Session 3
Monetary, fiscal & macroprudential policies and long-run structural challenges

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Perspectives on quantitative tightening
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Disclaimer: The views expressed herein are those of the author; they do not necessarily reflect those of the Federal Reserve Board or the Federal Reserve System.
Federal Reserve balance sheet runoff (QT) is well under way: When should it end?

Federal Reserve assets and liabilities, 2006M1-2024M2

When interest rate on reserves (IOR) is not constrained by effective lower bound:

- Fed can hit FF target for any reserve supply by setting the IOR as needed
- Need criterion to determine optimal size of balance sheet when it’s not needed for stimulus
When should quantitative tightening end?

Two perspectives:

1. **Interest rate volatility:** Avoid another yield spike like September 2019
   - What reserve supply is “too low” from this perspective in today’s economy?
     Lopez-Salido and Vissing-Jorgensen, 2023
   - Large optimal balance sheet. Still some, but diminishing, space for additional QT

2. **Other considerations:**
   - What are the relevant factors?
     Vissing-Jorgensen, 2023a: Focus on the Fed’s net supply of *convenience, “money”*
   - Much smaller optimal balance sheet

Putting some weight on 2, the Fed should tolerate a bit more interest rate volatility.

Tilting the Fed’s Treasury portfolio toward bills would reduce conflict b/w these criteria.
Reserve demand

<table>
<thead>
<tr>
<th>Bank Assets</th>
<th>Bank Liabilities</th>
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<tbody>
<tr>
<td>Reserves</td>
<td>Deposits</td>
</tr>
<tr>
<td>Securities, loans</td>
<td>Interbank and central bank borrowing</td>
</tr>
<tr>
<td>Interbank lending</td>
<td>Equity</td>
</tr>
</tbody>
</table>

1. **Interest on reserves: IOR**

2. Reserves are needed to satisfy reserve requirements (if any)

3. Reserves have **convenience benefits**: Don’t have to sell illiquid assets/cut lending/delay payments if deposits drop

   Also useful for supervision & regulation purposes

\[ v(\text{ExcessReserves}, \text{Deposits}) \]

**Convenience value:** Expected savings on transactions costs/other costs

\[ v'_R(\text{ExcessReserves}, \text{Deposits}) \]

**Convenience yield:** Marginal value of more reserves

Decreasing in reserves, increasing in deposits

4. **Bank balance sheet cost** \( \varphi \) per dollar of assets (capital requirements)
Reserve demand

FOC for borrowing to hold more reserves:

\[ r = \text{IOR} + v'_R(\text{ExcessReserves}, \text{Deposits}) - \varphi \]

Highest interest rate bank is willing to pay to borrow to invest in additional reserves

Net benefit of additional reserves

- **Demand for reserves:**
  - **Slope:** Comes from \( v'_R(.) \)
  - **Level:** Shifts up with IOR, down with \( \varphi \)
  - **Location:** Shifts right with req. reserves
  - **Asymptotes** to IOR-\( \varphi \) if \( v'_R(.) \to 0 \)

- **Reserve scarcity** is measured by \( v'_R(.) \):
  - **Scarce:** \( v'_R(.) \gg 0 \)
  - **Ample:** \( v'_R(.) > 0 \) but only slightly so
  - **Abundant:** \( v'_R(.) = 0 \)
Reminder: Can hit target (on avg) for any reserve supply by setting IOR as needed

When IOR is not constrained by eff. lower bound:

- Can hit target for any reserve supply by setting IOR as needed
- Need another criteria for optimal balance sheet size: Interest rate vol, convenience supply etc.
Interest rate volatility: Low reserve supply → Yield spikes, September 17, 2019
Interest rate volatility

Reserve demand flatter at higher quantities $\rightarrow$ Less interest rate volatility from:

- **Supply shocks**: Due to fluctuating autonomous factors (currency, government deposits)
- **Demand shocks**, if horizontal

![Graph showing money market interest rate vs reserves with demand and supply curves]

Money market interest rate, $r$

IOR - $\varphi$

Reserves

Money market interest rate, $r$

IOR - $\varphi$

Reserves
Interest rate volatility: September 17, 2019, was unexpected, given level of reserves

Lopez-Salido and Vissing-Jorg. (2023):

- To understand reserve demand, need to include size of banking sector (deposits)
- Show that then Sept 2019 was not surprising
- At which supply today are reserves as scarce as in Sept 2019, given today’s deposits?

