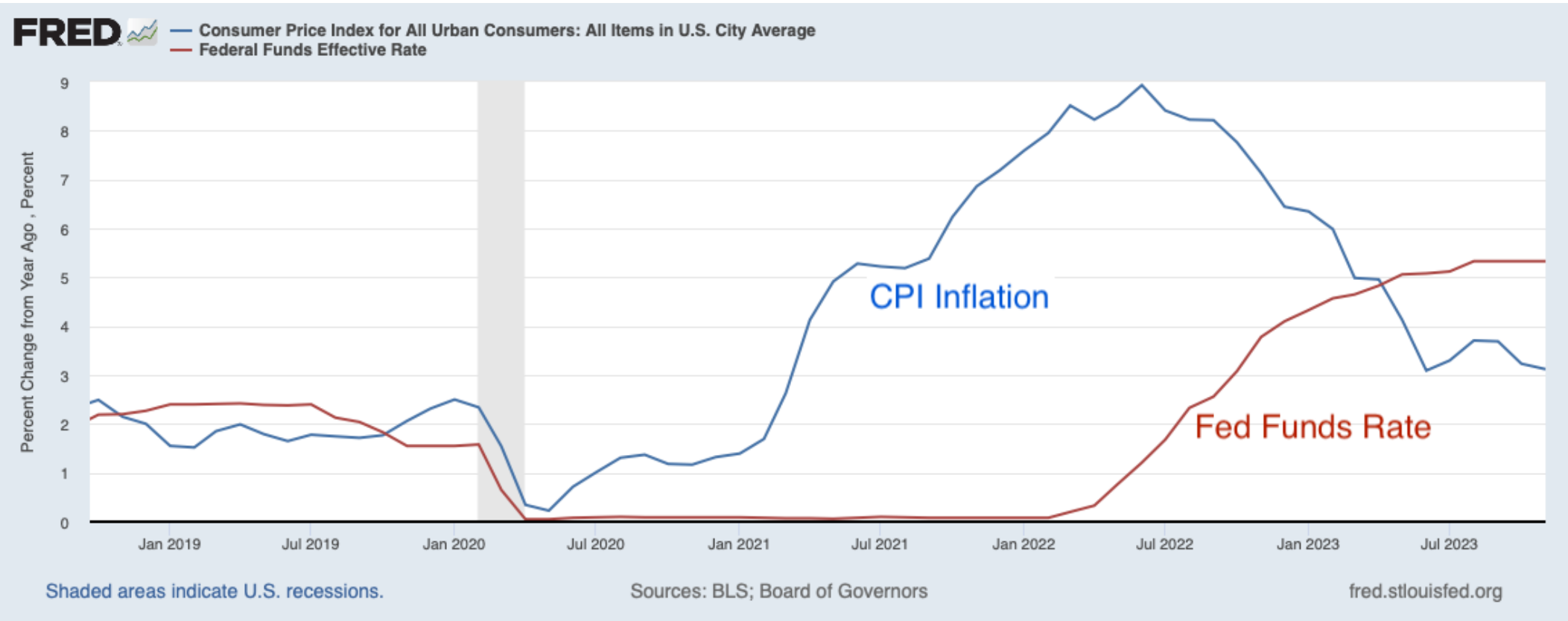


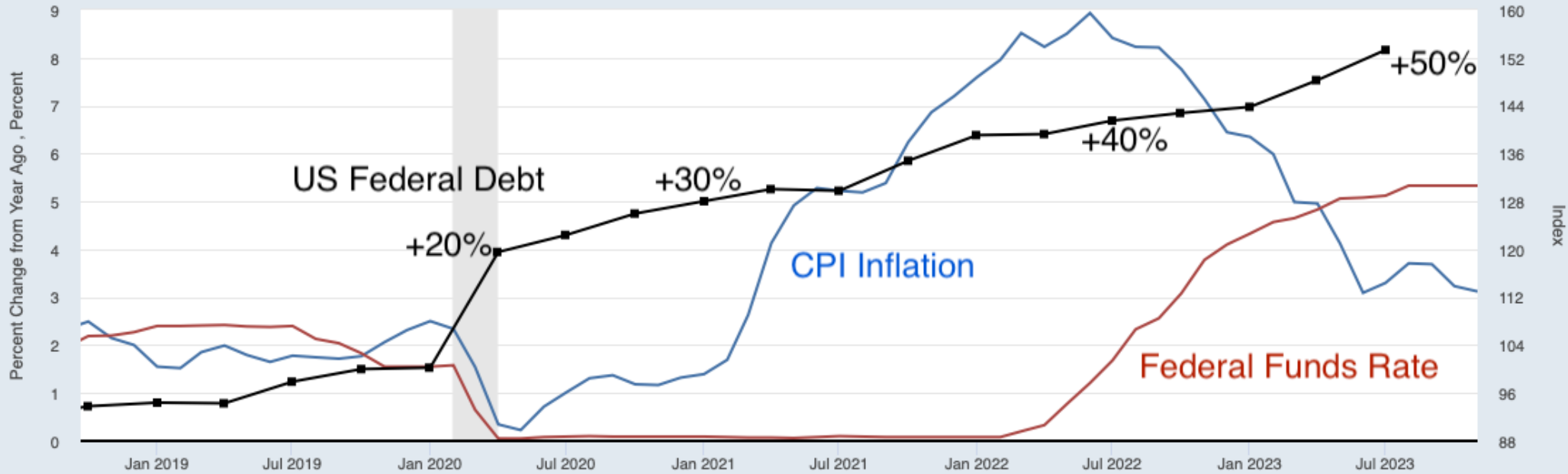
Inflation Narratives Comments (sort of) on Sims

