

The Inflationary Risks of Expansionary Fiscal Policy

Sophia Chen

SIP/2025/144

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on September 15, 2025. This paper is also published separately as IMF Country Report No 25/281.

**2025
NOV**



IMF Selected Issues Paper
Western Hemisphere Department

The Inflationary Risks of Expansionary Fiscal Policy, Colombia
Prepared by Sophia Chen*

Authorized for distribution by Ding Ding
November 2025

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on September 15, 2025. This paper is also published separately as IMF Country Report No 25/281.

ABSTRACT: Drawing on an extensive literature, this paper examines the extent to which expansionary fiscal policy poses a challenge to containing inflation. It does so by assessing how inflation responds to shocks to the fiscal deficit and public debt, and by identifying the channels through which these effects operate in Latin American countries. The analysis finds that unanticipated fiscal deficits are associated with higher current and future inflation. Consistent with predictions from an open economy Phillips curve framework, output gaps widen, inflation expectations rise, and the real exchange rate depreciates—due to an increase in the risk premium—following a shock. Unanticipated public debt is also linked to higher inflation mainly through the output gap and exchange rate channels.

RECOMMENDED CITATION: Chen, Sophia. 2025. “The Inflationary Risks of Expansionary Fiscal Policy”. IMF Selected Issues Paper SIP/2025/144.

JEL Classification Numbers:	E21, E52, E63, H6
Keywords:	Inflation, Inflation expectation, Fiscal deficits, Public debt, Phillips curve, Latin America
Author’s E-Mail Address:	Ychen2@imf.org

SELECTED ISSUES PAPERS

The Inflationary Risks of Expansionary Fiscal Policy

Colombia

Prepared by Sophia Chen¹

¹ The author would like to thank Philip Barrett, Luis Cubeddu, Ding Ding, Gon Huertas, Daniel Leigh, Juan Passadore, Roberto Perrelli, and seminar participants at the Banco de La República for helpful suggestions.



COLOMBIA

SELECTED ISSUES

September 15, 2025

Approved By
**Western Hemisphere
Department**

Prepared by Sophia Chen (WHD)

CONTENTS

THE INFLATIONARY RISKS OF EXPANSIONARY FISCAL POLICY	2
---	----------

FIGURES

1. Responses to Structural Deficit Shocks	7
2. Inflation Responses to Alternative Measures of Fiscal Shocks	8
3. Responses to Public Debt Shocks	9

TABLES

1. Responses to Fiscal and Public Debt Shocks	10
2. Responses to Alternative Measures of Fiscal Deficit Shocks	11
3. Responses to Public Debt Shocks by Levels of Debt	12

ANNEX

I. Empirical Methodology and Data	13
-----------------------------------	----

References	14
------------	----

THE INFLATIONARY RISKS OF EXPANSIONARY FISCAL POLICY

Drawing on an extensive literature, this paper examines the extent to which expansionary fiscal policy poses a challenge to containing inflation.¹ It does so by assessing how inflation responds to shocks to the fiscal deficit and public debt, and by identifying the channels through which these effects operate in Latin American countries. The analysis finds that unanticipated fiscal deficits are associated with higher current and future inflation. Consistent with predictions from an open economy Phillips curve framework, output gaps widen, inflation expectations rise, and the real exchange rate depreciates—due to an increase in the risk premium—following a shock. Unanticipated public debt is also linked to higher inflation mainly through the output gap and exchange rate channels.

1. This paper examines the extent to which expansionary fiscal shocks challenge the fight against inflation. This question is particularly relevant for Colombia, where fiscal policy has become expansionary during 2024-25 at a time when inflation has remained above the central bank's target range. This issue is also relevant in peer Latin American and emerging market economies, as countries balance the need to bring down inflation against the need to support the post-pandemic recovery and address new social and infrastructure demands.

2. How inflation responds to expansionary fiscal shocks is crucial for determining the appropriate policy response. Monetary policy calibration should consider the drivers and risks of inflation, including those stemming from fiscal policy. Following a period of elevated inflation and a restrictive monetary stance, an expansionary fiscal stance would boost domestic demand, limiting the scope for monetary policy normalization. Meanwhile, maintaining high interest rates could constrain fiscal space due to the increased public debt burden and could add to appreciation pressures, creating an adverse feedback loop for fiscal and external imbalances with negative confidence effects. Conversely, a tighter fiscal policy would enable a quicker reduction in policy rates, while supporting a reduction in fiscal and external imbalances.

3. There are several channels through which expansionary fiscal policy impacts the price formation process. First, it boosts domestic aggregate demand, creating upward pressure on prices—particularly for non-tradables—especially when supply is relatively inelastic in the short run. Second, inflation expectations could become de-anchored if the central bank is perceived as reluctant to maintain a sufficiently tight monetary policy stance, given concerns that higher interest rates would raise the cost of servicing public debt and threaten debt sustainability. Another key channel operates through the exchange rate. While a fiscal expansion typically leads to currency appreciation due to stronger domestic demand as well as increased capital inflows resulting from higher domestic interest rates (Monacelli and Perotti, 2010), negative effects on confidence could

¹ See Leeper and Leith (2016) for a survey of the literature.

dominate.² As such, the impact will much depend on economic fundamentals, including the strength and quality of institutions. For example, in countries with high public debt and weak policy credibility, a fiscal expansion could erode investor confidence, significantly raise the risk premium, and trigger currency depreciation (Ghosh et al., 2013).

