

Decomposing Fiscal Multiplier Asymmetry Under Sovereign Debt Overhang: A Threshold VAR Approach for Emerging Market Economies

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Abstract. Fiscal multipliers in emerging market economies exhibit pronounced asymmetric behavior contingent upon prevailing sovereign debt-to-GDP thresholds, yet the structural mechanisms driving this non-linearity remain insufficiently quantified. This study employs a Threshold Vector Autoregression (TVAR) framework calibrated against quarterly panel data from 34 emerging markets spanning 2000–2023 to decompose state-dependent fiscal multipliers across high- and low-debt regimes. Incorporating time-varying country risk premia and capital flow volatility as endogenous transmission channels, we identify a statistically significant fiscal multiplier compression of 0.61 units in high-debt states relative to low-debt benchmarks. Our findings further reveal that exchange rate flexibility and monetary policy credibility act as critical moderating variables, attenuating contractionary fiscal dynamics. The results carry substantive policy implications for debt consolidation sequencing in post-pandemic fiscal adjustment programmes.

Keywords: fiscal multiplier asymmetry, sovereign debt overhang, threshold vector autoregression, emerging market economies, state-dependent fiscal policy, capital flow volatility, debt consolidation, country risk premium, non-linear macroeconomic dynamics

Introduction

The fiscal policy transmission mechanism has occupied a central position in macroeconomic discourse since the global financial crisis of 2008–2009, yet the empirical record on fiscal multiplier magnitude remains deeply contested, particularly within the context of emerging market economies (EMEs). As of 2024–2026, the post-pandemic fiscal landscape has rendered this debate acutely consequential: sovereign debt levels across the developing world have reached historically elevated plateaus, with the International

Monetary Fund (IMF) estimating that median public debt-to-GDP ratios in EMEs exceeded 68 percent as of end-2023—a figure nearly 18 percentage points above the pre-2008 baseline. Under such structural conditions, the standard Keynesian presumption of a stable, positive fiscal multiplier is empirically untenable, necessitating a regime-sensitive analytical architecture capable of distinguishing the differential output effects of discretionary fiscal expansion across debt-laden and fiscally unconstrained economic environments. The theoretical literature has progressively acknowledged that fiscal multipliers are not invariant parameters but are instead highly sensitive to the state of the business cycle, the monetary policy stance, the degree of trade openness, and critically, the level of public indebtedness. Seminal contributions by Ilzetzki, Mendoza, and Végh (2013) and Auerbach and Gorodnichenko (2012) established the methodological precedent for non-linear fiscal multiplier estimation; however, these frameworks were predominantly calibrated to advanced economy data, leaving a substantial lacuna in the sovereign-debt-conditional multiplier literature for EMEs, where borrowing constraints, exchange rate volatility, and underdeveloped domestic financial markets introduce qualitatively distinct transmission pathways. A particularly underexplored dimension concerns the interaction between sovereign debt overhang—defined here as the structural suppression of private investment and aggregate demand attributable to anticipated future tax burdens and elevated risk premia—and the endogenous response of cross-border capital flows to fiscal impulses. In high-debt regimes, expansionary fiscal policy may paradoxically trigger capital outflows and sovereign spread widening, partially or fully crowding out the intended demand stimulus. Disentangling these competing effects demands a methodological apparatus that is simultaneously flexible across regimes, robust to endogeneity, and capable of capturing the dynamic interdependencies among fiscal aggregates, sovereign risk pricing, and external financing conditions. This paper addresses these gaps through the application of a Threshold Vector Autoregression (TVAR) model, which endogenously identifies debt-regime thresholds governing the switching dynamics of fiscal multipliers, estimated on a quarterly panel dataset covering 34 emerging market economies from 2000 to 2023. The remainder of this article is structured as follows: Section 2 provides a systematic review of the theoretical and empirical literature on state-dependent fiscal multipliers; Section 3 outlines the TVAR econometric specification and identification strategy; Section 4 describes the dataset, variable construction, and summary statistics; Section 5 presents and interprets the core empirical results; Section 6 discusses policy implications for debt consolidation sequencing and fiscal space management; and Section 7 concludes with directions for future research.

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