From Fiscal Deadlock to Financial Repression: Anatomy of a Fall

Olivier Jeanne

Johns Hopkins University
NBER and CEPR

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Introduction

- Financial repression has historically been used in advanced economies to stabilize or reduce excessive government debt (Reinhart and Sbrancia, 2015; Acalin and Ball, 2023)
- Concerns that financial repression could make a comeback
- This paper presents a framework to study financial repression scenarios
- Our framework captures different forms of financial repression
    - from open-market purchases of government debt to extracting quasi-fiscal revenue from the banking sector
- Literature: Becker and Ivashina (2018), Chien, Cole and Lustig (2023), Chari, Dovis and Kehoe (2020), Jeanne (2024)

Introduction

Model

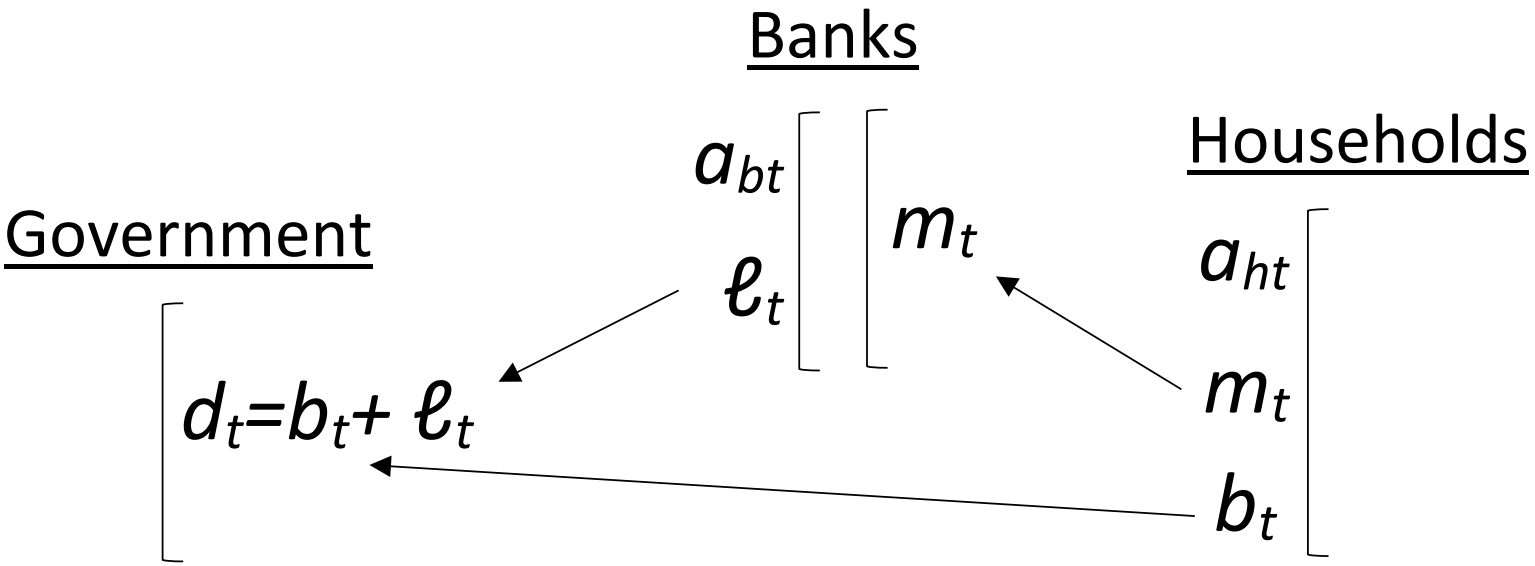
- Unsustainable government debt dynamics + possibility of fiscal adjustment
- Financial repression: banks purchase government debt and/or provide quasi-fiscal revenue to government
- We characterize the optimal financial repression policies

Data

- We benchmark the model against data on government debt and bank balance sheets in advanced economies

Model

Balance sheets



Debts are real

Banking sector consolidates central bank and depository institutions

Model

Assumptions

- Household utility

$$U_0 = E_0 \left\{ \int_0^{+\infty} \left[c_t + u\left(m_t\right) \right] e^{-rt} dt \right\}$$

- Government levies fiscal revenue τ_t on households and quasi-fiscal revenue θ_t on banking sector, at cost

$$\gamma_\tau \tau_t + \gamma_\theta \theta_t$$

- Fiscal inertia: Initially constant deficit δ leading to $d_t \nearrow +\infty$ but there could be a fiscal adjustment ($\tau_t \nearrow$) with probability ϕ

