Fiscal Sustainability and Proposal for Institutional Change: The Case for Jamaica

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Comments
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The paper assesses the sustainability of fiscal policy in Jamaica and the risks associated with the govt’s debt level.


Risks associated with the debt: → are evaluated through the IMF-DSA framework, which is consistent with the Govt’IBC.

The FRF involves primary balances and debt, controlling by a important number of macro variables suggested by literature.

Data: Uses quarterly (annualized) data from 1997Q4 to 2018Q4 along which the debt and primary balances present large fluctuations.

The empirical strategy follows close the Burger's paper for South Africa’s case.
The paper uses (Annualized) Quarterly Data in the analysis of Fiscal Policy Reaction

The point here is think about the Govt’ ability to react with taxes and primary spending inbetween a fiscal year.....

That because changes in

- Taxes .... Required approval by Congress (one year, at less)
- Expenditures ... It’s governed by annual or biennial budget law

FRF: \[(B/Y)_t = \alpha_1 + \alpha_2(B/Y)_{t-1} + \alpha_3(D/Y)_{t-1} + \ldots\]

If there is not alternative by data restrictions, with quarterly data is better to use 4 lags in the FRF estimates instead of 1 lag (estimates for Ukraine case, in 2012, uses 4 lag)

Quarterly data practically forces to enter a 4-quarter lag for the explanatory variables
The paper uses various modelling techniques to estimate FRF and to ensure robustness (and explore various aspects of the data)

✓ Initially the paper estimate simple OLS models.

✓ To overcome problems associated with simultaneity, non-linearity and other interactions between variables, the paper also use VAR, GMM models

✓ Finally, to face stationarity concerns, the paper estimates VEC Models to capture short & long term relationship between the key variables to involves the FRF

✓ Summarizing: according to it is assumed or not stationarity in the system, the paper uses OLS, GMM or VAR and VECM
Stationarity tests: Apparently the system satisfies this requirement BUT in differences (1st & 2nd), NOT in the way as the variables enter in the reduced form of the debt equation. → If its true, its important to review the first two estimates and results (OLS, GMM).

VAR: The VECM was re-worked to represent a VAR in levels; so VAR stationarity is solve by this way (Burger et al. 2011) → .... However, it is important to discuss how the VAR is identified. As it’s well known, the VAR’s parameters (sign, size) depend on the variables ordering. It is recommended that the identification analysis be included.

TAR (Threshold Autoregressive).

By the large fluctuations of the Jamaica’s debt: 80% of GDP in 1998; 120%/2003; 100%/2007; 145%/2012 and 100%/2018) → could be useful identifies changes in debt regimens and try to estimate the FRF with structural breaks.

A TAR model, f.e., could detected differentiated reactions of the primary balance/GDP ratio to positive and negative debt cycles or output gap (asymmetric gov’t responses)
3th Comment: Two Technical Details on Sustainability Condition (LT-FSC)

\[
\text{FSC : } \frac{\alpha_3}{1 - \alpha_2} > \alpha^* = \frac{(r-g)}{(1+g)}
\]

Where \(\alpha\)'s come from \( (B/Y)_t = \alpha_1 + \alpha_2 (B/Y)_{t-1} + \alpha_3 (D/Y)_{t-1} + \ldots + \alpha_6 (D/Y)^2_{t-1} + \alpha_7 (D/Y)^3_{t-1} \)

✓ \(\alpha\)'s and the Non Linear FRF:

The Non linear response of Primary Balance to Debt is verified (like Cubic Approach of Gosh). Therefore, ¿the numerator must be include \(\alpha_6\) and \(\alpha_7\)? What’s the role of the quadratic & cubic debt parameter in the FSC? Why the linear is the only key parameter, \(\alpha_3\)?

✓ Cost of the debt \((r-g)/(1+g))\): Data for Jamaica shows that there is a extremely high values for the analyzed period (+/-) for some quarters: >+50% and <-25%. Only since the 2014, this spread has been stable. How this data is used for calculus in the FSC? ... given such high volatility: Average? Average (excluding outlayers) ? ..... Spread relevant?