, energy subsidies effectively reduced pass-through where they were scaled up post-COVID, echoing the observation that fiscal designs may have stabilized prices beyond what conventional indicators would predict.

the likely endogeneity of policy choices. Conversely, the positive association between macroprudential tightening and foreign exchange interventions with inflation likely reflects endogeneity, as inflationary pressures may have triggered a policy response rather than the reverse.

Taken together, the findings underscore that the 2020–2024 inflation episode was predominantly a supply-driven shock, with domestic consequences shaped by pre-existing inflation management credibility and countries' exposure to energy price swings. Structural features and policy choices influenced outcomes mainly through their effects on shock absorption and expectations anchoring, rather than as standalone inflation drivers.

The findings carry several implications for policy design in an era of recurrent supply shocks:

- *Re-anchoring inflation expectations is essential.* Countries with historically low and stable inflation experienced milder post-COVID surges, highlighting the long-term value of credible monetary policy frameworks, particularly inflation-targeting regimes.
- *Energy price volatility remains a central transmission channel.* Strengthening energy security and diversifying energy sources can materially reduce exposure to global shocks and inflation vulnerability.
- *Temporary, targeted price-stabilizing measures can moderate inflation but must be balanced against fiscal sustainability.* Fuel subsidies effectively dampened short-term inflation but pose long-term efficiency and debt concerns.

As supply shocks become more frequent in an era of geopolitical fragmentation and climate transition, understanding the determinants of inflation persistence, beyond inflation peaks alone, will be increasingly central to monetary and fiscal policy design in response to future shocks. This paper provides systematic evidence that countries' inflation experiences during the pandemic and its aftermath were associated more with initial macroeconomic credibility and anchored inflation expectations than traditional fundamental, institutional, and policy factors. Future work could build on these findings by examining nonlinearities and the interplay between fiscal and monetary policy during large global shocks.

## References

- Adler, Gustavo, Kyun Suk Chang, Rui Mano, and Yuting Shao. 2025. "Foreign Exchange Intervention: A Data Set of Official Data Estimates." *Journal of Money, Credit and Banking* 57 (5): 1241-1273.
- Amaglobeli, David, Mengfei Gu, Emine Hanedar, Gee Hee Hong, and Celine Thevenot. 2023. "Policy Responses to High Energy and Food Prices." IMF Working Paper 23/74, International Monetary Fund
- Andersen, Robert. 2008. *Modern Methods for Robust Regression* (Thousand Oaks, California: SAGE Publications).
- Baba, Chikako, and Jaewoo Lee. 2022. "Second-Round Effects of Oil Price Shocks—Implications for Europe's Inflation Outlook." IMF Working Paper 22/173, International Monetary Fund
- Blanchard, Olivier and Ben S. Bernanke. 2023. "What Caused the U.S. Pandemic-Era Inflation?" NBER Working Paper No. 31417. National Bureau of Economic Research No. 31417  
<https://www.nber.org/papers/w31417>
- Blanchard, Olivier and Ben S. Bernanke. 2024. "An Analysis of Pandemic-Era Inflation in 11 Economies." NBER Working Paper No. 32532. National Bureau of Economic Research No.32532  
<https://www.nber.org/papers/w32532>
- Besley, Timothy, and Torsten Persson. 2019. "The Origins of State Capacity: Property Rights, Taxation, and Politics." *American Economic Review* 99 (4): 1218–1244
- Blinder, Alan. 2026. "The Monetary Policy Response" <https://www.piie.com/events/2026/worst-inflation-outbreak-40-years-conference-distilling-lessons-covid-era>
- Borio, Claudio, and Boris Hofmann. 2024. "Is This the Return of Monetary Aggregates?" BIS Working Papers No. 1167. Bank for International Settlements.
- Borio, Claudio, and Hyun Song Shin. 2024. "Inflation, Financial Cycles, and Policy Tradeoffs in a Post-Pandemic World." BIS Working Paper No. 1149. Basel: Bank for International Settlements.  
<https://www.bis.org/publ/work1149.htm>
- Calmfors, Lars, and John Driffill. 1988. "Centralization of Wage Bargaining and Macroeconomic Performance." *Economic Policy* 3 (6): 13–61.
- Cœuré, Benoît. 2019. "Heterogeneity and the ECB's monetary policy" Speech at the Banque de France Symposium & 34th SUERF Colloquium on the occasion of the 20th anniversary of the euro, Paris, 29 March 2019 <https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190329~da3110cea9.en.html>
- Coibion, Olivier, and Yuriy Gorodnichenko. 2012. "What Can Survey Forecasts Tell Us about Informational Rigidities?" *Journal of Political Economy* 120 (1): 116–159.
- Coibion, Olivier, and Yuriy Gorodnichenko. 2015. "Information Rigidity and the Expectations Formation Process: A Simple Framework and New Facts." *American Economic Review* 105 (8): 2644–2678
- Dao, Mai Chi, Ipppei Shibata, and Damiano Sandri. 2024. "Inflation after the Pandemic: Lessons from the Global Experience." IMF Working Paper No. 24/15. Washington, DC: International Monetary Fund.
- De Jonghe, Olivier & Benkovskis, Konstantins & Bielskis, Karolis & Bonfim, Diana & Bottero, Margherita & Briglevics, Tamás & Cesnak, Martin & Dirma, Mantas & Emiris, Marina & Filep-Mosberger, Pálma. 2025.

