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Inflation Tales: the Heterogenous Price Effects from Current Account Dynamics*

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Abstract

This paper examines the impact of current account balances on energy, headline, and core inflation across developed and developing economies from 1980 to 2023. Using Panel OLS fixed effects, Panel-IV 2SLS and Panel Vector Autoregressive models, we find that an improvement in the current account consistently leads to lower inflation, with heterogeneous effects across inflation components, even when controlling for monetary policy. Our analysis also explores regional differences and contrasts the periods before and after the 2008 subprime crisis, revealing that current account surpluses had a stronger deflationary effect in the more recent period. There is also a negative link between cyclical unemployment and inflation supporting the traditional Phillips curve perspective. These results suggest that policies aimed at improving current account balances, particularly in energy-importing countries, could help mitigate inflationary pressures.

JEL: E31, F32, Q43, C33

Keywords: Current Account, Energy Inflation, Headline Inflation, Core Inflation, Panel Data, VAR, Subprime Crisis, Inflation Dynamics, Monetary Policy.

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1. Introduction

The relationship between current account balances and inflation has gained increasing relevance in today's global economy, especially in the context of rising inflation and energy price volatility. As many countries face inflationary pressures driven by global energy supply disruptions and economic imbalances, understanding how current account fluctuations affect inflation components – such as energy, headline, and core inflation – has become crucial. In 2022, energy prices contributed to over 50 percent of headline inflation in the euro area, largely due to external imbalances and volatile global energy markets (ECB, 2022). Many energy-importing countries have experienced even sharper inflation surges, especially emerging markets that are vulnerable to external price shocks. Against this backdrop, this paper aims to explore the role of current account balances in shaping inflationary dynamics across different components of inflation, focusing particularly on energy inflation, which has been a central driver of recent inflationary episodes.

The motivation for this paper stems from the need to understand better, how external balances influence inflation, particularly in the context of today's interconnected and volatile global economy. Globalization and financial integration have significantly reshaped the interactions between current account balances and inflation. In recent years, energy price shocks have been identified as a key driver of inflation in many economies. For instance, during the 2021-2022 period, energy price shocks contributed nearly 30 percent to core inflation in the euro area, while their impact on core inflation in the US was less than 0.5 percent (CEPR, 2023). This stark contrast underscores the importance of understanding the varying impact of current account fluctuations on inflation across different regions. Moreover, the global financial landscape has undergone major structural changes since the 2008 financial crisis, further affecting how current account balances interact with inflation.

The central research question of this paper is how do current account balances affect inflation across different components, such as energy, headline, and core inflation, over time and across regions? We also ask whether the effects of current account balances have shifted following the 2008 subprime crisis. Additionally, we investigate how different inflation components are impacted by current account imbalances, as well as interacting with other mechanisms.

To address these questions, we use a panel dataset covering developed and developing economies from 1980 to 2023. The dataset includes a variety of macroeconomic

variables, such as inflation components (energy, headline, and core), current account balances, exchange rates, and global energy price indices. Our empirical strategy combines Panel OLS fixed effects, Panel Instrumental Variables Two-Stage Least Squares (2SLS) and Panel Vector Autoregressive (VAR) models to capture both the short- and long-term dynamics between current account balances and inflation. These methods also allow for robust treatment of endogeneity, ensuring that the uncovered relationships are not spurious but reflect deeper economic interactions. We further break the analysis into two sub periods – pre- and post-subprime crisis – to examine how structural changes in the global economy may have altered the effects of current account imbalances on inflation.

Our findings suggest a robust negative relationship between current account surpluses and inflation across all components – energy, headline, and core inflation. Post 2008, the impact of current account surpluses on inflation is more pronounced, likely due to structural changes in global economic dynamics. Further, regional analysis highlights that the significance of current account balances varies: core inflation in Europe, headline inflation in the Americas, and core inflation in Asia.

The theoretical mechanisms behind these findings are grounded in standard macroeconomic models that link the current account to inflation through multiple channels. According to the monetary approach to the balance of payments (Frenkel and Johnson, 2013), a current account surplus is associated with an excess of savings over investment, leading to upward pressure on the domestic currency. Currency appreciation, in turn, lowers the price of imported goods, particularly energy, which helps reduce inflation. Conversely, current account deficits are often associated with currency depreciation, leading to higher import costs and inflation. This channel is particularly relevant in the context of energy prices, as many economies depend heavily on imported energy, which exposes them to external price shocks. Additionally, the purchasing power parity (PPP) theory (Dornbusch, 1980) suggests that exchange rate movements triggered by current account imbalances directly influence domestic prices, particularly through the cost of imported goods. These theoretical insights are consistent with our empirical results, which show that current account surpluses help mitigate inflationary pressures, especially in the energy sector.

Our findings have significant policy implications, particularly for countries seeking to manage inflation. For energy-importing nations, maintaining a current account surplus can serve as an important tool to buffer against global energy price shocks. By improving

export competitiveness or reducing dependence on energy imports, these countries can strengthen their current account balances, which in turn helps stabilize domestic inflation. This is especially relevant in today's context of geopolitical uncertainty and volatile global energy markets. Policymakers in emerging markets, which are more susceptible to external shocks, should focus on fiscal and trade policies that help improve their current account positions as a means of controlling inflation. Furthermore, the post-2008 global economic environment has highlighted the need for better monetary and fiscal coordination to ensure that current account imbalances do not exacerbate inflationary pressures.

The remainder of this paper is structured as follows. Section 2 reviews the theoretical and empirical literature on the relationship between current account balances and inflation, with a focus on energy prices. Section 3 details the data and methodology used in the analysis. Section 4 presents the empirical findings, including comparisons between regions and periods. Section 5 concludes and discusses the policy implications of these results.

2. Literature Review

The current account, which reflects a country's net trade balance, as well as net income and transfers with the rest of the world, is influenced by several economic factors such as exchange rates, competitiveness, domestic savings, and investment. Changes in the current account have important implications for inflation dynamics, which has been the focus of both theoretical and empirical research. This literature review delves into these relationships and highlights how this paper contributes by examining the sectoral and component-specific impacts of current account fluctuations, particularly in the context of inflation dynamics across a diverse set of countries.

From a theoretical perspective, two primary frameworks have guided the analysis of the relationship between the current account and inflation: Purchasing Power Parity (PPP) and Monetary Models. Purchasing Power Parity (PPP) posits that changes in the current account affect inflation via exchange rate adjustments. A current account deficit, which results in the outflow of domestic currency to pay for imports, increases demand for foreign currencies, leading to domestic currency depreciation. This depreciation raises import prices, thereby contributing to inflation. Conversely, current account surpluses appreciate the domestic currency, lowering import prices and suppressing inflation. While this mechanism remains central in explaining the link between the current account and

inflation, empirical evidence has raised questions about its strength. For instance, Chinn and Prasad (2003) argue that market imperfections, non-tradable goods, and trade barriers complicate the pass-through of exchange rate changes to domestic inflation. Similarly, Obstfeld and Rogoff (1995) emphasize that sticky prices and non-tradable sectors add complexity to the simplistic assumptions of PPP models. This paper builds on these foundations by incorporating sector-specific inflation components, such as energy inflation, which is particularly sensitive to exchange rate fluctuations in countries that rely heavily on energy imports.

On the other hand, monetary models emphasize the role of money supply and its interaction with the current account in driving inflation. Expansionary monetary policy, which increases the money supply, can result in current account deficits and inflationary pressures through increased aggregate demand. Kónya (2006) demonstrated that this increased demand for goods and services, both domestically and internationally, could result in higher imports, widening the current account deficit and pushing inflation upward. The transmission mechanism of monetary policy – through interest rates, exchange rates, and inflation expectations – plays a significant role in determining how these dynamics unfold. Studies such as Ball et al. (1988) underscore that inflation expectations and credibility are crucial in shaping inflationary outcomes, especially in open economies with capital mobility.

Naturally, monetary policy has an important role in shaping inflation. Aguirre (2024) analyses the U.S. inflation surge during the COVID-19 pandemic, identifying wage increases, expansionary monetary policies, and price-push shocks as primary contributors. That study highlights that aggressive monetary tightening by the Federal Reserve could modestly curb inflation but exacerbate unemployment, underscoring the trade-offs faced by policymakers. This aligns with Arce-Alfaro (2022), who found that monetary policy uncertainty reduces inflation expectations, although this effect dissipated post-Great Recession, hinting at evolving expectations in response to structural changes in policy frameworks. Ascari (2024) showed that optimal monetary policy in response to global shocks should consider the extent of a country's integration into global value chains, an insight echoed by Brandao-Marques (2024), who found that high public debt levels complicate inflation management, especially in Emerging Market Economies (EMEs) with significant debt dollarization.

This paper builds on these insights by examining how fluctuations in the current account, influenced by monetary policy and external shocks, affect specific inflation components like energy, headline and core inflation.

Moreover, other studies show that inflation is indeed very dynamic throughout time. The study by Koursaros (2024) provides a detailed analysis of inflation responses to supply (cost) and demand (markup) shocks in the U.S. from 1948 to 2019, showing that larger shocks have less persistent inflationary effects, as their clarity enables timely corrective actions. This empirical framework complements Banerjee (2024), who, through quantile regression techniques, highlights the non-linear impact of the exchange rate on inflation distributions, particularly in EMEs. The findings align with Diaz (2024), who underscores the post-2010 predominance of supply chain disruptions and commodity price shocks as key inflation drivers in Germany, Japan, the U.K., and the U.S. This shift, particularly pronounced after the COVID-19 pandemic, echoes Gerlach's (2024) historical examination of 15 economies from 1851 to 1913, which confirmed that commodity prices were significant predictors of inflation, influenced by global demand cycles.

Other analysis have explored how global factors shape inflation. Eickmeier (2012), through a Phillips curve analysis across 24 OECD countries, revealed that common global components such as changes in unit labor costs and import price inflation substantially influence domestic inflation. Gross (2018) highlights the non-linear relationship between output and inflation through a regime-switching Phillips curve. This model, which integrates business cycle dependencies, finds that expansionary monetary policies exert less inflationary pressure during economic downturns compared to periods of growth.

Recent studies have highlighted the significant role energy prices play in inflation dynamics. For instance, the ECB (2022) found that energy price shocks accounted for more than 50 percent of the euro area's inflation in 2022. As energy prices rise, especially in economies dependent on fossil fuel imports, the cost of imports increases, leading to higher headline inflation. Terms like fossilflation and greenflation have emerged to describe these inflationary pressures. The empirical significance of these findings is explored further in our paper, where we differentiate between headline, core, and energy inflation across a large sample of countries.

Additionally, the role of energy prices in driving inflation has been emphasized in the context of the euro area, where CEPR (2023) documented that energy price shocks from 2021-2022 significantly impacted core inflation, with energy price pass-through being

much stronger in the euro area than in the US. Casoli (2024), who's Bayesian Structural VAR model demonstrates that post-pandemic Eurozone inflation was predominantly driven by energy price shocks, particularly natural gas, indicating a significant role of energy supply disruptions in shaping regional inflationary trends, further expanded the global scope. This links with Hwang (2024), who shows that oil price shocks have asymmetric effects on inflation, with significant impacts only during boom periods, and explores how inflation-targeting regimes influence the duration of oil-induced inflation deviations. The energy price shock contributed to nearly one-third of core inflation in the euro area, underscoring the importance of sector-specific inflation analysis, which this paper addresses by isolating energy inflation from other components.

Empirically, Chinn and Prasad (2003) found a positive relationship between current account deficits and inflation in both developed and developing countries. They argued that current account deficits driven by increased imports could contribute to inflationary pressures by boosting demand for goods and services. However, as Kónya (2006) found, these relationships vary by country, with some showing no significant link between current account deficits and inflation persistence. These mixed results underscore the importance of country-specific factors, such as exchange rate regimes and institutional frameworks, in determining the strength of the current account-inflation relationship. Our paper expands this analysis by using a broader dataset covering developed and developing countries, differentiating between different inflation measures, and focusing on the impacts of current account balances on energy, headline and core inflation, which has become increasingly important in light of global price volatility.

Microeconomic studies, such as those by Goldberg and Knetter (1997), have explored how exchange rate pass-through affects domestic prices, particularly in sectors with high import exposure, like energy and food. Pass-through rates vary significantly across industries and countries, making sector-specific analyses crucial to understanding how current account imbalances drive inflation. For example, Taguchi and Nishigaki (2017) found that improvements in Japan's current account balance were associated with lower food price inflation, suggesting that external competitiveness can influence sectoral inflation outcomes. Similarly, studies by Kilian (2009) have highlighted the role of energy price shocks in shaping inflationary pressures in energy-importing economies. This paper contributes to the literature by examining the differentiated impacts of current account fluctuations on headline, core, and energy inflation, providing new insights into how

external shocks, particularly in the energy sector, influence inflation in diverse economic contexts.

In conclusion, while the existing literature provides valuable insights into the relationship between the current account and inflation, several gaps remain. This paper addresses these gaps by examining the effects of current account balances on different inflation measures – headline, core, and energy inflation – across a broad set of developed and developing countries from 1980 to 2023. Using advanced econometric techniques, such as Panel OLS, and Panel VAR models, our paper sheds light on how current account dynamics influence inflation in a variety of economic contexts, with particular attention to the role of energy prices and headline inflation in shaping inflationary outcomes. By expanding the scope of the current account-inflation debate to include sector-specific inflation components, this paper makes a significant contribution to both theoretical and empirical literature.

3. Data and Methodology

3.1. Data Description

The primary focus of our paper are the inflation rates, which are proxied by the Energy consumer price inflation (*Energy Inflation*), the headline consumer price inflation (*Headline Inflation*), and the official Core consumer price inflation (*Core Inflation*). We retrieved the CPI data from the World Bank Database.

