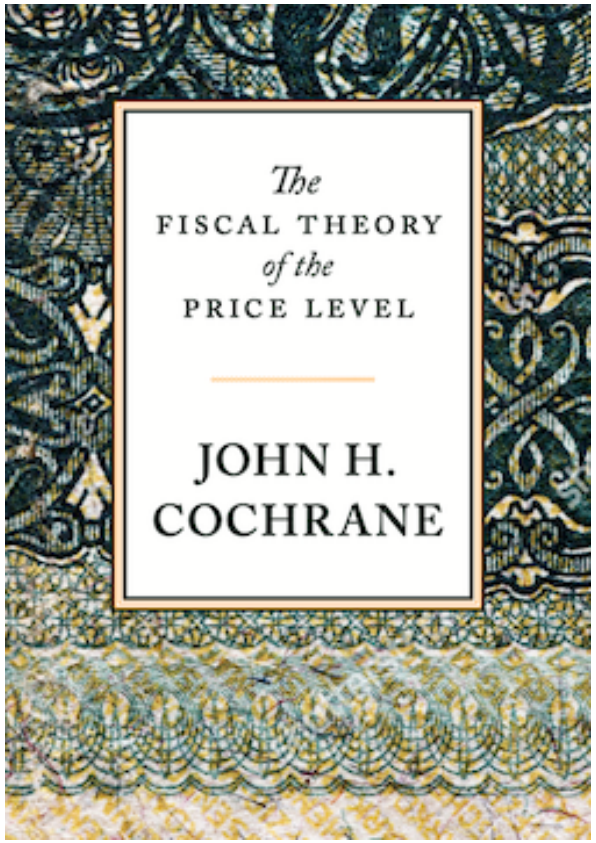
Fiscal-Monetary Interaction



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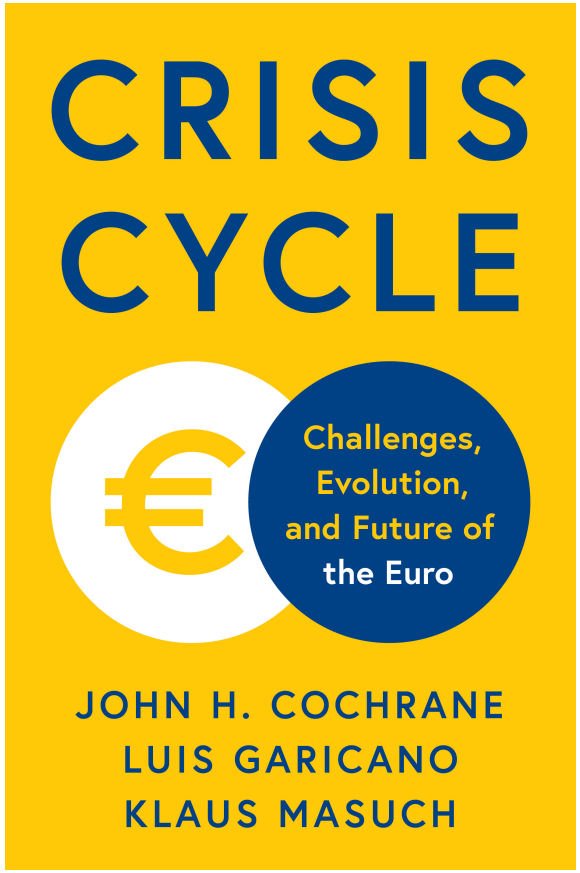
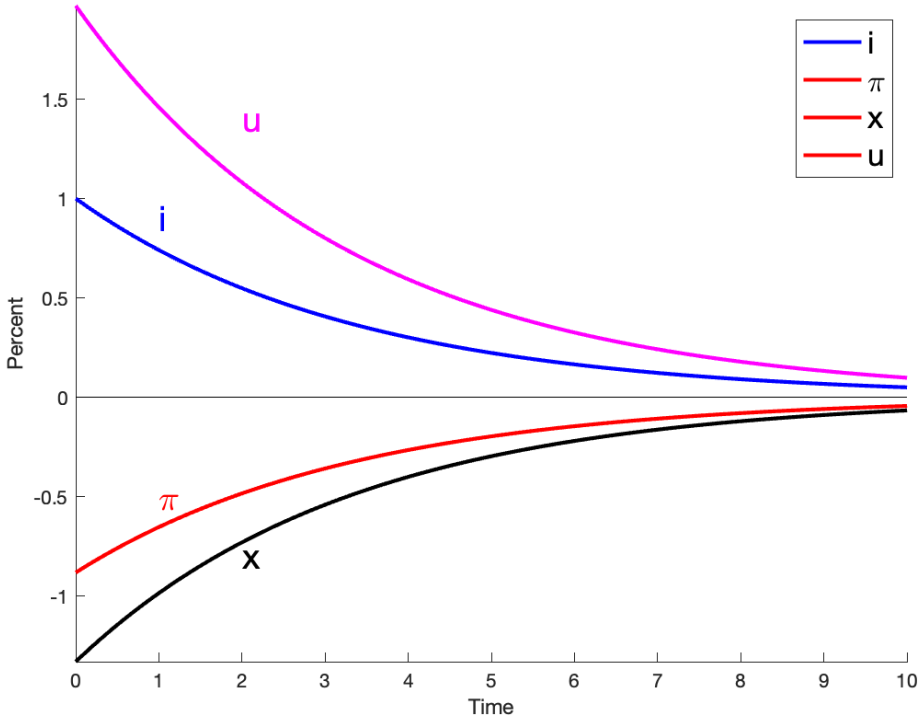
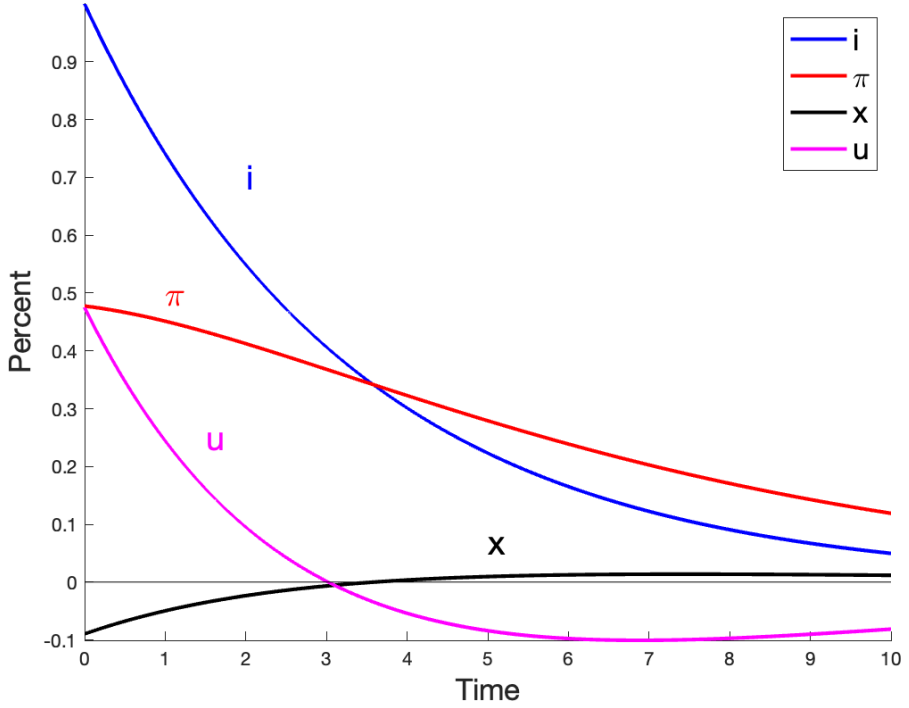


Inflation is always and everywhere joint monetary-fiscal policy

- Fiscal-monetary interactions:
  1. Pressure (Desire? 1941-45, 2021-2023) to finance deficits, hold down interest costs.
  2. Higher interest rates to fight inflation create inflationary deficits.
     - Interest costs. 100% Debt to GDP: Each 1% real rate rise is 1% of GDP more interest cost.
     - Bondholder windfall. Each 1% fall in price level raises debt 1% of GDP.
     - Higher rates soften the economy resulting in bailouts, stimulus, automatic stabilizers.
- *All current models describe a joint monetary-fiscal contraction in which fiscal policy tightens to pay these costs.* "Passive" fiscal policy must happen.
- *If fiscal policy cannot or refuses to pay, higher interest rates cannot durably lower inflation*.
- (Durably. Some "unpleasant interest rate arithmetic is possible.)

