Fiscal Policy and the Saving Glut of the Rich

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The Core Puzzle: Two Defining Economic Trends

Trend 1: The Saving Glut of the Rich

A massive accumulation of financial assets by the top 10% of the income distribution since the 1980s (Mian, Straub, Sufi, 2021).

Trend 2: Shift in policy

Monetary policy tolerating high inflation before, but not after 1980s

Central Question

Are these phenomena related?

This Paper's Argument

Yes. They are two sides of the same coin, driven by a **fundamental shift in the financing of U.S. fiscal redistribution**.

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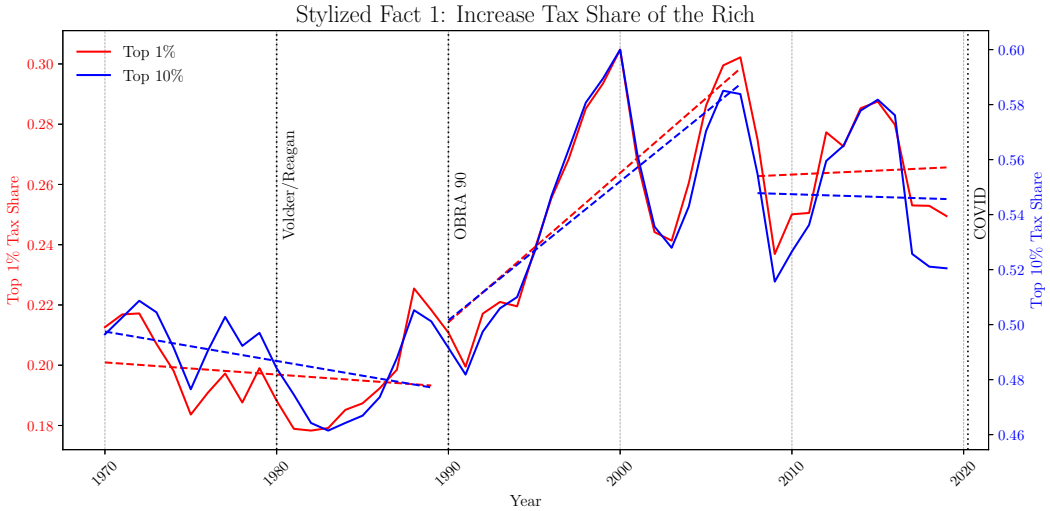
Roadmap

1. **Motivation**: Three stylized facts shaping the U.S. economy.
2. **Hypothesis**: A structural shift from unfunded to funded fiscal policy.
3. **A Simple Model**: Isolating the core mechanisms of funded vs. unfunded transfers.
4. **The Quantitative Model**: A richer framework for empirical analysis.
5. **Empirical Results**:
   - Estimated impulse responses.
   - Historical decomposition of debt.
   - Evidence of a structural break in financing.
6. **Conclusion**.

Three Motivating Stylized Facts



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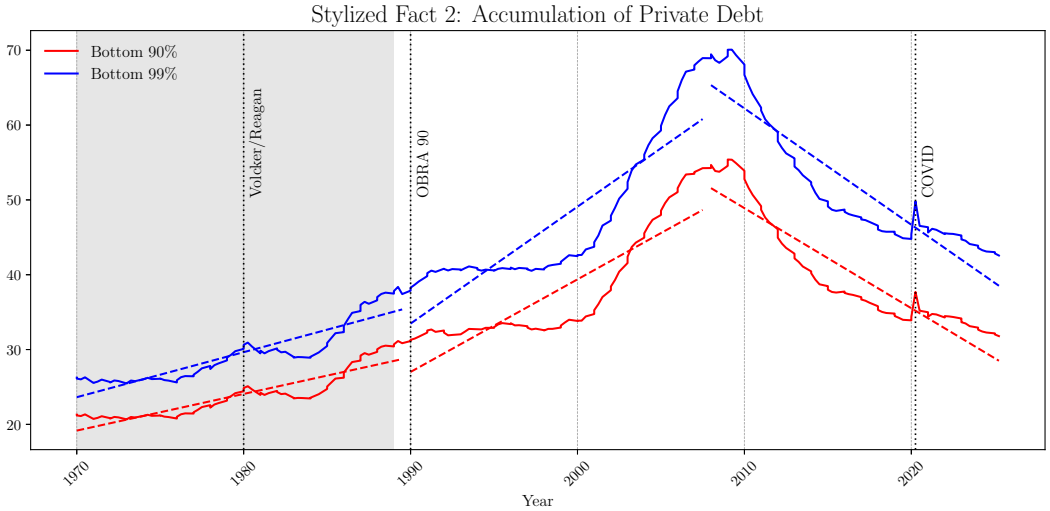