- "Household borrowing and monetary policy transmission: post-pandemic insights from nine European credit registers," Working Paper Series 3146, European Central Bank
- Dynan, Karen and Douglas Elmendorf. 2024. "Fiscal Policy and the Pandemic-Era Surge in US Inflation." Peterson Institute for International Economics Working Paper 24-22. December.
- English, William B., Kristin J. Forbes, and Ángel Ubide, eds. 2024. *Monetary Policy Responses to the Post-Pandemic Inflation*. London: Centre for Economic Policy Research Press.
- Fatás, A. 2024. "The resurgence of inflation: Why was emerging Asia different?", CEPR Discussion Paper No. 19445. <https://cepr.org/publications/dp19445>
- Gagnon, Joseph E., and Steven B. Kamin. 2025. "The Role of Long Histories of 'Lived Experience' in the COVID-Era Inflationary Surge." PIIE Working Paper 25-7, Peterson Institute for International Economics, April 30, 2025.
- Gagnon, Joseph, and Asher Rose. 2024. "The Trinity of COVID Era Inflation in G7 Economies." PIIE Working Paper 24-21. Washington: Peterson Institute for International Economics. Available at <https://www.piie.com/sites/default/files/2024-12/wp24-21.pdf>
- Gopinath, Gita. 2022. "Global Inflation Challenges." Remarks at the Jackson Hole Economic Symposium, Federal Reserve Bank of Kansas City, August 26. <https://www.imf.org/en/news/articles/2022/08/26/sp-gita-gopinath-remarks-at-the-jackson-hole-symposium>
- Ha, Jongrim, Ayhan M. Kose, and Franziska Ohnsorge. 2023. "One-Stop Source: A Global Database of Inflation." *Journal of International Money and Finance* 137: 102896.
- Haldane, Andrew G. 2022. "Inflation, Trust, and the Social Contract." SUERF Policy Brief No. 324. Vienna: SUERF—The European Money and Finance Forum. <https://www.suerf.org/publications/>
- Hsu, Joanne. 2024. "The influence of gasoline and food prices on consumer expectations and attitudes in the COVID era." PIIE Policy Brief 24-3. Washington: Peterson Institute for International Economics. Available at <https://www.piie.com/publications/policy-briefs/2024/influence-gasoline-and-foodprices-consumer-expectations-and>
- Imam, Patrick Amir and Tigran Poghosyan. 2025. "Navigating the 2022 Inflation Surge: A Comparative Analysis of IT and Non-IT Central Banks." IMF Working Paper No. 25/212. Washington, DC: International Monetary Fund.
- International Monetary Fund. 2016. *World Economic Outlook: Subdued Demand—Symptoms and Remedies*. Washington, DC: IMF.
- International Monetary Fund. 2022. *World Economic Outlook, October 2022: Countering the Cost-of-Living Crisis, October 2022*. Washington, DC: IMF.
- International Monetary Fund. 2024. *World Economic Outlook, April 2024: Navigating Global Divergences, April 2024*. Washington, DC: IMF.
- International Monetary Fund (IMF). 2025. *World Economic Outlook: Inflation and Policy Lessons*. Washington, DC: IMF. Chapter 2.
- Milesi-Ferretti, Gian Maria. 2024. "The COVID Shock and Global Adjustment." *Brookings Papers on Economic Activity* (Spring): 1–56. <https://www.brookings.edu/articles/the-covid-shock-and-global-adjustment/>