4. While these transmission channels are relevant in both advanced and emerging market economies, the risks are more pronounced in the latter. Emerging markets often face greater exposure to external shocks and generally have weaker fiscal and central bank credibility, even if these have been strengthened in many countries. Moreover, while an increasing share of public debt has been issued in domestic currency, currency mismatches persist in some cases, which can amplify the inflationary consequences of fiscal expansion (Celasun et al., 2004; BIS, 2019).

5. The empirical literature provides some evidence supporting the theoretical channels through which fiscal deficits can influence inflation and inflation expectations. Catão and Terrones (2005) find a strong link between deficits and inflation in high-inflation and developing countries, but not in low-inflation advanced economies. More recent studies show that the effect depends on fiscal space and the economic cycle (Cevik and Miryugin, 2023), as well as the fiscal-monetary policy regime (Banerjee et al., 2022). Research on inflation expectations finds they fall after fiscal consolidation (David et al., 2025) and rise following public debt surprises (Brandão-Marques et al., 2024) or news about future debt (Coibion et al., 2021). However, evidence on other transmission channels is less clear. This study contributes a unified empirical framework linking fiscal shocks to inflation and its drivers, using an open-economy Phillips curve. It thus offers a comprehensive view of key channels to inform policy in the current context of fiscal strain and inflation above target.

6. This paper estimates the impact of fiscal policy on inflation and channels through which it operates in financially integrated Latin American economies (LA5) using an open economy New Keynesian Phillips curve framework. The sample includes Brazil, Chile, Colombia, Mexico, and Peru, all of which have inflation targeting and flexible exchange rate regimes during the assessed period of 2010–24. The dynamic responses of inflation are assessed using a local projections method. The baseline fiscal policy measures are the end-of-year structural deficit and public debt, both expressed as a percentage of the previous year’s GDP. Additionally, alternative measures—such as the structural primary deficit, cyclically adjusted deficit, and cyclically adjusted primary deficit—are also examined. Under the assumed framework, inflation is influenced by factors including the output gap, expected inflation, and the exchange rate (Galí, 2015), as well as the risk premium which interacts with these factors.

7. For identification purposes, the analysis focuses on inflation responses to shocks to the fiscal deficit and public debt. A fiscal deficit shock is defined as the difference between the actual year-end fiscal deficit and its forecasted value from the IMF’s World Economic Outlook

² In countries with fixed exchange rate regimes, fiscal expansions lead to a drain in reserves.

published in October of that year. Public debt shocks are defined similarly.³ The dependent variable measures shocks to end-of-year headline inflation, also defined as the difference between actual and forecasted values. In other words, the estimation captures the relationship between unanticipated changes in fiscal policy and inflation outcomes. Using shocks instead of the levels of the inflation and fiscal variables offers a key advantage: it helps mitigate concerns about reverse causality and spurious correlations that may result from omitted variables.

8. The regression specification also accounts for the dynamic nature of inflation responses and potential confounding factors. It includes two lags of the dependent variable, as well as contemporaneous and one lag of real GDP growth and public debt. These controls help capture business cycle dynamics and the influence of the existing debt stock that may correlate with the shocks. To address potential effects from monetary policy decisions, the model also incorporates monetary policy shocks calculated as analysts' forecast errors of policy rates. Further details on the empirical specification and data are provided in the Annex.

9. The results show that shocks to the structural deficit are significantly associated with higher inflation, with inflation drivers consistent with the New Keynesian Phillips curve framework. Specifically, headline inflation rises by 0.35 percentage points following a fiscal deficit shock equivalent to 1 percentage point of GDP (Figure 1, Table 1). This effect is persistent, with headline inflation still elevated by 0.3 percentage points one year after the shock. Following the shock, one-year-ahead inflation expectations rise by 1 percentage point both in the current and the following year. In contrast, longer-term inflation expectations (five-year-ahead) remain unchanged, likely reflecting the effectiveness of the existing monetary policy framework in anchoring longer-term inflation expectations.⁴ The output gap increases by 0.38 percentage points in the current year, consistent with higher aggregate demand. The real exchange rate depreciates by 1 percent, possibly reflecting depreciation pressure from eroding investor confidence that outweighs the appreciation effect of higher demand and increased domestic interest rates. Additionally, there is evidence of a higher risk premium, albeit to a modest degree, with one-year and five-year credit default swap (CDS) spreads increasing by 6 and 11 basis points, respectively. This increase is consistent with investors' perception of higher sovereign risk, with the modest size possibly reflecting confidence in the strength of the policy framework to ensure debt sustainability. As a preview of the results discussed below, there is evidence that the increase in CDS spreads depends on the level of debt and is larger when debt levels are higher.