Estimating the reserve demand function in ample reserves regime

• Assume \( v'_R(.) - \varphi \) is log-linear. Allow for a reserve demand shock \( u \)

\[ v'_R(ExcessReserves, Deposits) - \varphi = a + b \ln(ExcessReserves) + c \ln(Deposits) + u \]

• Reserve demand:

\[ r - IOR = a + b \ln(Excess Reserves) + c \ln(Deposits) + u \]

• US data, monthly, 2009M1-2024M1
  o \( r \): Effective Federal funds rate (interbank market)
  o Both excess reserves and deposits are nominal so account for prices changes
  o Similar results with liquid deposits rather than total deposits
  o Important to instrument for Excess Reserves
  o Controlling for deposits is important, but instrumenting for deposits is not
Estimating the reserve demand function in ample reserves regime

<table>
<thead>
<tr>
<th>Fed Assets</th>
<th>Fed Liabilities</th>
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<tbody>
<tr>
<td>Securities</td>
<td>Currency, government deposits: Autonomous factors</td>
</tr>
<tr>
<td>Loans to banks</td>
<td>Reserves</td>
</tr>
<tr>
<td>ONRRP</td>
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</tbody>
</table>

Reserves = \[\text{Securities} - \text{Autonomous factors}\] + Loans to banks - ONRRP

- Along a horizontal part of the supply curve: Reserve demand shocks affect reserves
- Instrument excess reserves with Reserves + ONRRP (=Net sec's when loans to banks are small)
Estimating the reserve demand function in ample reserves regime

Reduced form of IV:  
\[ EFFR - IOR = A + B \cdot \ln(\text{Reserves} + \text{ONRRP}) + C \cdot \ln(\text{Deposits}) + U \]

\[ = A + B \cdot \ln\left( (\text{Reserves} + \text{ONRRP}) \cdot (\text{Deposits})^{\frac{C}{B}} \right) + U \]

Deposit-adjusted Reserves + ONRRP supply

[Graph showing EFFR vs. Reserves + ONRRP]
When is Reserves+ONRRP supply as tight as in September 2019?

Predicted spread, given deposits of $17.4T as of 2024M1:

\[ EFFR - IOR = \hat{A} + \hat{B} \times \ln(Res + ONRRP) + \hat{C} \times \ln(\text{Deposits}) \]

- Sep 2019: Predicted EFFR-IOR=4 bps
- Jan 2024: Predicted EFFR-IOR=4 bps for Reserves+ONRRP=$2.7T (actual=$4.1T)
- Values around/below this value could be risky from an interest rate volatility perspective

Horizontal line marks 4 bps, the predicted value in Sept 2019.
Other factors relevant for choosing balance sheet size

(a) *Central bank’s convenience (liquidity/safety) supply:* Vissing-Jorgensen (2023)
   - CB faces convenience supply *tradeoff* when supplying more reserves:
     - Adding convenience via reserves
     - Subtracting convenience via other assets if CB buys convenient assets

(b) *Side effects of large central bank balance sheets:* Banks need to fund the reserve holdings
   - Crowding-out of bank securities holdings/loans: Can lead to a welfare loss
   - Crowding-in of deposits/other liabilities: Adds convenience benefits but also fin. stab. risk

(c) *Central bank profits:*
   - CB losses may pose a threat to central bank independence
     - Large current balance sheet may limit headroom for future QE if needed
Convenience supply is at the heart of central banking