John H Cochrane
Hoover Institution

2021-2022



- Where did inflation come from?
- Why did it ease without interest rates higher than inflation, big recession (1980-1982?)

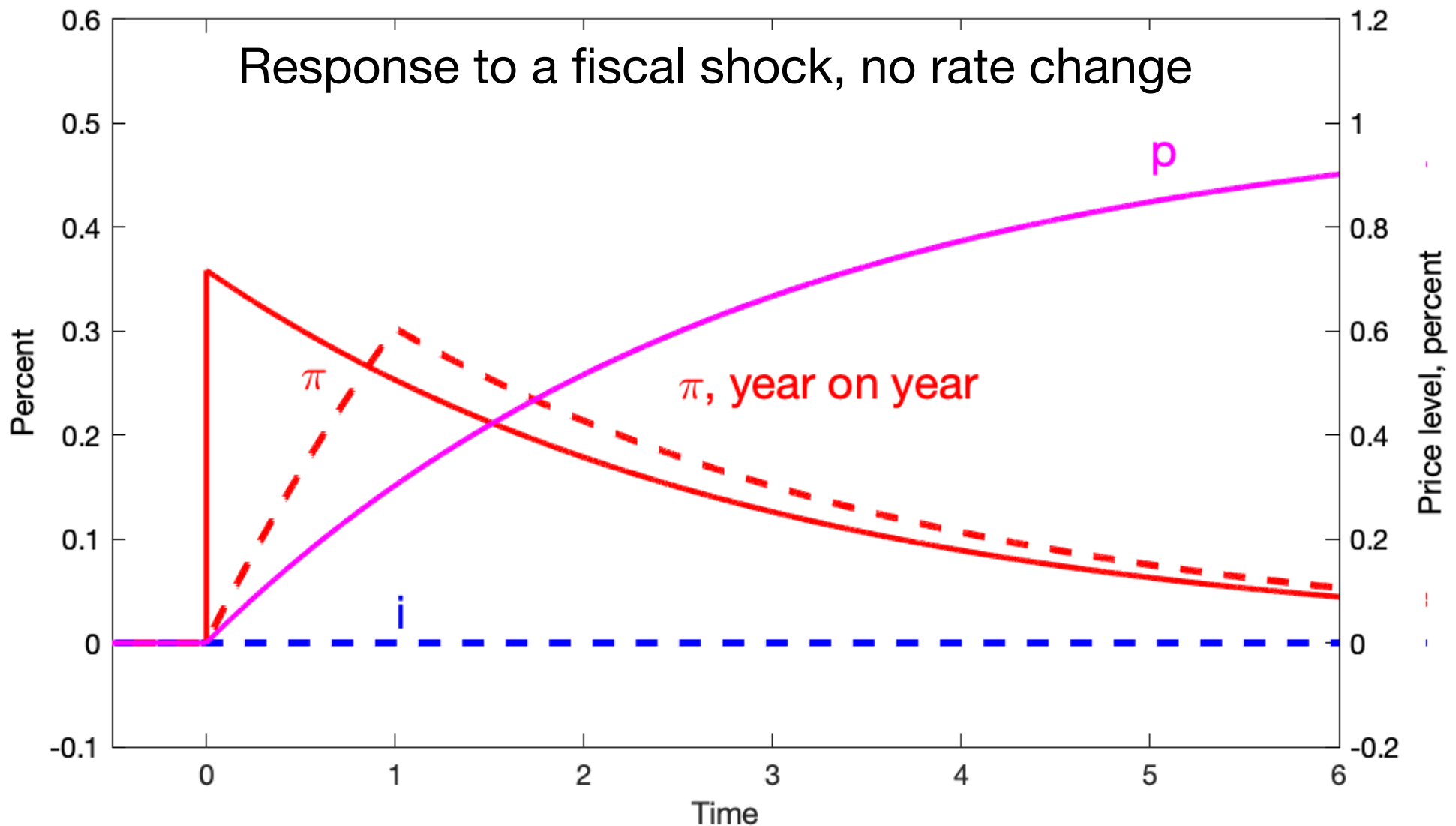


Shaded areas indicate U.S. recessions.