Our main explanatory variable is the Current Account Balance as a percentage of GDP (*Current Account*) collected from the World Economic Outlook of the IMF Database.

Regarding the control variables we include cyclical unemployment, output gap, interest rate (*IntRate*), interest rate spread (*Spread*), real effective exchange rate (*REER*), and lending rates (*Lending*). Cyclical unemployment is obtained as the difference between observed unemployment obtained from the World Bank database minus the natural/equilibrium unemployment. The output gap, meaning the difference between the actual level of GDP against the full employment level GDP (*Output Gap*) was extracted from the World Bank database. The REER variable generally captures credit risk arising from general macroeconomic disequilibrium. The real interest rate in percentage (*Int. Rate*), the lending interest rate in percentage (which is the bank rate that usually meets the short- and medium-term financing needs of the private sector, *Lending*) and the interest rate spread is the interest rate charged by banks on loans to private sector customers minus the interest rate paid by commercial or similar banks for demand, time,

or savings deposits (*Spread*) were collected from the IMF International Financial Statistics Database.

For the additional estimations and tests, we include the liquid liabilities to GDP (*Liabilities*), the logarithm of the general government gross debt as a percentage of GDP (*Debt*), the gross capital formation as percentage of GDP (*Investment*), the primary balance as percentage of GDP (*Pbalance*), the Terms of trade ratio (*ToT*), from the WEO database of IMF (except the terms of trade which were retrieved from the OECD Datawarehouse) the monetary policy shocks from the ECB and FED (*Shock ECB* and *Shocks FED*) which are exogenous shocks identified by Jaronciski and Karadi (2020)², the Political Stability Index (*Polstab*) from the World Bank Database, and the Geopolitical Risk measure, (*GPR*) by Caldara et al. (2022).

Table A1 in the appendix summarizes the relevant features of the data used in this paper. The dataset comprises annual observations spanning the period from 1980 to 2023. It encompasses a maximum of 8000 observations for each variable, thoroughly documented for all developed and developing countries incorporated in the paper. Energy and headline inflation exhibit similar average values, approximately 40 percent. However, their median values are significantly lower, indicating a skewed distribution. The standard deviation for both categories is relatively high, suggesting considerable variability within the data. This variability is further evidenced by the presence of extreme observations within the sample.

In contrast, the Core Consumer Price Index (CPI) values are more moderate. Despite this, the data still includes some extreme observations, highlighting occasional significant deviations from the norm.

Figure A1 in the appendix presents the map of correlations between the variables under study. We can see that a warmer colour (red) means a greater positive correlation, while a lighter one means a more negative correlation (yellow). From Figure A1, it is evident that the inflation variables exhibit significant inter-correlation, particularly between core and headline inflation, which report the highest correlation coefficient of 0.959. This strong correlation suggests that movements in core inflation are closely mirrored by changes in headline inflation, likely due to the inclusion of volatile items in the latter.

The second highest correlation coefficients are observed between lending rates and both core and Headline Inflation, with values of 0.771 and 0.749, respectively. These

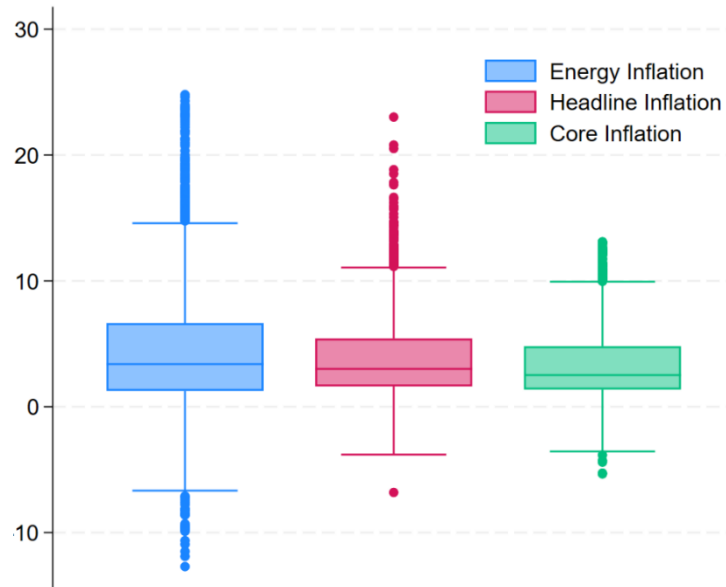
² These are contractionary. A surprise policy tightening (such as an unexpected increase in interest rates) raises interest rates and reduces stock prices, leading to a contraction in economic activity and a decline in the price level.

substantial correlations indicate that lending rates move in the same direction as inflationary pressures, reflecting the central bank's monetary policy adjustments in response to inflation trends.

Conversely, the most negative correlation coefficients are found between the current account and both lending rates and real interest rates, with values of -0.421 and -0.423, respectively. This negative relationship suggests that as lending and real interest rates increase, the current account balance tends to deteriorate, possibly due to higher borrowing costs and reduced investment inflows. Additionally, the current account shows a moderate positive correlation with the Energy Inflation, indicating that fluctuations in energy prices can affect the current account balance. However, for both headline and Core Inflation, the current account is negatively correlated, implying that higher inflation rates may adversely affect the current account balance.

Figure 1 shows a graphical representation of the distribution of the three inflation rate variables and displays its central tendency, variability, and outliers. Analysing the graph, we observe that the median rate of energy and headline inflation hovers around 4 percent. This median value indicates that half of the observed inflation rates are below 4 percent, while the other half are above this threshold. However, the distribution of both inflation rates is not uniform. There are notable high and extreme values that skew the overall picture. In some cases, these rates have surged to double digits. The lower edge of the box represents the first quartile (Q1), which is around 2 percent indicating that 25 percent of the data points are below 2 percent. For the third quartile (Q3) is situated around 10 percent for these inflation rates. For the case of the core inflation, the median value is slightly lower, around 2.9 percent and the interquartile range is small, around 4.6 percent.

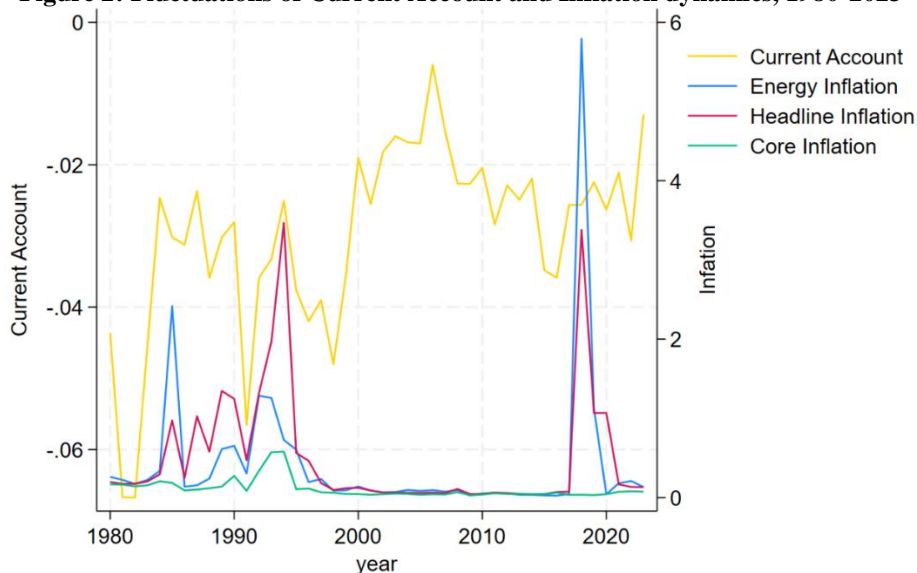
Figure 1: Box Plot for Inflation Variables



Notes: This graph shows the box plot for the three inflation rates used in our dataset, Energy, Headline and Core inflation for the period of 1980-2023, multiplied by 100. Source: Authors' own computations.

The whiskers that extend to the smallest value within 1.5 times the interquartile range below Q1 and above the Q3 are much widened for energy inflation then for headline and core inflation.

Figure 2: Fluctuations of Current Account and Inflation dynamics, 1980-2023

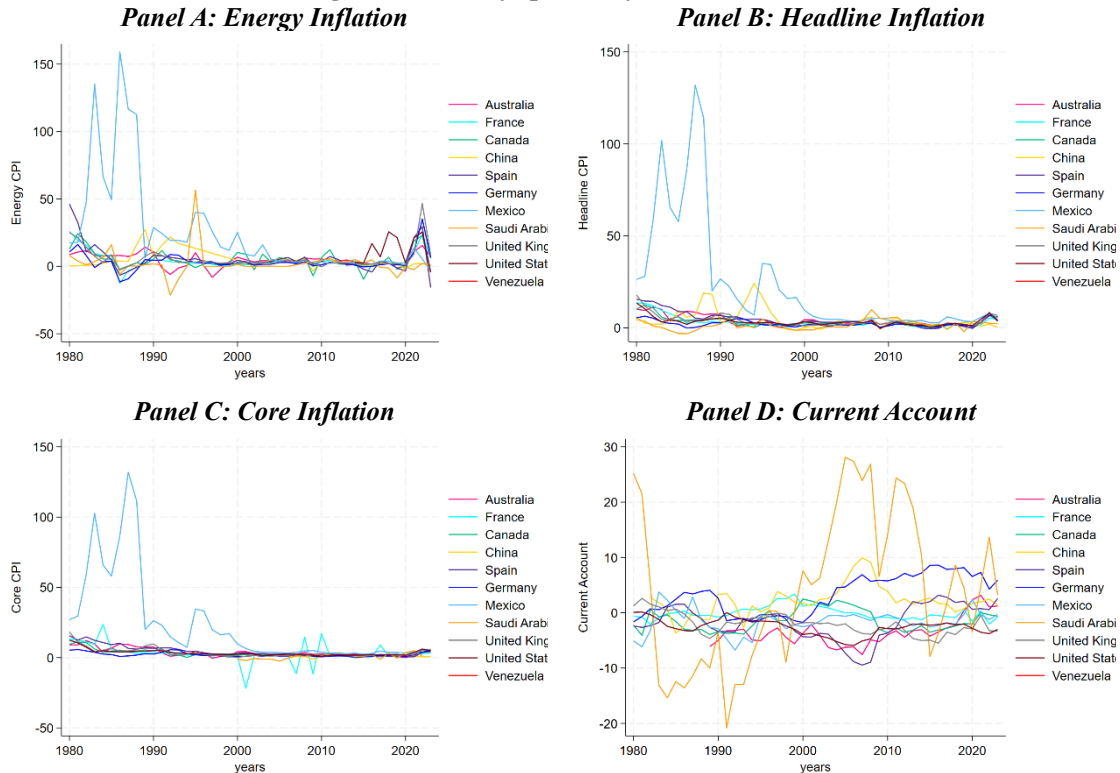


Notes: This figure reports the Current Account, as percent of GDP (left axis), Energy Inflation, Headline Inflation, and Core Inflation, in percent (right-axis), as a yearly average for all nations from our sample, between 1980 and 2023. Each line represents one variable. Source: Authors' own computations.

Figure A2 in the appendix further shows the distributions of the Energy, Headline and Core inflations, through its kernel density estimates graphs and quantile-quantile plots, concluding that data is skewed and heavy tailed.

To gain a clear understanding of the dynamics of both the current account and inflation, Figures 2 and 3 provide graphical representations of the evolution of these variables. From Figure 2, it is evident that energy and headline inflation exhibit significant variability, particularly during the early 1990s and the late 2010s (Diaz et al. 2024). This pronounced fluctuation can be attributed to several factors, including geopolitical events, changes in global oil prices, and economic policies implemented during these periods.

Figure 3: Country specific dynamics, 1980-2023



Notes: This figure reports the Energy Inflation (Panel A), Headline Inflation (Panel B), Core Inflation (Panel C), and Current Account balance in percentage (Panel D), multiplied by 100, for 11 nations from our sample, between 1980 and 2023. The selection of 11 nations from a large sample for graphical representation is justified by their ability to represent the diversity of countries and regions globally. These nations were carefully chosen to reflect a range of geographic regions, economic statuses, and political systems, ensuring that the analysis captures global patterns without regional bias. By focusing on a representative subset, the graphical representation remains clear and accessible while maintaining scientific validity. Each line represents one Country. Source: Authors' own computations.

Energy inflation, for instance, saw substantial spikes due to oil price shocks and supply disruptions, while headline inflation mirrored these trends due to its sensitivity to energy prices. The early 1990s were marked by the Gulf War, which led to a sharp increase in oil prices, thereby driving up energy inflation. Similarly, the late 2010s experienced volatility due to factors such as trade tensions and shifts in energy production technologies.

The current account balance also fluctuated throughout the entire sample period but displayed an overall upward trajectory. This upward trend can be linked to improvements in trade balances, increased foreign investments, and economic reforms in various countries. The fluctuations in the current account balance reflect the impact of global economic cycles, exchange rate movements, and changes in domestic economic policies.

Figure 3 displays the evolution of the Inflation variables and the Current account balance from 1980 to 2023 for 11 nations. These countries were chosen for their representativeness of the principal regions in our sample. The Energy Inflation exhibited significant fluctuations for Mexico during the 1980s and 1990s and for Saudi Arabia in the 1990s. These fluctuations can be attributed to economic instability, changes in energy policies, and global oil price shocks during these periods. In contrast, the 2010s saw relatively stable Energy Inflation values across the countries considered, likely due to more stable global energy markets and improved economic conditions. However, post-2020, there has been a marked increase in variation for the majority of countries, driven by factors such as the COVID-19 pandemic, geopolitical tensions, and supply chain disruptions. Panel B illustrates that Headline Inflation also experienced substantial variation in Mexico during the first 20 years of the sample period and in China during the 1990s. These variations may be linked to economic reforms, inflationary pressures, and structural changes within these economies. Additionally, there were notable increases towards the end of the sample period in the 2020s, which could be attributed to recent global economic uncertainties and inflationary trends. In Panel C, core inflation shows pronounced fluctuations in Mexico and France, with the latest experiencing significant positive and negative peaks between 2000 and 2010. These fluctuations might be due to economic cycles, fiscal policies, and external economic shocks that affected core inflation components.