Typical central bank mandates:

1. **Facilitating payments**: Supplying money improves welfare via its convenience yield
2. **Monetary policy**
3. **Financial stability**

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<tr>
<td>Securities</td>
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<td>Government deposits</td>
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<tr>
<td></td>
<td>Reserves</td>
</tr>
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<td></td>
<td>Equity capital</td>
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</table>

**Typical approach:** Supply currency and government deposits elastically to facilitate payments

**With IOR:** Free to use reserve supply to supply convenience too

Perhaps surprisingly: This does not imply a large optimal balance sheet for the Fed, because the Fed plans to mainly hold Treasuries as its asset
Evidence for a Treasury convenience yield, Krishnamurthy and V-J (2012)

Prediction: If $y_{Corp. bonds} - y_{Treasury}$ has a Treasury convenience yield component, then it should narrow with Treasury supply

- $y_{Corporate bond} - y_{Treasury} = v'_T(T) + \text{Default component}$
  - $v'_T(T)$: Spread for large Treasury supply
  - Default component: Asymptote Conv. yield: Distance to asymptote

- Avg. $v'_T(T)$, 1919-2008, long maturities:
  - 46 bps relative to Aaa corp. bonds
  - 73 bps relative to Baa corp. bonds
There is still a Treasury convenience yield

Top left: 1919-2008
Top right: 1919-2023

Outward shift post-GFC was due to Fed & foreign demand shocks:

Bottom left: Role of Fed demand shocks
Bottom right: Role of foreign demand shocks
There is still a Treasury convenience yield

Treasury holdings of Federal Reserve and foreigners
Annual data, 2019-2023
A simple framework for convenience-maximization

Private (non-central bank) sector’s convenience from reserves and bonds with conv. yield:

\[
[v_R(R) - \varphi R] + v_B(B - B^{cb})
\]

**Result (Convenience-maximizing reserve supply)**

(A) If a central bank holds assets without convenience yields, \( B^{cb} = 0 \):

\[
\text{Max}_R v_R(R) - \varphi R \quad \rightarrow \text{R}^A, \text{solves} \quad v'_R(R) - \varphi = 0
\]

(B) If a central bank holds bonds (B) with convenience yields, \( B^{cb} = R + A \):

\[
\text{Max}_R [v_R(R) - \varphi R] + v_B(B - R - A) \quad \rightarrow \text{R}^B \text{ solves:} \quad v'_R(R) - \varphi = v'_B(B - R - A)
\]

Federal Reserve: Has announced plans to primarily hold Treasuries in the longer run (Case B) “thereby minimizing the effect of Federal Reserve holdings on the allocation of credit across sectors of the economy”
Implementing the convenience-maximation framework: US, case A

Case A: Follows from reserve demand estimation in LSVJ, \( r - IOR = \nu'_R(R) - \varphi \)

\[
EFFR - IOR = \tilde{A} + \tilde{B} \times \ln(Res + ONRRP) + \tilde{C} \times \ln(Deposits)
\]

As of April 2023:

- \( \nu'_R(\cdot) - \varphi = 0 \): Reserve+ONRRP=$3.3T

- A bit larger than the value that sets predicted EFFR-IOR equal to same as in Sept 2019
Case B: Also need $v_T'(Treasuries^{Private})$. Updating KVJ (2012)

$$y^{Aaa} - y^{Treasury} = \max (A_T + B_T \cdot \ln \left( \frac{Treasuries^{Private}}{GDP} \right)) + \sum_{i=2009}^{2023} \beta_i D(\text{year} = i), C_T) + U$$

- Annual data for 1919-2023
- Year dummies for 2009-2023: Capture rightward shift post-GFC (due to foreigners)
- Max: Accounts for Treasury demand saturation
- $C_T$: Estimated default component, 31 bps
- April 2023: Spread=66 bps
  - Default component: 31 bps
  - Convenience yield: $v_T'(.) = 35$ bps
Implementing the convenience-maximation framework: US, case B

