A STUDY ON DYNAMIC FISCAL MULTIPLIERS

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Abstract

Government spending as a stabilization tool has been widely discussed in the literature as one of the most important components of economic growth. Literature suggests that there are different factors that determine the fiscal multiplier behaviour in the economy. Broadly there are two types of factors: first, there are the structural factors of the economy that affect how it works in normal times, such as the level of public debt, human development, trade openness, financial infrastructure, and labour markets; and second, there are the conjunctural factors, such as business cycles or monetary policies, that affect how fiscal policy acts, causing it to deviate from normal levels (Batini et al. 2014). This thesis reviews the heterogeneity in the fiscal multiplier estimates through three dimensions: examining the non-linear fiscal behaviour contingent on the structural characteristics, which is not just time-variant across threshold levels but time-invariant across distinct latent groups; analysing the sub-national level fiscal multiplier behaviour based on the structural factors of the states; and studying the asymmetric impact of fiscal shocks on macroeconomic variables across business cycles in India. This thesis is an attempt to address the limited evidence on fiscal multiplier efficiency, especially for the EMDEs. Notably, structural characteristics of the economy are intrinsic factors that shape economic behaviour over extended periods, potentially leading to heterogeneous behaviour among economies. This thesis is an attempt to extensively discuss the heterogeneity within a panel dataset by using the recently developed Panel Structure Threshold Regression Model (Miao et al. 2020). Heterogeneous effects in the panel data could be crucial, given that each unit possesses a distinct identity and exhibits structural variations (Durlauf 2001; Su and Chen 2013; Browning and Carro 2007). We identify latent groups of countries intrinsic to the structural characteristics of the variables and find that structural variables determine fiscal multipliers in a non-linear fashion where fiscal multipliers change significantly across the threshold of structural variables. Results suggest that improvements in human development and financial infrastructure measures play a prominent role in enhancing fiscal multiplier effects across economies. We also find that economies can achieve higher fiscal multipliers by keeping a check on the import propensity. We identify female labour force participation as one of the significant structural determinants of the fiscal multiplier, where many latent groups find parallels with the declining portion of the U-shaped feminization hypothesis. Overall, the results suggest that countries should pursue targeted, structural change-oriented fiscal policy to achieve higher economic growth. Furthermore, we study the asymmetric behaviour at state-

level fiscal multipliers. We also distinctively analyse the state government revenue and capital expenditure multipliers and find that capital expenditure multipliers are higher. We find state public debt has significant negative implications for all the categories of fiscal multipliers and across all the latent groups. This evidence suggests for a sustainable policy-oriented targeting framework wherein states target public debt below a certain threshold level. At last, our analysis of the Indian economy indicates that the adoption of preemptive fiscal stimulus in recessionary phases and fiscal consolidation during expansionary phases will facilitate macroeconomic stabilisation.