Lastly, Panel D highlights the current account balance, which shows considerable variability in Saudi Arabia, with values oscillating between positive and negative. This variability is likely influenced by fluctuations in oil prices, which significantly affect Saudi Arabia's balance. Furthermore, Germany's current account balance demonstrates a positive trajectory post-2000, indicating a sustained improvement over time, possibly due to strong export performance and economic stability.

Figures A4 and A5 in the appendix illustrate the average values of Energy and Headline inflation in relation to the current account for each country. The data reveals that most countries report values close to the overall mean. However, several countries in

South America, the Middle East, and Africa exhibit significantly extreme observations for both types of inflation.

3.2 Methodology

To analyse the impact of current account balances on inflation, we estimate a reduced-form equation that captures the relationship between changes in inflation, the current account balance, and other key macroeconomic variables. The model is specified as follows:

$$\text{Inflation}_{it} = \beta_0 + \delta_t + \sigma_i + \beta_1 CA_{it-1} + \beta_2 X_{it-1} + \varepsilon_{it} \quad (1)$$

where:

- Inflation_{it} represents the change in the inflation rate in country i at time t .
- CA_{it-1} is the current account balance in country i lagged by one period, our primary variable of interest.
- X_{it-1} is a vector of control variables lagged by one period, including cyclical unemployment, output gap, interest rate, interest rate spread, real effective exchange rate (Reer), and lending rates.
- δ_t are time-fixed effects that control for global macroeconomic shocks and trends affecting all countries in a given time period.
- σ_i are country-fixed effects that capture unobserved heterogeneity across countries, accounting for time-invariant country-specific factors.
- ε_{it} is the error term.

By including country- and time-fixed effects, the model controls for both global shocks (such as financial crises or energy price spikes) that affect all countries in the same way in a given period, and country-specific characteristics (such as institutional quality, structural inflation trends, or geographic factors) that do not vary over time. This fixed-effects approach isolates within-country variation over time, allowing us to examine how changes in the current account impact inflation within each country, net of time-invariant country-specific factors and time-varying global influences. The time-fixed effects (δ_t) absorb global shocks and common trends that may simultaneously affect the current account and inflation across countries, ensuring that our estimates are not confounded by such external factors. The country-fixed effects (σ_i) control for unobserved

characteristics unique to each country, such as historical inflation persistence or geographic factors that influence inflation dynamics. Together, these fixed effects enhance the reliability of the model by reducing omitted variable bias, making it more likely that we capture the true relationship between the current account and inflation.

While the reduced-form equation does not explicitly establish causality, it provides a robust framework to examine the association between current account balances and inflation. The inclusion of lagged explanatory variables (such as lagged current account balances and control variables) helps mitigate concerns about simultaneity or reverse causality, as we examine the impact of past values of the current account on current inflation outcomes. Furthermore, we use Driscoll and Kraay (1998) standard errors for coefficients estimated by fixed effects (within) regression. Driscoll-Kraay standard errors are robust to very general forms of cross-sectional (“spatial”) and temporal dependence when the time dimension becomes large.

To ensure robustness, we employ three complementary econometric methods³:

1. *Ordinary Least Squares (OLS) with Fixed Effects*: This baseline method accounts for both time- and country-fixed effects, providing an initial estimate of the relationship between current account balances and inflation while controlling for unobserved heterogeneity.

2. *Panel Instrumental Variables with Two-Stage Least Squares (2SLS)*. This method is used in econometrics to address endogeneity issues in panel data models.

3. *Panel Vector Autoregressive (VAR) Models*: The Panel VAR approach treats all variables as endogenous, allowing us to examine the dynamic interactions between the current account, inflation, and control variables. Through impulse response functions (IRFs), the Panel VAR captures both short-term and long-term effects of current account shocks on inflation.

In our analysis, we include the following control variables, each lagged by one period to mitigate potential simultaneity issues. Below, we discuss the expected signs for each control variable and provide relevant references to support these expectations.

- *Cyclical Unemployment*: Captures short-term labour market fluctuations. We expect cyclical unemployment to have a negative sign in relation to inflation. As cyclical unemployment rises, demand for goods and services declines, which reduces inflationary pressures. This relationship aligns with the traditional Phillips curve, which posits an

³ We also applied the Generalized method of moments (GMM) approach and since results are similar to the ones presented in this article they are available upon request.

inverse relationship between unemployment and inflation. When unemployment is high, wage pressures fall, reducing costs for businesses and lowering inflation. This is supported by Ball, Mankiw, and Romer (1988), who found similar dynamics in their work on the output-inflation trade-off in a New Keynesian context.

- *Output Gap*: Reflects demand-side pressures on inflation. The output gap is expected to have a positive sign. A positive output gap, where actual output exceeds potential output, leads to excess demand for goods and services, causing upward pressure on prices, in line with demand-pull inflation theory. This relationship has been extensively discussed by Blanchard and Quah (1989), who noted that an overheated economy typically generates inflation as firms raise prices in response to high demand and capacity constraints.

- *Interest Rate*: Represents the central bank's policy rate. The interest rate is expected to have a negative relationship with inflation. Higher interest rates increase borrowing costs, which reduces consumption and investment, ultimately decreasing demand and lowering inflationary pressures. However, in some cases, the interest rate may not emerge as significant, reflecting the global trend of reduced monetary policy effectiveness, particularly in low-interest environments. Mishkin (2007) provides insights into how monetary policy affects inflation through interest rates, but also emphasizes that its impact can be limited under certain conditions.

- *Interest Rate Spread*: Indicates expectations about future inflation and the stance of monetary policy. The interest rate spread (the difference between short-term and long-term interest rates) is generally expected to have a positive sign if it reflects future inflation expectations. A widening spread could signal market anticipation of rising inflation and a more accommodative monetary policy stance. Estrella and Hardouvelis (1991) found that the term structure of interest rates often predicts real economic activity, which indirectly affects inflation. However, in some contexts, the spread may not significantly affect inflation, especially when external factors such as current account dynamics dominate.

- *Real Effective Exchange Rate (REER)*: Reflects the competitiveness of a country's goods relative to its trading partners, affecting inflation through import prices. The REER is expected to have a negative relationship with inflation. An appreciation (an increase) of the REER strengthens the domestic currency, making imports cheaper and reducing the cost of imported goods, which can lower inflation. This effect is particularly important

in open economies, as found by Campa and Goldberg (2005), who highlighted the role of exchange rate pass-through in reducing inflationary pressures via lower import prices.

- *Lending Rate*: Captures the cost of borrowing, influencing investment and consumption patterns. The lending rate is anticipated to have a positive sign. Higher lending rates increase borrowing costs for businesses and households, which can lead to cost-push inflation. Firms facing higher borrowing costs might pass these costs onto consumers, particularly in capital-intensive industries, a dynamic discussed by Bernanke and Blinder (1992) in their paper of monetary transmission mechanisms and inflation.

4. Empirical Results

4.1 Baseline

We find a negative and statistically significant relationship between the current account balance and inflation across multiple inflation measures: Energy Inflation, Headline Inflation, and Core Inflation (with a higher estimated coefficient magnitude for Energy Inflation, see Table 1). This supports the hypothesis that an improved current account balance exerts downward pressure on inflation (as in Chinn and Prasad, 2003). Our results are consistent with the theoretical prediction that a current account surplus often associated with currency appreciation and reduced import costs, leads to lower inflationary pressures, particularly for energy prices. This is in line with the open-economy Phillips curve framework, where external factors such as trade balances and exchange rates significantly influence domestic price levels.

Specifically, our results suggest that a current account surplus reduces inflation across all three inflation measures. In the context of Energy Inflation, this is likely due to the direct effect of a stronger currency reducing the cost of energy imports (similar to Casoli, 2024). For Headline Inflation, the current account surplus also reduces inflation by making both energy and non-energy imports cheaper, thereby relieving cost-push inflationary pressures. Similarly, Core Inflation, which excludes volatile food and energy prices, still exhibits a negative relationship with the current account, indicating that currency appreciation and external factors affect inflation even beyond energy prices.

The control variables in our analysis offer further insights into the inflationary dynamics. The output gap comes out positive and significant for Energy and Core inflation, suggesting that when actual output exceeds potential output, inflationary pressures increase inflation measures, as would be expected from a demand-side perspective. This result aligns with traditional Phillips curve theory, which posits that

inflation rises as the economy operates above capacity (Gross, 2008). The cyclical unemployment rate, on the other hand, is negative and significant, reinforcing the idea that higher unemployment reduces inflation, consistent with the inverse relationship between inflation and unemployment captured by the Phillips curve.

Interestingly, the interest rate does not appear significant for the majority of our regressions' results. This suggests that, in this context, traditional monetary policy measures (such as changes in the policy rate) may not have a strong direct effect on inflation, particularly in an open economy setting where external factors such as the current account and exchange rates play a more dominant role. This result could also reflect the global trend of diminished monetary policy effectiveness in recent years due to low interest rates and liquidity traps, as noted by Mishkin (2007).

Table 1. Energy inflation, headline inflation, and core inflation, all countries

Variables	Energy Inflation				Headline Inflation				Core Inflation			
Current Acc.	-0.592*	-0.512*	-0.598*	0.026	-5.873***	-1.051	-8.126**	-2.413	-0.030*	0.005	0.023	-0.025*
	(0.397)	(0.276)	(0.491)	(0.113)	(2.059)	(0.822)	(3.586)	(2.301)	(0.047)	(0.054)	(0.040)	(0.038)
Output Gap	1.652*	0.610	1.136*	1.510*	-2.606	-1.368	-3.218**	-0.035	-0.002	0.035	0.104*	0.122**
	(0.929)	(0.678)	(0.670)	(0.789)	(2.261)	(1.725)	(1.533)	(1.232)	(0.081)	(0.081)	(0.059)	(0.056)
Int.Rate	-1.728		1.679		5.174		7.650***		0.071		-0.028	
	(1.864)		(1.360)		(3.390)		(1.947)		(0.107)		(0.048)	
Unemploy	1.192*	1.001	-1.337**	-0.495**	1.348	-2.994	-3.366**	-0.700	-0.369***	-0.371***	-0.384***	-0.278***
	(0.711)	(0.742)	(0.571)	(0.239)	(2.107)	(3.286)	(1.690)	(0.629)	(0.074)	(0.068)	(0.070)	(0.065)
Spread		0.061				-0.228**				0.139***		
		(0.118)				(0.008)				(0.011)		
Reer			-0.602**	-0.103			-2.672**	-1.483			-0.050***	-0.047***
			(0.288)	(0.077)			(1.063)	(0.923)			(0.012)	(0.012)
Lending				1.358*				0.070***				0.284***
				(0.777)				(0.003)				(0.057)
Obs.	1,784	1,611	1,172	1,172	2,072	1,859	1,318	1,318	1,166	1,023	902	902
R-squared	0.211	0.198	0.333	0.458	0.281	0.498	0.710	0.872	0.373	0.501	0.413	0.467

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries and between 1980 to 2023, Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real effective Exchange rate, and Lending is the cost of borrowing. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

However, the lending rate is positive and significant, indicating that higher borrowing costs are associated with higher inflation, which may seem counterintuitive at first glance. This could reflect the cost-push effect on inflation, where higher lending rates increase the cost of capital for businesses, leading to higher production costs and, subsequently, higher prices. In this case, businesses may pass these increased costs onto consumers, particularly in energy and capital-intensive sectors.

The real effective exchange rate (REER) is negative and statistically significant, further supporting the idea that currency appreciation, driven by a current account surplus, reduces inflation. A stronger currency lowers import prices, particularly for energy, and

reduces inflationary pressures, particularly in energy-importing economies, as noted by Campa and Goldberg (2005).

Considering the two sub-periods, before and after 2008 (see Table 2), we find that the current account balance effect on Inflation particularly holds for the period after 2008, while it is not statistically significant before 2008 for Energy and Core inflation, which might be associated with the aftermath of the Global and Financial Crisis (GFC). Before 2008, the global economy experienced relatively stable growth and inflation rates. This period was marked by somewhat predictable relationships between macroeconomic variables, including the current account balance and inflation. However, the GFC caused significant disruptions in global financial markets, leading to changes in economic policies, financial regulations, and market behaviours. These changes likely altered the dynamics between the current account balance and inflation.

Additionally, the crisis led to structural changes in economies, such as shifts in trade balances, changes in consumer behaviour, and adjustments in production capacities. These adjustments could have made the current account balance a more significant determinant of inflation post-2008. Further, we argue that the post-GFC period has been marked by higher economic volatility and uncertainty. This increased volatility might have amplified the sensitivity of inflation to changes in the current account balance. Interestingly, such effects were always present for headline inflation before and after 2008. The consistent negative relationship between the current account balance and headline inflation, contrasted with the varying results for energy inflation, can be explained by the broader and nature of headline inflation, which includes a basket of goods and services beyond energy. Headline inflation reflects aggregate economic conditions, making it more consistently linked to factors such as current account balances and currency fluctuations. Energy inflation, by comparison, is more narrowly focused and subject to greater volatility due to specific global market conditions, leading to differences in its relationship with economic indicators like the current account balance.