Disinflation needs fiscal tightening: New-Keynesian model



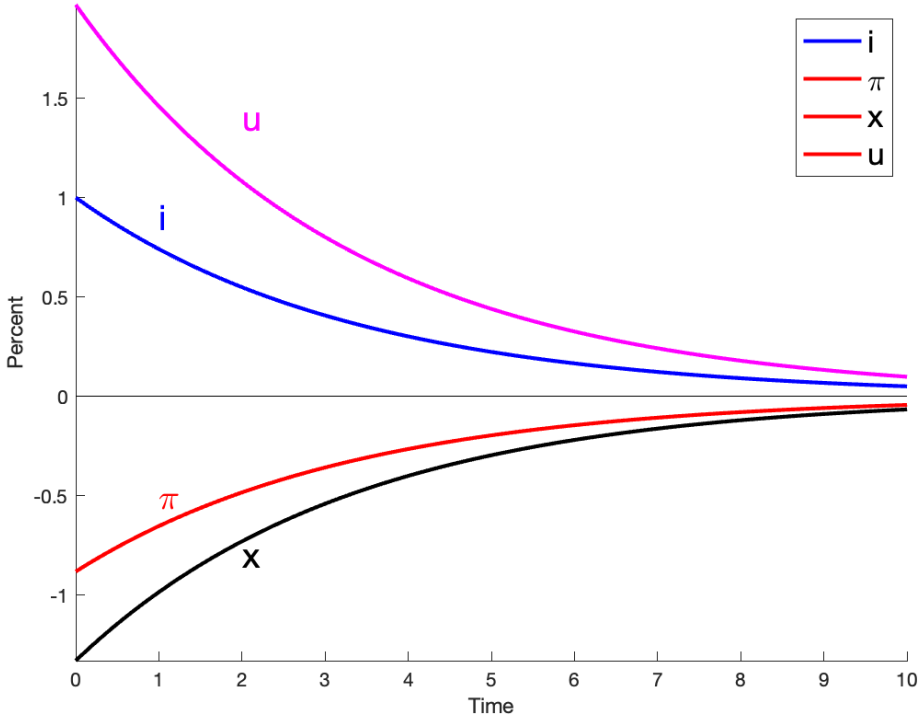


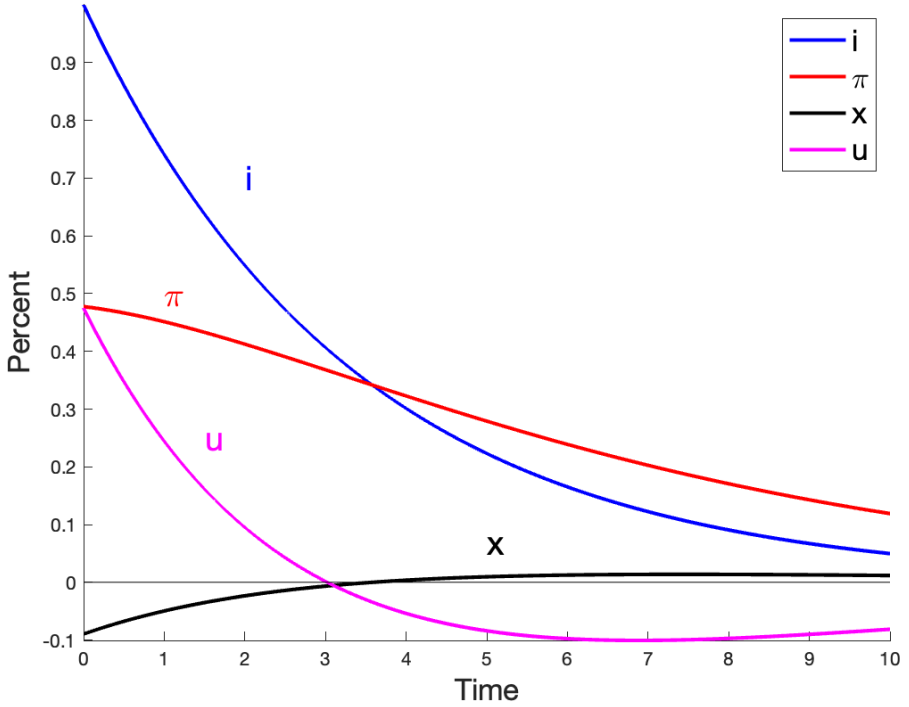
NK IS and PC. $i_t = \phi\pi_t + u_t$. No FTPL funny business.

