Recovery of 1933

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Thesis of Paper

- Thesis: *unbacked fiscal expansion* triggered America's recovery from the Great Depression
- Two steps
  1. Monetary: reduced gold content of dollar, abandoned convertibility of gold, abrogated gold clause
  2. Fiscal: expanded relief 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 & must be backed fully by taxes
  - revoking convertibility made bonds genuinely nominal
- Policy was state-dependent, temporary, & coordinated
- Policy worked until the 1937 fiscal retrenchment

Why Should We Care?

- Should resonate today
  - Covid: \$5 trillion in "emergency" spending
  - suspended usual fiscal procedures
  - no discussion of how to finance spending
  - initially bond, then money financed when Fed bought bonds

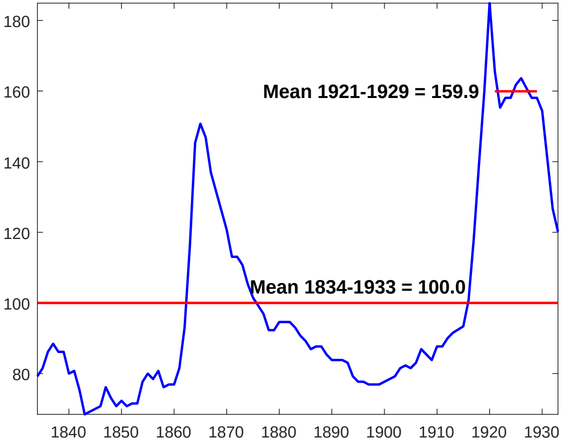
> *"It's important to note that we believe this should be provided on an emergency basis, not something where it would require offsets."*

Jen Psaki, White House Press Secretary, 15 March 2022, referring to \$22.5 billion request for Covid funding after \$5 trillion allocated in earlier relief

- This attitude toward Covid relief prevalent through 2020 & 2021

FDR's Policy Problem

- Gold standard $\Rightarrow$ price level mean reverting



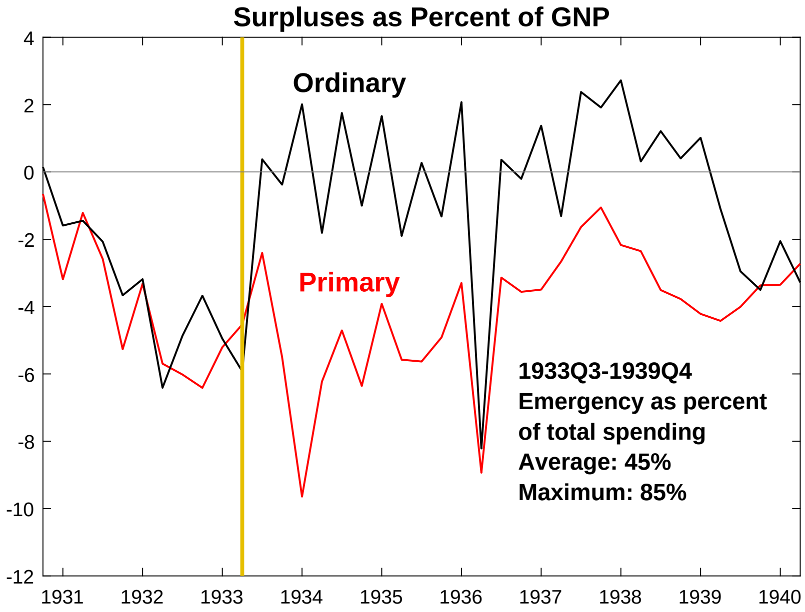
CPI: 1834 Coinage Act set 1 oz. gold $=$ \$20.67, rescaled so mean $=$ 100

- FDR wanted to return to 1920s levels (as Fisher recommended)

FDR’s Triple-Barreled Approach

1. Executive branch controlled 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
   - balanced “ordinary” budget
3. Political strategy to make fiscal policy believable
   - recovery *the* priority: “more grave” than WWI
   - feared “agrarian revolution” & “amorphous resentment” of economic institutions
   - “a choice between rise in prices or rise in dictators”
   - a “war for survival of democracy”