4.2 Mechanisms

The negative relationship between current account balances and inflation can be driven by several key mechanisms that vary in their theoretical and empirical significance. A first channel involves demand-driven effects. A stronger current account may reflect an economy's shift towards exporting more and importing less, which could signal reduced

domestic demand for foreign goods. This reduction in demand can lead to a decline in domestic aggregate demand, easing demand-pull inflationary pressures. Theoretical insights from Blanchard and Giavazzi (2002) suggest that current account adjustments through changes in demand, particularly in high-saving economies, may contribute to reduced inflationary pressures by lowering domestic demand for goods and services, thereby influencing inflation in sectors less exposed to international competition. This demand channel can be assessed through the inclusion of a key variable, investment, which reflect domestic demand dynamics. From table 3, we observe that investment reinforces the negative relationship between current account balance and Headline and Core inflation. We argue that this shift towards more investment can potentially lead to a reduction in consumption (lower demand), which in turn reduces demand-pull inflationary pressures (Atoyan et al. 2014).

A second channel encompasses fiscal balances. We observed a positive and significant relationship between the (lagged) primary balance and energy price inflation. According to the Fiscal Theory of the Price Level (FTPL), fiscal discipline stabilizes price levels by reducing the government's reliance on inflationary financing (Sims, 1994; Woodford, 2001). Fiscal surpluses, implying less borrowing or higher savings, can mitigate the adverse impacts of foreign exchange outflows on the domestic currency, thereby contributing to price stability.

Thirdly, we analyse the relationship between Public Debt and inflation pressures. In Table 3, we observe a positive association between public debt levels and energy and core inflation. We argue that when public debt levels rise significantly, governments often face increased costs for servicing this debt. If the government resorts to inflationary financing—such as expanding the money supply to cover debt obligations—this can increase aggregate demand, leading to upward pressure on prices across the economy, including core and energy inflation. Higher demand in the economy often drives up prices for energy and core goods, especially if supply is constrained. Therefore, while public debt generally exerts upward pressure on prices, a strong current account balance may mitigate inflationary trends.

Fourth, the channel we took into consideration is the liquid liabilities. Our analysis of liabilities shows a negative relation with Core inflation, while Current account balance keeps a negative relationship with core inflation. We argue that these combined effects, both the stronger current account and the increased liabilities from the prior period, may lead to an environment of moderated demand, lower input costs, and restricted liquidity,

all of which contribute to lower core inflation. This interaction captures the influence of external balances and domestic financial conditions on inflation, as reflected by the negative coefficients associated with both the current account and liabilities in Table 3.

Lastly, we observe in Table 3 a negative coefficient for the current account balance and a positive coefficient for terms of trade, which suggests that an improvement in terms of trade in the previous period is associated with higher headline and core inflation in the current period. This relationship can be justified by the mechanisms of reduced aggregate demand and lower import prices for the current account balance, and higher export revenues, potential imported inflation, and sectoral shifts for terms of trade. We argue that this positive relationship between terms of trade and inflation highlights how a stronger export sector can stimulate inflationary pressures, particularly when it leads to higher costs and increased income-driven demand within the economy.

Table 2. Energy inflation, headline inflation, and core inflation, before and after 2008

<i>Panel A: Before 2008</i>												
Variables	Energy Inflation				Headline Inflation				Core Inflation			
Current Acc.	0.543	0.648	0.794	0.101	-12.491***	-1.626	-15.716***	-6.194	0.049	0.166	0.074	0.094
	-0.935	-0.489	-0.65	-0.36	-4.152	-1.916	-5.896	-5.168	-0.067	-0.076	-0.067	-0.058
Unempl-Cyclical	0.608	0.912	-3.830***	-0.688	-3.885	-20.573	-19.912***	-6.828	-1.948***	-1.947***	-1.061**	-0.286
	-1.392	-1.945	-1.478	-1.114	-4.875	-15.459	-6.468	-4.962	-0.534	-0.474	-0.412	-0.385
Output Gap	3.257	1.334	1.663*	2.260**	-5.448	-1.819	-3.333**	0.998	-0.209	-0.097	0.086	0.112
	-2.022	-1.682	-0.871	-1.106	-4.822	-3.815	-1.622	-1.773	-0.13	-0.119	-0.092	-0.08
Int.Rate	-1.468		2.36		5.069*		6.967***		0.399**		0.071	
	-2.289		-1.486		-2.987		-1.598		-0.202		-0.102	
Spread		0.044				-0.226***				0.135***		
		-0.106				-0.01				-0.011		
Reer			-1.164**	-0.169			-6.882***	-3.823			-0.068**	-0.047*
			-0.506	-0.174			-2.437	-2.531			-0.026	-0.025
Lending				1.633*				0.065***				0.351***
				-0.897				-0.007				-0.074
Obs.	813	712	550	550	976	841	654	654	437	356	383	383
R-squared	0.316	0.322	0.48	0.542	0.344	0.525	0.801	0.886	0.546	0.718	0.557	0.618
<i>Panel B: After 2008</i>												
Variables	Energy Inflation				Headline Inflation				Core Inflation			
Current Acc.	-0.417*	-0.388*	-0.161**	-0.147**	-0.181***	-0.152***	-0.118***	-0.088***	-0.149**	-0.128*	-0.120**	-0.100**
	-0.229	-0.235	-0.076	-0.073	-0.042	-0.044	-0.032	-0.034	-0.068	-0.07	-0.047	-0.047
Unempl-Cyclical	0.056	-0.068	-0.191	-0.207	-0.176	-0.220**	-0.156*	-0.184**	-0.181*	-0.186*	-0.259**	-0.289**
	-0.195	-0.181	-0.16	-0.159	-0.108	-0.104	-0.091	-0.091	-0.101	-0.096	-0.104	-0.104
Output Gap	0.151	0.114	0.241**	0.250**	0.102**	0.107**	0.090*	0.110**	0.086	0.069	0.072	0.088
	-0.113	-0.123	-0.118	-0.116	-0.047	-0.049	-0.052	-0.055	-0.101	-0.108	-0.078	-0.085
Int.Rate	-0.473***		-0.067		-0.264***		-0.143***		-0.15		-0.160***	
	-0.152		-0.089		-0.072		-0.034		-0.099		-0.043	
Spread		-0.109				0.031				-0.149*		
		-0.265				-0.169				-0.089		
Reer			-0.012	-0.016			-0.047***	-0.054***			-0.040**	-0.047***
			-0.036	-0.036			-0.016	-0.016			-0.017	-0.018
Lending				-0.013				0.011				-0.022
				-0.142				-0.054				-0.076
Obs.	971	899	622	622	1,096	1,018	664	664	729	667	519	519
R-squared	0.397	0.361	0.398	0.397	0.574	0.547	0.619	0.607	0.41	0.424	0.43	0.418

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries and between 1980 and 2023. Panel A report results before 2008, and Panel B afterwards. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real effective Exchange rate, and Lending is the cost of borrowing. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Table 3. Mechanisms of Energy, Headline and Core Inflation, all countries

Variables	Energy Inflation					Headline Inflation					Core Inflation				
Current Acc.	-0.378*	-0.142	-0.222***	-0.158***	-0.321***	-0.166**	-1.114	-0.183	-0.475	-0.345***	-0.112**	-0.136*	-0.208**	-0.234***	-0.364***
	(0.195)	(0.098)	(0.064)	(0.056)	(0.104)	(0.075)	(0.832)	(0.160)	(0.398)	(0.085)	(0.048)	(0.081)	(0.083)	(0.072)	(0.090)
Invest.	-0.228					-0.528**					-0.251**				
	(0.370)					(0.231)					(0.108)				
Liq Liabi.		-0.072*					-0.067					-0.012**			
		(0.038)					(0.042)					(0.006)			
Primary Bal.			0.363***					-0.846					0.096		
			(0.135)					(0.839)					(0.107)		
Debt				0.287**					1.021					0.174***	
				(0.129)					(0.826)					(0.059)	
ToT					0.038					0.068*					0.080**
					(0.043)					(0.036)					(0.039)
Obs.	4,451	4,501	3,912	3,796	1,451	5,682	5,846	4,858	4,629	1,516	2,390	2,258	2,214	2,223	1,377
R-squared	0.018	0.016	0.039	0.058	0.160	0.018	0.014	0.007	0.006	0.140	0.036	0.034	0.044	0.057	0.121

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries and between 1980 and 2023, Current Acc. is the Current Account balance, Invest. is the total investment, Liq. Liabi. represents the liquid liabilities, Primary Bal. is the Primary Balance, Debt is the logarithm of the gross governmental debt, and Tot is the terms of trade, all independent variables are lagged. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

4.3 Additional analyses

Table 4 presents the estimated effects of monetary policy from the European Central Bank (ECB) and the Federal Reserve on inflation across all countries in the sample. The analysis reveals that even when accounting for monetary policy shocks, the current account balance maintains a negative relationship with all three types of inflation (headline, core, and energy inflation). This persistent negative association indicates that external balances continue to play a significant role in influencing inflation dynamics, even amidst policy interventions. Notably, these monetary policy shocks themselves appear to exert a generally negative effect on inflation, aligning with the conventional understanding that contractionary policies (e.g., interest rate hikes) are designed to curb inflationary pressures by reducing aggregate demand.

To further contextualize these findings, tables A2 to A5 in the Appendix provide complementary results from samples excluding the European Area countries and the United States. These additional analyses reinforce the robustness of the main findings by demonstrating that the negative relationship between the current account balance and inflation persists across different sample compositions.

Table 5 shifts focus to a regional analysis, dividing the sample into groups of countries from Europe, America, and Asia. This regional perspective highlights important differences in how the current account balance interacts with various types of inflation across different economic contexts. For European countries, the analysis shows that the current account balance is only statistically significant and negatively related to core inflation. This result suggests that in Europe, external imbalances more strongly influence underlying inflation trends, which exclude volatile components like energy and food. In the Americas, the analysis indicates that the current account balance exhibits a statistically significant effect only for headline inflation. This finding may reflect the impact of current account dynamics on broad consumer price levels, potentially due to exchange rate fluctuations that influence import costs and thus headline inflation more directly. For Asian countries, the results indicate that the current account balance is statistically significant only in relation to core inflation. This relationship might suggest that in Asia, structural economic factors, such as the composition of trade and reliance on manufacturing, could influence core price levels more substantially. The significance of the current account for core inflation points to deeper economic linkages between trade balances and non-volatile domestic price changes in the region.

Table 4. ECB and FED Monetary policy shocks: simple relationships by inflation type, for all countries

Variables	Energy Inflation						Headline Inflation						Core Inflation					
	Current Acc.	-0.022 (0.035)	-0.162*** (0.053)	-0.137*** (0.052)	-0.022 (0.035)	-0.162*** (0.053)	-0.137*** (0.052)	-0.004 (0.020)	-0.130*** (0.045)	-0.106*** (0.039)	-0.004 (0.020)	-0.130*** (0.045)	-0.106*** (0.039)	-0.002 (0.037)	-0.197** (0.083)	-0.157** (0.072)	-0.002 (0.037)	-0.197** (0.083)
Output Gap	0.121* (0.072)			0.121* (0.072)			0.041 (0.030)			0.041 (0.030)			0.107* (0.059)			0.107* (0.059)		
Int.Rate		-0.128** (0.056)			-0.128** (0.056)			-0.122 (0.085)			-0.122 (0.085)			-0.218 (0.151)			-0.218 (0.151)	
Lending			0.155* (0.092)			0.155* (0.092)			0.219*** (0.061)			0.219*** (0.061)			0.180** (0.084)			0.180** (0.084)
Spread	0.173* (0.099)			0.173* (0.099)			0.189*** (0.063)			0.189*** (0.063)			0.027 (0.055)			0.027 (0.055)		
Unempl	-0.021 (0.022)	-0.023 (0.025)	-0.021 (0.024)	-0.021 (0.022)	-0.023 (0.025)	-0.021 (0.024)	-0.073*** (0.012)	-0.029 (0.043)	-0.019 (0.042)	-0.073*** (0.012)	-0.029 (0.043)	-0.019 (0.042)	-0.029** (0.012)	0.053 (0.072)	0.055 (0.072)	-0.029** (0.012)	0.053 (0.072)	0.055 (0.072)
Reer		-0.084 (0.135)	-0.089 (0.133)		-0.084 (0.135)	-0.089 (0.133)		0.049 (0.178)	0.037 (0.175)		0.049 (0.178)	0.037 (0.175)		-0.005 (0.242)	0.023 (0.249)		-0.005 (0.242)	0.023 (0.249)
ECB MP Shock	-1.543** (0.761)	-1.960** (0.867)	-1.248 (0.839)				0.342 (0.281)	-0.472 (0.340)	0.362 (0.241)				0.405* (0.213)	-0.102 (0.385)	0.760** (0.316)			
FED MP Shock				-1.452** (0.716)	-1.844** (0.816)	-1.175 (0.789)				0.321 (0.265)	-0.444 (0.320)	0.341 (0.227)				0.381* (0.200)	-0.096 (0.362)	0.715** (0.298)
Observations	1,137	921	921	1,137	921	921	1,319	999	999	1,319	999	999	712	756	756	712	756	756
R-squared	0.335	0.338	0.341	0.335	0.338	0.341	0.525	0.510	0.529	0.525	0.510	0.529	0.462	0.456	0.451	0.462	0.456	0.451

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries and between 1980 and 2023. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real Effective Exchange Rate, and Lending is the cost of borrowing. ECB MP Shock and FED MP Shock are the European Central Bank and Federal Reserve Monetary policy shocks, respectively. These are contractionary. A surprise policy tightening (such as an unexpected increase in interest rates) raises interest rates and reduces stock prices, leading to a contraction in economic activity and a decline in the price level. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Table 5. Regional Analysis: simple relationships, by inflation type