Sources: BLS; Board of Governors; Treasury

fred.stlouisfed.org

- \$5 trillion spending (\$3 trillion monetized), write checks
- Unlike 2008, no talk of repayment. Spending rules suspended. “Go big, interest costs are low.”
- ARA, IRA. No return to normal fiscal policy



$$x_t = E_t x_{t+1} - \sigma(i_t - E_t \pi_{t+1})$$

$$\pi_t = \beta E_t \pi_{t+1} + \kappa x_t$$

$$\rho v_{t+1} = v_t + r_{t+1}^n - \pi_{t+1} - \tilde{s}_{t+1}$$

$$E_t r_{t+1}^n = i_t$$

$$r_{t+1}^n = \omega q_{t+1} - q_t$$

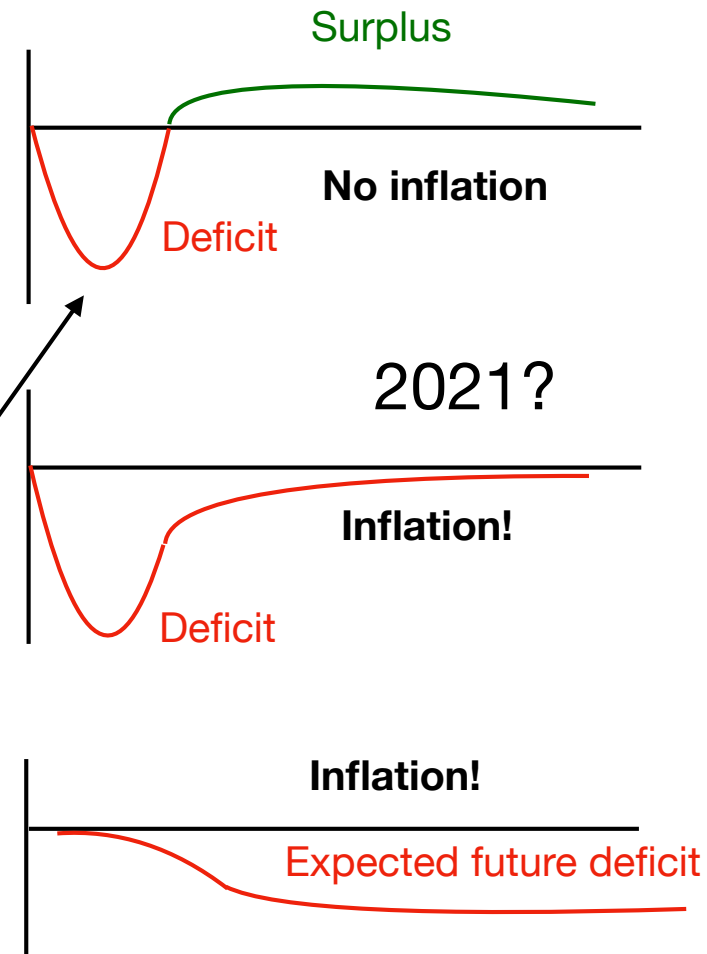
- Inflation surge, no monetary policy change
- Inflation above interest slowly inflates away debt
- No (or slow!) price level jump
- *Inflation eases, with no Fed action, no high real rates, no recession.*

