Balance sheet policies and Central Bank losses in a HANK model

by C. Labrousse and Y. Perdereau

Discussant: Luigi Iovino

Introduction

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The paper studies different QE/QT policies in an economy with

- distortionary taxes

- desire to self-insure (HANK model)

- money (focus on ZLB episode)

⇒ The details of the fiscal-monetary interaction matter

Understanding the Mechanism

Consider the following experiment:

1. During the ZLB episode the CB purchases bonds with money
   (perfect substitute with bonds)

2. When the ZLB ends, the CB issues bond-like securities
   (perfect substitute with bonds)

⇒ **Important:** the CB

   (i) rolls over its bonds forever

   (ii) never stops sending profits to the Treasury

Claim: this policy is neutral

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- CB replaces taxes with seigniorage ⇒ Auerbach and Obstfeld (2005)

- but it also affects the total quantity of debt through the fiscal rule

What is the Optimal Quantity of Public Debt?

Aiyagari et al. (2002)

distortionary taxation, no state-contingent debt

- tax distortions are minimized with non-stationary public debt

- a spending shock leaves a permanent mark on debt and taxes

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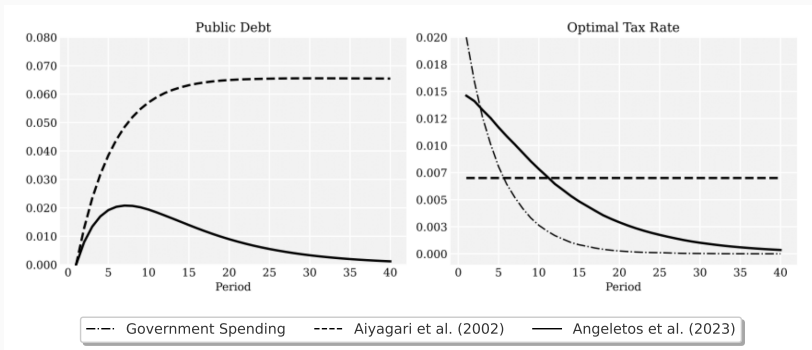distortionary taxation, no state-contingent debt

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Angeletos et al. (2023)

distortionary taxation, no state-contingent debt, liquidity service of debt

- trade-off tax distortions with "seigniorage" revenues

- lower accumulation of debt to keep rates low

- public debt is stationary $\rightarrow$ returns to a long-run target

A Negative Spending Shock

Public Debt — Optimal Tax Rate

Legend: —·— Government Spending ---- Aiyagari et al. (2002) —— Angeletos et al. (2023)

Labrousse and Perdereau (2024)

distortionary taxation, no state-contingent debt, liquidity service of debt, money demand & ZLB

- can finance debt with distortionary taxes or inflation

- exogenous fiscal rule determines taxes and debt

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$$d_t = (1 + r_t)d_{t-1} + \bar{G} - s_t^{CB} - \tau_t \times \text{labor income}_t \ \ (\text{budget})$$

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3. In general, is CB "fixing" sub-optimality of fiscal rule?
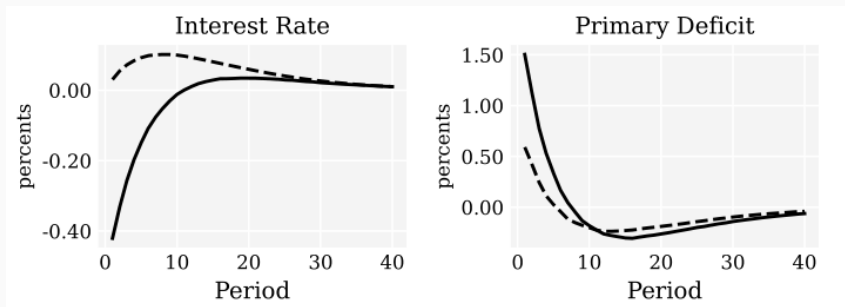
Private vs Public Value of Liquidity

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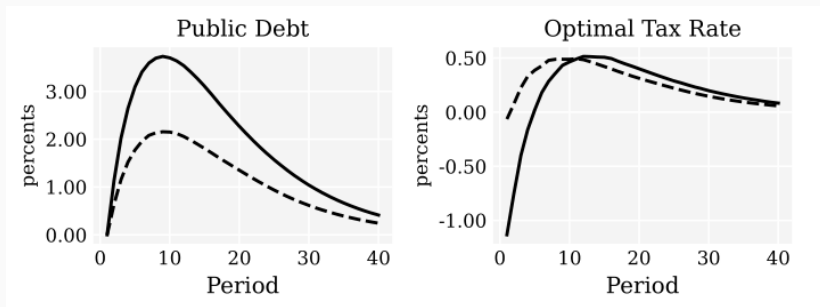

Regular recession (dashed), financial crisis (solid). Source: Angeletos et al. (2023).

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