- Reifschneider, David. 2024. "Lessons for Monetary Policy from the Post-Pandemic Inflation Episode." FEDS Notes, Board of Governors of the Federal Reserve System, February 23, 2024.
- Reis, Ricardo. 2021. "Losing the Inflation Anchor." *Brookings Papers on Economic Activity* (Fall): 307–361. <https://www.brookings.edu/articles/losing-the-inflation-anchor/>
- Romelli, Davide. 2023. "The Political Economy of Central Bank Independence." *Journal of Monetary Economics* 137: 1–18.
- Stracca, Livio. 2025. "The Great Moderation at 40: Learning from the Cross Section." ECB Working Paper 3124. Available at: <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp3124~475c23447f.en.pdf>
- Stiglitz, Joseph E. 2022. "The Return of Inflation and the Future of Stabilization Policy." NBER Working Paper No. 30512. Cambridge, MA: National Bureau of Economic Research. <https://www.nber.org/papers/w30512>
- World Bank. 2024. *World Development Indicators*. Washington, DC: World Bank. <https://databank.worldbank.org/source/world-development-indicators>

## Annex I: Robustness checks for cross-sectional regressions

**Table A\_I\_1. Robustness check: The impact of country-specific characteristics  
(Robust regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Pre-COVID inflation	0.665*** (0.054)	0.702*** (0.056)	0.885*** (0.052)	0.839*** (0.060)	0.827*** (0.060)	0.826*** (0.059)	0.831*** (0.057)	0.867*** (0.066)
IT dummy	0.335 (0.452)							-0.753 (0.854)
AE dummy		0.366 (0.471)						0.655 (0.895)
Exchange rate peg dummy			-1.156** (0.495)					-1.392* (0.807)
Expenditure rule dummy				0.705 (0.476)				1.166* (0.643)
Revenue rule dummy					-0.268 (0.636)			-2.249** (1.002)
Balanced budget rule dummy						0.707 (0.742)		1.072 (0.927)
Debt rule dummy							1.220** (0.607)	1.712** (0.723)
Constant	3.300*** (0.268)	3.194*** (0.291)	2.943*** (0.413)	2.678*** (0.417)	3.179*** (0.315)	2.518*** (0.712)	2.156*** (0.575)	1.014 (1.202)
Observations	129	129	84	90	90	90	90	56
R-squared	0.546	0.567	0.786	0.696	0.688	0.693	0.711	0.811

Source: World Bank's global inflation dataset (Ha and others, 2023), IMF fiscal rules database, AREAER, WEO, and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the robust regression estimator that downweights observations with larger absolute residuals using iterative weighted least squares (Andersen, 2008). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_2. Robustness check: The impact of fundamental factors  
(Robust regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Pre-COVID inflation	0.576*** (0.071)	0.675*** (0.059)	0.731*** (0.059)	0.830*** (0.051)	0.675*** (0.060)	0.764*** (0.056)	0.640*** (0.066)	0.676*** (0.110)	0.551*** (0.167)
Post-COVID energy inflation	0.259*** (0.033)								0.153*** (0.033)
Post-COVID real GDP growth		0.090 (0.121)							0.068 (0.132)
Change in FX reserves/GDP ratio			-0.012 (0.028)						-0.004 (0.026)
Post-COVID trade openness				-0.000 (0.003)					-0.001 (0.003)
Pre-COVID life expectancy					-0.007 (0.029)				-0.089** (0.042)
Post-COVID share of >65 population						0.088*** (0.028)			0.090** (0.039)
Post-COVID REER growth							0.421*** (0.087)		0.290*** (0.088)
Pre-COVID inflation volatility								0.002 (0.097)	0.066 (0.093)
Constant	2.289*** (0.248)	3.165*** (0.364)	3.164*** (0.270)	3.068*** (0.431)	3.897* (2.272)	2.145*** (0.438)	3.116*** (0.262)	3.342*** (0.297)	8.091*** (3.013)
Observations	103	126	120	120	126	129	120	127	87
R-squared	0.787	0.523	0.573	0.697	0.564	0.603	0.522	0.483	0.782

