

How to Stop Deflation with Fiscal Policy: Past Lessons for the Future

Eric M. Leeper
University of Virginia

November 2020
Hoover Institution Virtual Series

Macro Policies

- ▶ Can we distinguish monetary from fiscal policy?
 1. both issue interest-bearing “safe” liabilities
 2. in “dollars” whose supply government controls
 3. ultimately backed by primary budget surpluses
 4. price level must clear both money & bond markets
- ▶ Variation in expected surpluses alters rate of exchange between nominal govt liabilities and goods
 - ▶ this is the price level
- ▶ Price level always determined by both MP & FP
- ▶ In thinking about P , key distinction between policies is who controls the levers
 - ▶ fiscal authority controls the backing that gives liabilities value
 - ▶ monetary authority controls composition of liabilities public holds

Two Examples of Joint Policies

1. Incoherent policies: European efforts to hit inflation targets
 - ▶ MP interest rates negative & large asset purchases
 - ▶ long-term bond yields also negative
 - ▶ inflation chronically below target
 - ▶ FP chronically tight, retiring debt
 - ▶ makes sense *only if* believe FP irrelevant for inflation
2. Coherent policies: U.S. recovery from Great Depression
 - ▶ abandoned convertibility to gold
 - ▶ created genuinely nominal government debt
 - ▶ MP at ZLB
 - ▶ FP expansionary, financed with new nominal bonds
 - ▶ FDR convinced people debt expansion **unbacked**

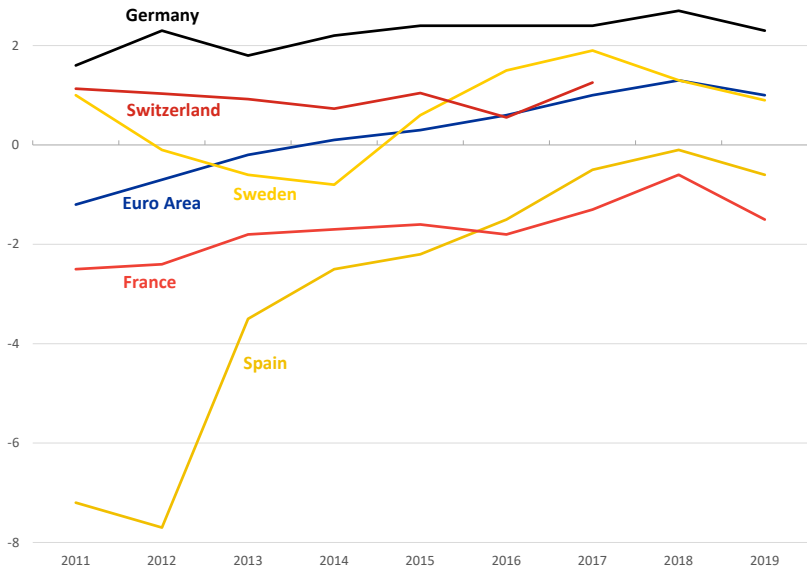
European Monetary Policy (pre-Covid)

- ▶ Negative policy interest rates
 1. Euro Area: since June 2014
 2. Sweden: since February 2015
 3. Switzerland: since December 2014

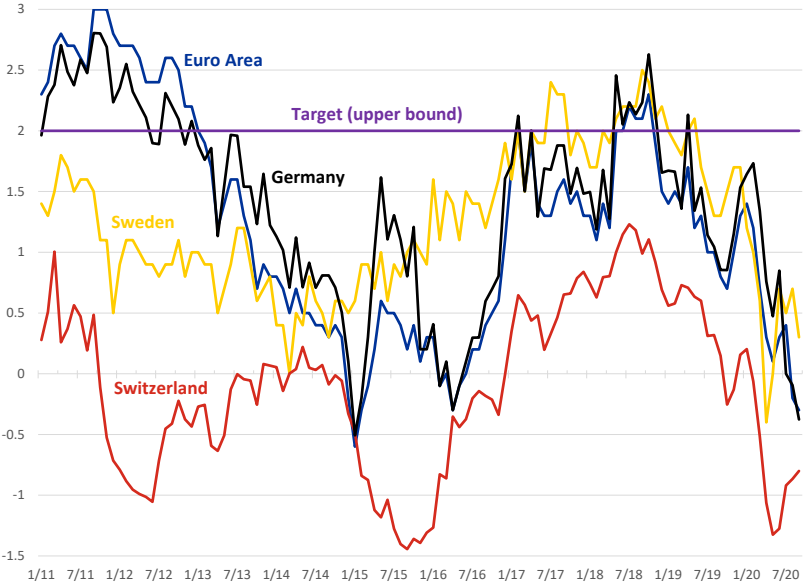
- ▶ Increases in central bank assets since 2006
 1. Euro Area: 4.5 ×
 2. Sweden: 5.1 ×
 3. Switzerland: 8.3 ×