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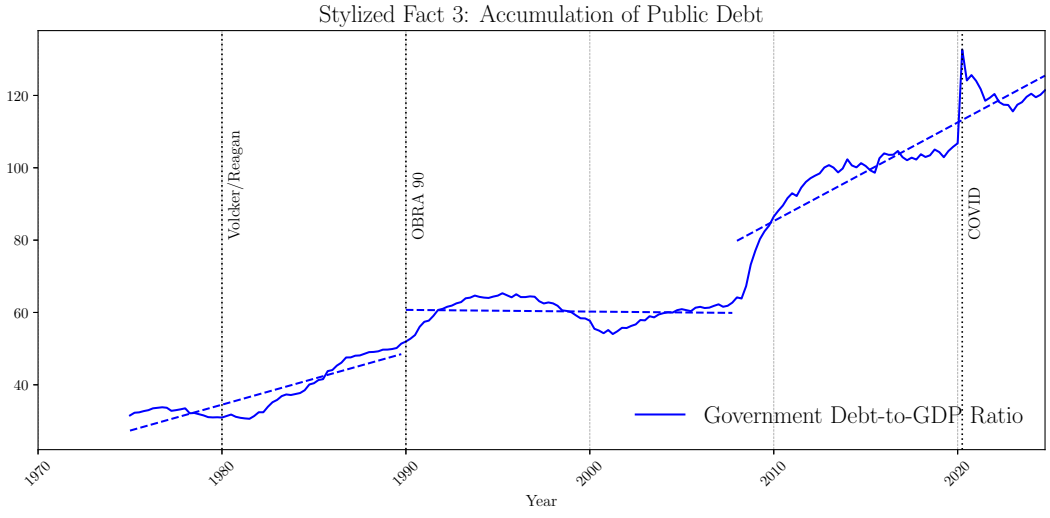


Our Hypothesis: A Structural Shift in Fiscal Financing

We argue these facts are explained by a shift in how the government finances redistributive transfers.

The Old Regime (pre-1980s): Unfunded

- **Financing:** Primarily via inflation "tax" and broad-based taxation.
- **Mechanism:** Inflation erodes the real value of nominal assets (public and private debt).
- **Outcome:** Keeps debt levels in check; discourages saving in nominal assets.

The New Regime (post-1980s): Funded

- **Financing:** Primarily by issuing government debt.
- **Mechanism:** Creates a credible expectation of future tax hikes to service the debt.
- **Outcome:** Given tax progressivity, high earners anticipate future tax liabilities and increase saving today.

A Simple TANK Model to Build Intuition

We use a stylized Two-Agent New Keynesian model to isolate the core mechanisms.

"Savers" (Investors)

(Top 10%)

- Supply savings.
- Hold government bonds and lend to households.
- Are subject to future tax increases.

"Borrowers" (Households)

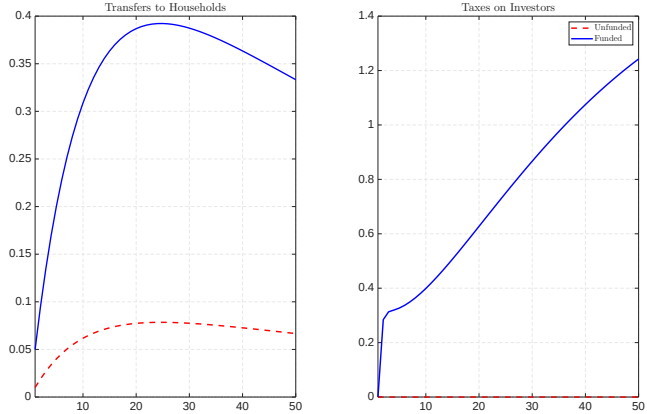
(Bottom 90%)

- Demand credit.
- Receive government transfers.
- Borrow via mortgages to smooth consumption.