Emergency Deficits, Ordinary Balance



“Ordinary” & “Emergency” Spending Impacts

- Representative household, infinitely lived
  - elastic labor, cashless, nominal bonds pay $1 + i_t$
  - utility: consumption, c_t & leisure, l_t
  - HHs receive lump-sum transfers, Z_t, pay taxes T_t
- Government “dual budget”

	“Ordinary”	“Emergency”
Purchases	G_t^o	G_t^e
Transfers	Z_t^o	Z_t^e
Bonds	B_t^o	B_t^e

- Government budget identity

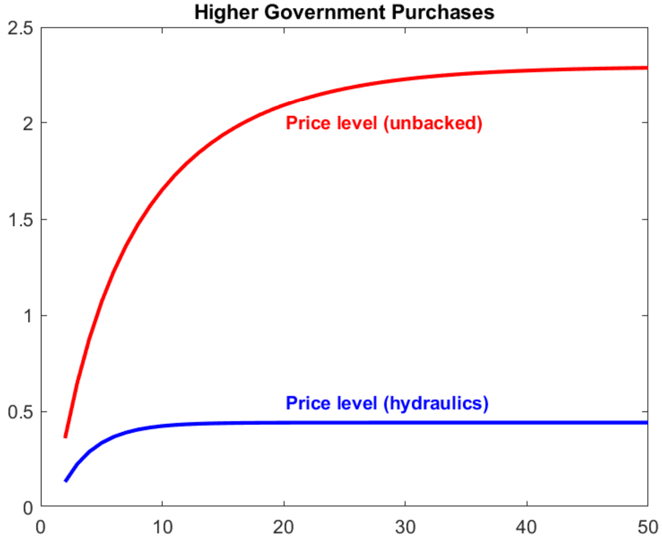
$$\frac{B_t^o + B_t^e}{P_t} + T_t^o = G_t^o + G_t^e + Z_t^o + Z_t^e + (1 + i_{t-1}) \left(\frac{B_{t-1}^o + B_{t-1}^e}{P_t} \right)$$

- Tax rule: $T_t^o = f(B_{t-1}^o / P_{t-1}), \quad f' > r$
- Monetary rule: $i_t = g(P_t / P_{t-1}), \quad 0 \leq g' < 1$

“Ordinary” & “Emergency” Spending Impacts

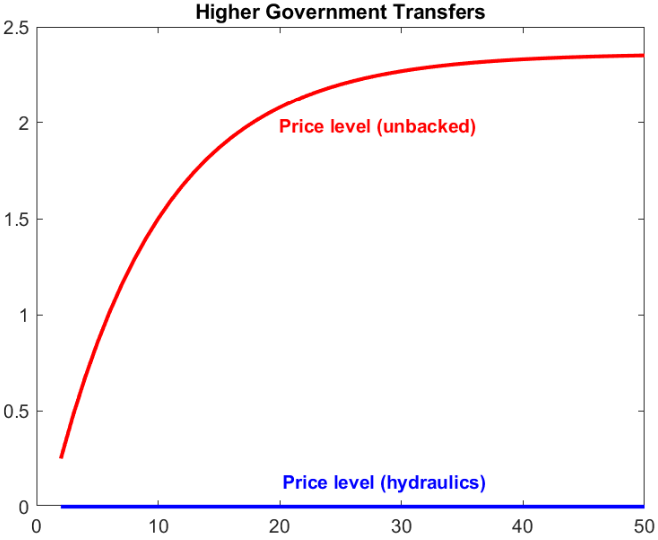
- Distinguished by their marginal sources of financing
- Ordinary spending aka “balanced-budget multiplier”
  - fully backed by future surpluses
  - real spending $\uparrow \Rightarrow$ real demand $\uparrow \Rightarrow$ multiple output $\uparrow$
  - no additional stimulus from higher nominal debt
  - called “Keynesian hydraulics”
- Shocks to emergency spending are unbacked
  - transfers are gifts instead of loans
  - raises household wealth & demand for goods
  - additional monetary role for government bonds *supplements* Keynesian hydraulics
  - revalues all outstanding debt
- Unbacked impacts exceed those of hydraulics alone
- Total impact $=$ hydraulics $+$ debt dynamics