- ▶ Basic theory: MP can raise inflation only if...
 - ▶ backed by appropriately expansionary FP
 - ▶ this is what “passive” FP delivers
 - ▶ Europe has been all about fiscal consolidation

European Fiscal Policy: Primary Surpluses



European Inflation

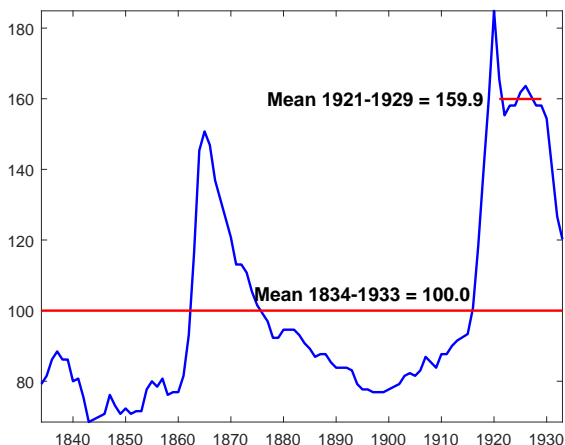


Policies Working Together

- ▶ Thesis: *unbacked fiscal expansion* triggered America's recovery from the Great Depression
- ▶ Two steps
 1. Monetary: reduced gold value of \$, abandoned convertibility of gold, abrogated gold clauses
 2. Fiscal: expanded government spending financed with nominal bonds and convinced people bonds would not be backed by taxes until economy recovered
- ▶ Monetary component necessary for fiscal step
 - ▶ under convertibility: bonds are claims to gold
 - ▶ credibility requires bonds be backed fully by taxes
 - ▶ revoking convertibility made bonds genuinely nominal
- ▶ Policy explicitly state-dependent, lasting until economy & prices recovered
 - ▶ fiscal communication essential to implementation

The Policy Problem

- ▶ Gold standard \Rightarrow price level mean reverting, but reversion can take decades



CPI since 1834 Coinage Act setting 1 oz. gold = \$20.67, rescaled to make mean = 100

The Policy Problem

- ▶ FDR & Congress concerned about debtors who incurred their debts at 1920s prices
 - ▶ deflation raised real costs of debt obligations
 - ▶ household debt-income ratio peaked at 80% in 1933
 - ▶ farm foreclosures tripled in 1933
- ▶ Policy objective called for *permanent* increase of the price level to level 60% above long-run average
 - ▶ requires substantial permanent revaluation of dollar price of gold
 - ▶ without revaluation, gold cover ratio would fall below legal standard
- ▶ Cannot permanently raise price level under classical gold standard

VAR Evidence from 1930s

- ▶ Primary surpluses quantitatively important
 - ▶ S most important source of P & Y (17%), aside from own innovations
 - ▶ S most important source of M (39%)
 - ▶ S most important source of G (27%), aside from own innovations
 - ▶ S close to exogenous, explaining 92% of itself
- ▶ Historical decompositions: S most important contributor to paths of P & Y , aside from own innovations
- ▶ Estimated output multipliers large—3 to 4—and significant

What Is Unbacked Fiscal Expansion?

- ▶ **Definition:** *Unbacked fiscal expansion (UBFE)*
 1. *increase spending—purchases or transfers,*
 2. *issue nominal bonds to cover the deficit, and*
 3. *convince people surpluses will not rise in future to pay off the bonds*
- ▶ New nominal debt is not expected to be backed by higher primary surpluses
 - ▶ higher nominal debt raises aggregate demand \Rightarrow higher prices & output
- ▶ **Unbacked fiscal expansion can permanently raise price level, as FDR desired**

Keynesian Hydraulics + Debt Dynamics

- ▶ UBFE challenges conventional wisdom: recovery unrelated to fiscal policy
 - ▶ Brown (1956), Romer (1992), Hausman (2016)...
 - ▶ fiscal deficits too small to close gap in output
- ▶ Conventional view: “Keynesian hydraulics”
 - ▶ narrowly construed transmission mechanism
 - ▶ real spending $\uparrow \Rightarrow$ real demand $\uparrow \Rightarrow$ multiple output \uparrow
 - ▶ expansion in nominal demand from higher nominal debt provides no additional stimulus
 - ▶ implicitly, taxes extinguish wealth effects from debt
- ▶ Broader view: hydraulics + impacts of debt dynamics
 - ▶ unbacked fiscal expansion raises wealth & demand
- ▶ Multipliers substantially larger when fiscal expansion unbacked