Source: World Bank's global inflation dataset (Ha and others, 2023), WEO, WDI, and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the robust regression estimator that downweights observations with larger absolute residuals using iterative weighted least squares (Andersen, 2008). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_3. Robustness check: The impact of institutional factors  
(Robust regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Pre-COVID inflation	0.678*** (0.059)	0.804*** (0.056)	0.628*** (0.114)	0.679*** (0.060)	0.706*** (0.058)	0.714*** (0.056)	0.706*** (0.060)	0.685*** (0.056)	0.663*** (0.056)	0.683*** (0.057)	0.678*** (0.057)	0.685*** (0.061)	0.674*** (0.062)	0.617*** (0.055)	0.830*** (0.158)
Post-COVID rule of law index	-0.011 (0.224)														0.850 (0.770)
Post-COVID CB independence index		5.018*** (1.375)													3.837* (1.926)
Pre-COVID trade union density rate			-0.007 (0.014)												-0.006 (0.017)
Post-COVID political stability index				0.001 (0.245)											0.749 (0.701)
Post-COVID liberal democracy index					1.062 (0.805)										-0.116 (5.922)
Post-COVID freedom of expression index						1.601** (0.765)									2.737 (3.133)
Post-COVID clean election index							0.819 (0.700)								1.067 (3.217)
Post-COVID legislative constraints index								0.522 (0.699)							-2.016 (2.281)
Post-COVID range of consultation index									-0.033 (0.174)						-1.207** (0.532)
Post-COVID engaged society index										0.093 (0.190)					0.231 (0.646)
Post-COVID public goods index											0.140 (0.200)				0.405 (0.371)
Post-COVID public administration index												0.070 (0.150)			-0.093 (0.428)
Post-COVID public corruption index													-0.099 (0.762)		1.724 (2.132)
Post-COVID electoral regime index														1.160*** (0.412)	0.833 (0.596)
Constant	3.357*** (0.277)	-0.544 (1.066)	3.755*** (0.499)	3.349*** (0.269)	2.817*** (0.500)	2.150*** (0.618)	2.800*** (0.571)	3.059*** (0.534)	3.500*** (0.344)	3.296*** (0.362)	3.274*** (0.346)	3.334*** (0.332)	3.467*** (0.338)	2.878*** (0.346)	-1.354 (2.343)
Observations	129	110	85	129	119	119	119	119	119	119	119	119	119	119	77
R-squared	0.557	0.661	0.277	0.557	0.566	0.587	0.560	0.561	0.551	0.559	0.555	0.554	0.554	0.555	0.482

Source: World Bank's global inflation dataset (Ha and others, 2023), V-DEM, Romelli (2023), and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the robust regression estimator that downweights observations with larger absolute residuals using iterative weighted least squares (Andersen, 2008). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_4. Robustness check: The impact of policies  
(Robust regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Pre-COVID inflation		0.824*** (0.061)	0.708*** (0.062)	0.681*** (0.056)	0.702*** (0.055)	0.603*** (0.058)	0.795*** (0.088)
Change in central bank policy rate		0.558*** (0.133)					0.182 (0.109)
Change in macroprudential instruments			1.105*** (0.415)				0.795 (0.566)
Change in Debt/GDP ratio				-0.044*** (0.015)			-0.092*** (0.031)
Change in fossil fuel subsidies in % of GDP					-0.280 (0.185)		-0.084 (0.326)
Change in average REER appreciation						0.296*** (0.058)	0.094 (0.080)
Post-COVID FX interventions in % of GDP							1.195* (0.601) (0.908)
Constant		2.817*** (0.314)	3.691*** (0.286)	3.729*** (0.292)	3.409*** (0.271)	3.197*** (0.251)	4.066*** (0.643)
Observations		84	104	126	119	121	53
R-squared		0.705	0.575	0.558	0.591	0.506	0.700