April 2023:

• Red: $v'_R(\cdot) - \varphi$ given current deposits
• Blue: $v'_T\left(\frac{Treas. Private}{GDP}\right)$ given current GDP
• A: Locations at current
  Reserves+ONRRP if Fed only held Treasuries
• B: Locations at convenience-maximizing
  Reserves+ONRRP if Fed only holds Treasuries

\[
\begin{align*}
\hat{A}_R + \hat{B}_R * \ln(x) + \hat{C}_R * \ln(Deposits) &= \\
\max (\hat{A}_T + \hat{B}_T * \ln\left(\frac{Treas. - [x + AF]}{GDP}\right)) + \hat{\beta}_i - \hat{C}_T, 0)
\end{align*}
\]

Reserves+ONRRP=$593B
Convenience yields equalize at 29 bps

Vertical black line: Treasuries $Private$ given that Fed currently holds Treas. and MBS
Summary: When should quantitative tightening end?

Two perspectives:

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   - What reserve supply is “too low” from this perspective in today’s economy?
     Lopez-Salido and Vissing-Jorgensen, 2023
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2. **Other considerations:**
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     Vissing-Jorgensen, 2023: Focus on the Fed’s net supply of convenience, “money”
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Putting some weight on 2, the Fed should tolerate a bit more interest rate volatility.
Tilting the Fed’s Treasury portfolio toward bills would reduce conflict b/w objectives

**Extension (Convenience-maximizing reserve supply with multiple Treasury maturities)**

If a central bank can choose the maturity structure of its convenient assets, deciding between two maturities of bonds, 1 and 2, then its convenience supply is maximized by equalizing all three convenience yields involved:

\[
v'_R(B^{cb}_1 + B^{cb}_2 - A) - \phi = v'_{B_1}(B_1 - B^{cb}_1)
\]

\[
v'_R(B^{cb}_1 + B^{cb}_2 - A) - \phi = v'_{B_2}(B_2 - B^{cb}_2)
\]

- Since **Treasury bills** have a lower convenience yield than **Treasury bonds**: Fed can increase its convenience supply by reallocating assets toward bills.
Tilting the Fed’s Treasury portfolio toward bills would reduce conflict b/w objectives.
References (available at Annette Vissing-Jorgensen (google.com))


Lopez-Salido, D. and A. Vissing-Jorgensen, 2023, “Reserve Demand, Interest Rate Control, and Quantitative Tightening”, working paper

Vissing-Jorgensen, A., 2023a, “Balance Sheet Policy Above the Effective Lower Bound”, ECB Forum on Central Banking (Sintra)
(video here, paper on my google site)

Vissing-Jorgensen, A., 2023b, “Convenience Yields and Monetary Policy”, Baffi Lecture, Bank of Italy
(video here, paper on my google site)
Supply changes alone cannot explain the Sept. 2019 yield spike
Demand shocks

The predicted value of the EFFR-IOR spread (which equals the net convenience yield, $v'_R(\cdot) - \varphi^*$) peaks exactly in Sept 2019

- Why? Possibly due to importance of horizontal demand shocks

- $r(FF) - IOR = A + B \cdot \ln \left( \frac{(Reserves + ONRRP) \cdot (Deposits)^c}{x} + \varepsilon \right)$

  $$= A + B \cdot \ln(x + \varepsilon) \approx A + B \cdot \ln(x) + \frac{B}{x} \varepsilon$$

  using $\ln(x + \varepsilon) \approx \ln(x) + \frac{1}{x} \varepsilon$

- Then a horizontal demand shock $\varepsilon$ shifts the demand curve up more for low than for high $x$:

  $$\frac{\partial (r(FF)_t - IOR_t)}{\partial \varepsilon_t} = \frac{B}{x}$$

  where $x$ is deposits-adjusted supply
13th Annual JRCPPF Conference

Monetary, Fiscal and macroprudential policies and long-run challenges.