Fiscal theory of the price level

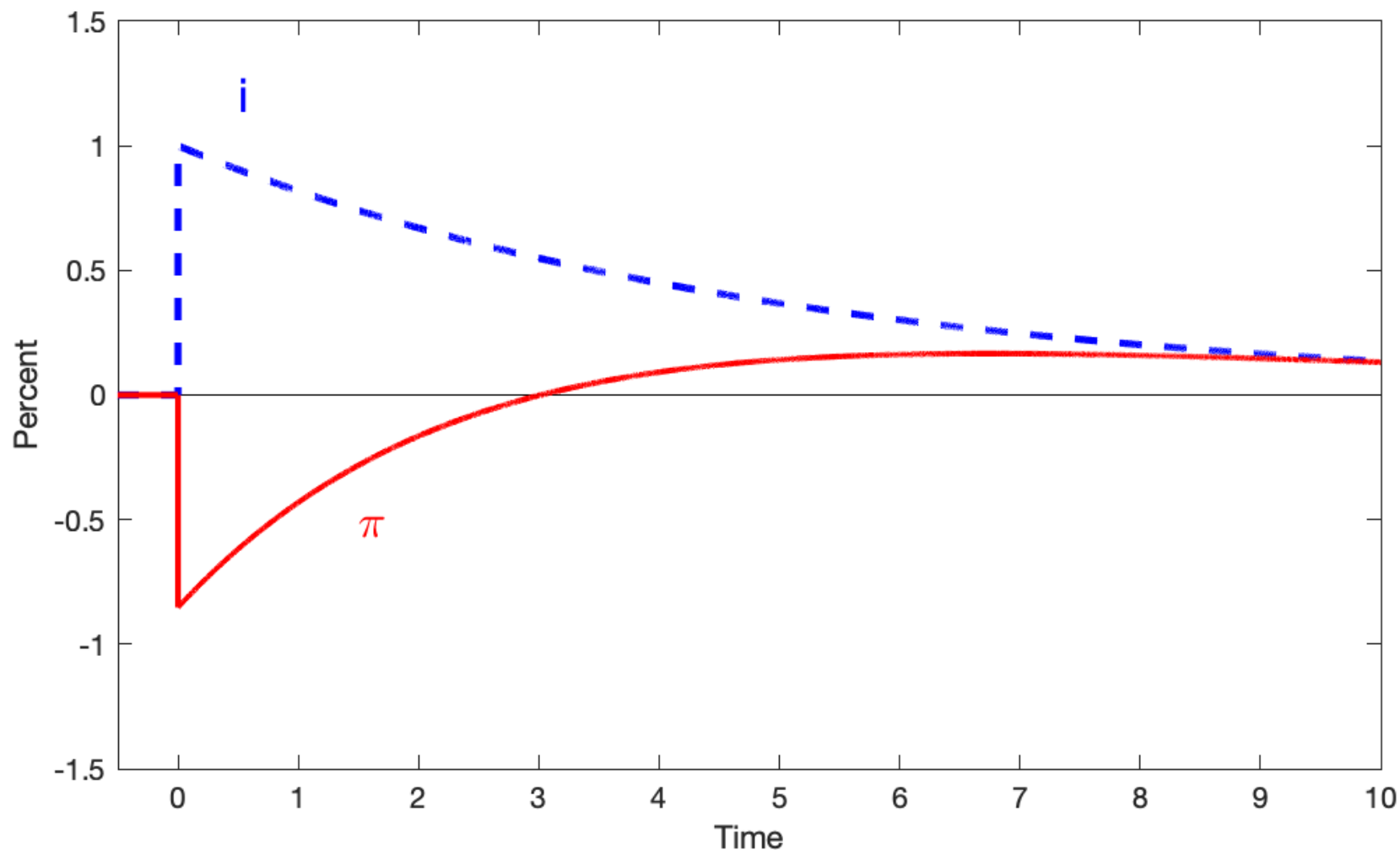
$$\frac{\text{Nominal government debt}}{\text{price level}} = \text{Present value of primary government surpluses}$$