FDR's Triple-Barreled Approach

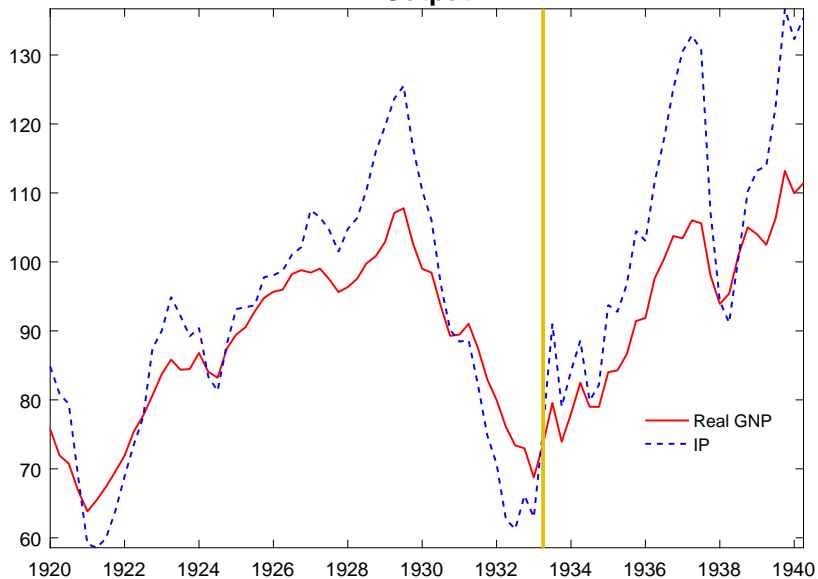
1. Executive branch—with Congressional blessing—took control of monetary policy
 - ▶ Fed universally regarded as “inept”
 - ▶ Executive reduced gold content of dollar
 - ▶ abandoned convertibility
2. Ran “emergency” deficits financed by nominal bonds
 - ▶ relief through works programs & infrastructure
 - ▶ “emergency” communicated temporary & state-contingent nature of the fiscal policy
3. Political strategy made unprecedented fiscal policy credible
 - ▶ recovery *the* priority: “more grave” than WWI
 - ▶ feared “agrarian revolution” & “amorphous resentment” of economic institutions
 - ▶ faced “a choice between rise in prices or rise in dictators”; recovery a “war for survival of democracy”

Recovery Was Stunning

- ▶ Recovery coincides with departure from gold
 - ▶ April 1933 the economy turned around
 - ▶ over course of 1933, Treasury & FDR steadily raised dollar price of gold from \$20.67 an ounce
 - ▶ FDR was clear there would be no return to gold
- ▶ Abrogated gold clauses in debts & set price of gold at \$35.00 an ounce
 - ▶ a 59% devaluation of the dollar value of gold
- ▶ Jalil-Rua: inflation expectations rose sharply 1933Q2
 - ▶ contemporary news accounts & business forecasts
 - ▶ attribute much to FDR's speeches, fireside chats, press conferences