- Financial repression can raise revenue at any time, but it is more distortive than regular taxation

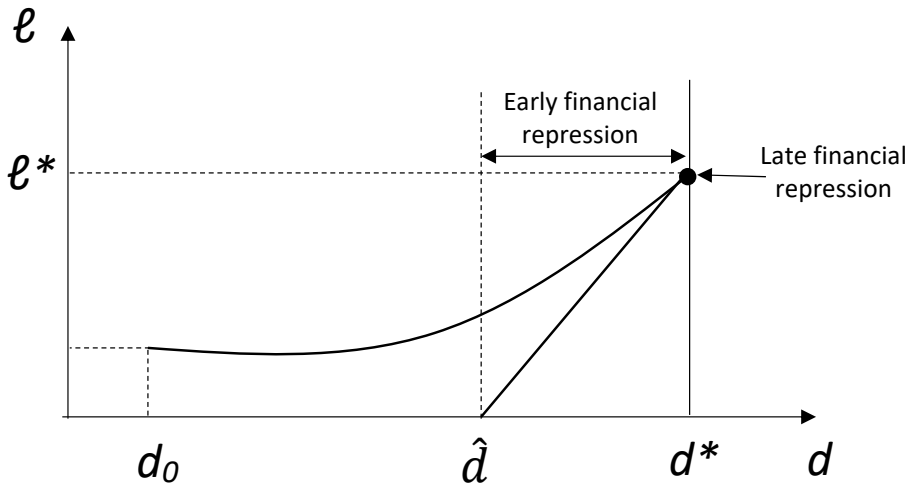
$$\gamma_\theta > \gamma_\tau$$

- The government can default at any time *on non-bank creditors* ($b_t \to \underline{b}$), with output cost γ_d

  - banks protected from default (Chari, Dovis and Kehoe, 2020)

Optimal financial repression

- Financial repression policy: conditional paths for government debt purchases and quasi-fiscal revenue from banks $(\ell_t, \theta_t)_{t=0,+\infty}$
  - θ_t determines deposits m_t
- There is a default-preventing financial repression policy iff $d < d^*$ (Prop. 1)
- The welfare-maximizing policy has two stages: **early stage** with government debt purchases only and **late stage** with quasi-fiscal revenue to stabilize the debt



Model with deposit expansion

- Banks can issue deposits yielding different transaction utility per unit

$$u\left(\sum_{i=1}^{n}\omega_i m_{it}\right)$$

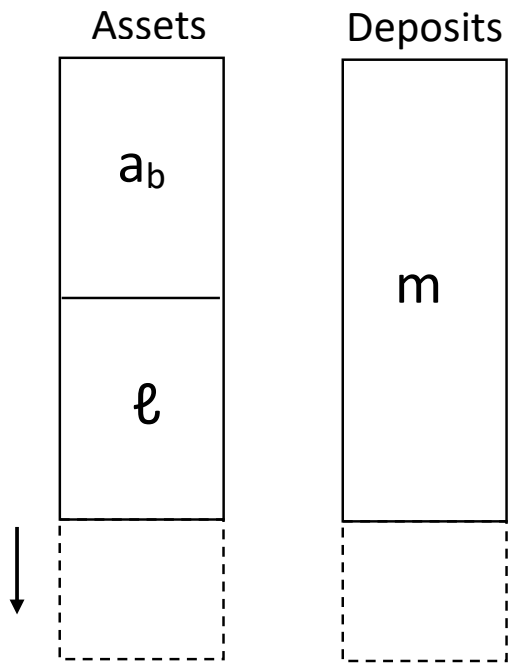
  where $\omega_1 = 1 > \omega_2 > ... > \omega_n$

- Now θ_t determines $\sum_{i=1}^{n}\omega_i m_{it}$ but not $m_t = \sum_{i=1}^{n} m_{it}$

- Financial repression policy: conditional paths $(\ell_t, \theta_t, m_t)_{t=0,+\infty}$

Model

- In the early stage, banks finance their government debt purchases by issuing low-utility deposits rather than selling illiquid assets (Prop.3)



- If deposits unconstrained ($\omega_n \to 0$), the government debt limit is determined by the cost of defaulting on banks