$$\frac{B_{t-1}}{P_t} = E_t \sum_{j=0}^{\infty} \frac{1}{R_{t,t+j}} s_{t+j}$$

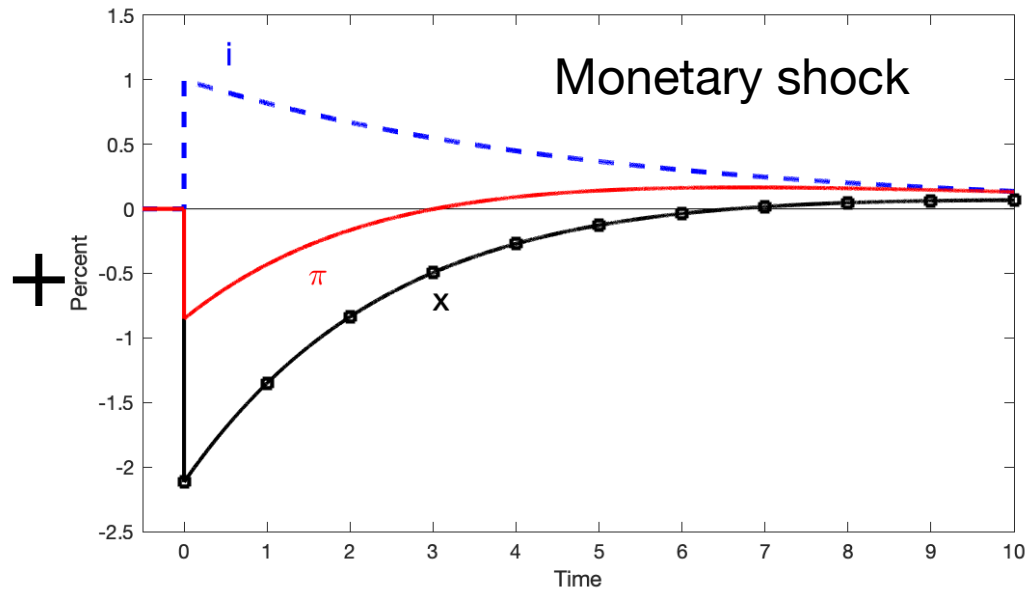
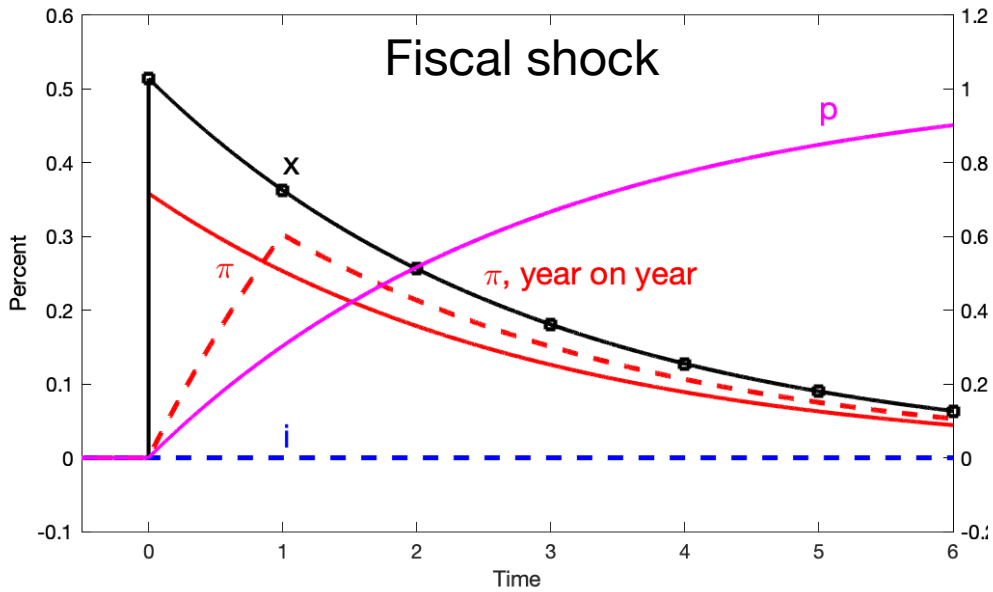
- Debt vs. *long run* ability/will to repay. Like stocks & bonds.
- Not necessarily *today's* deficits or debt. “Stock” vs. Keynesian “flow.”
- Lots of debt/deficit possible with no inflation. That’s typical and good policy.
- Or, inflation can be a surprise with little current deficit.
- For fiscal inflation narratives, exploring repayment / rate expectations is key.



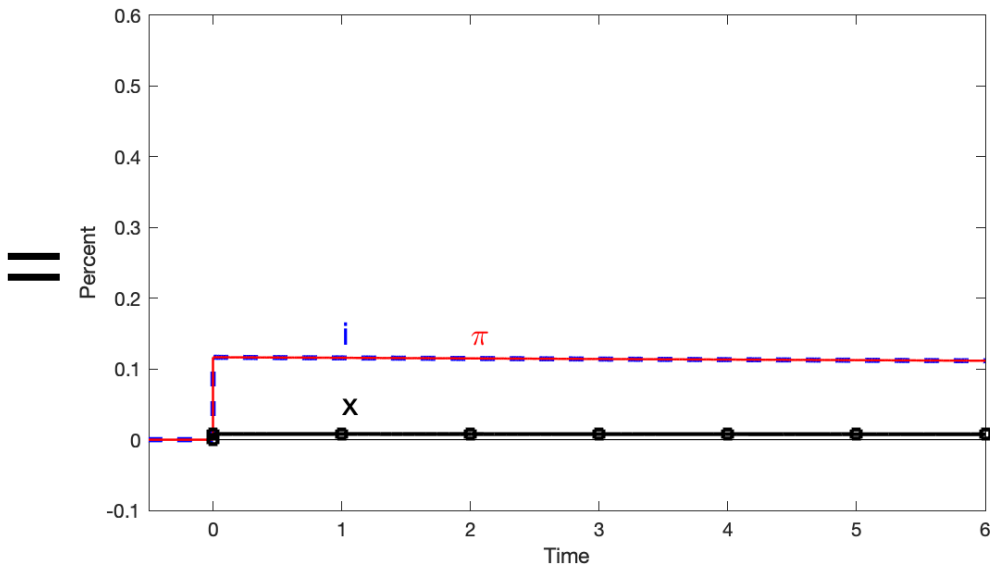
Response to interest rate shock, no fiscal change



- What about the Fed? Rate rise lowers short run inflation.
- Mechanism: “Stepping on a rake.” “Unpleasant interest rate arithmetic.”
- Not ISLM, and Fed cannot completely avoid fiscal inflation.
- Good policy, reduces output volatility.
- Better models of short-run negative effect?