Source: World Bank's global inflation dataset (Ha and others, 2023), WEO, WDI, IMF iMap, Adler and others. (2024), and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using the robust regression estimator that downweights observations with larger absolute residuals using iterative weighted least squares (Andersen, 2008). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_5. Robustness check: The impact of country-specific characteristics (Quantile regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Pre-COVID inflation	0.909*** (0.059)	0.917*** (0.059)	0.945*** (0.059)	0.872*** (0.063)	0.872*** (0.067)	0.870*** (0.066)	0.894*** (0.068)	0.946*** (0.073)
IT dummy	-0.091 (0.620)							-2.239** (0.954)
AE dummy		0.553 (0.636)						0.965 (1.000)
Exchange rate peg dummy			-1.286** (0.569)					-2.281** (0.901)
Expenditure rule dummy				0.571 (0.503)				1.580** (0.718)
Revenue rule dummy					-0.399 (0.710)			-1.805 (1.119)
Balanced budget rule dummy						0.784 (0.833)		1.509 (1.035)
Debt rule dummy							1.190 (0.720)	1.154 (0.807)
Constant	2.854*** (0.350)	2.590*** (0.368)	2.748*** (0.475)	2.602*** (0.441)	3.173*** (0.352)	2.407*** (0.799)	2.190*** (0.682)	1.201 (1.342)
Observations	130	130	84	90	90	90	90	56

Source: World Bank's global inflation dataset (Ha and others, 2023), IMF fiscal rules database, AREAER, WEO, and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using quantile regression for the median. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_6. Robustness check: The impact of fundamental factors (Quantile regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Pre-COVID inflation	0.921*** (0.134)	0.910*** (0.059)	0.903*** (0.061)	0.821*** (0.048)	0.891*** (0.070)	0.928*** (0.070)	0.823*** (0.062)	0.919*** (0.099)	0.704*** (0.264)
Post-COVID energy inflation	0.387*** (0.052)								0.420*** (0.057)
Post-COVID real GDP growth		-0.000 (0.074)							0.127 (0.214)
Change in FX reserves/GDP ratio			-0.022 (0.031)						-0.002 (0.045)
Post-COVID trade openness				-0.002 (0.003)					-0.002 (0.005)
Pre-COVID life expectancy					-0.032 (0.043)				-0.075 (0.071)
Post-COVID share of >65 population						0.060 (0.044)			-0.029 (0.066)
Post-COVID REER growth							0.446*** (0.094)		0.322** (0.140)
Pre-COVID inflation volatility								-0.025 (0.070)	-0.021 (0.156)
Constant	1.152** (0.455)	2.827*** (0.362)	2.872*** (0.349)	3.258*** (0.425)	5.419 (3.318)	2.027*** (0.671)	2.766*** (0.357)	2.910*** (0.387)	7.244 (5.034)
Observations	104	129	122	121	127	130	124	130	88

Source: World Bank's global inflation dataset (Ha and others, 2023), WEO, WDI, and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using quantile regression for the median. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_7. Robustness check: The impact of institutional factors (Quantile regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Pre-COVID inflation	0.915*** (0.062)	0.915*** (0.078)	0.718*** (0.106)	0.911*** (0.061)	0.919*** (0.061)	0.913*** (0.061)	0.916*** (0.063)	0.914*** (0.062)	0.911*** (0.062)	0.912*** (0.062)	0.913*** (0.071)	0.910*** (0.070)	0.910*** (0.071)	0.921*** (0.072)	1.045*** (0.193)
Post-COVID rule of law index	0.126 (0.297)														0.726 (1.090)
Post-COVID CB independence index		4.561* (2.473)													4.724* (2.720)
Pre-COVID trade union density rate			-0.002 (0.015)												-0.006 (0.024)
Post-COVID political stability index				0.081 (0.320)											1.605 (0.974)
Post-COVID liberal democracy index					1.063 (1.068)										4.146 (8.326)
Post-COVID freedom of expression index						1.058 (1.067)									-1.147 (4.445)
Post-COVID clean election index							0.792 (0.927)								0.190 (4.528)
Post-COVID legislative constraints index								0.589 (0.981)							-0.966 (3.229)
Post-COVID range of consultation index									0.095 (0.242)						-1.275* (0.746)
Post-COVID engaged society index										0.084 (0.260)					0.545 (0.916)
Post-COVID public goods index											0.087 (0.320)				0.313 (0.527)
Post-COVID public administration index												0.075 (0.218)			-0.339 (0.581)
Post-COVID public corruption index													-0.393 (1.123)		1.776 (3.017)
Post-COVID electoral regime index														0.900 (0.886)	0.998 (0.844)
Constant	2.758*** (0.342)	-0.590 (1.881)	3.419*** (0.518)	2.836*** (0.329)	2.342*** (0.639)	2.189** (0.849)	2.392*** (0.728)	2.585*** (0.746)	2.826*** (0.460)	2.802*** (0.479)	2.768*** (0.529)	2.821*** (0.447)	3.007*** (0.511)	2.426*** (0.577)	-2.225 (3.302)
Observations	130	111	86	130	120	120	120	120	120	120	120	120	120	120	78