10. Inflation responses to alternative measures of fiscal deficit shocks are similar. For example, inflation rises by 0.32 and 0.30 percentage points following a shock to the cyclically

³ The availability of market analysts' forecasts for fiscal deficits and public debt is very limited for our purposes.

⁴ The estimated effects on inflation and inflation expectations are broadly in line with recent literature that use similar frameworks or structural VARs. For instance, Cevik and Miryugin (2023) find that headline inflation rises by 0.73 percentage points, on average, in the year of a fiscal deterioration of at least 1.5 percent of GDP in overall or primary balances. Similarly, Brandão-Marques et al. (2024) show that public debt surprises lead to a small but statistically significant increase in five-year-ahead inflation expectations in emerging markets—rising by 2 basis points for each 1 percentage point increase in the debt-to-GDP ratio.

adjusted deficit in the current and following year, respectively (Figure 2, Table 2). In response to a cyclically adjusted primary deficit shock, the increases are 0.34 percentage points in both years. The results also indicate the same set of inflation drivers with comparable response magnitudes, except that the response of the risk premium is more muted following a primary structural deficit shock or a cyclically adjusted primary deficit shock, and the exchange rate response is more muted following a cyclically adjusted deficit shock.

11. Shocks to public debt are also significantly associated with higher inflation. A one-percentage-point-of-GDP shock to public debt is linked to a 0.25 percentage-point increase in inflation in the current year and a 0.22 percentage-point increase in the following year (Figure 3, Table 1). Similar channels involving aggregate demand and the exchange rate are evident, with the output gap increasing by 0.25 percentage points and the real exchange rate depreciating by 1 percent. Furthermore, there is evidence that the response of inflation expectations and the risk premium depends on the level of debt, with both increasing more when debt is higher, while the real exchange rate also depreciates more under high debt levels (Table 3). For example, the real exchange rate depreciates by 12 percentage points. One-year-ahead and five-year-ahead inflation expectations rise by 1.0 and 0.2 percentage points, respectively, while the five-year CDS spread increases by 54 basis points one year after the debt shock when the debt level is at or above 55 percent of GDP.⁵ In contrast, when debt levels are low, the responses are muted.

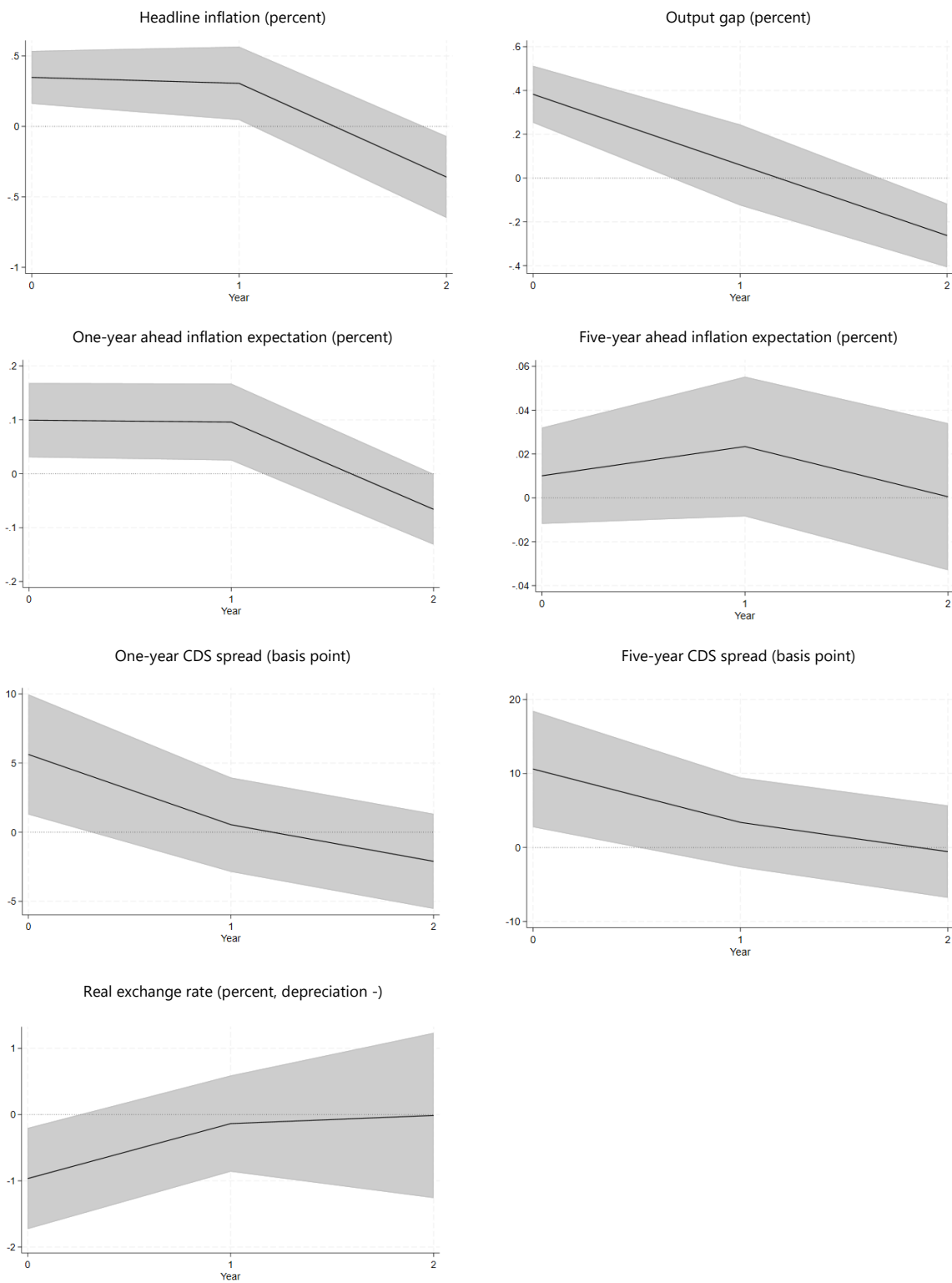
12. The results remain robust across different cyclical positions of the economy and hold true for both fiscal expansions and contractions. Additional analyses, not shown here, confirm that the findings hold when controlling for the economy's cyclical position—proxied by the output gap—as well as external trade positions—proxied by the terms of trade. Similar patterns emerge for both positive and negative shocks to the fiscal deficit or public debt. In other words, unanticipated fiscal contractions are associated with lower inflation, as are unexpected reductions in public debt.

