

Recovery of 1933

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Introduction

- Abandonment of the gold standard in April 1933 converted effectively real government debt into nominal debt.
- Opened the door for an *unbacked fiscal expansion (UBFE)*, a debt-financed increase in government spending unaccompanied by higher primary surpluses.
- Roosevelt followed a fiscal rule that ran primary deficits –emergency spending– until the price level rose and economic activity recovered.
- Consensus view: fiscal policy contributed little or nothing to the recovery, deficits were too small. Federal Reserve reduced to impotence.
- Extend Keynesian hydraulics/multiplier mechanisms to add role of nominal government debt dynamics: debt expansion central to recovery.
- Monetary/gold policy –perhaps unwittingly– supported the unbacked fiscal expansion.

Unbacked Fiscal Expansion

- Household intertemporal budget constraint, $t = 0$

$$\mathbb{E}_0 \sum_{t=0}^{\infty} q_t \left[c_t + \frac{i_t}{1+i_t} m_t \right] = \frac{A_0}{P_0} + \mathbb{E}_0 \sum_{t=0}^{\infty} q_t [y_t - \tau_t]$$
- Nominal wealth: $A_0 = M_{-1} + B_{-1}$; stochastic discount factor for date 0 value of goods at t : q_t
- Liquidity preference, $m_t = L(i_t, c_t)$
- Policy rules close the model:

$$i_t = \bar{i} = \bar{\pi}/\beta$$

$$\tau_t = \bar{\tau} + \epsilon_t, \quad \mathbb{E}_t \epsilon_{t+j} = 0, \quad j > 0$$
- Imposing equilibrium leads to goods and asset markets clearing. Combining equilibrium outcomes with policies yields:

$$\frac{M_{-1} + B_{-1}}{P_0} = L(\bar{i}, \bar{y}) + \tau_0 + \frac{\beta}{1-\beta} \bar{\tau}$$
- Real value of government liabilities depends on their backing
- A tax cut/increase in transfers at $t = 0 \implies \downarrow \tau_0$
 - Household has more goods, government fewer
 - Positive wealth effect \implies household shifts up consumption path
 - \uparrow demand for goods $\implies \uparrow P_0$ and $\downarrow A_0/P_0$
 - Negative wealth effect must be large enough to eliminate excess demand for goods at $t = 0$
 - Net effect: $\tau_0 \downarrow$ and $P_0 \uparrow$

Formal Evidence

- Identified BVAR (Sims-Zha prior)
- Results consistent with the theoretical implications of an UBFE in a new Keynesian model.