An Unhappy Marriage. Monetary and Fiscal Policy at the start of the XXIst century
Junior Can’t Vote

Government Budgets under pressure.

**Secular decline in growth rate and demographic transition**

- Governments in advanced economies
  
  - Have made significant promises to transfer recipients
  
  - Have shifted the burden to future generations.

  "It is feasible for one generation to shift costs to subsequent ones. That is what national government debts do"...*(Sargent (2007), Berkeley commencement address)*.

- Future generations can’t vote today.

- **Price discovery** in Treasury markets:
  
  - Bond markets enforce government debt valuation equation:

    \[ PDV(\text{Surpluses}) = \text{Treasury Valuation}. \]
Low Real Rates

- Long history of U.S. and other governments adopting low-rate policies in wars:
  - U.S: Civil war, WW-I, WW-II. (Financial repression) (recent work by Payne et al. (2023))
  - Recently: Central banks and financial regulators have adopted low-rate policies.
    - Bank of Japan led the charge (now Yield Curve Control) (What about Japan, joint with Yili Chien and Hal Cole.)
    - The ECB and the Fed have followed.
    - U.S: Civil war, WW-I, WW-II, COVID. (recent work by Hall and Sargent (2022, 2023))
- Price Discovery in Treasury markets impaired
New Central Banking Consensus

Around low-rate policies.

March 12, 2020.

“We are not here to close spreads, this is not the function or the mission of the ECB,” said Ms Lagarde. “There are other tools for that and other actors to deal with those issues.”

Ms Lagarde’s mis-step came on the day she announced the first change in monetary policy since she took over at the ECB in November.
Low-Rate Policies

- Distort incentives of governments.
- Engineer transfers of wealth.
  - *Within generations*: Impose *hidden tax* on younger, poorer and less financially sophisticated households (*duration* shortfall).
  - *Across generations*: Shifting the burden to future generations.
    - Governments (*duration* shortfall)
    - *Across borders*: Shifting the burden to other countries (Eurozone).
- Distort incentives of market participants.
  - Re-engineer the financial system
    - Reaching for yield.
CBO 10-YR Budget Projections
Yields continued downwards trend after GFC

- Treasury market was no longer penalizing large deficits
- Fiscal Optimism: $r < g$
  - We can keep rolling over deficits.

“Put bluntly, public debt may have no fiscal cost”
Navigating by the stars

Yields continued downwards trend after GFC

- Fiscal optimism ($r<g$) ignores role of Fed in pushing down $r$ (models with perfectly elastic demand for USTR)
- Fed deploys measure of equilibrium real rates ($r_{\text{star}}$) that keeps trending down. March 2022.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
<th>Central Tendency</th>
<th>Longer run</th>
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<tbody>
<tr>
<td></td>
<td>2023</td>
<td>2024</td>
<td>2025</td>
</tr>
<tr>
<td>Federal funds rate</td>
<td>5.1</td>
<td>4.3</td>
<td>3.1</td>
</tr>
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</table>

- But stars seem to be moving when the Fed changes course.

(Laubach and Williams, 2003, 2016)
Why were rates so low?

- 2 Large Inelastic buyers of US Treasurys:
  - RoW: U.S. Treasury is the world’s safe asset supplier.
    - Between 2007 and 2022, RoW absorbed $5.36 trillion (mostly prior, during and after GFC).
  - Federal Reserve: In 4 different rounds of QE, the Fed absorbed $5.15 trillion in issuance.
    - Fed 29% of issuance of Notes and Bonds.
  - disconnect between valuation of USTR and PDV(Surpluses)
Yields continued downwards trend after GFC

- Treasury market is no longer penalizing large deficits.
  - Hard to get $PDV(Surpluses)$ anywhere close to valuation of USTR.
  - US Treasury valuations do not respond to fiscal fundamentals.
    - *The Dogs that didn’t bark* (2020)
- Treasurys seem overpriced (footprint of low-rate policies).
  - *Feed in CBO Projections and compute PDV(Surpluses)*
- Limits to Arbitrage: Bond trader don’t trade against the Fed (in Japan, they call this the “widowmaker trade”).