13. Overall, the findings suggest that the fiscal policy stance has significant implications for inflation in our sample of Latin American countries. Shocks to the fiscal deficit and public debt are inflationary, with effects persisting for up to one year. The evidence highlights potential transmission channels, including increased aggregate demand, elevated inflation expectations, exchange rate depreciation, and higher risk premiums on account of concerns over deteriorating public finances. In terms of magnitude, while the aggregate demand channel is the most influential, estimates also indicate that both exchange rate depreciation and rising risk premiums can be substantial in the event of large fiscal shocks. As such, loose fiscal policy and increasing fiscal risks can heighten inflationary pressures, complicating monetary policy—especially in an environment of elevated inflation and external vulnerabilities.

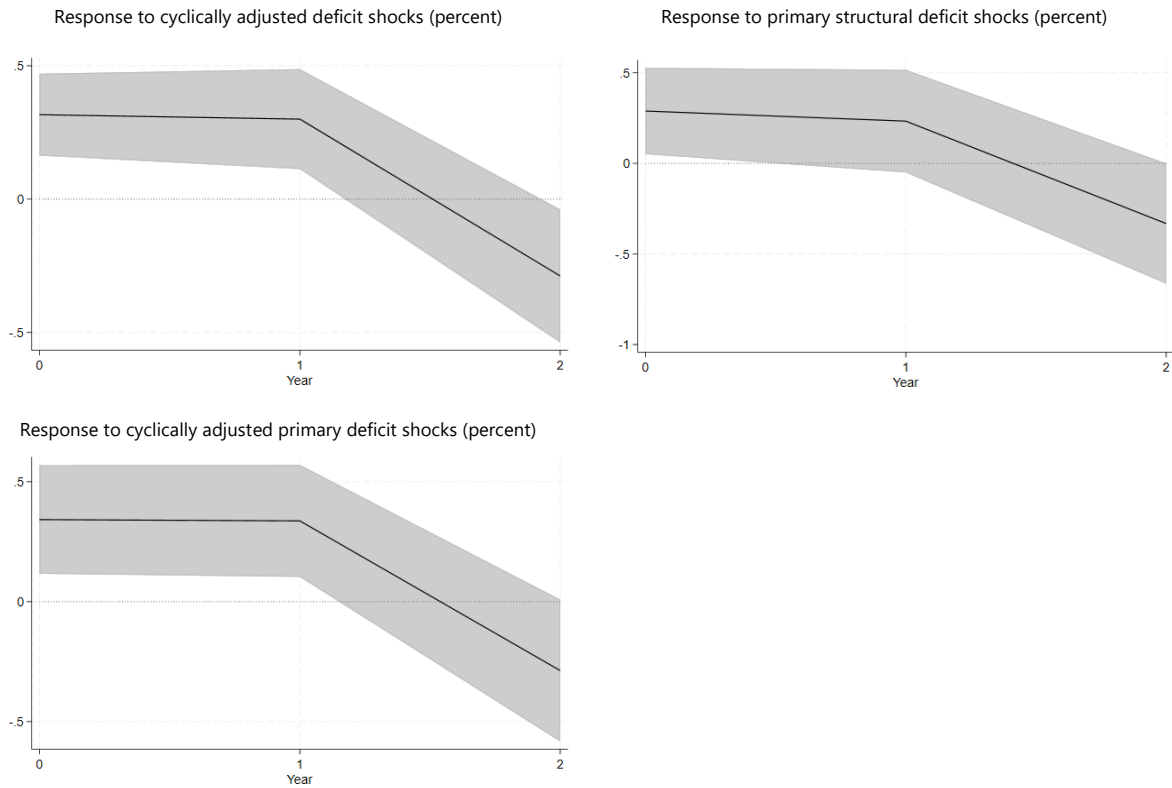
14. A strong and credible policy framework is essential to effectively address the inflationary challenges posed by expansionary fiscal policy and rising public debt. On the fiscal side, a robust framework reassures markets of long-term fiscal discipline and helps ensure that

⁵ Results are qualitatively similar with alternative thresholds for high debt, such as 50 or 60 percent of GDP.

