10TH MALAYSIA STATISTICS CONFERENCE
"*Looking Beyond GDP: Towards Social Well-being and Environmental Sustainability*"
25TH-26TH SEPTEMBER 2023

MyStats 2023

Fiscal Fatigue: A Cross-Country Empirical Analysis

Aaron Zhong Fu Goh   Zi Yun Chow

Central Bank of Malaysia

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September 2023

Motivation

- Rapid jump in sovereign debt globally since COVID-19
- **Is there cross-country evidence for Fiscal Fatigue?** Same as asking if there is a sovereign debt limit beyond which solvency is compromised?
- **If so, is this limit broad-based, or country-specific?**

Full paper & Replication codes
https://github.com/Aarongzf/fiscal-fatigue

TL;DR

- No universal magic threshold
- Heterogenous thresholds across countries, if present
- Thresholds are generally higher in AEs than EMEs
- Fiscal fatigue should be analysed at the country level to account for heterogeneity
- Fiscal fatigue may not follow even if threshold crossed in some countries

Methodology

Debt limit is estimated from a non-linear fiscal reaction function (FRF) using annual panel data from 18 countries (1993 – 2022; 8 AEs, and 10 EMEs)

$$pb_{it} = \alpha_i + \sum_{j=1}^{3} \beta_j debt_{i,t-1}^{j} + \gamma y_{it} + \lambda X_{it} + \varepsilon_{it}$$

- pb_{it} = Cyclical adjusted primary balance (% of potential GDP)
- $\sum_{j=1}^{3} \beta_j debt_{t-1}^{j}$ = Cubic polynomial of lagged gross government debt (% of GDP)
- y_{it} = Real GDP (YoY growth)
- X_{it} = Vector of control variables
- α_i = Country fixed effects

Estimation Steps
- Pooled OLS (POLS)
- Country FE with $AR(1)$ errors
- TWFE with $AR(1)$ errors
- Country-specific OLS (COLS)

Key Findings

1. No universal magic threshold
   - Only POLS estimates support fiscal fatigue
   - POLS estimates are sensitive to country coverage and model specification
2. Fiscal fatigue may be present only in some countries
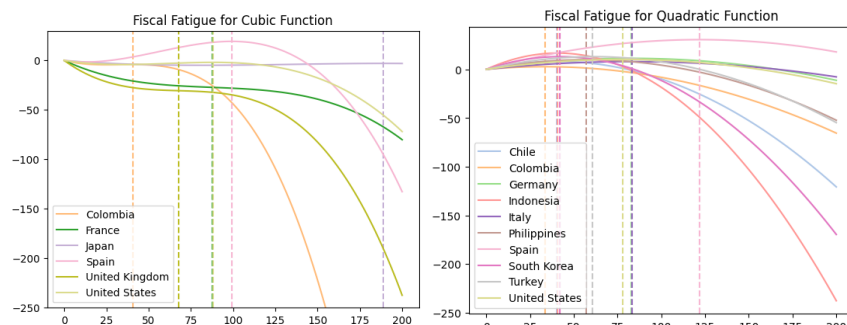
- COLS suggests that the debt limit tends to be higher for advanced economies (AEs) than for emerging economies (EMEs)
- Not all countries (only 6 out of 18 for cubic, and 10 out of 18 for quadratic) exhibit FRF in support of fiscal fatigue
3. However, even if some countries exceed the estimated debt limit, fiscal fatigue does not necessarily follow
   - Estimated debt limit may be downward biased if the true debt threshold was never reached
   - Country-specific estimation requires careful treatment of country-specific determinants