Source: World Bank's global inflation dataset (Ha and others, 2023), V-DEM, Romelli (2023), and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using quantile regression for the median. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_8. Robustness check: The impact of policies (Quantile regression)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Pre-COVID inflation		0.889*** (0.067)	0.889*** (0.072)	0.897*** (0.066)	0.922*** (0.070)	0.805*** (0.069)	0.925*** (0.069)
Change in central bank policy rate		0.398*** (0.139)					0.471** (0.220)
Change in macroprudential instruments			1.135* (0.672)				0.735 (1.139)
Change in Debt/GDP ratio				-0.034 (0.023)			-0.066 (0.062)
Change in fossil fuel subsidies in % of GDP					-0.237 (0.301)		0.137 (0.658)
Change in average REER appreciation						0.344*** (0.069)	-0.066 (0.157)
Post-COVID FX interventions in % of GDP							1.192 (0.755)
Constant		2.603*** (0.427)	3.433*** (0.433)	3.117*** (0.439)	2.896*** (0.409)	2.765*** (0.392)	2.028*** (0.432)
Observations		86	105	127	120	124	85

Source: World Bank's global inflation dataset (Ha and others, 2023), WEO, WDI, IMF iMap, Adler and others. (2024), and authors' calculations.

Note: The dependent variable is the post-COVID inflation. Estimations are performed using quantile regression for the median. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table A\_I\_9. Robustness check: The impact of country-specific characteristics  
(Using 2015Q1-2019Q4 inflation as dependent variable, and 2010Q1-2014Q4 inflation as control)**