Left: $u_t \sim AR(1)$. "Passive" fiscal must tighten 5.9% value of debt to pay interest cost.

Right: u_t chosen to produce the *same* $\{i_t\}$ but no "passive" fiscal tightening. $\int_{t=0}^{\infty} e^{-rt}(i_t - \pi_t)dt = 0.$

Disinflation needs fiscal tightening: FTPL + New-Keynesian model



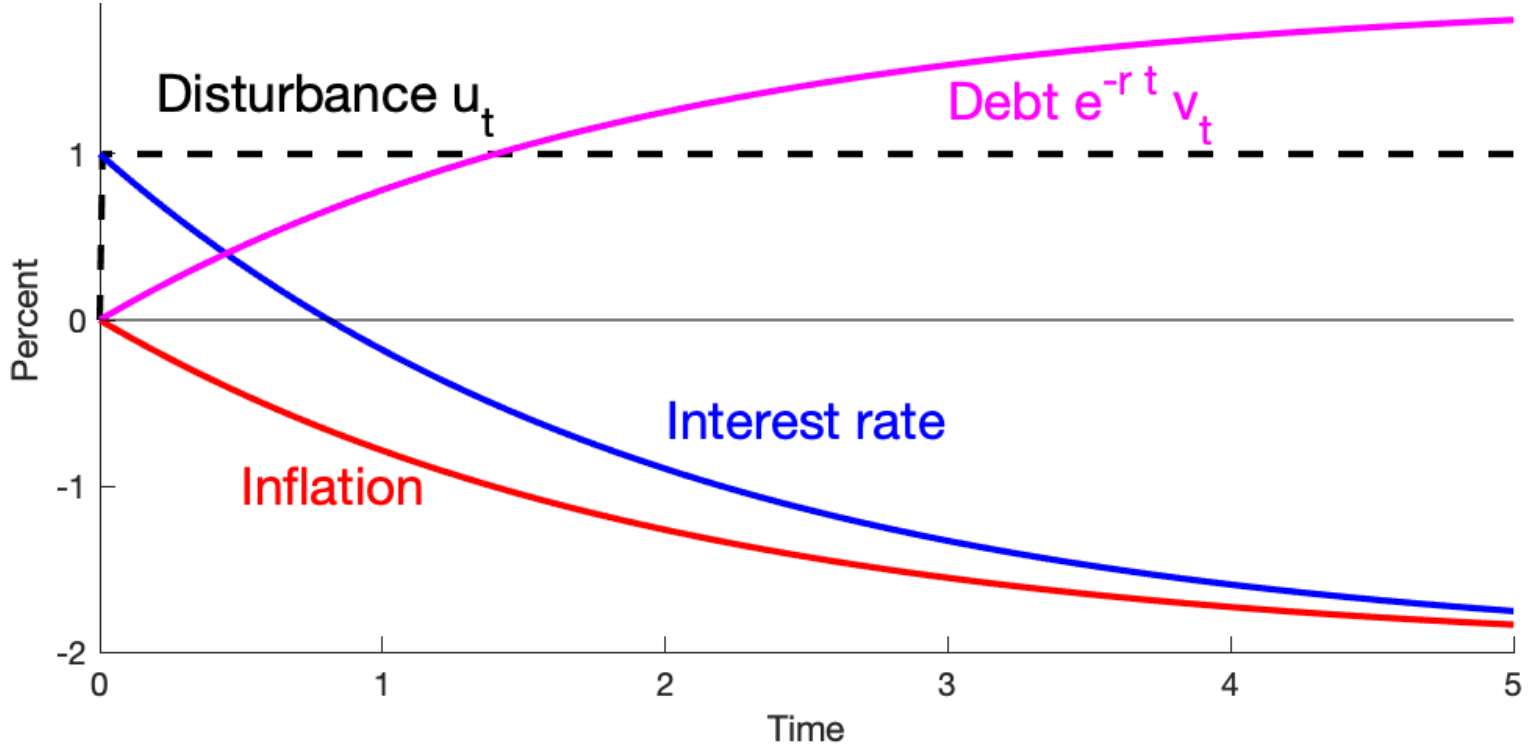


NK IS, PC. Fed picks $\{i_t\}$. Many $\{\pi_t\}$. Fiscal policy picks $\int_{t=0}^{\infty} e^{-rt} s_t dt = \int_{t=0}^{\infty} e^{-rt}(i_t - \pi_t)dt$, hence π_0, $\{\pi_t\}$.