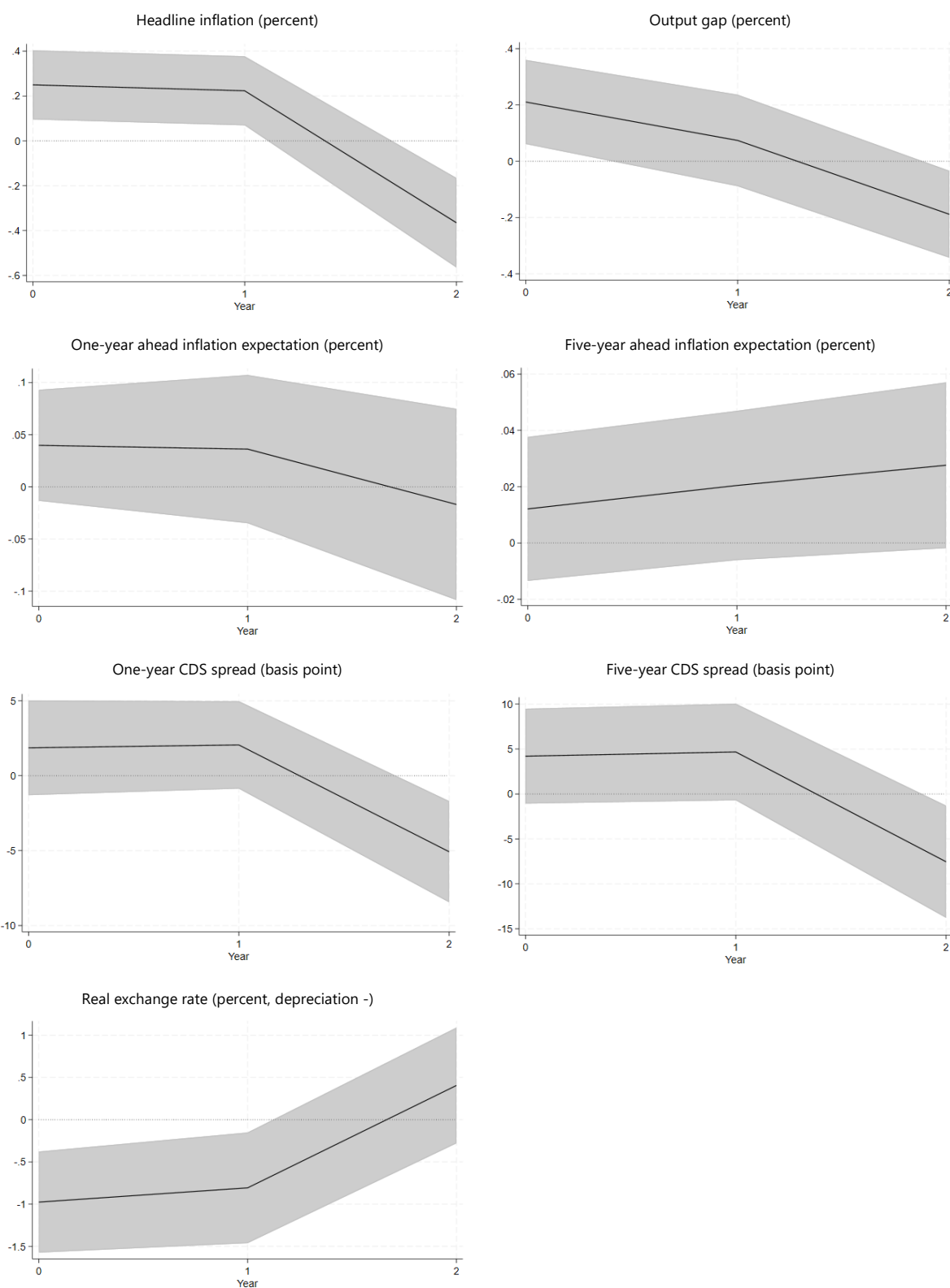
temporary fiscal expansions do not become unsustainable. On the monetary side, central bank credibility plays a critical role in anchoring inflation expectations, supporting a cautious and data driven monetary policy stance and reinforcing its commitment to price stability. The importance of credible policy frameworks is underscored by empirical results: while actual inflation responds significantly to fiscal deficit and public debt shocks, one-year-ahead inflation expectations react only moderately, and five-year-ahead inflation expectations remain stable in countries with strong frameworks. This suggests that strong credibility and institutions can help prevent an inflationary spiral by anchoring long-term inflation expectations, even in the face of near-term fiscal pressures.