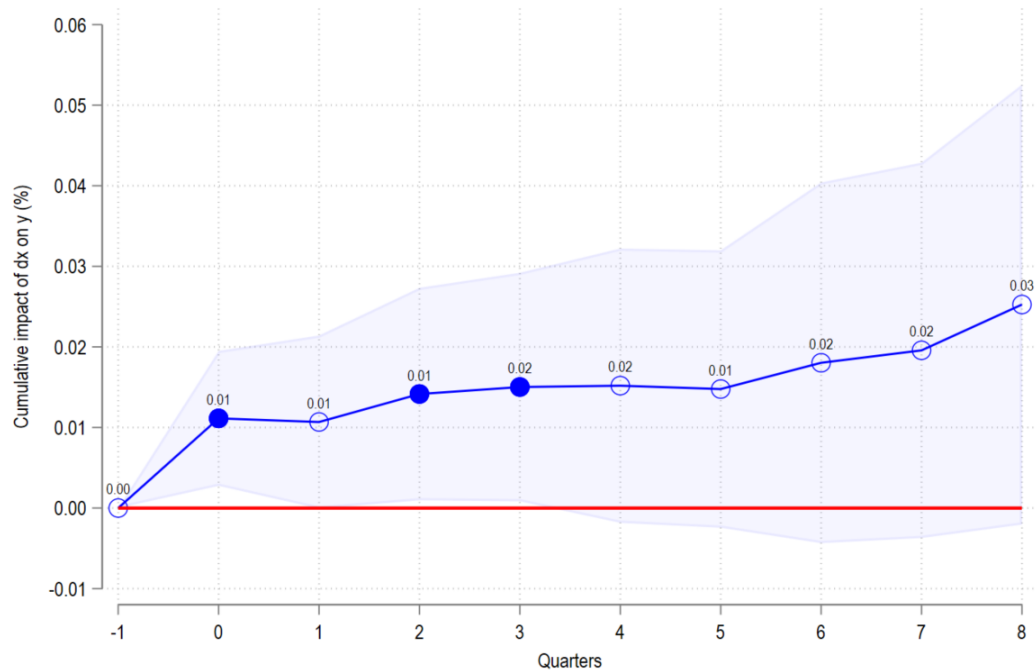
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2010Q1-2014Q4 inflation	0.435** (0.198)	0.414** (0.199)	0.361* (0.201)	0.814*** (0.238)	0.821*** (0.245)	0.824*** (0.246)	0.828*** (0.246)	0.997** (0.415)
IT dummy	0.018 (0.497)							-0.410 (1.049)
AE dummy		-1.219* (0.647)						0.464 (1.403)
Exchange rate peg dummy			0.572 (0.885)					-0.742 (0.986)
Expenditure rule dummy				-0.598 (0.560)				-1.165 (0.745)
Revenue rule dummy					-1.117** (0.563)			-1.707 (1.769)
Balanced budget rule dummy						-0.944 (1.243)		-0.304 (0.928)
Debt rule dummy							0.014 (0.422)	0.510 (0.713)
Constant	1.444* (0.843)	1.762* (0.959)	1.898** (0.873)	0.031 (0.558)	-0.113 (0.643)	0.484 (1.262)	-0.341 (0.908)	0.164 (2.289)
Observations	169	169	98	110	110	110	110	63
R-squared	0.254	0.263	0.212	0.346	0.351	0.348	0.341	0.402

Source: World Bank's global inflation dataset (Ha and others, 2023), IMF fiscal rules database, AREAER, WEO, and authors' calculations.

Note: The dependent variable is the 2015Q1-2019Q4 inflation. Estimations are performed using quantile regression for the median. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## Annex II: Pass-through to core inflation

Figure A\_II\_1. Energy price pass-through to core inflation: Total sample



Note: The figure shows the cumulative impact of a 1 percent change of energy prices on core CPI inflation. The line denotes point estimates and the shaded area denotes the 95 percent confidence interval based on robust standard errors. Filled circles indicate significance.

## Annex III: Variables and their sources

**Table A\_III\_1. List of IT and non-IT countries**

IT countries	Non-IT countries
1 Albania	1 Algeria
2 Armenia (Strong)	2 Azerbaijan
3 Australia	3 Bahamas
4 Brazil	4 Bahrain
5 Canada (Strong)	5 Belarus
6 Chile	6 BosniaandHerzegovina
7 Colombia	7 Botswana
8 Czechia (Strong)	8 BruneiDarussalam
9 DominicanRepublic	9 Bulgaria
10 Georgia (Strong)	10 CapeVerde
11 Hungary	11 China
12 Iceland (Strong)	12 CostaRica
13 India	13 Denmark
14 Indonesia (Strong)	14 Ecuador
15 Israel (Strong)	15 ElSalvador
16 Japan (Strong)	16 Fiji
17 Kazakhstan	17 HongKongSAR
18 Korea (Strong)	18 Jamaica
19 Mexico (Strong)	19 Jordan
20 NewZealand (Strong)	20 Kuwait
21 Norway	21 Macedonia
22 Paraguay (Strong)	22 Malaysia
23 Peru (Strong)	23 Mauritius
24 Philippines	24 Mongolia
25 Poland	25 Montenegro
26 Romania (Strong)	26 Morocco
27 Russia (Strong)	27 Oman
28 Serbia (Strong)	28 SaintKittsAndNevis
29 SouthAfrica	29 SaudiArabia
30 Sweden	30 Singapore
31 Thailand	31 Switzerland
32 UnitedKingdom	32 Tonga
33 Uruguay (Strong)	33 TrinidadandTobago
	34 Tunisia
	35 UnitedArabEmirates
	36 UnitedStates
	37 Vietnam