Price Level: Hydraulics vs. Unbacked



- Serially correlated increase in government purchases

Price Level: Hydraulics vs. Unbacked

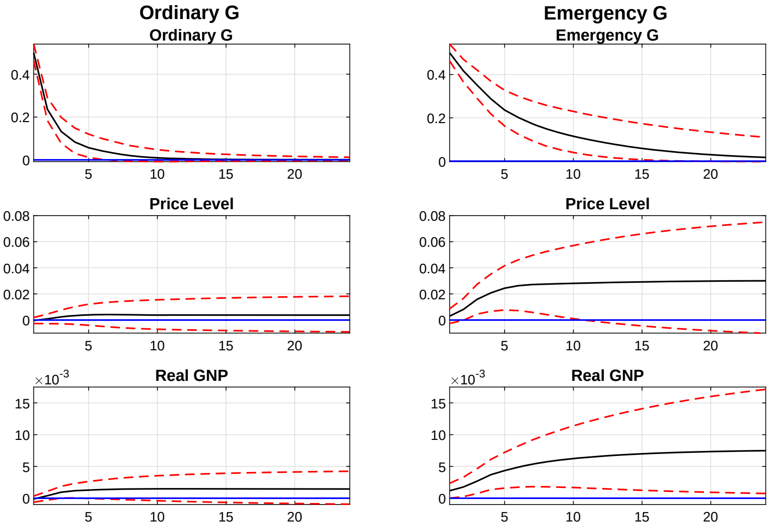


- Serially correlated increase in government transfers

VAR Evidence I

- Identified Bayesian VAR (Sims-Zha prior)
  - monthly data from 1933:4 to 1940:6
  - ordinary spending/debt, emergency spending/debt, tax receipts/debt, GNP deflator, real GNP
- Adopt Blanchard-Perotti: spending predetermined

VAR Estimates: Higher Spending



If all spending backed, should get same impacts

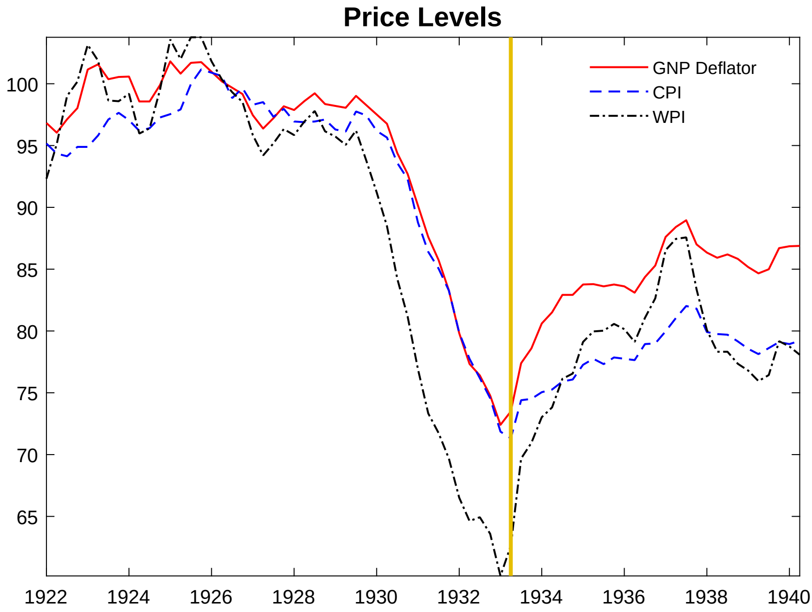
VAR Evidence II

- Expanded identified Bayesian VAR (Sims-Zha prior)
  - monthly data from 1933:4 to 1940:6
  - primary surplus, commercial paper rate, monetary base, gold stock, nominal market value of debt, GNP deflator, real GNP
  - zero restrictions identity monetary policy, money demand, and fiscal surplus shocks
- Findings: fiscal expansion generates
  - positive comovements among base money, gold inflows, price level, real GNP
  - surplus shocks biggest source of base movements
  - surplus shocks biggest source of price level, GNP, gold movements (except own innovations)
  - no non-fiscal shock generates these positive comovements
- No VAR support for monetary/gold explanations of recovery, independent of fiscal expansion