Variables	Europe						America						Asia					
	Energy Inflation		Headline Inflation		Core Inflation		Energy Inflation		Headline Inflation		Core Inflation		Energy Inflation		Headline Inflation		Core Inflation	
Current Acc.	1.274 -0.956	0.372 -0.529	1.017 -0.999	0.096 -0.48	-0.135** -0.068	-0.001 -0.057	-0.053 -0.037	-0.041 -0.035	-6.203** -3.037	-1.838 -1.671	0.094 -0.062	0.08 -0.065	0.048 -0.126	0.171 -0.144	-0.032 -0.083	0.078 -0.09	-0.132*** -0.035	-0.122*** -0.035
Output Gap	1.996* -1.051	3.856** -1.657	1.342 -1.231	2.938** -1.386	0.06 -0.082	0.147 -0.091	0.007 -0.086	0.012 -0.083	-2.788 -1.841	-1.215 -1.133	0.112 -0.148	0.165 -0.13	0.383 -0.265	0.542* -0.326	0.377** -0.161	0.544*** -0.182	0.153** -0.06	0.147** -0.061
Int.Rate	2.366 -1.619		1.938 -1.92		-0.215*** -0.071		-0.071 -0.05		8.217*** -2.086		-0.03 -0.056		-0.813*** -0.293		-0.758*** -0.152		-0.081 -0.072	
Reer	-0.697 -0.435	-0.585* -0.346	-0.25 -0.616	-0.099 -0.174	-0.064*** -0.024	-0.058*** -0.021	-0.015 -0.026	-0.005 -0.028	-0.172 -0.129	-0.086 -0.083	-0.023 -0.019	-0.03 -0.02	0.035 -0.038	0.090** -0.036	0.053* -0.028	0.136*** -0.037	-0.026*** -0.008	-0.024** -0.009
Lending		1.645** -0.788		2.038*** -0.728		0.382*** -0.116			0.044 -0.027		0.072*** -0.002	0.210*** -0.071		0.842* -0.43		0.688*** -0.19		0.023 -0.122
Obs.	425	425	454	454	350	350	637	637	834	834	326	326	668	668	894	896	313	313
R-squared	0.473	0.615	0.33	0.692	0.456	0.47	0.427	0.426	0.694	0.878	0.406	0.451	0.403	0.345	0.553	0.484	0.79	0.782

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries between 1980 and 2023, for Europe, America and Asia. The regressors are the Current Account, Output Gap, Interest Rate, Real Effective Exchange Rate (Reer) and Lending Rate. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Table 6 presents the estimated results that incorporate three dummy variables, each assigned a value of one when specific conditions are met: when inflation (as indicated in the top row) is above its average, when the current account balance is above its average, and when the output gap is above its average, all by each year. This approach helps capture the conditional effects of these variables on inflation under different economic circumstances. Results indicate that during periods of above-average inflation, the current account balance maintains a negative relationship with all types of inflation. This suggests that external imbalances continue to exert a dampening influence on inflation even when inflationary pressures are elevated. This consistent negative relationship underscores the role of current account deficits in contributing to higher import costs, potentially due to currency depreciation, which feeds into inflation but is mitigated when surpluses are present. When the current account balance itself is above its average, its negative relationship with inflation is reinforced, particularly for energy and core inflation. This outcome implies that stronger current account surpluses can amplify the stabilizing effect on inflation, likely due to the associated currency appreciation and reduced import prices. This reinforcing effect is particularly relevant in economies where external trade balances are integral to price stability.

Table 6. Dummies above average: simple relationships by inflation type

Variables	Energy Inflation			Headline Inflation			Core Inflation		
Current Acc.	-0.150*** (0.049)	-0.100* (0.055)	-0.209*** (0.058)	-1.688 (1.422)	-2.238 (1.838)	-1.764 (1.456)	-0.065** (0.027)	0.146*** (0.047)	-0.106*** (0.027)
Unemploy	-0.173*** (0.056)	-0.247*** (0.069)	-0.224*** (0.067)	-0.740 (0.611)	-0.593 (0.492)	-0.757 (0.633)	-0.062** (0.026)	-0.418*** (0.068)	-0.054** (0.025)
Output Gap	0.138 (0.165)	0.008 (0.138)	-0.130 (0.155)	-0.876 (0.576)	-1.057 (0.778)	-0.836** (0.418)	0.006 (0.066)	0.077 (0.065)	-0.002 (0.080)
Spread	0.158*** (0.055)	0.243*** (0.060)	0.237*** (0.060)	-0.237*** (0.005)	-0.235*** (0.005)	-0.237*** (0.005)	0.044** (0.022)	0.123 (0.075)	0.129*** (0.025)
Reer	-0.149*** (0.046)	-0.162*** (0.045)	-0.168*** (0.045)	-0.841 (0.597)	-0.854 (0.538)	-0.890 (0.613)	-0.039*** (0.012)	-0.060*** (0.014)	-0.052*** (0.013)
D. Inflation Above Avg.	6.614*** (0.928)			10.938*** (3.871)			4.037*** (0.521)		
D. Current Acc. Above Avg.	-2.506*** (0.802)			14.310 (12.819)			-1.271*** (0.473)		
D. Output Gap Above Avg.	2.303*** (0.735)			-0.786 (3.018)			0.613* (0.336)		
Obs.	1,011	1,025	1,025	1,138	1,138	1,138	742	759	759
R-squared	0.248	0.101	0.101	0.896	0.905	0.895	0.205	0.497	0.101

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries and between 1980 and 2023. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real Effective Exchange Rate, and Lending is the cost of borrowing. D. Inflation Above Avg. represents a dummy that takes the value one if the inflation labelled at the top row is above average, D. Current Acc. Above Avg. represents a dummy that takes the value one if the Current Account balance is above average, and D. Output Gap Above Avg. represents a dummy that takes the value one if Output Gap is above average, and “above average” means “above each year average”. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

The analysis further reveals that when the output gap is above its average, indicating that the economy is operating above potential, there is a differentiated impact on inflation. Specifically, the output gap exhibits a positive effect on both energy and core inflation, suggesting that higher-than-average economic activity can lead to increased demand pressures that push up prices in these sectors. This is consistent with economic theory, where a positive output gap reflects an economy experiencing strong demand, leading to higher input costs and inflation in less volatile components.

Endogeneity between current account balances and inflation is a key concern in this analysis, as reverse causality and omitted variable bias can obscure the true relationship. For example, while an improved current account balance can theoretically reduce inflation by lowering import prices or stabilizing the economy, inflation itself can influence the current account through changes in domestic prices relative to international prices. Higher domestic inflation may reduce the competitiveness of exports, thereby affecting the current account balance. Additionally, external shocks, such as global commodity price changes, could simultaneously affect both inflation and the current account balance, introducing bias if not properly accounted for. To address this endogeneity, we consider several instrumental variable (IV) approaches to isolate the exogenous variation in the current account balance, presented on Table 7. Suitable instruments should be correlated with the current account but uncorrelated with the error term in the inflation equation. To do so, we used political stability and geopolitical risk indices as these indicators can influence investor confidence, leading to changes in capital flows and subsequently the current account, but are arguably exogenous to inflation. Political stability might affect the current account by influencing international trade or investment without directly affecting price levels in the short run. The World Governance Indicators, provided by the World Bank, offer a “Political Stability and Absence of Violence” index, which measures the likelihood of political instability and/or politically motivated violence, including terrorism. Data is available for most countries globally, covering annual data from 1996 onward. Moreover, the Geopolitical Risk Index, developed by Caldara and Iacoviello, is based on a text analysis of newspapers, tracking mentions of geopolitical risks over time. It captures global risk trends and can be adapted for country-specific use.

Table 7. Results for Instrumental Variables, all countries

<i>Panel A: Political Stability as an Instrumental variable</i>												
Variables	<i>Energy Inflation</i>				<i>Headline Inflation</i>				<i>Core Inflation</i>			
Current Acc.	-0.088*	-0.059	-0.140***	-0.116***	-0.129***	-0.100***	-0.105***	-0.067***	-0.045	-0.033	-0.065***	-0.029
	-0.048	-0.05	-0.04	-0.04	-0.02	-0.019	-0.018	-0.019	-0.044	-0.047	-0.021	-0.022
Output Gap	0.01	-0.005	0.360***	0.374***	0.135**	0.153***	0.191***	0.210***	0.116	0.111	0.109	0.124
	-0.162	-0.173	-0.101	-0.1	-0.055	-0.058	-0.067	-0.062	-0.092	-0.099	-0.088	-0.081
Int.Rate	-0.184***		-0.016		-0.216***		-0.03		-0.063		0.015	
	-0.066		-0.031		-0.053		-0.022		-0.047		-0.024	
Unemploy	-0.013	-0.027	-0.057	-0.074*	-0.018	-0.056**	-0.028	-0.058***	0.015	0.001	-0.009	-0.031
	-0.035	-0.035	-0.039	-0.04	-0.022	-0.022	-0.019	-0.019	-0.024	-0.026	-0.02	-0.019
Spread		0.079*				0.100***				0.065***		
		-0.044				-0.035				-0.021		
Reer			-0.037	-0.022			-0.062***	-0.037***			-0.051***	-0.028***
			-0.022	-0.022			-0.011	-0.01			-0.012	-0.01
Lending				0.105***				0.172***				0.156***
				-0.028				-0.028				-0.029
Obs.	1,185	1,097	768	768	1,345	1,247	829	829	872	790	638	638
R-squared	0.152	0.128	0.255	0.268	0.135	0.102	0.224	0.306	0.083	0.078	0.13	0.205

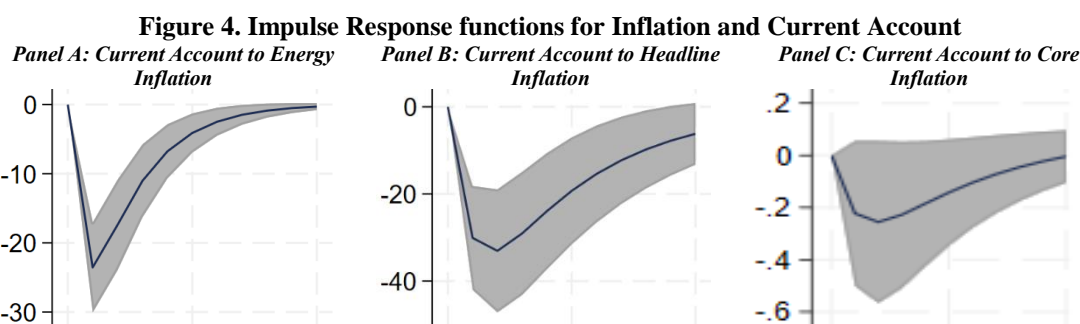
<i>Panel B: GPR as an Instrumental variable</i>												
Variables	<i>Energy Inflation</i>				<i>Headline Inflation</i>				<i>Core Inflation</i>			
Current Acc.	-1.245**	-0.811*	0.099	0.179*	-4.912	-1.382	0.027	0.119*	-0.142***	-0.104***	-0.121***	-0.066*
	-0.523	-0.477	-0.094	-0.094	-3.178	-1.4	-0.075	-0.064	-0.042	-0.04	-0.039	-0.038
Output Gap	2.815**	2.205**	0.008	0.226*	-5.137	-1.435	-0.326	-0.042	-0.094	0.02	0.239*	0.218*
	-1.096	-0.915	-0.155	-0.137	-6.827	-4.945	-0.219	-0.152	-0.151	-0.118	-0.139	-0.124
Int.Rate	-0.335*		-0.059		-8.325*		-0.071		0.106*		0.013	
	-0.194		-0.044		-4.946		-0.073		-0.056		-0.018	
Unemploy	-1.152*	-1.124*	0.122**	0.044	-0.121	-1.449	0.150***	0.04	0.070*	0.091***	-0.039	-0.066*
	-0.612	-0.626	-0.052	-0.051	-0.76	-1.341	-0.043	-0.032	-0.038	-0.031	-0.035	-0.034
Spread		0.221*				0.602				0.137***		
		-0.116				-0.455				-0.011		
Reer			-0.112***	-0.068***			-0.116***	-0.060***			-0.086***	-0.053***
			-0.029	-0.026			-0.017	-0.017			-0.013	-0.011
Lending				0.221***				0.296***				0.159***
				-0.042				-0.054				-0.03
Obs.	715	627	571	571	833	712	650	650	665	574	553	553
R-squared	0.122	0.117	0.204	0.257	0.16	0.144	0.275	0.461	0.19	0.43	0.225	0.319

Notes: This table reports the Panel IV 2SLS estimated results (Panel A with Political Stability and Panel B with GPR) for three types of inflation labelled at the top row of each regression for all countries and between 1980 and 2023, Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real effective Exchange rate, and Lending is the cost of borrowing. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

From Table 7, we can clearly see that the instrumental variables report for Current account keep the negative relationship with inflation. In fact, in some cases this relationship is reinforced, with coefficients presenting statistically significant values on current account balance.

Finally, Figure 4 illustrates the results from the Panel Vector Autoregressive (PVAR) stability analysis, focusing on the impulse response functions (IRFs) of the current account balance's effect on energy inflation, headline inflation, and core inflation. Specifically, the figure shows how a positive shock to the current account balance influences inflation across these different measures in the short term. Our findings reveal a clear, short-term decrease in all three inflation types following an improvement in the current account. This suggests that increases in the current account balance, which may

reflect currency appreciation, reduced import costs, or heightened economic stability, help dampen inflationary pressures across energy, headline, and core inflation. These effects highlight the stabilizing role of a positive current account in buffering against inflation, possibly due to the associated reduction in imported inflationary pressures, particularly within the energy sector. The consistency of these results across different inflation measures points to the broad applicability of current account improvements as a tool to moderate inflation. For further details on the complete set of impulse response functions, please refer to Figure A6 in the Appendix, which provides an expanded view of the IRFs over a longer time horizon, illustrating the sustained influence of current account shocks on each inflation component. This additional analysis underscores the robustness of the short-term impact observed in Figure 4.