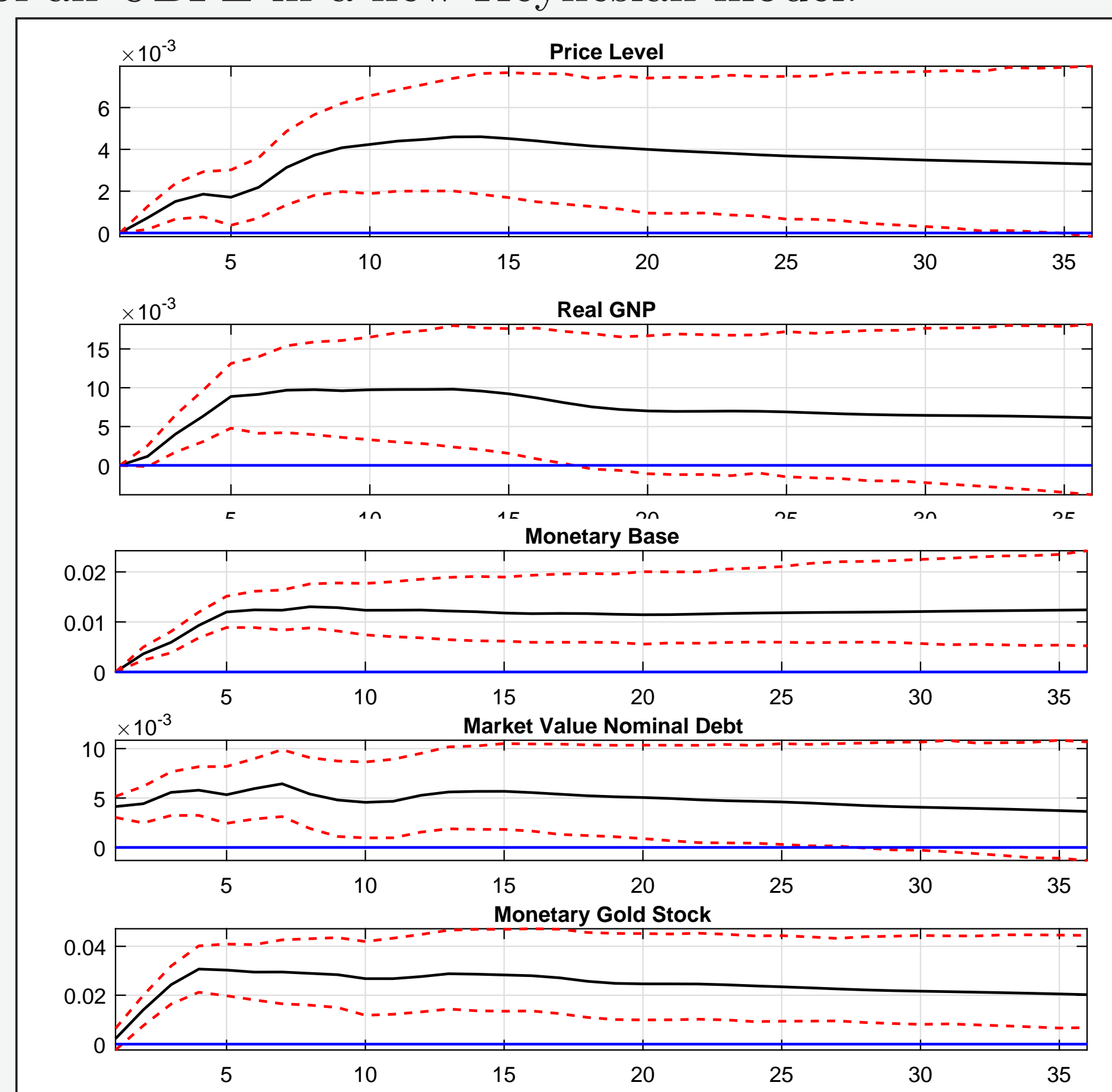


Figure 4: VAR estimates: deficit shock

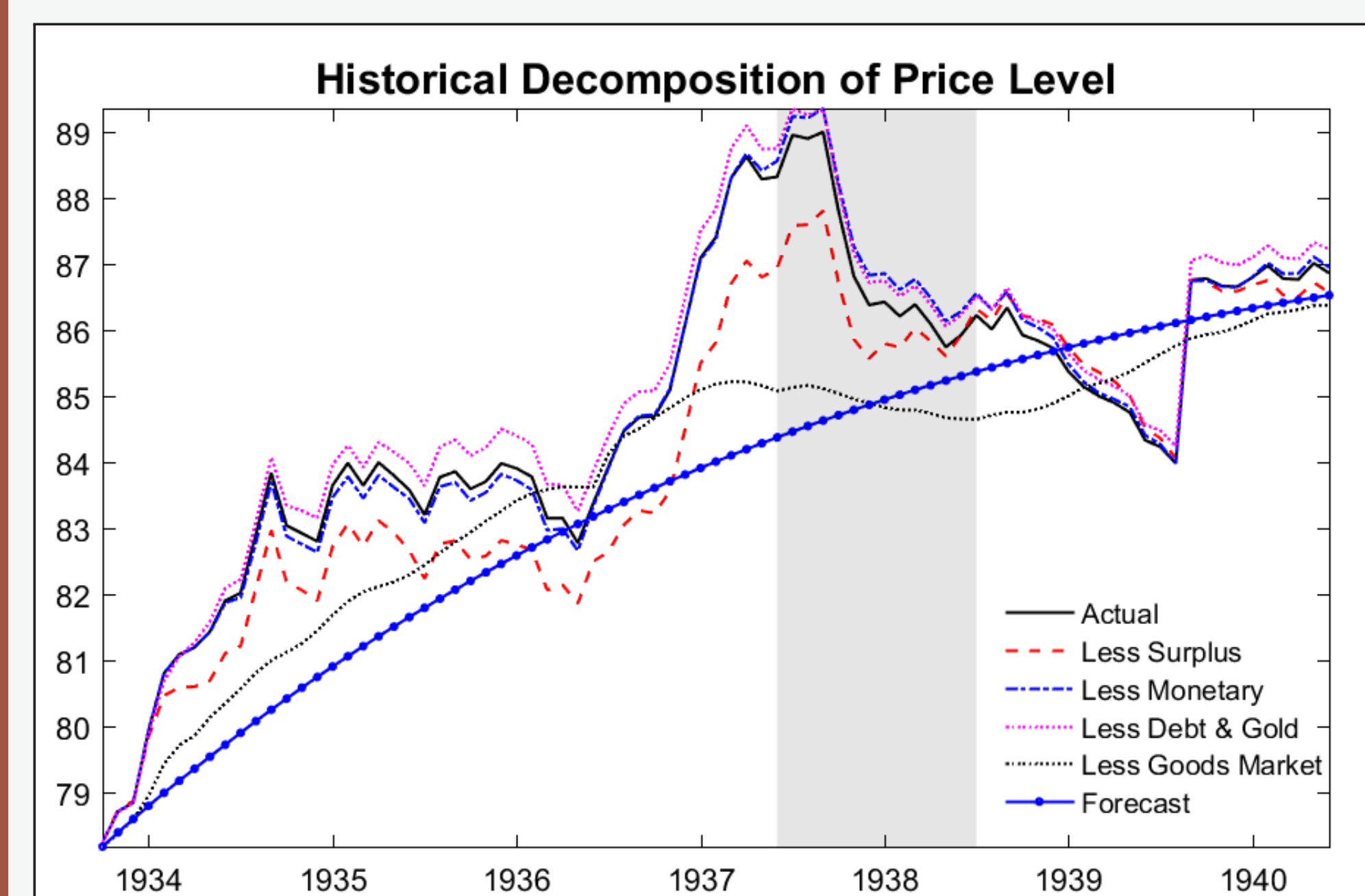


Figure 5: Decomposition of the multi-period forecast error in forecasting the GNP deflator into parts due to various shock combinations.

Recovery Narrative

- Raising the price level and employment were objectives of the Roosevelt administration. The recovery in prices and output coincided *exactly* with the departure from the gold standard.