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 became 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 & Hall-Payne-Sargent-Szoke: inflation expectations rose sharply 1933Q2
  - contemporary news accounts & business forecasts
  - government bond returns
  - due to departure from gold, FDR's speeches, fireside chats, press conferences

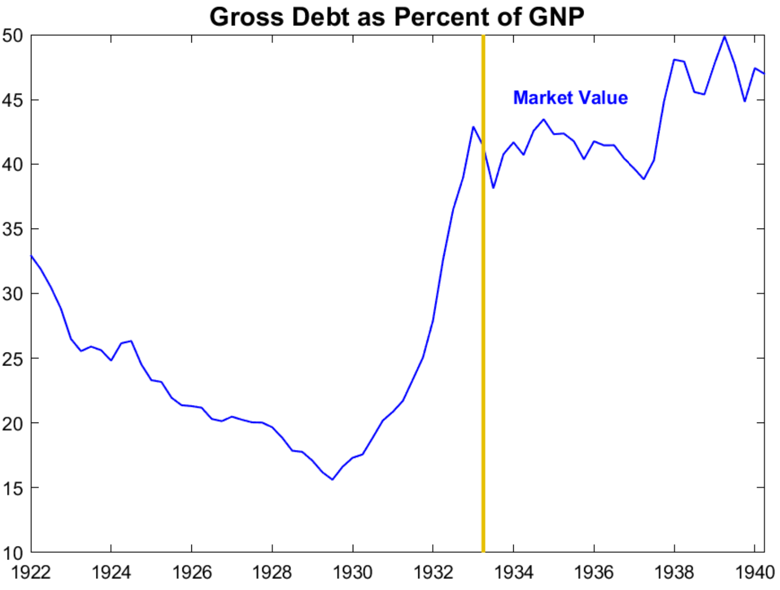
Nominal Economic Activity



Corroborating Evidence

- Revaluation of government bond portfolio at heart of UBFE
- Data consistent with the theory
  - post-gold standard: real returns more negative
  - post-GS: surprise devaluations large & negative
  - post-GS: relative price of bonds fell—bonds lost value
  - nominal debt grew 20% faster than real debt
  - debt-GNP ratio stabilized at 40%

Debt Stabilized Under UBFE



Nominal debt doubled from 4/1933–6/1940

Returns on Government Bond Portfolio

	Gold Standard 1926Q1-1933Q1		**Unbacked Fiscal Expansion 1933Q2-1940Q2**	
	Monthly	*Annual*	*Monthly*	*Annual*
Nominal	0.24	2.91	0.23	2.72
Real	0.66	7.86	0.10	1.20
Surprise Real	0.40	4.81	−0.06	−0.76

- Surprise revaluation distinctive feature of UBFE
  - nominal returns comparable
  - real returns much lower under UBFE
  - surprise real returns negative under UBFE
- Achieved FDR goal to redistribute from private lenders to private borrowers
- Ultimately recovery incomplete: FDR's fiscal retrenchment in 1937

Lessons for Today

1. Initially FDR was single-minded in pursuit of higher prices & employment; willing to experiment
   - fiscal policy state contingent
   - clear emergency deficits would not be offset by surpluses
2. Monetary-fiscal policies shared common goal
   - nominal debt doubled, Fed prevented debt service from exploding debt
   - communication anchored fiscal expectations
3. Fiscal response to Covid-19
   - similar to fiscal response in Great Depression
   - could have designated Covid spending “emergency,” issued unbacked “Covid bonds”
   - macro objectives & consequences?
   - instead, we now expect the Fed to mop up