We shock this economy with two distinct types of government transfers to Borrowers.

Details

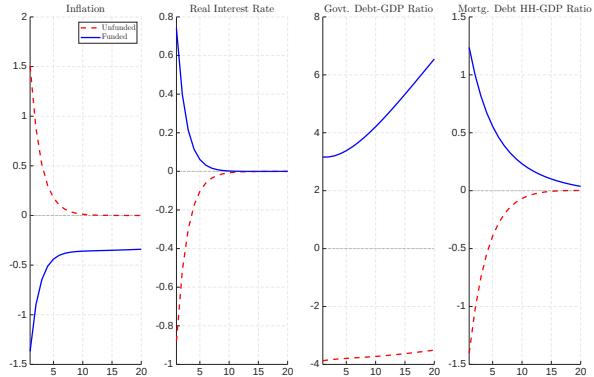
Impulse responses: Transfers and Taxation



At time 0, government announces a redistributive program in favor of households:

- Funded shock: Gradual increase in taxes
- Unfunded shock: No adjustment in taxes

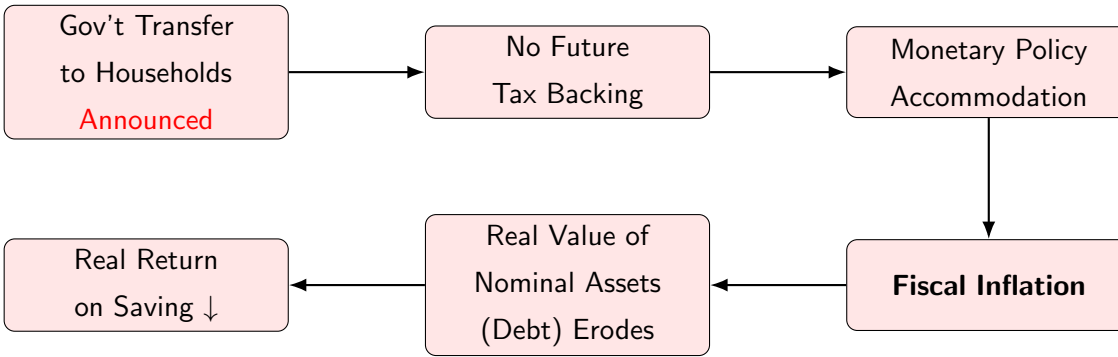
Impulse responses: Inflation vs saving glut



Policy mix determines whether fiscal transfers lead to a saving glut or inflation:

- Funded Shock (Blue Line): Saving glut. Real rates rise, inflation is contained, and both government and mortgage debt increase. Private debt *moves first*.
- Unfunded Shock (Red Line): Fiscal inflation. Real rates fall, debt is eroded.

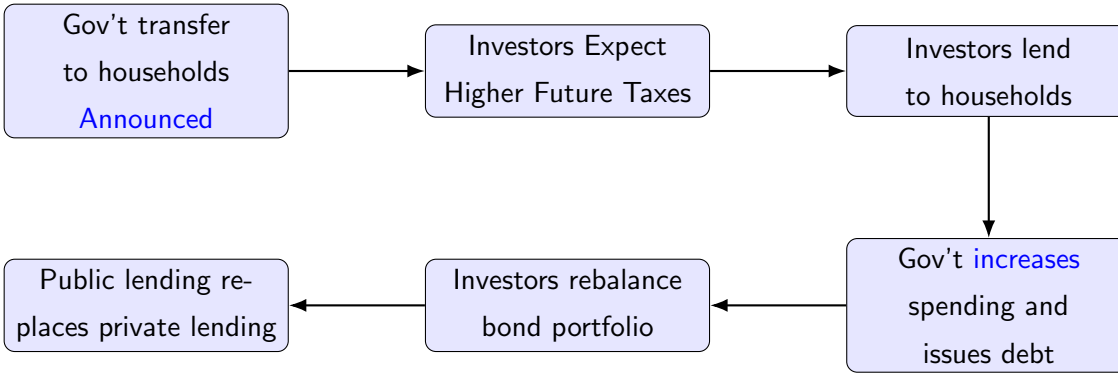
Mechanism 1: Unfunded Transfers Create Fiscal Inflation