Left: AR(1) interest rate with 5.9% fiscal tightening. Right: Same interest rate with no fiscal shock.

(NK embarrassment: given fiscal/equilibrium selection shock, higher interest rates raise inflation.)

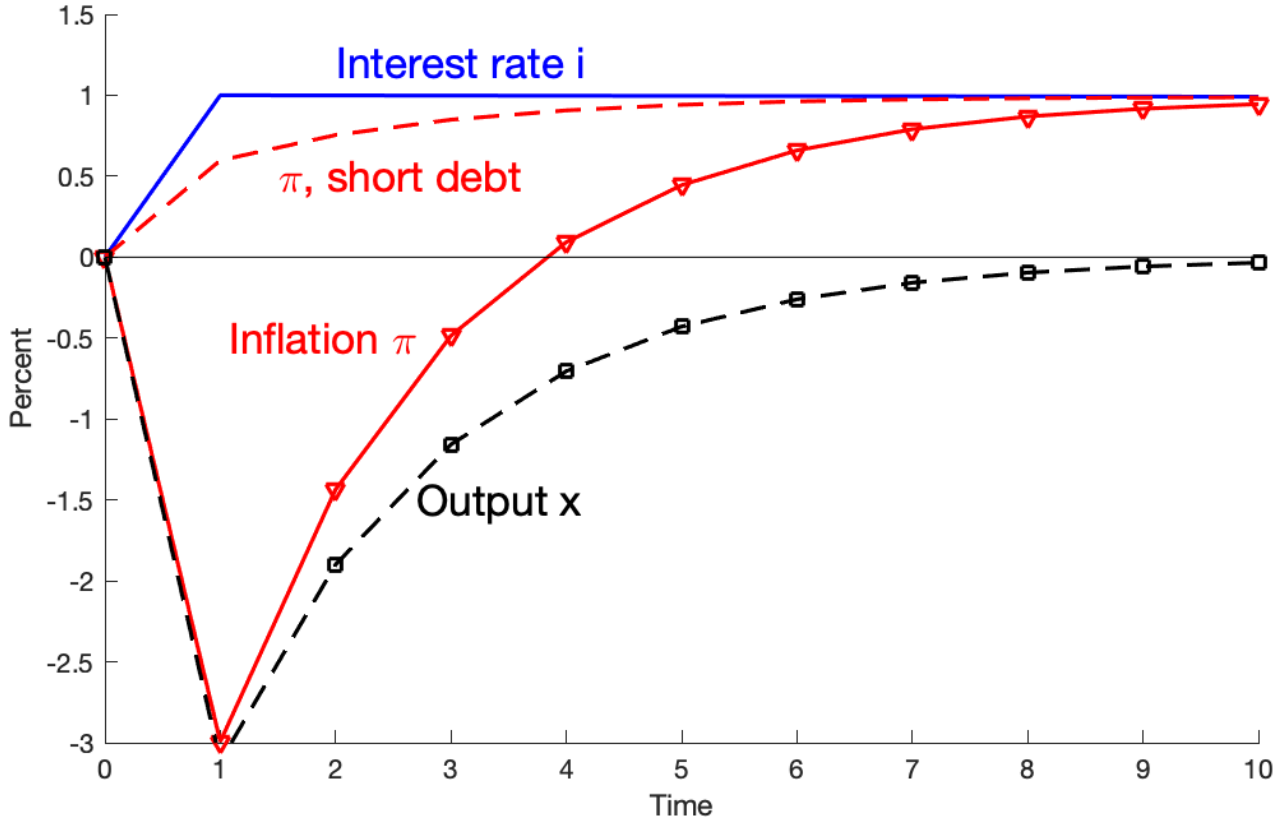
Disinflation needs fiscal tightening: Adaptive expectations ISLM too!



$$x_t = -\sigma(i_t - \pi_{t-1})$$
$$\pi_t = \pi_{t-1} + \kappa x_t$$
$$i_t = \phi\pi_t + u_t$$