Figure 1. Responses to Structural Deficit Shocks

Sources: Consensus Economics, IMF International Financial Statistics, IMF World Economic Outlook, and author's calculations.

Figure 2. Inflation Responses to Alternative Measures of Fiscal Shocks

Sources: Consensus Economics, IMF International Financial Statistics, IMF World Economic Outlook, and author's calculations.

Figure 3. Responses to Public Debt Shocks

Sources: Consensus Economics, IMF International Financial Statistics, IMF World Economic Outlook, and author's calculations.

Table 1. Responses to Fiscal and Public Debt Shocks

	Headline inflation	Output gap	Inflation expectation (1-yr ahead)	Inflation expectation (5-yr ahead)	CDS spread (1 yr)	CDS spread (5 yr)	Real exchange rate
Structural deficit shock							
Year 0	0.348*** (0.114)	0.108 (0.122)	0.099** (0.042)	0.010 (0.013)	5.625** (2.642)	10.607** (4.779)	-0.966** (0.464)
Observations	45	44	45	45	45	45	45
R-squared	0.856	0.856	0.948	0.973	0.859	0.901	0.937
Year 1	0.305* (0.158)	0.304*** (0.064)	0.096** (0.043)	0.023 (0.019)	0.541 (2.075)	3.390 (3.687)	-0.136 (0.441)
Observations	45	40	45	45	45	45	45
R-squared	0.839	0.889	0.920	0.960	0.860	0.909	0.936
Year 2	-0.359* (0.176)	0.304*** (0.064)	-0.066 (0.040)	0.001 (0.020)	-2.106 (2.091)	-0.560 (3.794)	-0.013 (0.758)
Observations	45	40	45	45	45	45	45
R-squared	0.777	0.889	0.912	0.951	0.882	0.910	0.937
Public debt shock							
Year 0	0.250** (0.094)	0.210** (0.091)	0.040 (0.032)	0.012 (0.016)	1.861 (1.922)	4.208 (3.207)	-0.976** (0.364)
Observations	55	40	60	60	60	60	60
R-squared	0.806	0.740	0.921	0.959	0.804	0.861	0.940
Year 1	0.223** (0.094)	0.074 (0.099)	0.036 (0.043)	0.020 (0.016)	2.052 (1.774)	4.674 (3.267)	-0.807* (0.398)
Observations	55	40	60	60	60	60	60
R-squared	0.787	0.708	0.856	0.939	0.831	0.867	0.933
Year 2	-0.365*** (0.121)	-0.188* (0.094)	-0.017 (0.056)	0.028 (0.018)	-5.073** (2.054)	-7.540* (3.797)	0.406 (0.417)
Observations	55	40	60	60	60	60	60
R-squared	0.721	0.643	0.818	0.939	0.857	0.884	0.935

Note: This table reports estimates from the local projection model in equation (1). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Sources: Consensus Economics, IMF International Financial Statistics, IMF World Economic Outlook, and author's calculations.

Table 2. Responses to Alternative Measures of Fiscal Deficit Shocks

	Headline inflation	Output gap	Inflation expectation (1-yr ahead)	Inflation expectation (5-yr ahead)	CDS spread (1 yr)	CDS spread (5 yr)	Real exchange rate
<i>Cyclically adjusted deficit shock</i>							
Year 0	0.317*** (0.093)	0.319*** (0.076)	0.098*** (0.035)	0.010 (0.013)	5.913** (2.225)	10.193** (3.856)	-0.771 (0.481)
Observations	45	44	45	45	45	45	45
R-squared	0.868	0.825	0.952	0.974	0.878	0.912	0.937
Year 1	0.300** (0.114)	0.051 (0.101)	0.093** (0.037)	0.020 (0.018)	1.657 (1.923)	5.264 (3.278)	-0.023 (0.423)
Observations	45	40	45	45	45	45	45
R-squared	0.849	0.703	0.923	0.059	0.863	0.916	0.936
Year 2	-0.288* (0.152)	-0.195** (0.081)	-0.048 (0.035)	0.000 (0.019)	-1.137 (1.926)	1.648 (3.673)	0.287 (0.647)
Observations	45	40	45	45	45	45	45
R-squared	0.765	0.686	0.908	0.954	0.876	0.910	0.937
<i>Primary structural deficit shock</i>							
Year 0	0.289* (0.145)	0.423*** (0.088)	0.086** (0.039)	0.034 (0.022)	0.821 (2.133)	3.738 (4.323)	-1.107* (0.638)
Observations	46	35	49	49	49	49	49
R-squared	0.880	0.898	0.957	0.962	0.834	0.876	0.949
Year 1	0.233 (0.172)	-0.016 (0.161)	0.066 (0.064)	0.045 (0.027)	-1.092 (1.984)	-0.071 (4.146)	0.062 (0.566)
Observations	46	35	49	49	49	49	49
R-squared	0.855	0.716	0.892	0.949	0.865	0.900	0.950
Year 2	-0.332 (0.202)	-0.384*** (0.120)	-0.027 (0.065)	0.024 (0.027)	-1.073 (2.364)	-0.891 (3.896)	0.215 (0.661)
Observations	46	35	49	49	49	49	49
R-squared	0.784	0.796	0.860	0.951	0.847	0.888	0.949
<i>Cyclically adjusted primary deficit shock</i>							
Year 0	0.342** (0.137)	0.379*** (0.098)	0.100** (0.045)	0.038 (0.026)	4.523 (3.028)	8.549 (5.073)	-1.269** (0.571)
Observations	45	35	47	47	47	47	47
R-squared	0.905	0.903	0.960	0.967	0.861	0.876	0.958
Year 1	0.337** (0.142)	-0.005 (0.141)	0.075 (0.066)	0.042 (0.026)	1.849 (2.426)	6.199 (4.166)	-0.141 (0.440)
Observations	45	35	47	47	47	47	47
R-squared	0.880	0.716	0.896	0.952	0.873	0.912	0.960
Year 2	-0.287 (0.180)	-0.283** (0.119)	-0.040 (0.063)	0.029 (0.029)	-0.119 (2.593)	3.695 (4.474)	0.504 (0.662)
Observations	45	35	47	47	47	47	47
R-squared	0.790	0.762	0.863	0.956	0.847	0.896	0.961