Outcome

Inflation ↑, real interest rates ↓, and both public and private debt fall in real terms as Savers lend less and Borrowers deleverage.

Mechanism 2: Funded Transfers Create the Saving Glut of the Rich



Outcome

Government Debt ↑, Mortgage Debt ↑, and Savers accumulate assets.

This is the "Saving Glut of the Rich."

The Structural Shift Hypothesis

The simple model suggests a powerful hypothesis:

- Pre-1980s economy, low debt and high inflation, behaves like the unfunded regime.
- Post-1980s economy, rising debt and saving glut, behaves like the funded regime.

Hypothesis

The stylized facts can be explained by a structural shift in the U.S. from a fiscally-led, unfunded policy mix to a monetary-led, funded policy mix around the early 1980s.

To test this, we need a richer model to take to the data.

The Full Quantitative Model: Motivation & Features

Why a Richer Model?

- To quantitatively match U.S. business cycle and long-run dynamics.
- To conduct historical counterfactual analysis.
- To structurally estimate the timing and magnitude of the policy shift.

Key Features Added

- Long-term private (mortgage) and public (gov't) debt.
- Capital accumulation, investment, habit formation.
- Nominal rigidities in prices and wages.
- Rich fiscal block.

Key Innovation: Fiscal-Monetary Interaction

We build on Bianchi, Faccini, and Melosi (QJE, 2023) by allowing funded and unfunded shocks to coexist:

- Fiscal policy **Ricardian** for the funded debt, and **non-Ricardian** for unfunded debt
- Monetary policy's behavior is state-contingent.

The Taylor rule is modified: $\tilde{r}_{n,t} = \cdots + \phi_\pi(\tilde{\pi}_t - \tilde{\pi}_t^F) + \ldots$

- The central bank is **active** against normal inflation deviations ($\tilde{\pi}_t$).
- It is **passive** towards fiscal inflation ($\tilde{\pi}_t^F$), the level of inflation needed to stabilize the unfunded portion of debt.

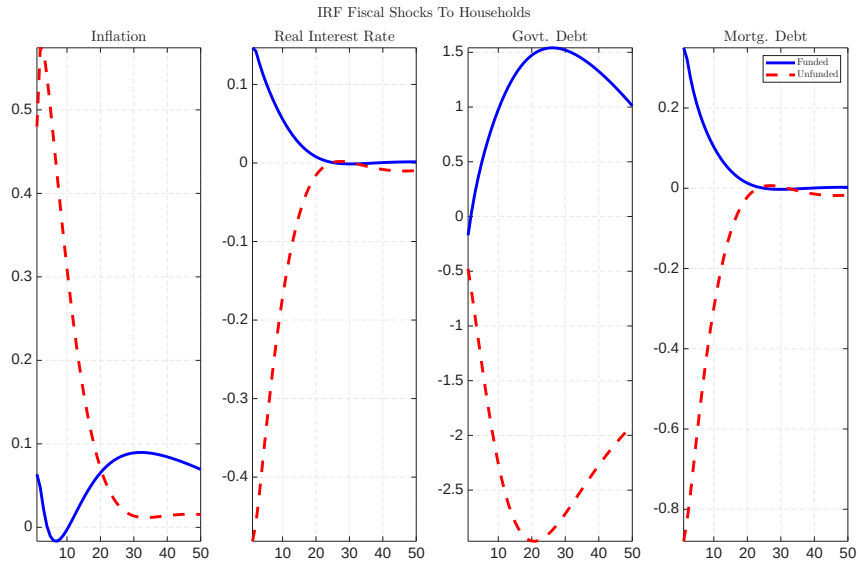
Framework generates an endogenous inflation target that moves with the fiscal stance, capturing the essence of fiscal dominance for a portion of the public debt.