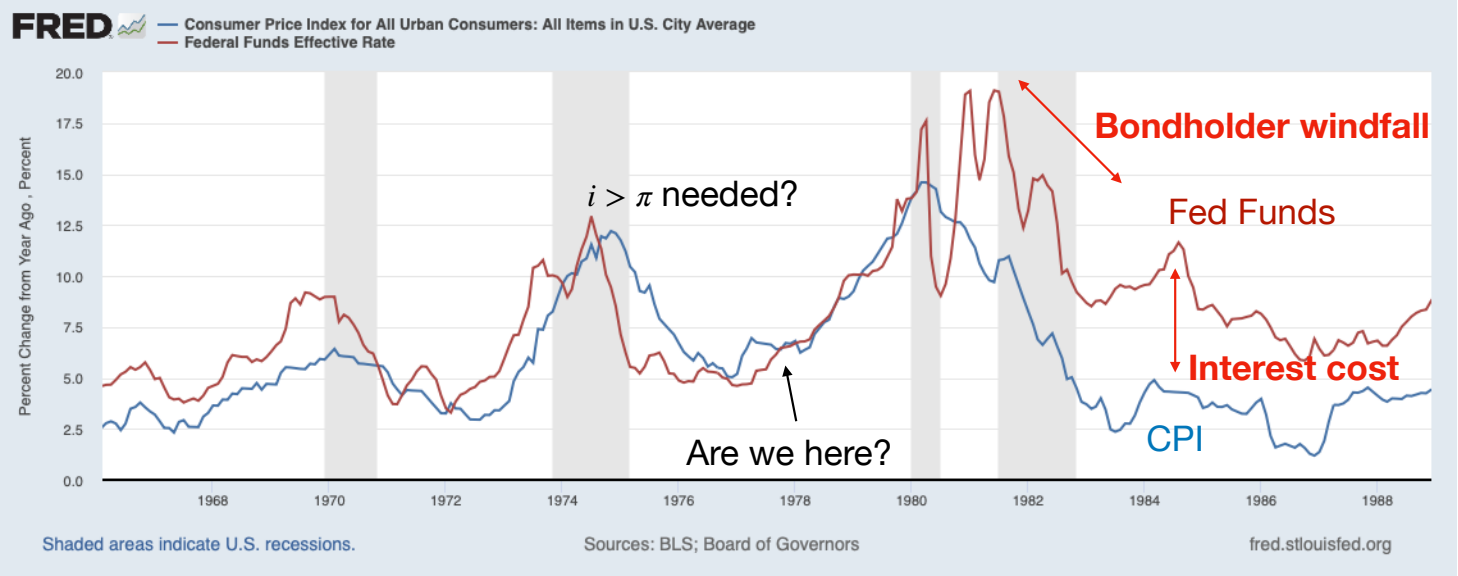
- The classic view. But who pays interest costs on the debt?
- With no fiscal tightening to pay interest, *can't* permanently lower inflation
- $\int_{t=0}^{\infty} e^{-rt}(i_t - \pi_t)dt = 0$ here too! High rates lower inflation, but drive up debt. Must then lower rates, which raises inflation back to where it was.

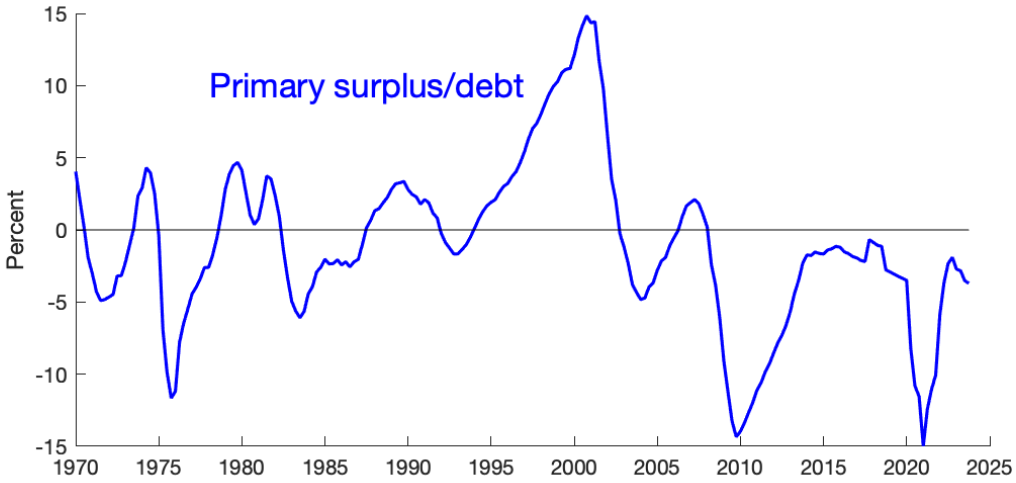
Unpleasant interest rate arithmetic / stepping on a rake



- NK with long-term debt. Response with no fiscal policy change.
- Best I know in which interest rates do some good with no fiscal tightening: Lower short term inflation by raising long term inflation. Completely different from standard AD mechanism.

