Discussion on “A Framework for Debt-Maturity Management by Saki Bigio, Galo Nuño and Juan Passadore.”

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1. This is the kind of paper one wishes to have written.

2. In effect, it is innovative in several ways. Not only methodologically, but it also has applications in several strands of the literature such as corporate finance, international finance and public finance.

3. On other matters, it seems to me that a more natural boundary condition is: \( f(T, t) = \iota(T, t) \). Intuitively, the stock of bonds with maturity \( T \) can only be due to new issuances. In effect, one cannot have bonds with maturity \( T + \epsilon \).

4. In the paper, this boundary condition is \( f(T, t) = 0 \), which means that one cannot have bonds with maturity \( T \) but \( f(T + \epsilon, t) = 0 \) is already given.
Suggestions

1. A possible extension would be to consider risk-averse international investors (Lizarazo, 2013).
2. In the context of sovereign debt default, providing the government the option of model financial aid would be a nice extension.
3. The generality in the debt structure and the presence of the revenue-echo effect in the model would allow for a rich characterization of when financial aid is crucial to avoid a sovereign default and when it might be just a subsidy, and thus lead to moral hazard (a problem study by Cuadra, Ramos-Francia and García-Verdú, 2018).
4. Another extension and an elaborated one is to consider a three factor term structure of interest rate (Litterman and Scheinkman 1991). This would make interest rate hedging more general.