Note: This table reports estimates from the local projection model in equation (1). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Sources: Consensus Economics, IMF International Financial Statistics, IMF World Economic Outlook, and author's calculations.

Table 3. Responses to Public Debt Shocks by Levels of Debt

	Headline inflation	Output gap	Inflation expectation (1-yr ahead)	Inflation expectation (5-yr ahead)	CDS spread (1 yr)	CDS spread (5 yr)	Real exchange rate
Public debt shock and interaction with high debt dummy							
Year 0							
<i>Public debt shock</i>	0.200 (0.185)	0.209 (0.186)	-0.016 (0.047)	-0.027 (0.022)	-0.430 (2.484)	-1.520 (3.420)	-0.476 (0.549)
<i>Public debt shock * high debt</i>	-0.443 (1.165)	-0.539 (1.133)	0.081 (0.053)	0.231 (0.176)	13.349 (19.044)	47.759* (24.316)	-11.266*** (2.944)
Observations	55	40	60	60	60	60	60
R-squared	0.826	0.746	0.939	0.967	0.846	0.913	0.956
Year 1							
<i>Public debt shock</i>	0.023 (0.193)	0.007 (0.158)	-0.099 (0.062)	-0.023 (0.025)	-1.011 (2.261)	-3.489 (3.635)	-1.148 (0.705)
<i>Public debt shock * high debt</i>	1.299 (1.073)	-1.025 (0.940)	0.907*** (0.284)	0.233* (0.131)	13.663 (16.198)	54.348** (23.850)	-2.791 (3.884)
Observations	55	40	60	60	60	60	60
R-squared	0.814	0.771	0.908	0.956	0.866	0.904	0.938
Year 2							
<i>Public debt shock</i>	-0.541** (0.247)	-0.332 (0.196)	-0.097 (0.067)	-0.026 (0.024)	-5.038* (2.625)	-9.186** (4.347)	0.529 (0.912)
<i>Public debt shock * high debt</i>	1.519 (1.321)	1.323 (0.866)	0.832** (0.405)	0.352** (0.135)	27.557** (10.950)	57.204*** (19.079)	-2.756 (3.240)
Observations	55	40	60	60	60	60	60
R-squared	0.738	0.681	0.86	0.959	0.900	0.926	0.94

Note: This table reports estimates from the local projection model in equation (2). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Sources: Consensus Economics, IMF International Financial Statistics, IMF World Economic Outlook, and author's calculations.

Annex I. Empirical Methodology and Data

1. The following impulse response system of equations are estimated:

$$y_{i,t+h} = \alpha^h + \theta^h S_{i,t} + \sum_{k=0}^K \Gamma_k^h X_{i,t-k} + \sigma_i^h + v_t^h + u_{i,t}^h, \quad (1)$$