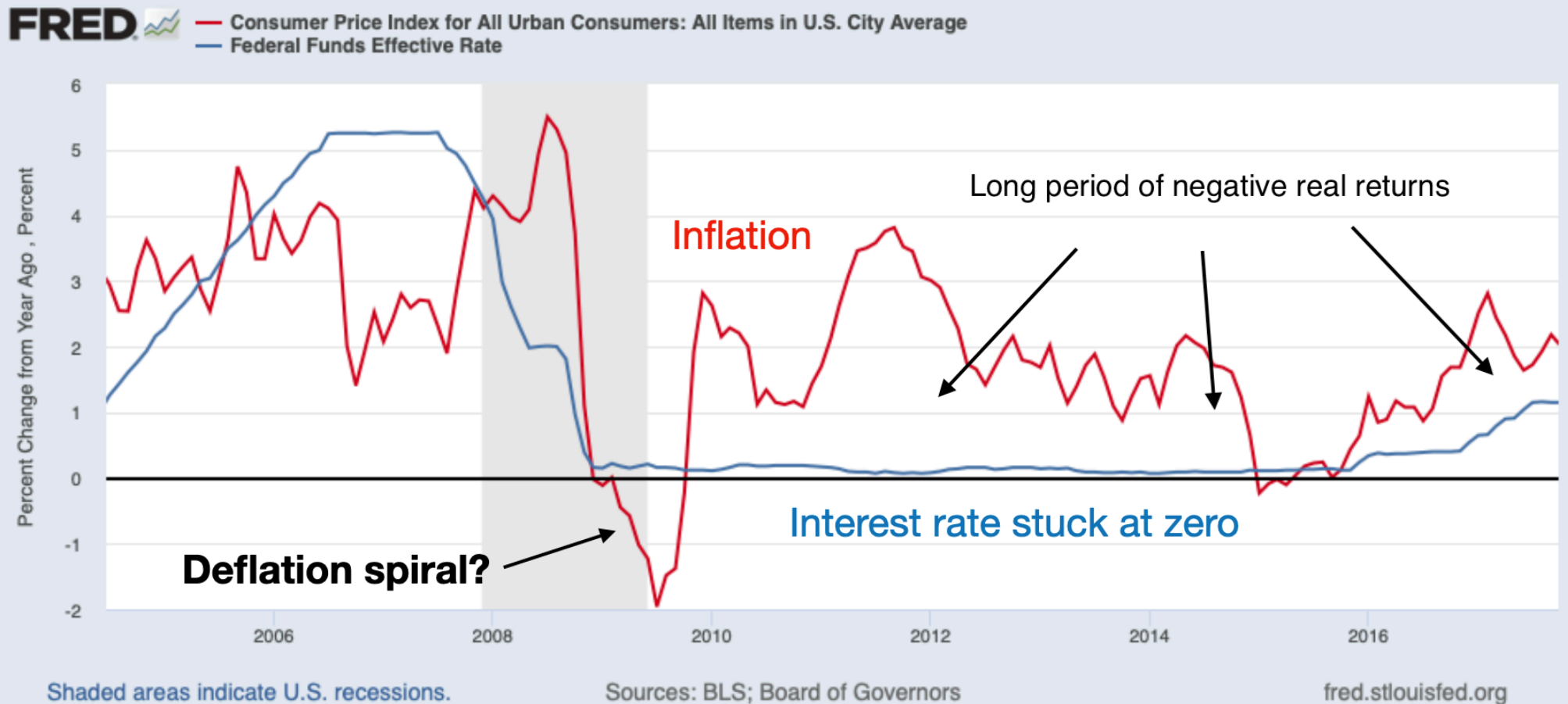


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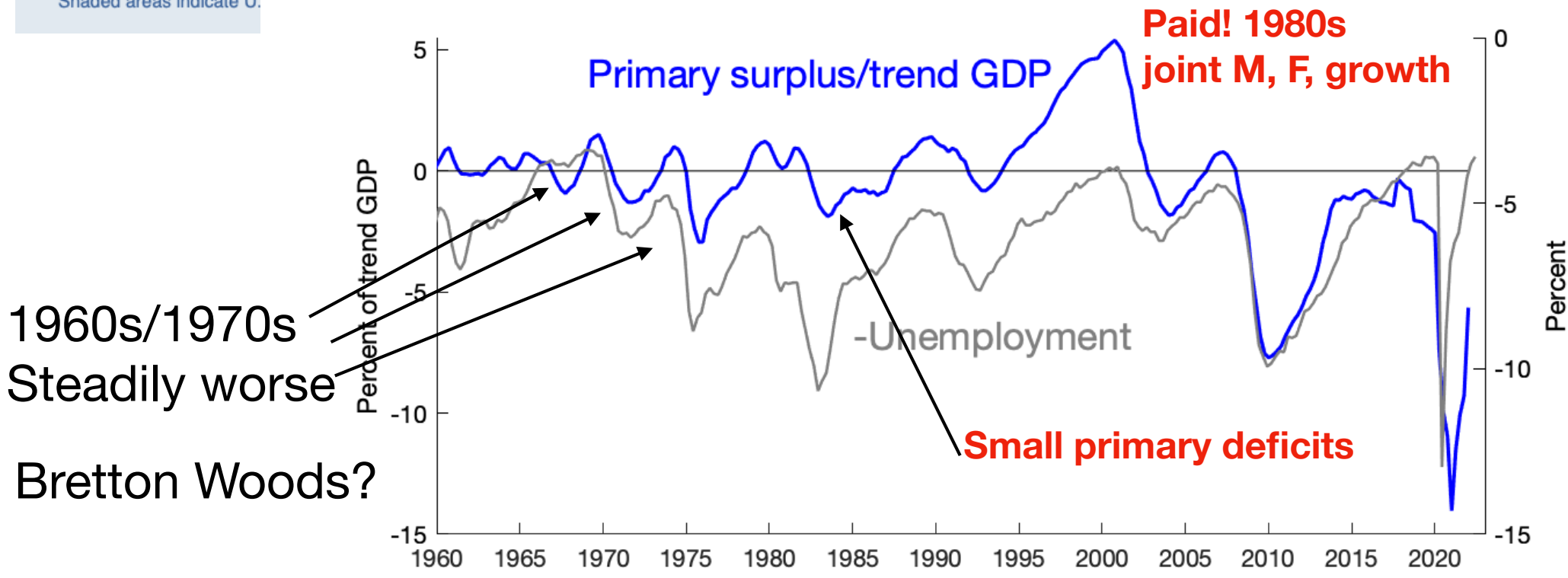