Estimation Strategy

- **Method:** Bayesian estimation using the Kalman filter.

- **Data:** 12 quarterly U.S. series, from **1960:Q1 to 2022:Q3**.
  - **Macro Data:** Real GDP, consumption, investment growth; hours gap; FFR; wage growth; GDP deflator inflation; real gov't transfers & consumption.
  - **Distributional Data:** Ratio of mortgage liabilities to GDP for the **bottom 90th percentile** (from Fed's Distributional Financial Accounts).

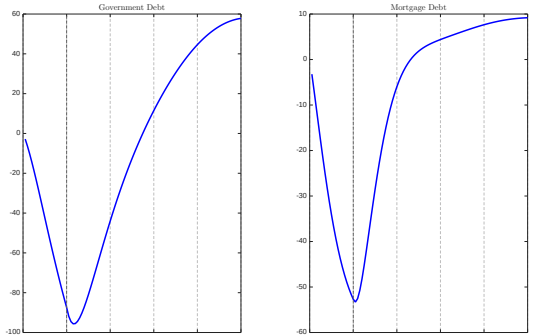
Results: Estimated Impulse Responses



Illustrating the Shift: An Announced Policy Change

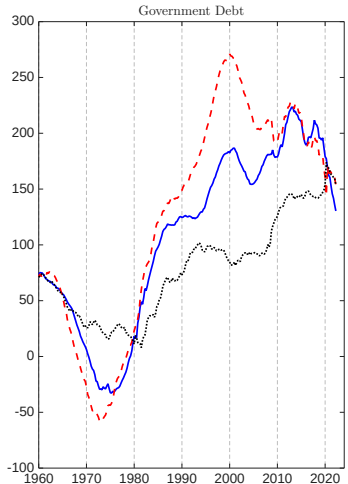
We simulate a conceptual experiment in the estimated model:

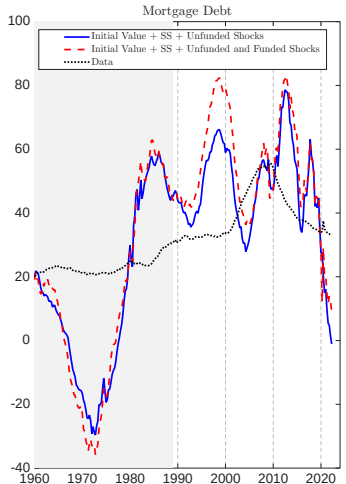
- For the first 20 quarters, the economy is hit only by unfunded shocks.
- At quarter 20, a permanent shift to only funded shocks is announced and implemented.



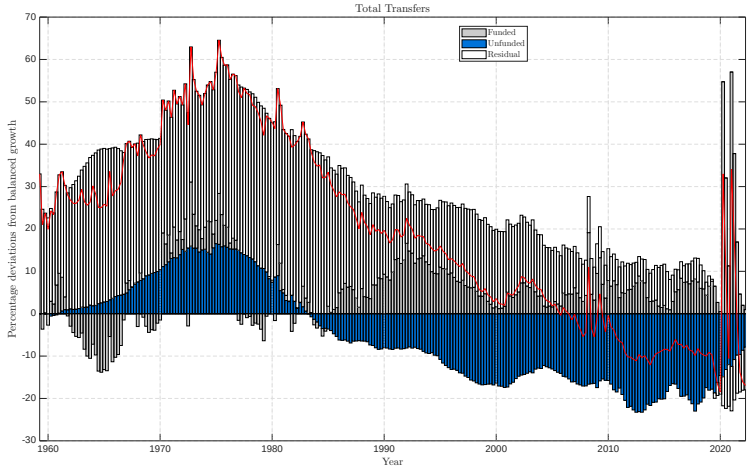
Result: In response to the announced shift, investors divest assets during the unfunded phase and then massively increase savings in the funded phase, generating the saving glut.

