Discussion on "Domestic Policies and Sovereign Default" by Emilio Espino, Julian Kozlowski, Fernando M. Martin, Juan M. Sanchez

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# One-page summary

- Standard trade-off for debt holding: impatience v.s. default risk (thus borrowing cost)
- ▶ This paper: domestic policies also affect the incentives to accumulate debt
  - ▶ Domestic policies focus on tax, money growth (in eqm: inflation, currency depreciation)
- ▶ Incorporates fiscal and monetary policy into a sovereign default model
- Importance of distortionary tax and default risk to reproduce business cycle statistics of fiscal and monetary policy in emerging markets

### This Discussion

Very nice paper, advances sovereign default literature

- ▶ Standard sovereign default literature, government chooses B' (if not default) and D.
- Taxation and sovereign default: e.g. Pouzo and Presno (2014), Karantounias (2019), Cuadra et al. (2010), Deng (2019)
- Monetary policy and sovereign default: e.g. Arellano et al. (2020), Sunder-Plassmann (2020), Hurtado et al. (2022)

This Paper: distortionary tax  $\tau$ , money growth  $\mu$ , interacting with B' and D

# A Particularly Useful Decomposition

How much debt to hold?

$$\beta \frac{\partial \mathbb{E} \left[ \mathcal{V} \left( B', s' \right) \mid s \right]}{\partial B'} + \xi \frac{\left[ \partial Q \left( B', s \right) B' \right]}{\partial B'} + \lambda \beta \frac{\partial \mathbb{E} \left[ u'_N c^{N'} \mid P, s \right]}{\partial B'} = 0$$

- ► Distortionary-policies channel (further derived with an explicit form in the paper): more debt tomorrow ⇒ larger distortions and larger default risk ⇒ affect household money demand today ⇒ affect govt budget constraint today
- $\blacktriangleright$  Theoretically, can be positive or negative, depending on curvature of u
- ▶ Quantitatively: negative in calibration

# Remark #1: Role of Default Risk

- One key conclusion: distortionary tax and default risk to reproduce business cycle statistics of fiscal and monetary policy in emerging markets
- ▶ Authors compare the "benchmark" and a "lower default" model (Figure next page)
- ▶ Would be helpful to further quantify the role of default risk
- ▶ Authors could evaluate the importance of default risk by shutting down default risk:
  - ▶ Option 1: a reduced-form debt elastic interest rate
  - Option 2: calibrate such that no default in the eqm



#### Figure 8: Evolution of Inflation and Depreciation after a shock

## Remark #2: Discipline on $\sigma_N$

► Recall  

$$\beta \frac{\partial \mathbb{E} \left[ \mathcal{V} \left( B', s' \right) \mid s \right]}{\partial B'} + \xi \frac{\left[ \partial Q \left( B', s \right) B' \right]}{\partial B'} + \lambda \beta \frac{\partial \mathbb{E} \left[ u'_N c^{N'} \mid P, s \right]}{\partial B'} = 0$$
►  $u \left( c^N, c^T \right) = \alpha^N \frac{\left( c^N \right)^{1 - \sigma^N}}{1 - \sigma^N} + \alpha^T \frac{\left( c^T \right)^{1 - \sigma^T}}{1 - \sigma^T}$ 

- ▶  $\sigma_N < 1$  implies the distortionary-policies channel has a negative sign, mitigating the incentives to accumulate debt
- ▶ Paper sets  $\sigma_N = 0.5$  (exogenous parameter)  $\Rightarrow$  mitigating debt
- ▶ Key for the sign of the mechanism. Can it be a key empirical target in the analysis?



Figure 12: Policies as functions of debt, alternative calibrations

Benchmark —  $\sigma = 1.5$  ---  $\rho = 2$  ·····

Maybe corr(money supply, debt) in the data can identify  $\sigma_N$ ?

## Remark #3: Domestic Currency Debt

- ▶ Foreign currency debt
- ▶ Could add nominal debt?
  - Data shows growing dominance of debt issued in domestic currency (Figure next page)
  - ▶ A high share of nominal debt provides extra inflation incentives. Affects the key mechanism in the decomposition mentioned earlier. Affects optimal borrowing.

# A Global Phenomenon: Rise of Domestic Currency Debt



Source: Mitchener, K.J. and Trebesch, C., 2021. Sovereign debt in the 21st century: looking backward, looking forward

### Conclusion

▶ Very nice paper on an important research agenda!

- ▶ Interactions among fiscal policy, monetary policy, and debt and default
- Could be relevant for advanced economies too
- Suggestions/comments for future steps and research
  - Quantify the role of default risk
  - More discipline on key parameter  $\sigma_N$
  - ▶ Integrate domestic currency debt in the framework