Notes: This figure displays three graphical representations of the Impulse response function of Current Account to Energy inflation in Panel A, to Headline Inflation in Panel B and to Core inflation in Panel C. Moreover, the gray area represents the 95 percent confidence interval, while the thick (blue) line is the orthogonalized IRF.

5. Conclusion and Policy Implications

This paper delves into the complex relationship between current account balances and various inflation components – namely, energy, headline, and core inflation – across a broad panel dataset covering developed and developing economies from 1980 to 2023. Using Panel OLS fixed effects, Panel Instrumental Variables Two-Stage Least Squares (2SLS) and Panel Vector Autoregressive (VAR) models, we assess both short- and long-term dynamics between current account balances and inflation. The analysis also incorporates two distinct periods, pre- and post-subprime crisis, allowing us to evaluate how global economic shifts may have influenced the interaction between current account imbalances and inflation over time.

Our results indicate a robust negative relationship between current account balances and inflation measures, underscoring that current account surpluses – often linked to currency appreciation and lower import prices – help moderate inflationary pressures.

This aligns with the open-economy Phillips curve, which suggests that external economic factors like trade balances and exchange rates significantly affect domestic inflation levels. Moreover, our control variables yield further insights: a positive association between the output gap and both energy and core inflation reflect the tendency of inflation to rise when economies operate above their potential. The negative correlation between cyclical unemployment and inflation supports the traditional Phillips curve perspective of an inverse relationship.

Moreover, a key contribution of this paper is the finding that current account surpluses have a more pronounced impact on inflation, especially post-2008, signalling structural changes in global economic conditions. Following the subprime crisis, factors like trade balance shifts and adjustments in production capacities have heightened inflation's responsiveness to current account variations, with a notable impact on energy inflation. This heightened sensitivity highlights the significant role of global economic adjustments on inflationary trends, particularly during times of central bank interventions and financial market shocks.

Our results show that several channels influence the relationship between current account balances and inflation. Stronger current accounts often reduce domestic demand, easing inflationary pressures, while fiscal discipline stabilizes prices by lowering inflationary financing risks. Public debt and terms of trade also play roles, with rising debt fuelling inflation, and improved terms of trade increasing inflation through sectoral shifts and higher income-driven demand.

In addition, our regional analysis reveals substantial heterogeneity, indicating that the impact of current account balances on inflation varies by region. For instance, core inflation in Europe, headline inflation in the Americas, and core inflation in Asia all display distinct sensitivities to external balances, likely reflecting underlying structural and economic differences across these regions. Additionally, the use of dummy variables to capture periods of heightened inflation, current account surpluses, and output gaps provides a nuanced understanding of conditional effects. Current account surpluses exhibit a stabilizing influence on inflation, reinforcing the negative relationship, while the output gap significantly affects energy and core inflation, emphasizing the critical role of domestic economic activity.

The policy implications of these findings are significant. Policymakers should account for the dual influences of external and internal economic conditions when formulating inflation control strategies, particularly in an increasingly interconnected global

economy. Understanding the differential effects of current account balances on various inflation components – especially in regions with distinct economic structures – can enhance inflation-targeting frameworks. These findings contribute to a more comprehensive approach to inflation analysis, stressing the need for policymakers to consider both domestic activity and external balances in their macroeconomic strategies. Future research could deepen this analysis by exploring non-linearities or asymmetric effects, considering factors like capital flows and commodity price shocks, to inform further tailored policy responses across diverse economic environments.

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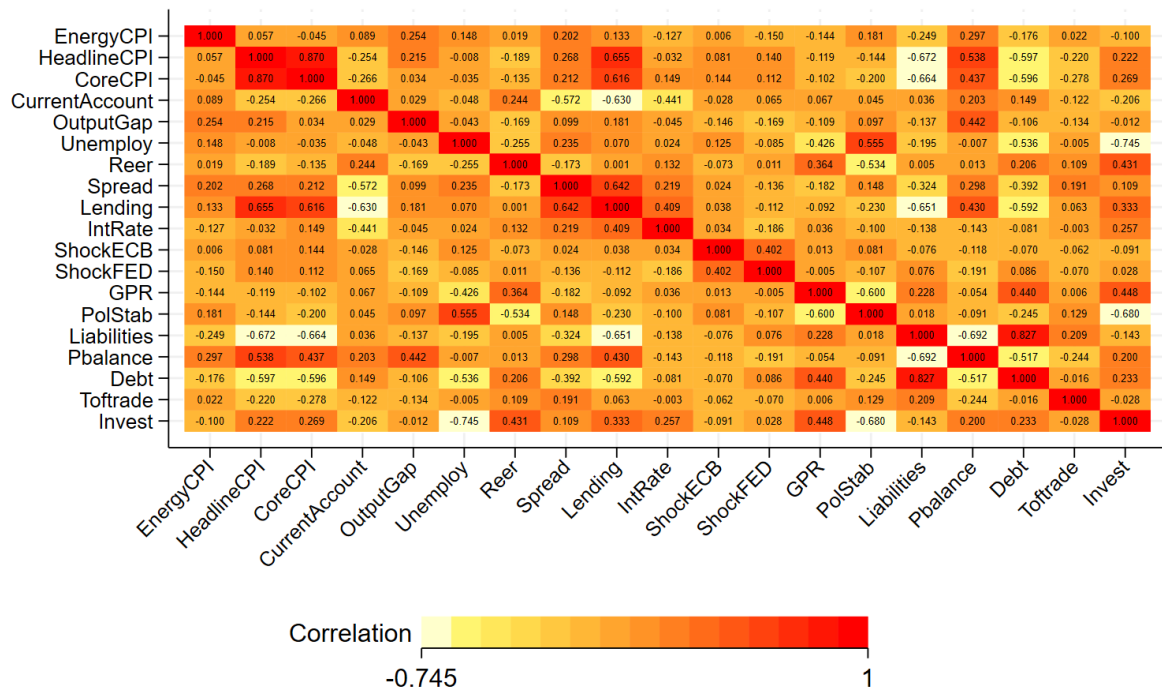
APPENDIX

Table A1: Summary statistics

	Obs	Mean	Median	SD	Min	Max
Energy Inflation	5708	0.437	0.044	13.15	-0.987	94.800
Headline Inflation	8081	0.495	0.048	8.950	-72.730	65.370
Core Inflation	2725	0.084	0.030	0.610	-0.286	20.690
Current Account	6688	-0.029	-0.029	0.132	-2.405	3.117
Output Gap	1104	-0.362	-0.306	3.003	-18.390	12.280
Unemployment	3937	0.089	0.075	0.059	0.003	0.700
Reer	3932	1.146	1.006	1.035	20.330	30.530
Spread	3965	0.119	6.023	4.915	-308.300	18.200
Lending	4410	0.399	0.119	15.04	0.000	99.980
Interest Rate	4392	0.056	0.057	0.157	-0.976	6.283
Shock ECB	4950	0.875	0.973	4.201	-6.104	9.496
Shock FED	4950	-1.479	-1.809	3.878	-9.487	4.653
GPR	1892	0.224	0.075	0.509	0.000	6.369
Political Stability	4745	-0.057	0.030	0.979	-3.180	1.759
Liabilities	6582	56.341	43.677	57.686	0.0280	927.432
Primary balance	5445	-0.502	-0.620	6.601	-186.820	126.460
Debt	5392	5.076	5.373	3.726	-6.908	17.699
Terms of Trade	1659	98.708	99.134	14.638	54.050	174.404
Investment	6705	24.007	22.828	10.531	-40.199	144.450

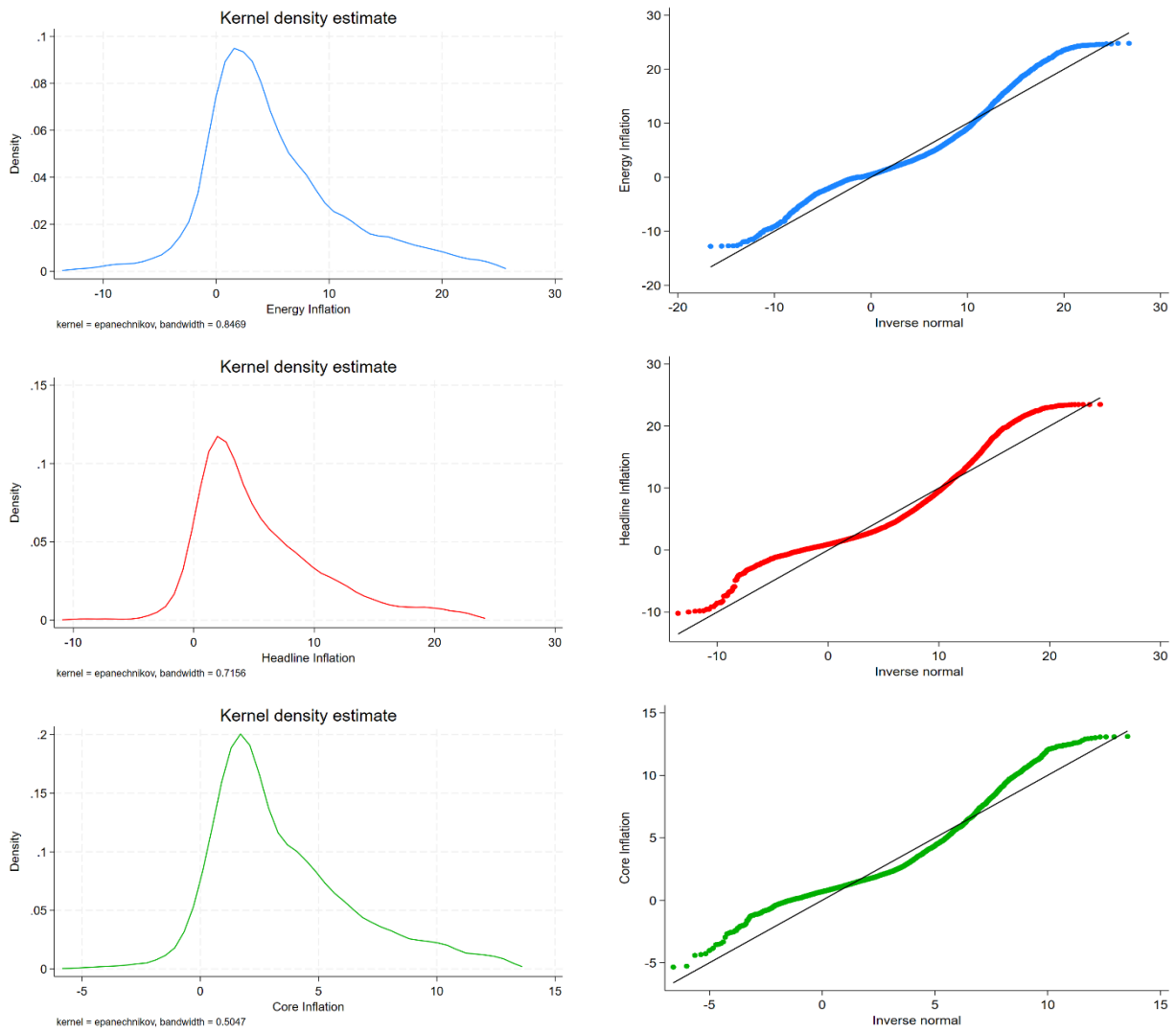
Notes: This table presents the summary statistics of the variables under study for the period of 1980-2023. Specifically, we report the number of observations, mean, median, Standard deviation (Std. Dev.), the maximum, and the minimum of the series.