*joint work with Zhenyang Jiang, Stijn Van Nieuwerburgh and Mindy Xioalan.*
Wars and COVID

Real Returns on Government Debt
Mini-Case Study: COVID-19


- 10 YR Treasury Yield \( \uparrow \) by 70 bps between March 9 and March 19.
  - Largest post-war fiscal shock in the U.S.
  - Treasury yields have to increase to mark the valuation of all Treasurys to market.
  - Treasury Market hits \( \text{⏯} \) on Mark-to-Market
    - Valuation of USTR has to backed by PDV(Surpluses)
Fed Intervention.

“Markets aren’t functioning.”

• On March 15, 2020, Fed announced purchases to support “smooth functioning of Treasury markets”
  - At least $500 billion in Treasurys
  - $200 billion in MBS.

• On March 23, 2020, Fed announced purchases were open-ended:
  - Using Fed balance sheet to warehouse USTR.

• Fed hits onPause on Mark-to-Market
  - Excluding T-bills, the Fed had absorbed 99% of Bond and Note issuance.

• Suspension of SLR (excluding USTR)
Fed stops intervening

Markets are functioning.

- QT starts in March 2022.
- Fed stops warehousing USTR.
  - Fed hits pause on Mark-to-Market in March 2022 by announcing halt of large-scale asset purchases
- Real 10-year yields rise by more than 300 bps.
An unhappy marriage of monetary and fiscal policy

**Things Central Bankers will Say**
- Treasury markets are illiquid (FED).
  - Primary dealers running out of balance sheet capacity.
- Sovereign Debt Markets are Segmented (ECB).
- Transmission of Monetary Policy is Impaired (Fed+ECB).
- Firesales in Gilt Markets (BoE).

**What Central Bankers really Mean.**
- The US Treasury needs low rates to fund its deficits.
- The periphery (e.g. Italy) in the Eurozone needs low rates to avoid default.
- We want to bail out UK pension funds.
Low-Rate Policies Benefit Current Generations

Government Duration Mismatch

Losers

- **Future Young** face a tax bill.
  - Cheap Debt allows governments to borrow more.
  - Shift burden to future young.

Winners.

- **Governments** get extra fiscal space
  - Surpluses have high duration (far in the future), but government debt does not (especially after QE and consolidation)
    - duration mismatch: lower rate create extra fiscal capacity (higher G or lower T)

\[ \text{Duration}(D) < \text{Duration}(T-G) \]

- **Current Old** get government transfers.
  - Social security payments
  - Other transfers.

*What about Japan * joint with Yili Chien and Hal Cole.
Wealth Inequality

Lower Rates increase Wealth Inequality for Current Generation

• Between 1980 and 2020, real rates \( \downarrow \) by 350 basis points.
  • Discount rates for long-lived assets \( \downarrow \).
  • Asset valuations \( \uparrow \) more for assets with longer duration.
  • Long-lived assets (with high duration) mostly held in top percentiles of wealth distribution.
  • Wealth inequality \( \uparrow \).

Financial and Total Wealth Inequality with Declining Interest Rates (2020)*

*joint with Greenwald, Leombronii and Van Nieuwerburgh
Low-Rate Policies Redistribute

Household Duration Mismatch

Losers from lower real rates
- **Currently Young**, Poor, Least Financially Sophisticated
  - Young need to save for retirement at low-rates
  - Poor and least sophisticated save in deposits
    - Don’t participate in asset markets (no stocks, no bonds)
    - Not enough **duration** in their portfolio
      \[\text{Duration(portfolio)} < \text{Duration(C-Y)}\]
  - Young need to buy house

Winners from lower real rates
- **Old**, Rich, More Financially Sophisticated
  - Old don’t need to save for retirement
  - Rich and more financially sophisticated (and asset managers who earn fees on AUM)
    - Do participate in asset markets (stocks and bonds)
    - Too much **duration** in their portfolio
      \[\text{Duration(portfolio)} > \text{Duration(C-Y)}\]
  - Old typically own a house.