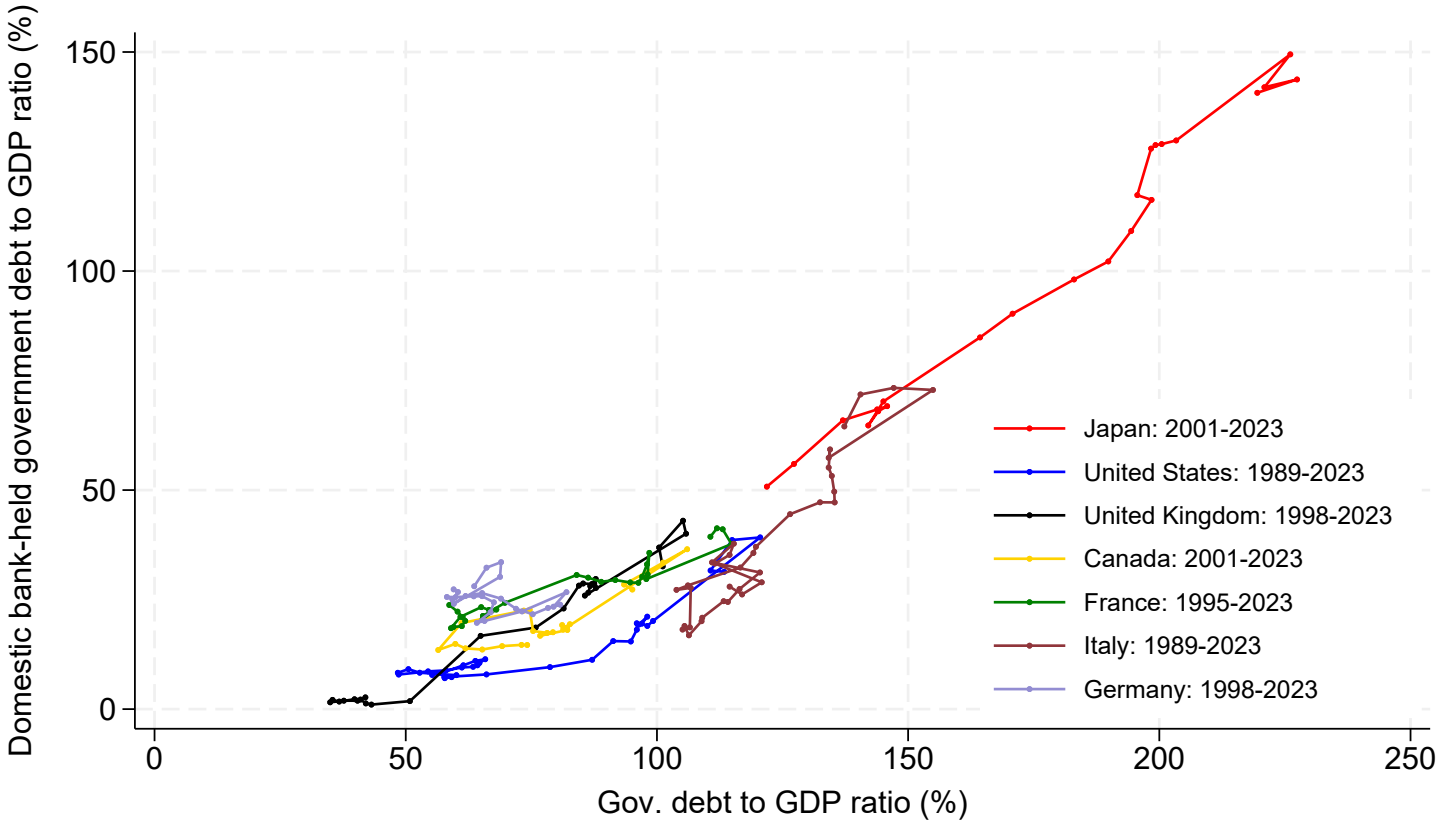
Data

The model predicts that in a fiscal deadlock with increasing debt

- the banking sector purchases government debt when debt surpasses a threshold (early stage financial repression)
- when its purchasing capacity becomes constrained, the banking sector provides quasi-fiscal revenue to stabilize the debt (late stage financial repression)
- the banking sector can finance its debt purchases by selling assets (crowding out) or by expanding deposits

