Decomposing Fiscal Multiplier Heterogeneity Under Sovereign Debt Distress: A State-Dependent Local Projection Framework for Emerging Market Economies

Jack Brown
Professor
University of Warwick
Gibbet Hill Road, Coventry, CV4 7AL, United Kingdom

Cameron Parker
Associate Professor
Fundação Getulio Vargas – São Paulo School of Economics (FGV EESP)
Rua Itapeva, 474, Bela Vista, São Paulo, SP 01332-000, Brazil

Nico Baker
PhD
Seoul National University
1 Gwanak-ro, Gwanak-gu, Seoul, 08826, Republic of Korea

Abstract. Fiscal multipliers in emerging market economies (EMEs) exhibit pronounced cyclical asymmetry that standard representative-agent models systematically underestimate, particularly during episodes of sovereign debt distress. This study employs a state-dependent local projection methodology applied to a panel of 34 EMEs over 1995–2022 to disentangle the structural determinants of multiplier heterogeneity across debt-stress and non-stress regimes. Controlling for exchange rate flexibility, financial openness, and commodity export dependency, we find that government expenditure multipliers contract sharply—averaging 0.31 on impact—under high sovereign spread conditions, compared to 0.89 in tranquil periods. Crowding-out through sovereign risk premia and compressed private credit channels account for approximately 61% of this differential. These findings carry direct implications for the calibration of fiscal consolidation programs in IMF-supported adjustment arrangements.

Keywords: fiscal multiplier heterogeneity, sovereign debt distress, state-dependent local projections, emerging market economies, crowding-out effect, sovereign risk premium, fiscal consolidation, panel data econometrics, exchange rate flexibility

Introduction

The calibration of discretionary fiscal policy in emerging market economies (EMEs) remains one of the most consequential and technically contested challenges in applied macroeconomics as of 2024–2026. The post-pandemic fiscal landscape has left a significant share of low- and middle-income countries operating under structurally elevated public debt-to-GDP ratios, with median general government debt in EMEs surpassing 68% of GDP by end-2023 according to IMF World Economic Outlook projections. Against this backdrop, the question of whether government expenditure expansions generate sufficient output multiplier effects to be self-financing—or whether they exacerbate sovereign risk dynamics and crowd out private investment—has moved from a theoretical debate to an operationally urgent policy dilemma. Multilateral institutions, national treasuries, and central banks must now navigate fiscal adjustment programs under conditions of acute market scrutiny, with sovereign credit default swap (CDS) spreads serving as real-time referendum on fiscal credibility. The canonical New Keynesian and neoclassical synthesis models offer divergent predictions regarding the sign and magnitude of fiscal multipliers, contingent upon assumptions about monetary accommodation, Ricardian equivalence, and the degree of financial market integration. In open economies with flexible exchange rate regimes, expenditure-based stimulus is conventionally expected to face significant import leakage and exchange rate appreciation effects, compressing domestic demand spillovers. However, these theoretical benchmarks consistently fail to account for the nonlinear feedback mechanisms that emerge specifically when sovereign spreads breach threshold levels associated with debt sustainability concerns. In such regimes, the sovereign-bank nexus amplifies fiscal contractions, as rising risk premia reduce commercial bank balance sheet capacity through mark-to-market losses on government bond holdings, curtailing private credit supply endogenously. Empirical identification of these regime-dependent dynamics has historically been constrained by limited time-series depth for individual EMEs and by the endogeneity of fiscal stance to the macroeconomic cycle. Recent methodological advances in state-dependent local projection (LP) estimators, particularly those developed by Jordà (2005) and extended by Ramey and Zubairy (2018) for nonlinear settings, provide a robust semi-parametric alternative to structural VAR approaches that relaxes linearity assumptions without sacrificing interpretability. This paper exploits these advances alongside an expanded and harmonized panel dataset spanning 34 EMEs across Latin America, Sub-Saharan Africa, and Emerging Asia over 1995–2022, incorporating quarterly fiscal outturns, sovereign spread data from JP Morgan EMBI+, and private sector credit flows from BIS locational banking statistics. The remainder of this paper is structured as follows. Section 2 reviews the theoretical and empirical literature on fiscal multiplier heterogeneity in EMEs. Section 3 presents the state-dependent local projection model specification and identification strategy. Section 4 describes the data construction and the sovereign debt distress classification algorithm. Section 5 reports baseline estimation results and robustness checks across alternative threshold specifications. Section 6 derives policy implications for fiscal program design under IMF-supported adjustment arrangements, and Section 7 concludes.

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