Financial and Total Wealth Inequality with Declining Interest Rates (2020)*

*joint with Greenwald, Leombroni and Van Nieuwerburgh
See also Fagereng, Gomez, Moll et al (2022)
Pension Funds reach for yield

**Defined benefit PFs invest in risky assets**

- Natural holders of long-dated USTR but they don’t buy USTR.
- Invest in risky assets (and prefer private assets because the risks are hidden) --> rise of private equity.
- Increases the risk of future shortfalls.
- Shifts the *burden to future taxpayers.*

Banks reach for yield

**Banks invest in long-dated USTR.**

- Not natural holders of long-dated USTR but they do buy long-dated USTR (zero risk weights)
- Taking on interest rate risk, borrowing from depositors at low-rates (taxpayer-funded deposit insurance)
- Shifts the *burden to future taxpayers*
  - SVB Bailout March 2023
Low-Rate Policies

- Long history of governments resorting to low-rate policies.
- Low-rate policies may have the following effects:
  - Help governments shift burden to future generations.
  - Extra fiscal capacity: Government debt has short duration.
  - Have heterogeneous effects on the wealth and welfare of current generations.
  - Extra spending power for the rich/old: Household Portfolio duration is concentrated
  - Distort incentives of agents (including the government and market participants)
  - Re-engineer financial system.
- Need more work on the effects of low-rate policies.
- Need debate on whether low-rate policies are desirable.
Mini-Case Study: COVID-19


1. $2 trillion CARES act on March 25, 2020.
   a. $480 billion income support.
   b. $274 billion on stimulus checks.
   c. $440 billion Paycheck Protection.
2. $900 billion Response & Relief Plan on Dec 2020.
3. $2 trillion American Rescue Plan in March 2021.

Between March and July of 2020, US outspent (11.5% of GDP) France, Italy or Spain by factor of 3.
Fed Leaning Against the Fiscal Winds

- Change in 10-year yields in short windows
  - Around CBO cost releases for new bills.
    - Bad fiscal news $\uparrow$ 10-year yields by 400 bps.
  - Around FOMC meetings.
    - FOMC $\downarrow$ long yields by 350 bps.

Can Treasury Markets Add and Subtract? *

*joint work with Roberto Gomez Cram Howard Kung*
2024 JRCPPF Conference

Monetary, fiscal, and macroprudential long-run challenges

Thomas Philippon

NYU, NBER, CEPR
Outline

• Monetary policy and financial stability
  • Stress testing and supervision

• Fiscal policy
  • Debt sustainability, r-g and risks

• Long term growth
  • Reallocation vs technology
Stress testing

SVB debacle.

Policy proposal

• Independent panel to review stress scenarios

(b) Targeted interventions

Source: Parlatore & Philippon, JF 2024
Debt sustainability

• Currently $r \approx g$
  • In theory primary deficit must go to 0

• Risk matters
  • GFC 2008-2009, COVID 2020, Ukraine 2022
  • With probability 1/10 debt jumps by 10 points of GDP
Actual vs 2019 Forecast, France

Debt /GDP. (source Debtwatch)

Interest Payments /GDP
Debt sustainability

• Risks
  • Primary surplus of 1% needed for sustainability

• Credibility
  • Priority: green transition and defense. Reduced spending in other areas

• Policy proposal:
  • Replace debt ceiling shenanigans with formal debt brake
Growth

- Weak Demographics

- One-offs on better allocation of talent
  - Hsieh, Hurst, Jones & Klenow

- Productivity additive?