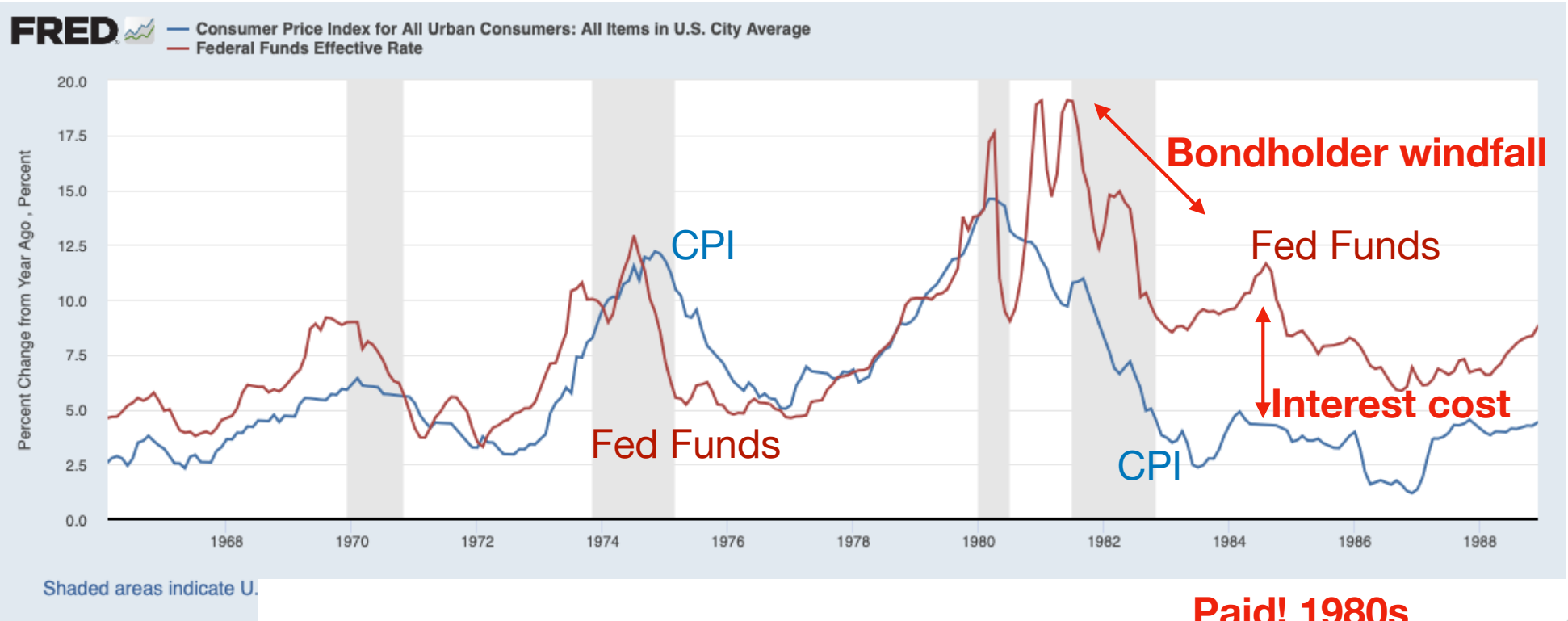
- Fiscal shock + $i_t = 1.0\pi_t$ produces random walk inflation, 0 output variation.

