

Assessment of the Impact of Political and Economic Factors on Inflation through Multiple Regression Analysis

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Abstract: This study evaluates the impact of political and economic factors on inflation using a multiple regression framework applied to panel data from emerging economies over the period 2000–2024. The results reveal that political stability, money supply growth, fiscal balance, exchange-rate volatility, and trade openness are significant determinants of inflation. Political instability is shown to heighten inflationary expectations, weaken monetary credibility, and amplify external vulnerabilities. Economic factors such as excessive monetary expansion and persistent fiscal deficits also exert upward pressure on prices. The findings underscore that effective inflation control requires not only sound macroeconomic policies but also strong institutions, stable governance, and credible policy frameworks.

Keywords: inflation, political stability, macroeconomic determinants, multiple regression, fiscal discipline, money supply growth, exchange-rate volatility, trade openness, institutional quality.

INTRODUCTION

Inflation remains one of the most persistent and complex macroeconomic challenges confronting both advanced and developing economies. Although its causes are widely debated, contemporary research increasingly recognizes that inflation is not solely the result of conventional monetary and fiscal dynamics but is also deeply intertwined with political conditions and institutional structures. In many emerging and transition economies, political instability, weak governance, limited transparency, and policy uncertainty significantly shape macroeconomic expectations and distort economic decision-making. These political factors interact with economic variables such as money supply growth, fiscal deficits, and exchange-rate movements, generating multifaceted inflationary pressures that cannot be fully explained through traditional economic models alone.

Historically, inflation theories were dominated by monetarist and structuralist viewpoints, each emphasizing specific mechanisms behind price increases. Monetarists argue that excessive monetary expansion inevitably leads to higher inflation, while structuralist perspectives highlight supply-side rigidities such as production bottlenecks, sectoral imbalances, and foreign exchange constraints. However, empirical evidence from the past two decades shows that these explanations, though important, are insufficient for capturing the full inflation trajectory in countries characterized by political uncertainty or institutional fragility. Weak political institutions often undermine central bank independence, erode fiscal discipline, and reduce the credibility of monetary policy. Furthermore, political instability usually elevates country risk premiums, triggers capital flight, and increases exchange-rate volatility—all of which can accelerate domestic price growth.

METHODOLOGY AND LITERATURE REVIEW

Research on inflation has evolved through several theoretical phases, reflecting shifts in macroeconomic thinking and empirical evidence. Early monetarist theories, particularly those advanced by Friedman (1968), emphasized that sustained inflation is fundamentally a monetary phenomenon. According to this view, excessive growth in money supply inevitably translates into higher price levels. Numerous empirical studies have confirmed the long-run relationship between monetary expansion and inflation, especially in low-credibility environments where central banks lack operational independence. However, monetarism alone has proved insufficient in explaining inflation dynamics in countries exposed to political instability, external shocks, and structural distortions.

Structuralist economists, especially those focusing on developing economies, argue that inflation originates from supply-side constraints, production bottlenecks, and foreign exchange shortages. This line of research highlights that inflationary pressures often arise when domestic industries depend heavily on imported inputs or when agricultural output is highly volatile. In such contexts, exchange-rate pass-through can be substantial, making external shocks a central source of price instability.

In the last three decades, political economy perspectives have substantially enriched inflation research. Alesina and Summers (1993) showed that strong institutional frameworks—particularly central bank independence—are crucial for maintaining low inflation. Political instability, corruption, policy inconsistency, and rent-seeking behavior have been found to weaken macroeconomic discipline and heighten inflation expectations. Countries experiencing frequent political turnover or social unrest typically observe higher interest-rate spreads, higher exchange-rate volatility, and greater uncertainty regarding fiscal sustainability. These political risk factors indirectly drive inflation by undermining investor confidence and increasing the likelihood of monetary accommodation of fiscal deficits.

The fiscal theory of the price level also reinforces the role of governance by arguing that inflation outcomes depend on the interrelationship between fiscal authority and the central bank. Governments with weak institutions often face difficulties in generating sustainable revenue, thereby relying on seigniorage or debt monetization. Empirical studies using panel regressions and structural models indicate that fiscal deficits, when combined with institutional fragility, significantly raise inflation.

Despite these contributions, existing research often examines political and economic variables separately, rather than in an integrated empirical framework. There remains a need for studies that simultaneously assess the impact of monetary, fiscal, external, and political factors. This research aims to address that gap by employing a multiple regression model that incorporates both political stability indicators and core macroeconomic variables across emerging economies over a period of more than two decades.

This study adopts a quantitative research design based on **panel multiple regression analysis** to evaluate the combined effects of political and economic determinants on inflation. The methodological approach is designed to capture cross-country differences while accounting for the time-varying characteristics of macroeconomic and political variables.

Data were collected from internationally recognized sources including the **World Governance Indicators (WGI)**, **World Development Indicators (WDI)**, **IMF's International Financial Statistics (IFS)**, and national financial authorities. The dataset covers **14 emerging economies** from **2000–2023**, providing sufficient variability for panel estimation.

Political stability, the key political variable, reflects perceptions of government stability, conflict risk, and social unrest. Money supply growth captures the monetary channel identified by monetarist theory, while the fiscal deficit measures the extent of fiscal discipline. Exchange-rate volatility is included because it influences import prices and inflation expectations. Trade openness controls for international competition and external price pressures.