Main Result: Decomposing the Historical Rise in U.S. Debt



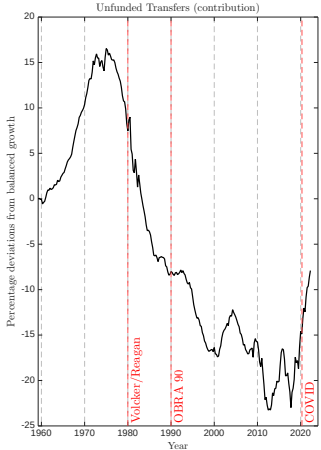


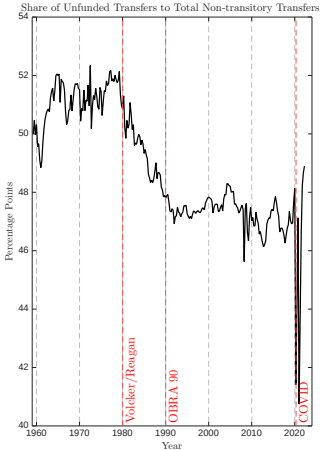
What Drives the Counterfactuals? A Look at Transfers



- This shows the "surprises" in transfer spending relative to expectations at the start of the sample.

The Smoking Gun: A Structural Break in Financing





- The model identifies a dramatic shift around the late 1970s / early 1980s.
- The **share of government transfers that are unfunded plummets**.
- This marks the end of the unfunded period and the beginning of the debt-financing.

Tying It All Together: The Full Narrative

1. **The Shift (c. 1980):** U.S. pivoted from financing a share of transfers via inflation to financing them via debt. Our model structurally identifies this break.
2. **The Expectation:** This created a credible expectation that future taxes, primarily on high earners, would rise to service this new debt (Reagan Tax Reform Act, 1986, Clinton Omnibus Budget Reconciliation Act, 1993)
3. **The Response:** High earners (Savers) increased their saving to prepare for these future tax liabilities.
4. **The Outcome:** This "saving glut" financed the surge in government debt and the initial leveraging-up of households, creating the macroeconomic landscape of the past 40 years.

Conclusion and Contributions

- We connect the literature on monetary-fiscal interactions with the literature on household inequality and the saving glut, showing they are deeply intertwined.
- The "saving glut of the rich" is an **endogenous response** to a structural shift in U.S. fiscal policy, not an exogenous shock.
- The move from **unfunded (inflation-financed)** to **funded (debt-financed)** redistribution is a key, quantitatively important driver of the joint dynamics of public debt, private debt, and wealth accumulation at the top.
- Our framework provides a **unified explanation** for three major stylized facts of the post-1980s U.S. economy $\Rightarrow$ New shift soon?

Thank You

Environment and Agents

Agents: $i \in [0, \omega]$ households, $i \in [\omega, 1]$ investors, firms $j \in [\omega, 1]$

Households:

$$V^H(B_{H,t-1}, \zeta^H_{s,t}, \zeta^I_{s,t}) = \max \log C_{H,t} - \frac{N_{H,t}^{1+\eta}}{1+\eta} + \beta \mathbb{E}_t[V^H(B_{H,t}, \zeta^H_{s,t+1}, \zeta^I_{s,t+1})]$$

s.t. $C_{H,t} + B^{(H)}_{H,t} = W_t N_{H,t} + R^{(H)}_{t-1} \frac{B^{(H)}_{H,t-1}}{\Pi_t} - T_{H,t}$

Investors:

$$V^I(\mathcal{S}^I_t) = \max \log C_{I,t} - \frac{N_{I,t}^{1+\eta}}{1+\eta} + U(B^{(H)}_{I,t}) + \beta \mathbb{E}_t[V^I(\mathcal{S}^I_{t+1})]$$

s.t. $C_{I,t} + B^{(H)}_{I,t} + B^{(G)}_{I,t} + \int P^S_{j,t} S_{j,t} dj =$
$W_t N_{I,t} + R^{(H)}_{t-1} \frac{B^{(H)}_{I,t-1}}{\Pi_t} + R^{(G)}_{t-1} \frac{B^{(G)}_{I,t-1}}{\Pi_t} + \int (P^S_{j,t} + D_{j,t}) S_{j,t-1} dj - T_{I,t}$