Figure A1: Heatmap of Correlations (all sample)



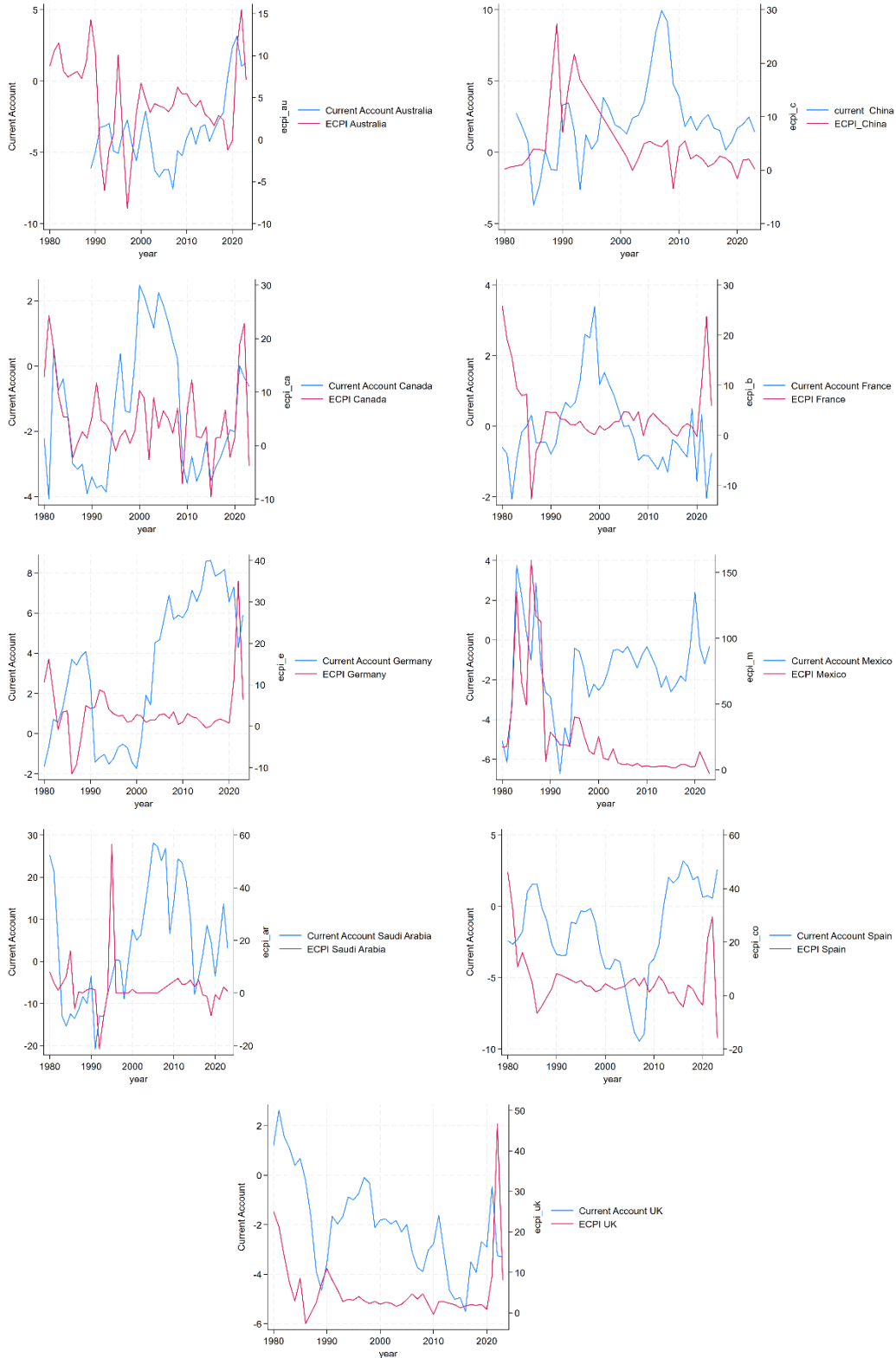
Notes: This figure reports the correlation coefficients between the variables used in this paper. Since economies are susceptible to external shocks, this has an impact on countries' inflation. A warmer colour means a correlation closer to 1 (red) and a lighter one closer to -0.423 (light yellow). Source: Authors' own computations.

Figure A2: Distribution Analysis of Inflation



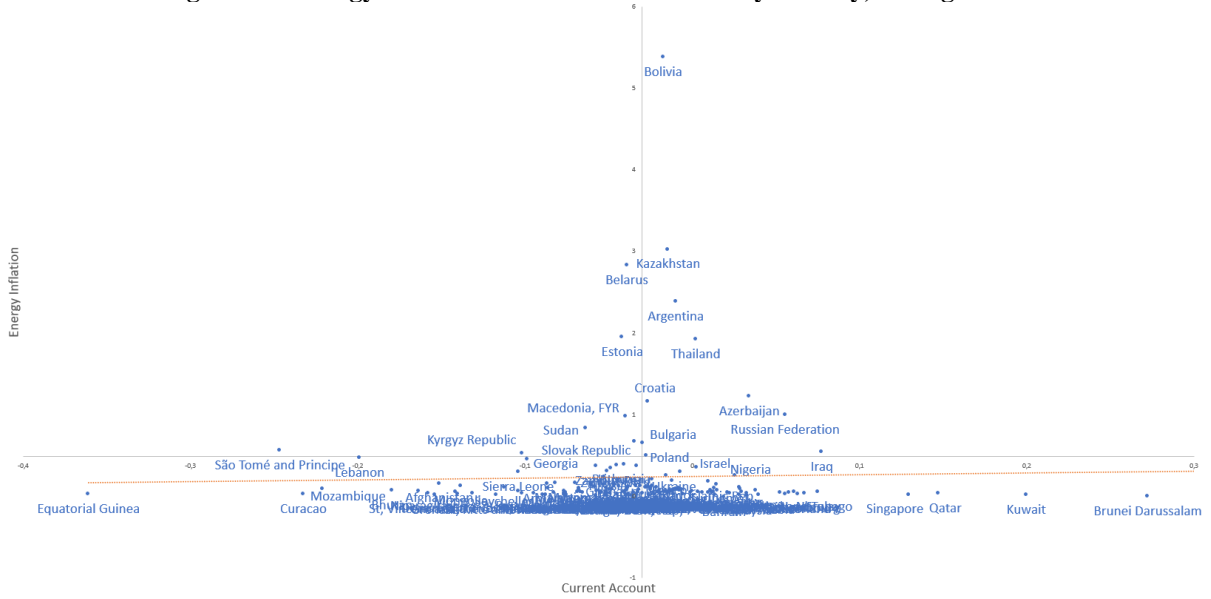
Notes: This figure displays in the left the Epanechnikov kernel function estimates for Energy, Headline and Core inflation, while on the left it shows the QQ plot of the distribution's probabilities of Energy, Headline and Core inflation. This figure shows the distributions of the Energy, Headline and Core inflations, through its kernel density estimates graphs and quantile-quantile plots, concluding that data is skewed and heavy tailed. Source: Authors' own computations.

Figure A3: Current Account and Energy Inflation



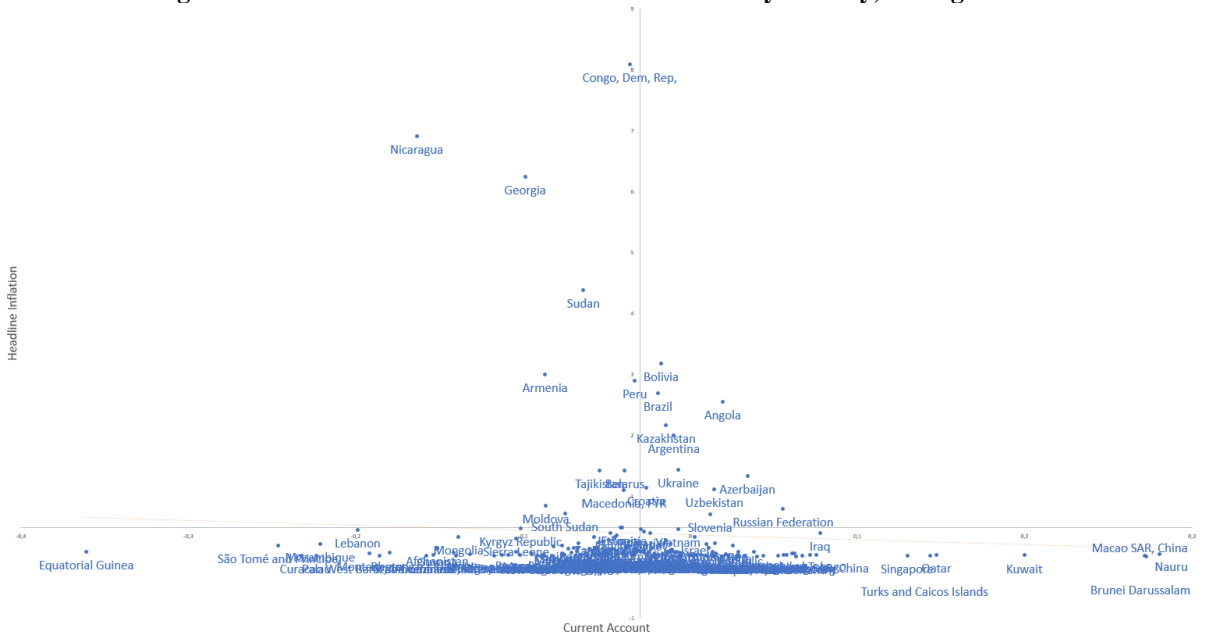
Notes: This figure reports the Current Account (left axis), Energy Inflation (right-axis), as a year average for all nations from 9 representative nations of our sample, between 1980 and 2023. Each line represents one variable. Source: Authors' own computations.

Figure A4: Energy Inflation and Current Account by country, average



Notes: This figure displays the Energy Inflation and Current Account average for each country. Each point is a country. The yellow line it the trend line. Source. Author's own calculations.

Figure A5: Headline Inflation and Current Account by country, average



Notes: This figure displays the Headline Inflation and Current Account average for each country. Each point is a country. The yellow line it the trend line. Source. Author's own calculations.

Table A2. Summary of the ECB and FED Monetary policy shocks: simple relationships by inflation type, for all countries

Variables	Panel A: Full sample																	
	Energy Inflation						Headline Inflation						Core Inflation					
Current Acc.	-0.022	-0.162***	-0.137***	-0.022	-0.162***	-0.137***	-0.004	-0.130***	-0.106***	-0.004	-0.130***	-0.106***	-0.002	-0.197**	-0.157**	-0.002	-0.197**	-0.157**
	(0.035)	(0.053)	(0.052)	(0.035)	(0.053)	(0.052)	(0.020)	(0.045)	(0.039)	(0.020)	(0.045)	(0.039)	(0.037)	(0.083)	(0.072)	(0.037)	(0.083)	(0.072)
ECB MP Shock	-1.543**	-1.960**	-1.248				0.342	-0.472	0.362				0.405*	-0.102	0.760**			
	(0.761)	(0.867)	(0.839)				(0.281)	(0.340)	(0.241)				(0.213)	(0.385)	(0.316)			
FED MP Shock				-1.452**	-1.844**	-1.175				0.321	-0.444	0.341				0.381*	-0.096	0.715**
				(0.716)	(0.816)	(0.789)				(0.265)	(0.320)	(0.227)				(0.200)	(0.362)	(0.298)
Obs.	1,137	921	921	1,137	921	921	1,319	999	999	1,319	999	999	712	756	756	712	756	756
R-squared	0.335	0.338	0.341	0.335	0.338	0.341	0.525	0.510	0.529	0.525	0.510	0.529	0.462	0.456	0.451	0.462	0.456	0.451

Panel B: Full sample without EU countries																		
Current Acc.	-0.025	-0.171***	-0.141***	-0.025	-0.171***	-0.141***	-0.005	-0.135***	-0.106***	-0.005	-0.135***	-0.106***	-0.004	-0.205**	-0.160**	-0.004	-0.205**	-0.160**
	(0.035)	(0.054)	(0.053)	(0.035)	(0.054)	(0.053)	(0.020)	(0.046)	(0.040)	(0.020)	(0.046)	(0.040)	(0.037)	(0.087)	(0.075)	(0.037)	(0.087)	(0.075)
ECB MP Shock	-1.560**	-2.121**	-1.361				0.336	-0.546	0.347				0.404*	-0.053	0.900***			
	(0.793)	(0.969)	(0.943)				(0.287)	(0.369)	(0.265)				(0.220)	(0.422)	(0.348)			
FED MP Shock				-1.468**	-1.996**	-1.281				0.316	-0.514	0.327				0.380*	-0.050	0.847***
				(0.747)	(0.912)	(0.888)				(0.270)	(0.347)	(0.250)				(0.207)	(0.397)	(0.327)
Obs.	1,106	851	851	1,106	851	851	1,288	929	929	1,288	929	929	681	686	686	681	686	686
R-squared	0.335	0.339	0.339	0.335	0.339	0.339	0.523	0.505	0.524	0.523	0.505	0.524	0.459	0.480	0.474	0.459	0.480	0.474

Panel C: Full sample without the US																		
Current Acc.	-0.022	-0.163***	-0.138***	-0.022	-0.163***	-0.138***	-0.004	-0.130***	-0.106***	-0.004	-0.130***	-0.106***	-0.002	-0.198**	-0.158**	-0.002	-0.198**	-0.158**
	(0.035)	(0.053)	(0.052)	(0.035)	(0.053)	(0.052)	(0.020)	(0.045)	(0.039)	(0.020)	(0.045)	(0.039)	(0.037)	(0.083)	(0.072)	(0.037)	(0.083)	(0.072)
ECB MP Shock	-1.543**	-1.962**	-1.253				0.342	-0.484	0.361				0.405*	-0.121	0.755**			
	(0.761)	(0.867)	(0.838)				(0.281)	(0.346)	(0.245)				(0.213)	(0.396)	(0.325)			
FED MP Shock				-1.452**	-1.847**	-1.179				0.321	-0.456	0.340				0.381*	-0.114	0.710**
				(0.716)	(0.816)	(0.789)				(0.265)	(0.325)	(0.231)				(0.200)	(0.373)	(0.306)
Obs.	1,137	912	912	1,137	912	912	1,319	976	976	1,319	976	976	712	733	733	712	733	733
R-squared	0.335	0.332	0.335	0.335	0.332	0.335	0.525	0.509	0.528	0.525	0.509	0.528	0.462	0.456	0.451	0.462	0.456	0.451

Panel D: Full sample without EU and the US																		
Current Acc.	-0.025	-0.172***	-0.142***	-0.025	-0.172***	-0.142***	-0.005	-0.135***	-0.107***	-0.005	-0.135***	-0.107***	-0.004	-0.207**	-0.161**	-0.004	-0.207**	-0.161**
	(0.035)	(0.054)	(0.053)	(0.035)	(0.054)	(0.053)	(0.020)	(0.046)	(0.040)	(0.020)	(0.046)	(0.040)	(0.037)	(0.088)	(0.075)	(0.037)	(0.088)	(0.075)
ECB MP Shock	-1.560**	-2.123**	-1.366				0.336	-0.562	0.346				0.404*	-0.074	0.900**			
	(0.793)	(0.969)	(0.943)				(0.287)	(0.377)	(0.271)				(0.220)	(0.438)	(0.360)			
FED MP Shock				-1.468**	-1.998**	-1.285				0.316	-0.529	0.325				0.380*	-0.070	0.847**
				(0.747)	(0.912)	(0.888)				(0.270)	(0.355)	(0.255)				(0.207)	(0.412)	(0.338)
Obs.	1,106	842	842	1,106	842	842	1,288	906	906	1,288	906	906	681	663	663	681	663	663
R-squared	0.335	0.334	0.334	0.335	0.334	0.334	0.523	0.504	0.522	0.523	0.504	0.522	0.459	0.480	0.474	0.459	0.480	0.474