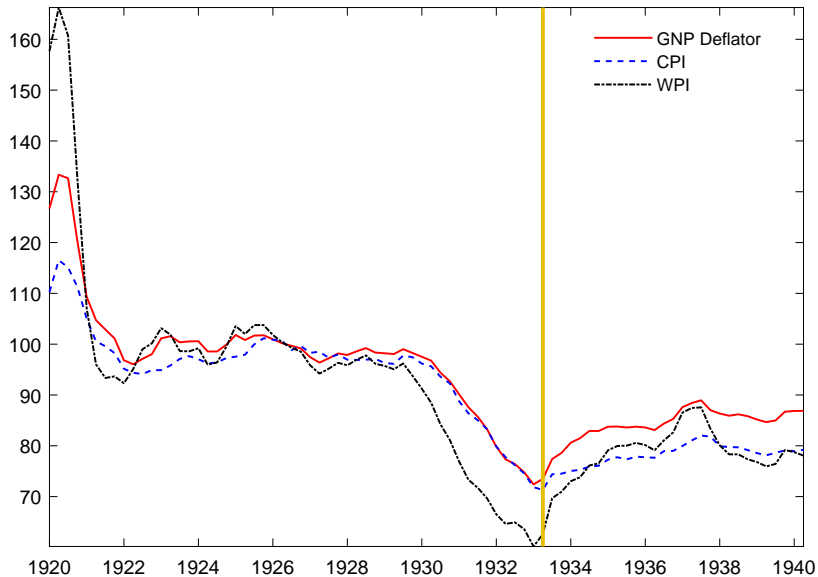
Real Economic Activity

Output



Nominal Economic Activity

Price Levels



Corroborating Evidence

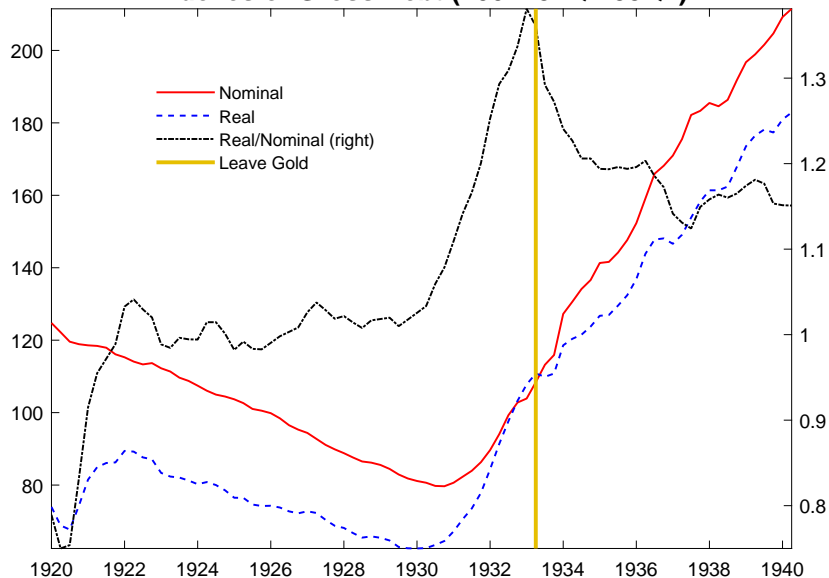
- ▶ Revaluation of government bond portfolio at heart of UBFE
 - ▶ surprise changes in price level
 - ▶ surprise changes in bond prices (expected inflation)
 - ▶ changes in real discount rates
- ▶ How do facts about government debt line up with UBFE?

Government Debt Facts

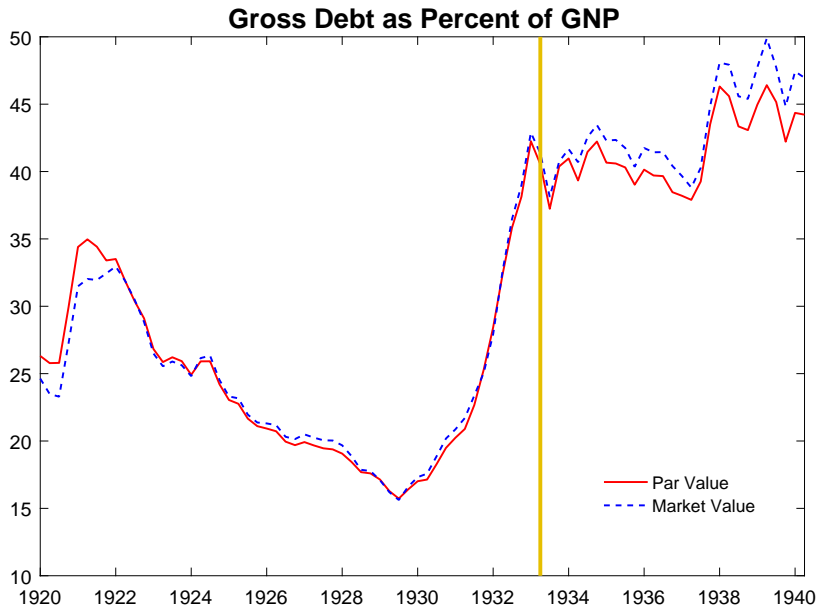
- ▶ Construct detailed government bond portfolio data
- ▶ Data consistent with UBFE story
 - ▶ nominal debt grew 20% faster than real debt
 - ▶ debt-GNP ratio stabilized at 40%
 - ▶ post-gold standard: real returns more negative
 - ▶ post-GS: surprise devaluations large & negative
 - ▶ post-GS: surprise inflation & lower bond prices important
 - ▶ post-GS: relative price of bonds fell—bonds lost value

Government Bond Valuation

Indexes of Gross Debt (100 = 32Q2-33Q1)



Debt Stabilized Under UBFE



Lessons for Today

1. Initially FDR was single-minded in pursuit of higher prices & employment; willing to experiment
 - ▶ fiscal policy state contingent
 - ▶ clear deficits would not be offset by surpluses
2. Joint monetary-fiscal behavior triggered recovery
 - ▶ doubling of nominal debt critical
 - ▶ communication about policy goals
3. Policy makers do not understand fiscal inflation
 - ▶ perceive it is a slippery slope: easily leads to runaway inflation

Lessons for Today

4. Governments today lack single-mindedness
 - ▶ objectives bounce between stimulus and austerity
 - ▶ fears of sustainability taint policy actions
 - ▶ renders fiscal policy impotent for stimulus
5. Fiscal backstop against deflation (Sims)
 - ▶ no purely monetary cures to serious deflation
 - ▶ commitment to trigger UBFÉ in face of falling prices
6. Anchoring fiscal expectations
 - ▶ at least as important as monetary expectations