where the subscripts i and t index country and time respectively, and the superscript $h = 0, 1, 2$ denotes the horizon being considered (i.e., the number of years after t). The dependent variable is a measure of inflation or its drivers to be discussed below. The independent variable of interest, $S_{i,t}$, is a shock to fiscal deficit or public debt, defined as the difference between the actual year-end value and its forecasted value from the IMF's World Economic Outlook published in October of that year. In the baseline, fiscal deficit is measured as the structural deficit expressed as a percentage of the previous year's GDP. Alternative measures of fiscal deficit—including structure primary deficit, cyclically adjusted deficit, and cyclically adjusted primary deficit—are also considered. Public debt is measured as gross public debt as a percentage of the previous year's GDP. In the regression on inflation, the dependent variable $y_{i,t+h}$ is a shock to end-of-year headline inflation, defined as the difference between actual and forecasted values. In the regression on the output gap, the dependent variable is the difference between the actual and forecasted values of the output gap, where the output gap is measured as a percentage of potential GDP. In the regressions on other inflation drivers, the dependent variables are, respectively, the real effective exchange rate, one-year-ahead and five-year-ahead inflation expectations, and one-year and five-year CDS spreads. These are measured as actual values rather than forecast errors due to the lack of forecasted data. α^h is a constant. $X_{i,t-k}$ are control variables, including one lag of the shock ($S_{i,t-1}$), one and two lags of the dependent variable ($y_{i,t-1}, y_{i,t-2}$), contemporaneous and one lag of real GDP growth and the government debt-to-GDP ratio, and monetary policy shocks. We include country fixed effects to absorb unobserved time-invariant heterogeneity across countries, and year fixed effects to absorb unobserved common shocks. To limit the influence of outliers, the variables are winsorized at the 2nd and 98th percentiles.

To examine whether the responses depend on the debt levels, the following equations are estimated:

$$y_{i,t+h} = \alpha^h + \theta^h S_{i,t} HighDebt_{i,t} + \kappa^h HighDebt_{i,t} + \sum_{k=0}^K \Gamma_k^h X_{i,t-k} + \sigma_i^h + v_t^h + u_{i,t}^h, \quad (2)$$

where $HighDebt_{i,t}$ is a dummy variable equal to 1 when the public-debt-to-GDP ratio is at or above 55 percent in the baseline estimation, and 50 or 60 percent in the robustness tests.

2. The data are collected from multiple sources. Data on fiscal deficit, public debt, output gap, and real GDP growth are from the IMF's World Economic Outlook database. Data on real effective exchange rates are from the IMF's International Financial Statistics. Data on inflation expectations are from Consensus Economics. Data on monetary policy shock are estimated by Checo et al. (2024). These shocks are constructed using analysts' forecast errors of policy rate decisions—an approach building on the literature identifying monetary policy shocks using high-frequency data. The identification assumption is that analysts construct their forecasts by incorporating the endogenous response of monetary policy to economic conditions. Under this assumption, analysts' forecast errors reflect exogenous variation in monetary policy decisions.

References

- Banerjee, R., V. Boctor, A. Mehrotra, F. Zampolli. 2022. Fiscal Deficits and Inflation Risks: the Role of Fiscal and Monetary Regimes. BIS Working Paper 1028.
- Brandão-Marques, L., Casiraghi, M., Gelos, G., Harrison, O., and Kamber, G. 2024. "Is High Debt Constraining Monetary Policy? Evidence from Inflation Expectations" *Journal of International Money and Finance*, 149, 103206.
- Bank for International Settlements (BIS), 2019. "Monetary Policy Frameworks in EMEs: Inflation Targeting, the Exchange Rate and Financial Stability," BIS Annual Economic Report, 31–53. Basel: Bank for International Settlements.
- Catão, L., and Terrones, M. 2005. "Fiscal Deficits and Inflation." *Journal of Monetary Economics* 52(3): 529–554.
- Celasun, O., G. Gelos, and A. Prati, 2004. "Obstacles to Disinflation: What is the Role of Fiscal Expectations?" *Economic Policy*, Volume 19, Issue 40, October, pp. 442–481.
- Cevik, S. and Miryugin, F., 2023. "It's Never Different: Fiscal Policy Shocks and Inflation" *Comparative Economic Studies* (2025) 67:186–220.
- Checo, A., F. Grigoli, and D. Sandri, "Monetary Policy Transmission in Emerging Markets: Proverbial Concerns, Novel Evidence," BIS Working Papers 1170, Bank for International Settlements March 2024.
- Coibion, O. Gorodnichenko, Y., and Weber, M., 2021. "Fiscal Policy and Households' Inflation Expectations: Evidence from a Randomized Control Trial," NBER Working Paper No. 28485.
- David, A., S. Pienknagura, and J. Yepes. 2025. "Can Fiscal Consolidation Announcements Help Anchor Inflation Expectations?," *Journal of International Money and Finance*, 151, 103247.
- Galí, J. 2015. *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications*. Princeton University Press.
- Ghosh, A., J. Kim, E. Mendoza, J. Ostry, and M. Qureshi, 2013. "Fiscal Fatigue, Fiscal Space and Debt Sustainability in Advanced Economies," *Economic Journal*, Royal Economic Society, vol. 0, pages 4–30, February.
- Leeper, E., and C. Leith. 2016. "Understanding Inflation as a Joint Monetary-Fiscal Phenomenon," in John B. Taylor, Harald Uhlig, eds., *Handbook of Macroeconomics*, 2305– 2415.
- Monacelli, T. and R. Perotti, 2010. "Fiscal Policy, the Real Exchange Rate and Traded Goods," *Economic Journal*, Royal Economic Society, vol. 120(544), pages 437–461, May