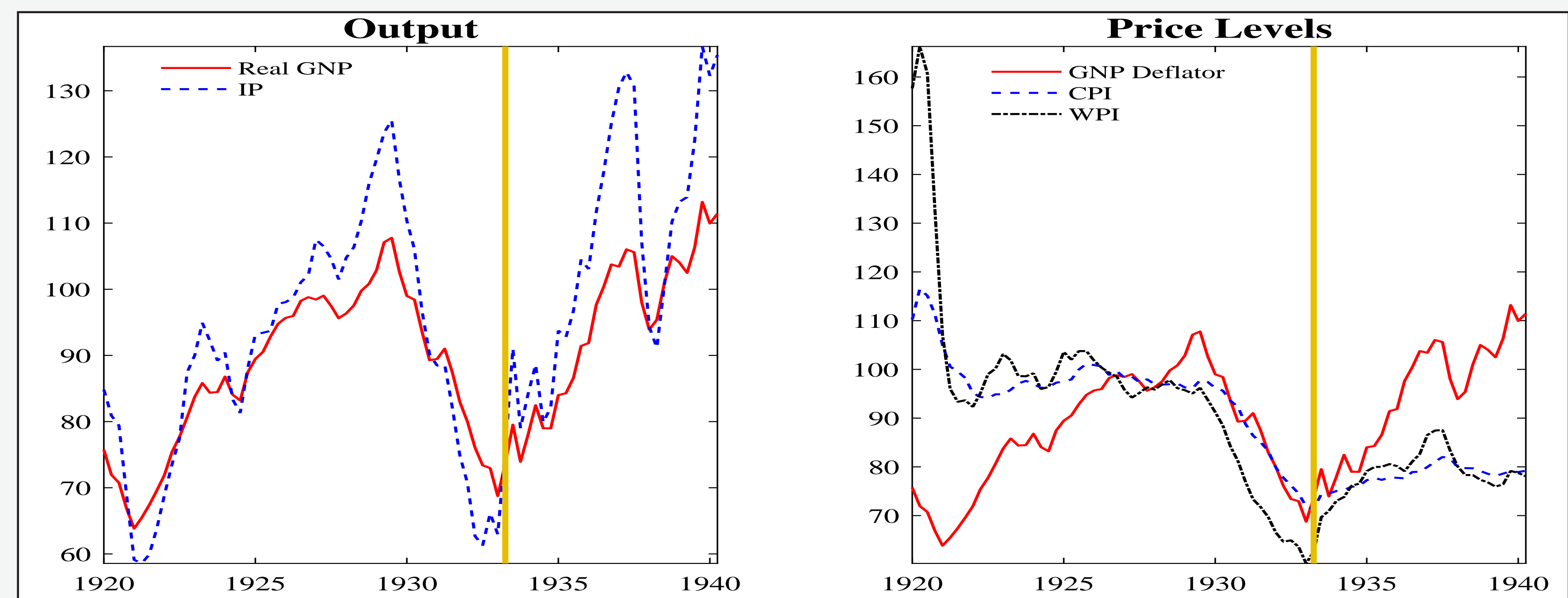


Figure 1: Measures of real economic activity and price levels. All series use 1926 base year. Vertical line marks when the United States abandoned the gold standard.

- Federal Reserve policy was passive –it did not adjust interest rates in response to the price level. The decision to not sterilize gold inflows allowed the monetary base to expand with gold. A flood of reserves kept the interest rate pegged to stabilize debt. Surprise devaluations on government debt were a distinct feature of the unbacked fiscal expansion period.

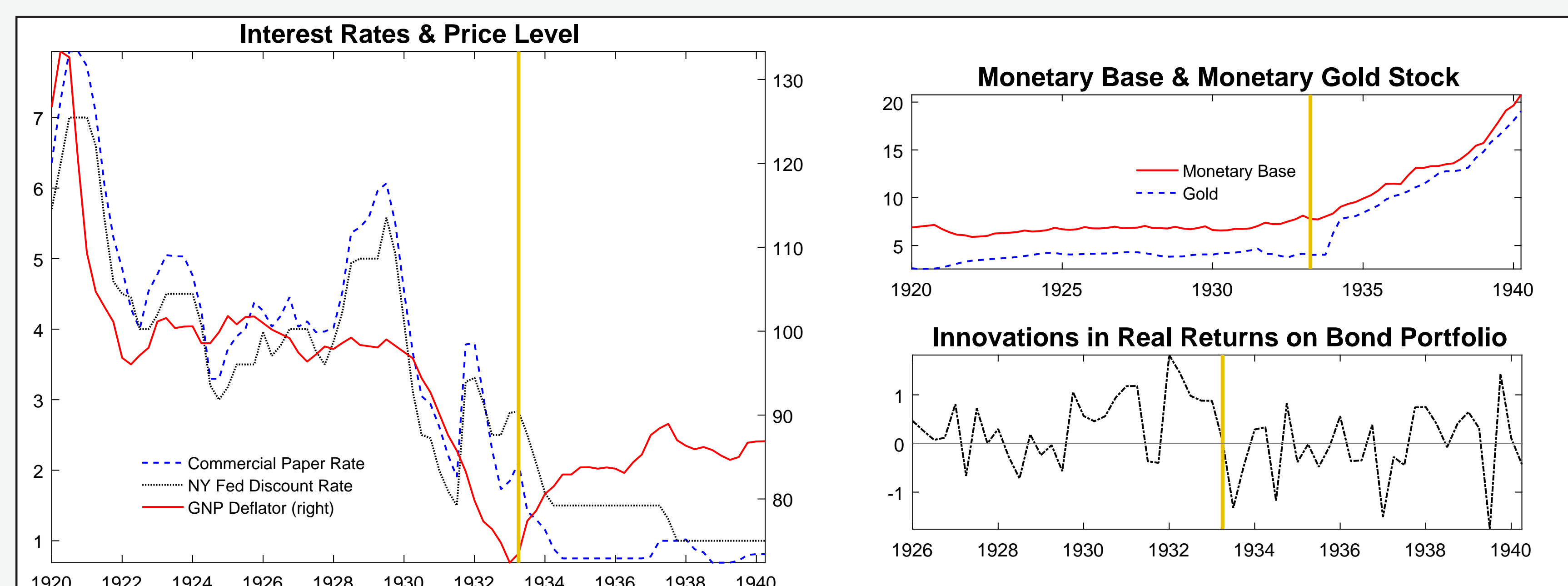


Figure 2: Inflation, interest rates, monetary base, gold held by Federal Reserve Banks (in billions), and one-step-ahead unanticipated real monthly returns on the federal government bond portfolio. Vertical line marks when the United States abandoned the gold standard.