2008 - 2020. The silent dog



- Deflation with deficits? Low interest rates/interest costs!
- No spiraling deflation? Needs austerity! No deflation because of *fiscal* policy.
- Long zero bound / peg: no spiral, no sunspots, though widely predicted.
- Only FTPL: inflation *can be* stable, quiet at ZLB.
- Fiscal? Not great, but no news. Low interest costs. $b_t - p_t = E_t \sum \rho^j (\tilde{s}_{t+j} - r_{t+j})$.

1980 was a joint fiscal-monetary (& growth) stabilization

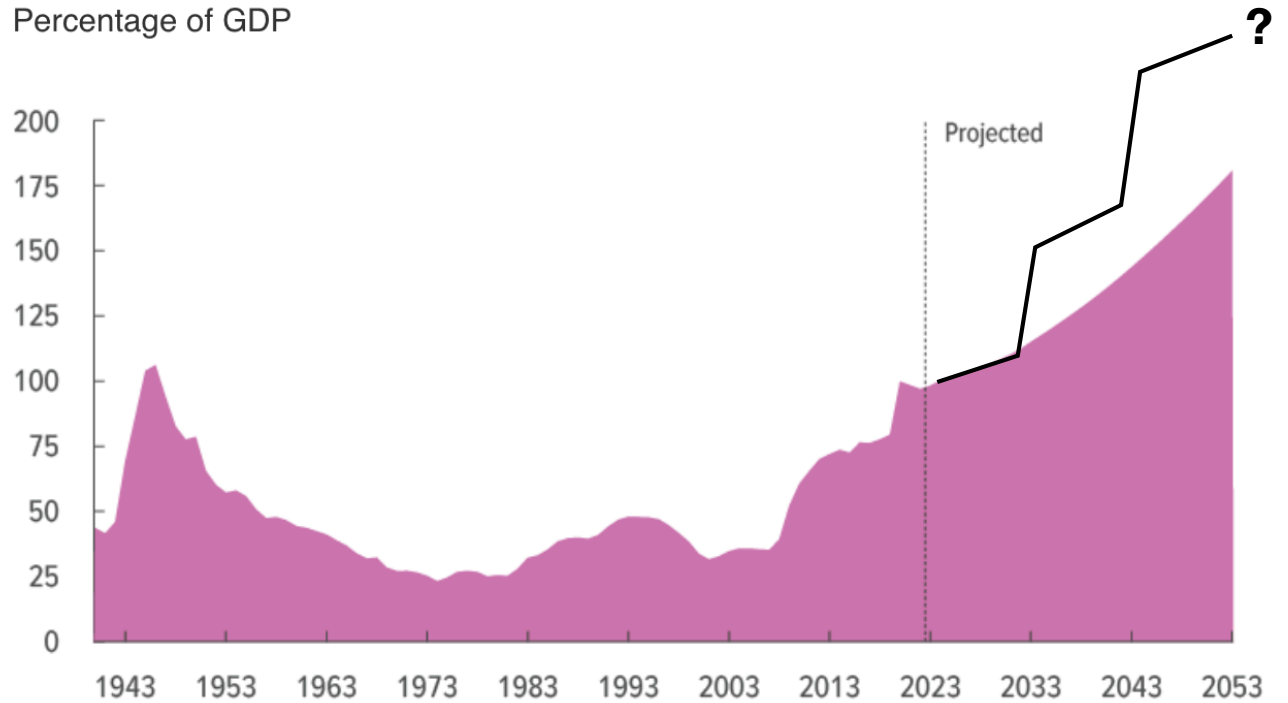


Obvious worry

- CBO *projections*
- Next fiscal shock?

Federal Debt Held by the Public

Percentage of GDP



Deficits

Percentage of GDP