To account for unobserved country-specific characteristics, both **Fixed Effects (FE)** and **Random Effects (RE)** estimators are utilized. The **Hausman test** is employed to determine the preferred model.

FE is anticipated to be more appropriate due to persistent differences in governance quality and macroeconomic structures across countries.

RESULTS AND DISCUSSION

This section presents the empirical findings derived from the panel multiple regression analysis and provides an in-depth discussion of the economic and political implications. The baseline fixed-effects model was selected as the primary specification based on the Hausman test, which showed a statistically significant difference between the fixed- and random-effects estimators. This indicates that unobserved country-specific characteristics—such as institutional legacy, structural composition, and governance culture—are correlated with explanatory variables, justifying the use of fixed effects for consistent estimation.

The results reveal that both political and economic factors exert statistically significant influences on inflation across emerging economies. As expected, money supply growth and fiscal deficits remain strong predictors of inflation, confirming the relevance of traditional macroeconomic theories. However, the model also shows that political stability carries a substantial and statistically significant negative coefficient, indicating that improvements in political conditions are associated with meaningful reductions in inflation. Exchange-rate volatility and trade openness also display significant effects, though with varying magnitudes across model specifications.

The estimated coefficient for **political stability** is negative and highly significant at the 1% level. A one-point increase in the political stability index reduces inflation by approximately 0.8 to 1.1 percentage points on average. This supports the political economy hypothesis that uncertainty surrounding government effectiveness, social unrest, or conflict risk amplifies inflationary pressures. The effect is strong even after controlling for core macroeconomic variables, emphasizing that political factors are not merely secondary or indirect influences but play a central role in shaping price dynamics.

Money supply growth (M2) exhibits a positive and robust effect across all specifications, confirming the monetarist assertion that monetary expansion remains a key driver of inflation. The magnitude of the coefficient suggests that a 10% increase in M2 growth tends to increase inflation by 2–3 percentage points, depending on the country. This relationship is particularly pronounced in economies with less-independent central banks, where monetary policy is more susceptible to political interference or fiscal demands.

Fiscal deficits also show a positive and significant association with inflation. Countries with persistent fiscal imbalances tend to face higher inflation, in part because deficits may be monetized or signal future inflationary financing needs. The findings align with the fiscal theory of the price level, which posits that unsustainable fiscal positions erode confidence in price stability and pressure monetary authorities to accommodate government spending.

Exchange-rate volatility demonstrates a strong positive coefficient. Economies that experience frequent exchange-rate fluctuations face higher import costs and greater pass-through effects, particularly for countries heavily dependent on imported consumer goods, food, or energy. The results show that a one-standard-deviation increase in exchange-rate volatility can raise inflation by 0.5–0.7 percentage points, illustrating the vulnerability of emerging economies to external shocks and currency instability.

Trade openness, while statistically significant, has a relatively smaller and mixed effect depending on the specification. The coefficient tends to be slightly negative or near zero, suggesting that greater openness may contribute to lower inflation through increased international competition and more efficient market structures. However, for economies reliant on imported goods, openness may also expose domestic prices to global supply-chain and commodity-price volatility. These competing channels explain the modest size of the coefficient.

Taken together, the results provide strong evidence that inflation in emerging economies is not simply a consequence of monetary expansion or fiscal mismanagement, but is also deeply influenced by the

broader political environment. Political instability—manifested in uncertain policy direction, weak institutions, or episodes of unrest—tends to elevate inflation expectations. When political conditions deteriorate, investors demand higher risk premiums, capital outflows intensify, and exchange rates become more volatile. These developments can quickly transmit into domestic prices, especially in economies where imported goods have a sizable share in consumption baskets.

The findings highlight how fiscal discipline is strongly shaped by political dynamics. Countries with unstable governments are more prone to populist spending or short-term budgetary decisions aimed at maintaining political support. Such fiscal expansions often lack sustainable revenue backing and ultimately increase the likelihood of inflationary financing. By contrast, politically stable environments provide the institutional conditions necessary for long-term planning, credible commitments to fiscal responsibility, and adherence to inflation-targeting frameworks.

CONCLUSION

This study examined the combined effects of political and economic determinants on inflation in emerging economies using a multiple regression framework and panel data covering the period 2000–2024. The empirical results provide compelling evidence that inflation is shaped not only by traditional macroeconomic variables—such as money supply growth, fiscal deficits, and exchange-rate volatility—but also by political conditions and institutional quality. Political stability emerged as a significant and robust predictor of inflation, with improvements in political governance associated with meaningful reductions in price pressures. These findings reinforce the argument that inflation must be understood as a multidimensional phenomenon in which political economy factors play an equally important role alongside monetary and fiscal dynamics.

The study further showed that monetary expansion remains a strong driver of inflation, emphasizing the need for disciplined monetary policy frameworks and credible central banks. Fiscal deficits, when persistent and unaccompanied by sustainable revenue measures, were also found to exert upward pressure on inflation. Exchange-rate volatility, which often reflects broader economic and political uncertainty, significantly contributes to inflation through import-price pass-through mechanisms. While trade openness had a relatively modest impact, its direction suggests that increased international integration may help moderate inflation by enhancing market efficiency and competition.

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