- Although Roosevelt touted the evils of deficits, he balanced the “regular budget” and ran deficits on the “emergency budget.” Nominal debt rose 20 percent more than real debt and debt as a share of income remained flat throughout the unbacked fiscal expansion.

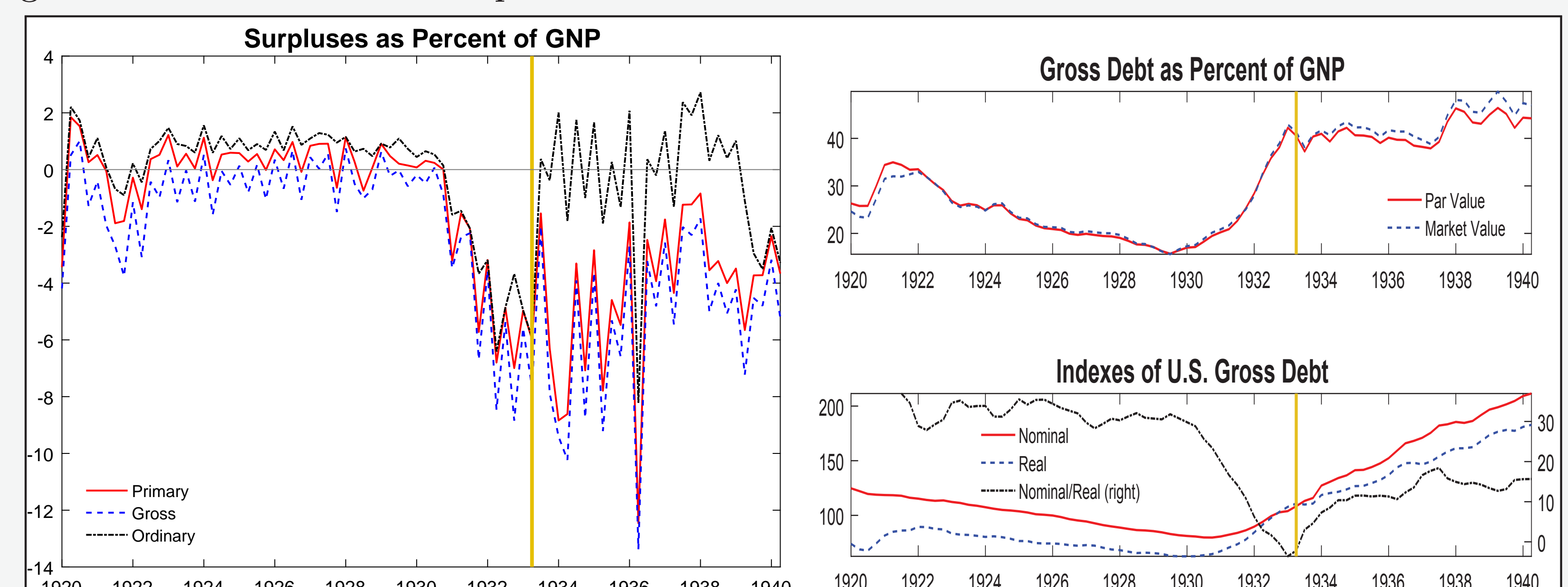


Figure 3: Surpluses are defined as total receipts less expenditures, ordinary or total. Primary surplus is gross surplus less net interest payments. Real debt is par value deflated by the GNP deflator. Vertical line marks when the United States abandoned the gold standard.

Lessons for Today

1. A joint monetary-fiscal attack instead of leaning entirely on monetary policy may stimulate aggregate demand and inflation.
2. Fiscal stimulus and fiscal sustainability need not be in conflict.

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