Optimization and Equilibrium Conditions

First-Order Conditions:

$$
\begin{aligned}
W_t &= C_{H,t} N_{H,t}^{\eta} = C_{I,t} N_{I,t}^{\eta} \\
Q_t^{(H)} &= \mathbb{E}_t[M_{t,t+1}^{H} \Pi_{t+1}^{-1}] \\
Q_t^{(H)}(1 - C_{I,t} U'(B_{I,t}^{(H)})) &= \mathbb{E}_t[M_{t,t+1}^{I} \Pi_{t+1}^{-1}] \\
Q_t^{(G)} &= \mathbb{E}_t[M_{t,t+1}^{I} \Pi_{t+1}^{-1}]
\end{aligned}
$$

where $M_{t,t+1}^{j} = \beta(C_{j,t+1}/C_{j,t})^{-1}$ for $j \in \{H, I\}$

Production and Pricing:

$$
Y_t = \left(\int_{\omega}^{1} Y_{j,t}^{\frac{\theta-1}{\theta}} dj \right)^{\frac{\theta}{\theta-1}}, \quad Y_{j,t} = \left(\frac{P_{j,t}}{P_t} \right)^{-\theta} Y_t \, Y_{j,t} = N_{j,t}, \quad \mathcal{R}_{j,t} = \frac{\varphi}{2} \left(\frac{P_{j,t}}{P_{j,t-1}} - \bar{\Pi} \right)^2 Y_t
$$

Policy Rules and Market Clearing

Government Budget Constraint:

$$B_{G,t} + \mathtt{w}\, T_{H,t} + (1 - \mathtt{w})\, T_{I,t} = R_{t-1}^{(G)} \frac{B_{G,t-1}}{\Pi_t}$$

Fiscal Rules:

$$\frac{T_{H,t}}{Y_t} - \frac{\bar{T}}{\bar{Y}} = \left(\frac{T_{H,t-1}}{Y_{t-1}} - \frac{\bar{T}}{\bar{Y}} \right)^{\rho^H} \left(\frac{B_{G,t-1}}{Y_{t-1}} - \frac{\bar{B}_G}{\bar{Y}} \right)^{\delta_b^H (1-\rho^H)} e^{\zeta_{s,t}^H}$$

$$\frac{T_{I,t}}{Y_t} - \frac{\bar{T}}{\bar{Y}} = \left(\frac{T_{I,t-1}}{Y_{t-1}} - \frac{\bar{T}}{\bar{Y}} \right)^{\rho^I} \left(\frac{B_{G,t-1}}{Y_{t-1}} - \frac{\bar{B}_G}{\bar{Y}} \right)^{\delta_b^I (1-\rho^I)} e^{\zeta_{s,t}^I}$$

Taylor Rule:

$$\frac{R_t^{(G)}}{\bar{R}^{(G)}} = \left[\frac{R_{t-1}^{(G)}}{\bar{R}^{(G)}} \right]^{\rho_R} \left[\left(\frac{\Pi_t}{\bar{\Pi}} \right)^{\phi_\pi} \left(\frac{Y_t}{\bar{Y}} \right)^{\phi_Y} \right]^{1-\rho_R} e^{\zeta_{M,t}},$$ Back

Details Data Motivating Evidence

- **Tax shares**
  - Distributional National Accounts (PSZ'18) (as in Mian, Straub, and Sufi 2021).
- **Mortgage debt**
  - Post 1989Q2: Distributional Financial Accounts B101.H (wealth based method in MSS'21).
  - Pre 1989Q2: FRED Households and Nonprofit; Total Mortgages; Liability
    + Assumption Constant Shares at mean 1989Q2-1990:Q2 from Table B101.H.
- **Government debt**
  - FRED Federal Debt: Total Public Debt as Percent of Gross Domestic Product.