Notes: This table reports a summary of the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries and between 1980 to 2023. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real effective Exchange rate, and Lending is the cost of borrowing. ECB MP Shock and FED MP Shock are the European Central Bank and Federal Reserve Monetary policy shocks, respectively. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Table A3. ECB and FED Monetary policy shocks: simple relationships by inflation type, without the EU

Variables	Energy Inflation						Headline Inflation						Core Inflation					
Current Acc.	-0.025 (0.035)	-0.171*** (0.054)	-0.141*** (0.053)	-0.025 (0.035)	-0.171*** (0.054)	-0.141*** (0.053)	-0.005 (0.020)	-0.135*** (0.046)	-0.106*** (0.040)	-0.005 (0.020)	-0.135*** (0.046)	-0.106*** (0.040)	-0.004 (0.037)	-0.205** (0.087)	-0.160** (0.075)	-0.004 (0.037)	-0.205** (0.087)	-0.160** (0.075)
Output Gap	0.123* (0.074)			0.123* (0.074)			0.041 (0.030)		0.041 (0.030)				0.106* (0.061)			0.106* (0.061)		
Int.Rate		-0.141** (0.057)			-0.141** (0.057)			-0.127 (0.087)		-0.127 (0.087)				-0.225 (0.157)			-0.225 (0.157)	
Lending			0.144 (0.092)			0.144 (0.092)		0.220*** (0.061)			0.220*** (0.061)			0.189** (0.084)				0.189** (0.084)
Spread	0.172* (0.099)			0.172* (0.099)			0.189*** (0.063)		0.189*** (0.063)				0.028 (0.055)			0.028 (0.055)		
Unempl		-0.117 (0.135)	-0.122 (0.133)		-0.117 (0.135)	-0.122 (0.133)		0.043 (0.178)	0.034 (0.175)		0.043 (0.178)	0.034 (0.175)		-0.006 (0.241)	0.027 (0.249)		-0.006 (0.241)	0.027 (0.249)
Reer	-0.021 (0.022)	-0.025 (0.025)	-0.025 (0.025)	-0.021 (0.022)	-0.025 (0.025)	-0.025 (0.025)	-0.073*** (0.012)	-0.029 (0.043)	-0.019 (0.042)	-0.073*** (0.012)	-0.029 (0.043)	-0.019 (0.042)	-0.028** (0.012)	0.053 (0.074)	0.054 (0.073)	-0.028** (0.012)	0.053 (0.074)	0.054 (0.073)
ECB MP Shock	-1.560** (0.793)	-2.121** (0.969)	-1.361 (0.943)				0.336 (0.287)	-0.546 (0.369)	0.347 (0.265)				0.404* (0.220)	-0.053 (0.422)	0.900*** (0.348)			
FED MP Shock				-1.468** (0.747)	-1.996** (0.912)	-1.281 (0.888)				0.316 (0.270)	-0.514 (0.347)	0.327 (0.250)				0.380* (0.207)	-0.050 (0.397)	0.847*** (0.327)
Observations	1,106	851	851	1,106	851	851	1,288	929	929	1,288	929	929	681	686	686	681	686	686
R-squared	0.335	0.339	0.339	0.335	0.339	0.339	0.523	0.505	0.524	0.523	0.505	0.524	0.459	0.480	0.474	0.459	0.480	0.474

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries except the EU and between 1980 to 2023. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real Effective Exchange Rate, and Lending is the cost of borrowing. ECB MP Shock and FED MP Shock are the European Central Bank and Federal Reserve Monetary policy shocks, respectively. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Table A4. ECB and FED Monetary policy shocks: simple relationships by inflation type, without the US

Variables	Panel A: Full sample																	
	Energy Inflation						Headline Inflation						Core Inflation					
Current Acc.	-0.022 (0.035)	-0.163*** (0.053)	-0.138*** (0.052)	-0.022 (0.035)	-0.163*** (0.053)	-0.138*** (0.052)	-0.004 (0.020)	-0.130*** (0.045)	-0.106*** (0.039)	-0.004 (0.020)	-0.130*** (0.045)	-0.106*** (0.039)	-0.002 (0.037)	-0.198** (0.083)	-0.158** (0.072)	-0.002 (0.037)	-0.198** (0.083)	-0.158** (0.072)
Output Gap	0.121* (0.072)			0.121* (0.072)			0.041 (0.030)			0.041 (0.030)			0.107* (0.059)			0.107* (0.059)		
Int.Rate		-0.129** (0.056)			-0.129** (0.056)			-0.123 (0.085)			-0.123 (0.085)			-0.221 (0.152)				-0.221 (0.152)
Lending			0.153* (0.092)			0.153* (0.092)			0.218*** (0.061)			0.218*** (0.061)			0.178** (0.084)			0.178** (0.084)
Spread	0.173* (0.099)			0.173* (0.099)			0.189*** (0.063)		0.189*** (0.063)				0.027 (0.055)			0.027 (0.055)		
Unempl		-0.086 (0.134)	-0.091 (0.133)		-0.086 (0.134)	-0.091 (0.133)		0.047 (0.179)	0.035 (0.176)		0.047 (0.179)	0.035 (0.176)		-0.008 (0.243)	0.021 (0.250)		-0.008 (0.243)	0.021 (0.250)
Reer	-0.021 (0.022)	-0.026 (0.025)	-0.024 (0.024)	-0.021 (0.022)	-0.026 (0.025)	-0.024 (0.024)	-0.073*** (0.012)	-0.030 (0.043)	-0.021 (0.042)	-0.073*** (0.012)	-0.030 (0.043)	-0.021 (0.042)	-0.029** (0.012)	0.055 (0.075)	0.056 (0.075)	-0.029** (0.012)	0.055 (0.075)	0.056 (0.075)
ECB MP Shock	-1.543** (0.761)	-1.962** (0.867)	-1.253 (0.838)				0.342 (0.281)	-0.484 (0.346)	0.361 (0.245)				0.405* (0.213)	-0.121 (0.396)	0.755** (0.325)			
FED MP Shock				-1.452** (0.716)	-1.847** (0.816)	-1.179 (0.789)				0.321 (0.265)	-0.456 (0.325)	0.340 (0.231)				0.381* (0.200)	-0.114 (0.373)	0.710** (0.306)
Observations	1,137	912	912	1,137	912	912	1,319	976	976	1,319	976	976	712	733	733	712	733	733
R-squared	0.335	0.332	0.335	0.335	0.332	0.335	0.525	0.509	0.528	0.525	0.509	0.528	0.462	0.456	0.451	0.462	0.456	0.451

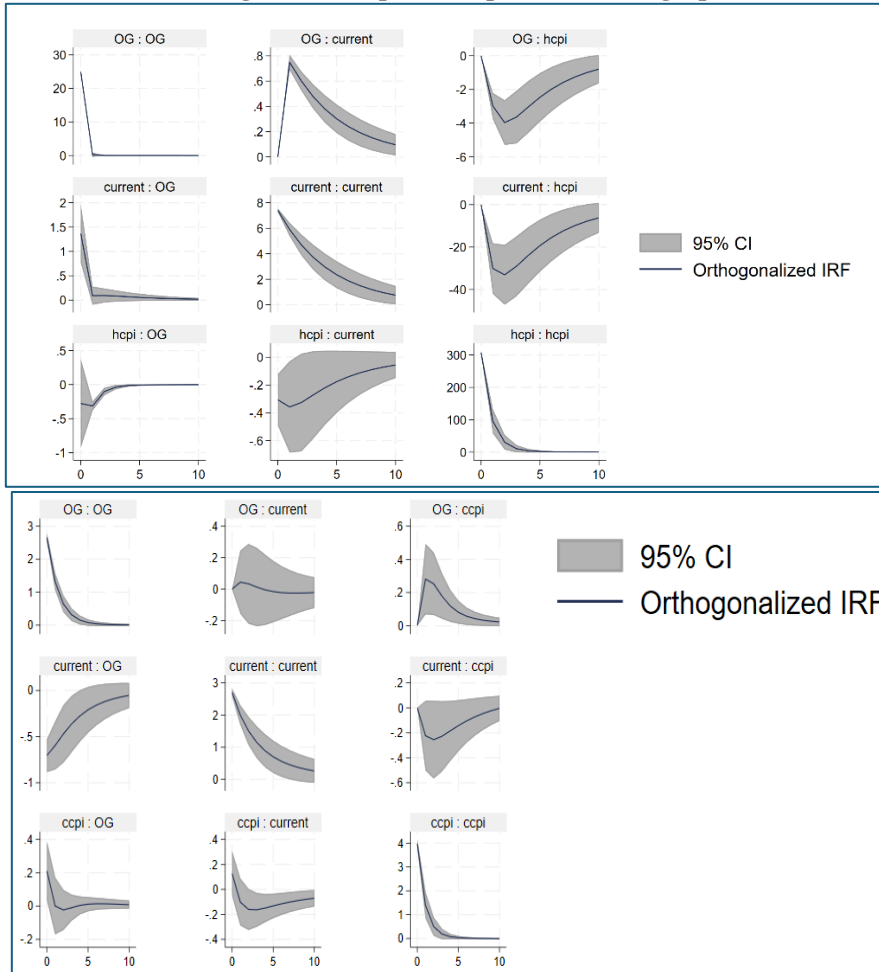
Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries except the US and between 1980 to 2023. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real Effective Exchange Rate, and Lending is the cost of borrowing. ECB MP Shock and FED MP Shock are the European Central Bank and Federal Reserve Monetary policy shocks, respectively. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Table A5. ECB and FED Monetary policy shocks: simple relationships by inflation type, without EU and the US

Variables	Panel A: Full sample																	
	Energy Inflation						Headline Inflation						Core Inflation					
Current Acc.	-0.025 (0.035)	-0.172*** (0.054)	-0.142*** (0.053)	-0.025 (0.035)	-0.172*** (0.054)	-0.142*** (0.053)	-0.005 (0.020)	-0.135*** (0.046)	-0.107*** (0.040)	-0.005 (0.020)	-0.135*** (0.046)	-0.107*** (0.040)	-0.004 (0.037)	-0.207** (0.088)	-0.161** (0.075)	-0.004 (0.037)	-0.207** (0.088)	-0.161** (0.075)
Output Gap	0.123* (0.074)			0.123* (0.074)			0.041 (0.030)			0.041 (0.030)			0.106* (0.061)			0.106* (0.061)		
Int.Rate		-0.142** (0.057)			-0.142** (0.057)			-0.128 (0.087)			-0.128 (0.087)			-0.229 (0.158)				-0.229 (0.158)
Lending			0.142 (0.092)			0.142 (0.092)			0.220*** (0.062)			0.220*** (0.062)			0.186** (0.084)			0.186** (0.084)
Spread	0.172* (0.099)			0.172* (0.099)			0.189*** (0.063)			0.189*** (0.063)			0.028 (0.055)			0.028 (0.055)		
Unempl		-0.119 (0.134)	-0.124 (0.132)		-0.119 (0.134)	-0.124 (0.132)		0.040 (0.179)	0.032 (0.176)		0.040 (0.179)	0.032 (0.176)		-0.009 (0.241)	0.025 (0.250)		-0.009 (0.241)	0.025 (0.250)
Reer	-0.021 (0.022)	-0.028 (0.025)	-0.028 (0.024)	-0.021 (0.022)	-0.028 (0.025)	-0.028 (0.024)	-0.073*** (0.012)	-0.029 (0.044)	-0.020 (0.043)	-0.073*** (0.012)	-0.029 (0.044)	-0.020 (0.043)	-0.028** (0.012)	0.056 (0.076)	0.056 (0.075)	-0.028** (0.012)	0.056 (0.076)	0.056 (0.075)
ECB MP Shock	-1.560** (0.793)	-2.123** (0.969)	-1.366 (0.943)				0.336 (0.287)	-0.562 (0.377)	0.346 (0.271)				0.404* (0.220)	-0.074 (0.438)	0.900** (0.360)			
FED MP Shock				-1.468** (0.747)	-1.998** (0.912)	-1.285 (0.888)				0.316 (0.270)	-0.529 (0.355)	0.325 (0.255)				0.380* (0.207)	-0.070 (0.412)	0.847** (0.338)
Observations	1,106	842	842	1,106	842	842	1,288	906	906	1,288	906	906	681	663	663	681	663	663
R-squared	0.335	0.334	0.334	0.335	0.334	0.334	0.523	0.504	0.522	0.523	0.504	0.522	0.459	0.480	0.474	0.459	0.480	0.474

Notes: This table reports the OLS Fixed effect estimated results for three types of inflation labelled at the top row of each regression for all countries except the EU and the US and between 1980 to 2023. Current Acc. is the lagged Current Account balance, Output Gap is the lagged ratio of outputs, Int.Rate represents the interest rate, Unemploy is the cyclical unemployment rate, Spread is the interest rate spread Reer is the Real Effective Exchange Rate, and Lending is the cost of borrowing. ECB MP Shock and FED MP Shock are the European Central Bank and Federal Reserve Monetary policy shocks, respectively. Obs. are the number of observations that vary from regression to regression due to missing observations reported. *, **, and *** represent statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively (robust standard errors in brackets).

Figure A6: Impulse Response function graphs



Notes: The first four graphs in Panel A are referred to Energy inflation (first graph), Panel B to Headline Inflation (second graph) and Panel C to Core inflation (third graph). Further, the gray area represents the 95 percent confidence interval, while the blue line is the orthogonalized IRF.