Data

Bank-held government debt



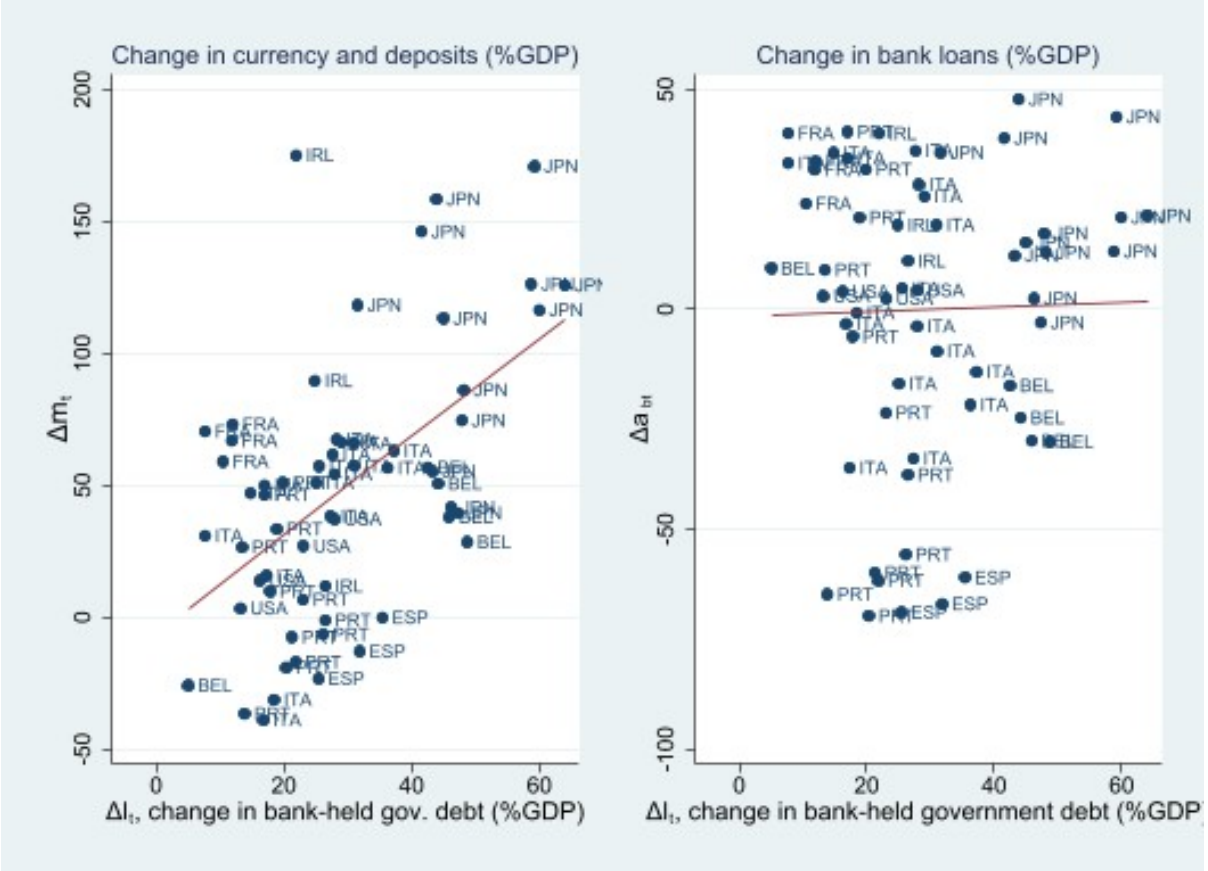
Source: Arslanalp and Tsuda

Source: Arslanalp and Tsuda database

Threshold regressions find a debt threshold between 100% and 120% of GDP

Data

Increases in bank-held government debt are associated with increases in deposits rather than decreases in bank loans



10-year changes in currency and deposits/GDP (lhs) and bank loans/GDP (rhs) vs. 10-year changes in bank-held government debt. Observations with gov. debt/GDP$>$ 110%. Source: Arslanalp and Tsuda database, OECD and national sources.

Calibration

- The model with deposit expansion gives upper bounds for non-bank-held government debt and total government debt

$$
\begin{aligned}
b^* &= \underline{b} + \frac{\gamma_d}{\gamma_\tau} - \left(\frac{\gamma_\theta}{\gamma_\tau} - 1\right)\frac{\delta}{r+\phi} \\
d^* &= \underline{b} + \frac{\Gamma_d}{\gamma_\tau} - \left(\frac{\gamma_\theta}{\gamma_\tau} - 1\right)\frac{\delta}{r+\phi}
\end{aligned}
$$

- The data suggest $b^* \geq 100\%$ and $d^* \geq 250\%$

- Consistent calibration (Jeanne, 2024)

Table: Calibration

$\underline{b}$	r	γ_τ	γ_θ	ϕ	δ	γ_d	Γ_d
60%	2%	0.15	0.25	6.7%	4.7%	$\geq$ 11.4%	$\geq$ 33.9%

Conclusions

Conclusions: avenues for further research

- Financial repression in the open economy
  - euro area
- Financial repression and IO of banking industry
- Financial repression as manipulation of convenience yield on government debt

THANK YOU!