1980s were a joint monetary and fiscal disinflation





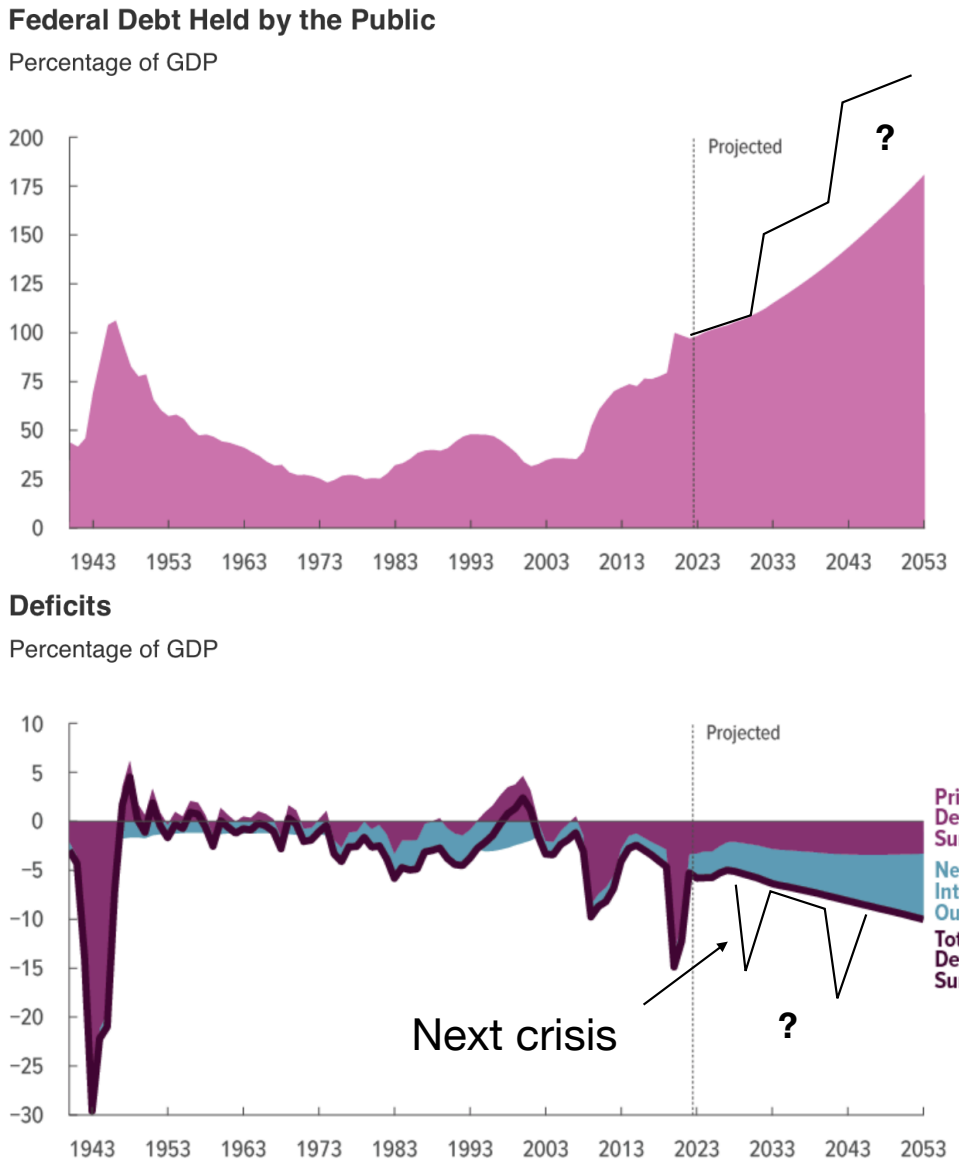
- 1980-1987: Reagan primary deficits small, especially given recession.
- Fed not alone! Tax, Social Security reform, deregulation, growth! *Present value* of surpluses did pay for disinflation.
- Without fiscal reform and growth, many rate rises fail.