Source: IMF AREAER, 2023 vintage, which is based on the de jure classification of monetary policy regimes. From the initial sample of 40 IT countries in the AREAER we have excluded Finland and Spain given that they have adopted Euro since then. In addition, we have excluded Ghana, Guatemala, Moldova, Turkiye and Uganda, since they have experienced very high annual inflation rates (more than 10 percent) in the pre-COVID sample which casts doubt on their de facto IT implementation. Ukraine is removed from the IT sample given the exceptional wartime circumstances and Euro Area is removed from the sample since it is a special arrangement consisting of a group of countries making it incompatible with the rest of the sample.

Table A\_III\_2. Variable definition and sources

Variable	Definition	Sources	Variable	Definition	Sources
<i>infl</i>	Growth in CPI index (headline or core), y/y, percent (log diff)	Ha and others (2023), World Bank	Rule of law index	Index measuring the perceptions of the rule of law	World Bank's Worldwide Governance Indicators (WGI)
<i>infl_e</i>	Growth in energy price index, y/y, percent (log diff)	Ha and others (2023), World Bank	CB independence index	Central Bank Independence score (de jure)	Romelli (2022, 2024)
IT dummy	Dummy: =1 for IT countries	IMF AREAER	Trade union density rate	The share of workers who are union members	OECD
AE dummy	Dummy: =1 for advanced economies	IMF WEO	Political stability index	Index measuring the perceptions of political stability	World Bank's Worldwide Governance Indicators (WGI)
Exchange rate peg dummy	Dummy: =1 for countries pegging their exchange rate	Adler and others (2025)	Liberal democracy index	Extent of liberal democracy	V-DEM
Expenditure rule dummy	Dummy: =1 for countries with expenditure rule	IMF fiscal rules dataset	Freedom of expression index	Extent to which governments respect	V-DEM
Revenue rule dummy	Dummy: =1 for countries with revenue rule	IMF fiscal rules dataset	Clean election index	Extent to which election violence, government intimidation, fraud, large irregularities, and vote buying are absent	V-DEM
Balanced budget rule dummy	Dummy: =1 for countries with balanced budget rule	IMF fiscal rules dataset	Legislative constraints index	Measure of how effectively legislatures and oversight agencies investigate and constrain government actions	V-DEM
Debt rule dummy	Dummy: =1 for countries with debt rule	IMF fiscal rules dataset	Range of consultation index	Extent of consultations across political elites	V-DEM
Real GDP growth	Growth in real GDP, y/y, percent (log diff)	IMF WEO	Engaged society index	Extent to which ordinary people independently discuss important policy changes among themselves	V-DEM
FX reserves/GDP ratio	Ratio of foreign exchange reserves over GDP (percent)	World Bank	Public goods index	Extent to which public goods are distributed equally across a society	V-DEM
Trade openness	Sum of trade export and import over GDP (percent)	World Bank	Public administration index	Extent to which public officials follow the law and show no favoritism or discrimination	V-DEM
Life expectancy	Life expectancy at birth (years)	UNDP	Public corruption index	Measure of corruption	V-DEM
Share of >65 population	Share of >65 population in total population (percent)	World Bank	Electoral regime index	Extent to which political systems adhere to democratic principles	V-DEM
REER growth	Growth in REER index, y/y, percent (log diff)	IMF WEO	Central bank policy rate	Central bank policy rate	LSEG
Inflation volatility	Standard deviation of CPI inflation (percent)	Ha and others (2023), Worldbank	Macroprudential instruments	Summary of changes in 17 macroprudential indices	IMF IMaPP dataset
FX interventions in % of GDP	Purchase or sale of FX (percent of GDP)	Adler and others (2025)	Debt/GDP ratio	Public debt as a share of GDP	IMF WEO
Fossil fuel subsidies in % of GCI	Total explicit fossil fuel subsidies as a share of GDP	IMF, Amaglobeli and others (2023)			



# PUBLICATIONS

**One Global Shock, Many Inflation Paths:  
Explaining Post-COVID Inflation Divergence**  
Working Paper No. WP/2026/103