

# Time-varying Fiscal Multipliers Identified with Sign and Zero Restrictions: A Bayesian Approach to TVP-VAR-SV model \*

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## Abstract

This study might be the first attempt applied zero and sign restrictions method proposed by Arias, Rubio-Ramirez and Waggoner (2018) to a time-varying-parameter VAR model, and identifies the structural model by imposing long-run zero restrictions and short-run sign restrictions for a fiscal policy shock to be orthogonal to monetary policy and business cycle shocks in the US economy between 1953:Q1-2013:Q4. Our estimation reports that time-varying fiscal multipliers could be negative during the Great Moderation, since private consumption was crowded out, and that they, however, changed positively after the Great Recession by increasing the consumption. And we also observed that the propagation effect of fiscal policy has had non-trivial time lag so that it has taken at least two years to work effectively after 1970's.

*Keywords:* Bayesian estimation, time-varying-parameter Structural VAR, Sign and Zero Restrictions,

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