Inflation in the shadow of debt

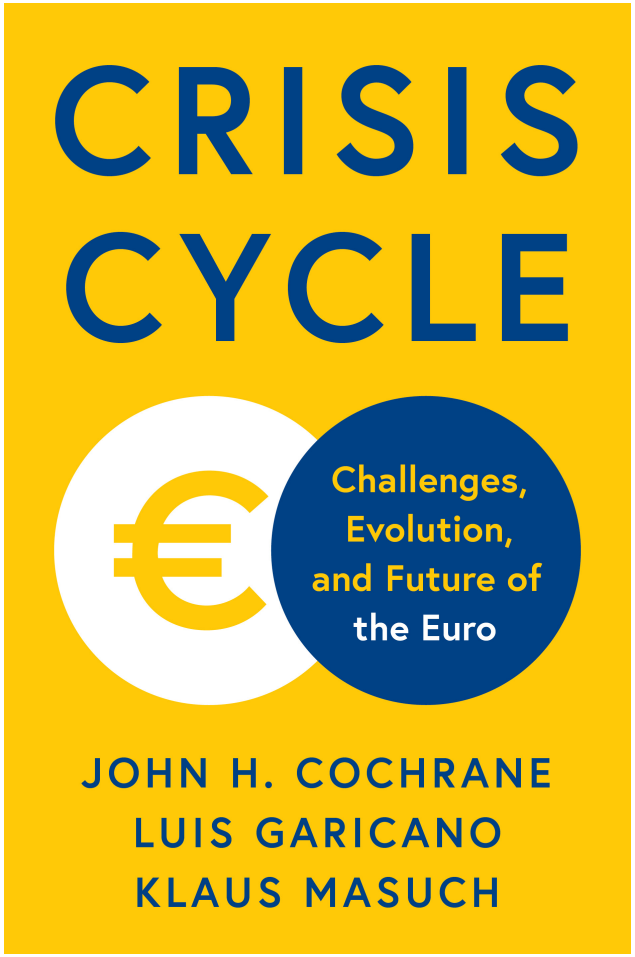
- "All current models describe joint monetary-fiscal contraction. Without fiscal policy to pay interest costs, windfall, and stimulus, higher interest rates cannot durably lower inflation."

$$\int_{t=0}^{\infty} e^{-rt} s_t dt = \int_{t=0}^{\infty} e^{-rt}(i_t - \pi_t) dt$$

- "Fiscal space" to back Fed is the danger. (Also to crisis fighting ability.)
- Good news: *Present value* of surpluses counts. OK to borrow against credible *future* surpluses. Small, slow, decades of repayment.
- Long term structural surpluses can (must!) come from growth, spending, micro reform, likely not higher marginal tax rates.
- Short term "austerity" not likely to work. Capital taxes not likely to work. 3 decade Laffer curve is about growth, not labor/leisure choice.
- Tax, social program *reform*, deregulation, immigration matter more than tax tweaks.



The Euro



- Problem: Temptation to borrow, ECB bail out with new money.
- Euro well structured to meet that: Inflation mandate, no debt buying, no bail out clause, debt and deficit limits.
- But.. Default or not? No mechanism. Debt risk free to banks.
- Natural to leave institutional evolution to the future.
- Sequence of unimagined crises. Break debt and deficit limits, financial crisis, sovereign debt crisis, QE, pandemic.
- After Greece, a resolution mechanism, now abandoned.
- ECB now has large balance sheet, expected to tamp down spreads. Governments over borrow (no market signal). Banks hold lots of sovereign debt. Next crisis will be bigger.
- We do not criticize actions. Missing reform, cure moral hazard.
- Extensive reforms. Before the next crisis.

Tariff-Monetary Interactions

- Obvious: Tariffs are a stagflationary supply shock.

- Less obvious: Tariffs-capital account financial shock. If we turn off all trade deficits, then foreigners cannot get the dollars they need to buy US treasury debt. The US must have saving = investment, immediately, and no budget deficit, immediately. More saving = less consumption. The government has to stop writing a lot of checks that support consumption, immediately. Interest rates spike, to incentivize saving. This is part of the “rebalancing” plan

- Be careful what you wish for, you just might get it.