THE FISCAL FOOTPRINT OF CENTRAL BANK ACTIONS: IMMEDIATE AND FAR FUTURE

Ricardo Reis LSE

> 9th of January, 2020 The Future of Inflation Targeting Bank of England

Monetary policy affects inflation!

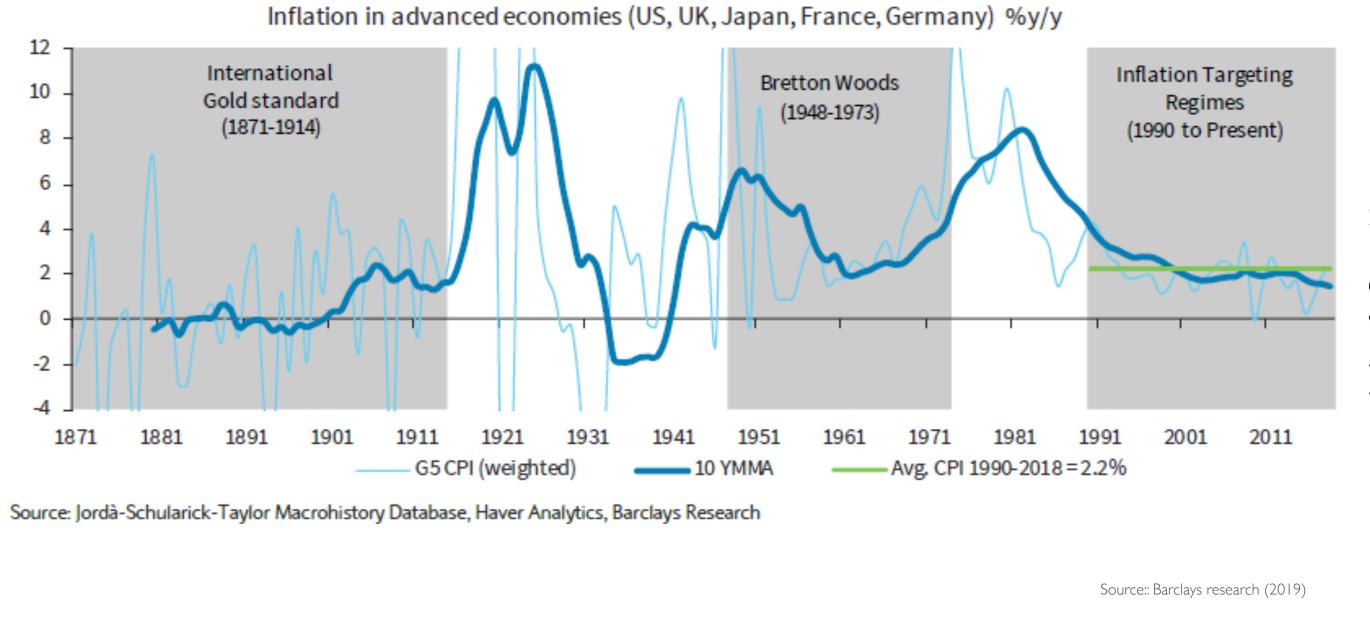
The Most Dangerous Idea in Federal Reserve History:

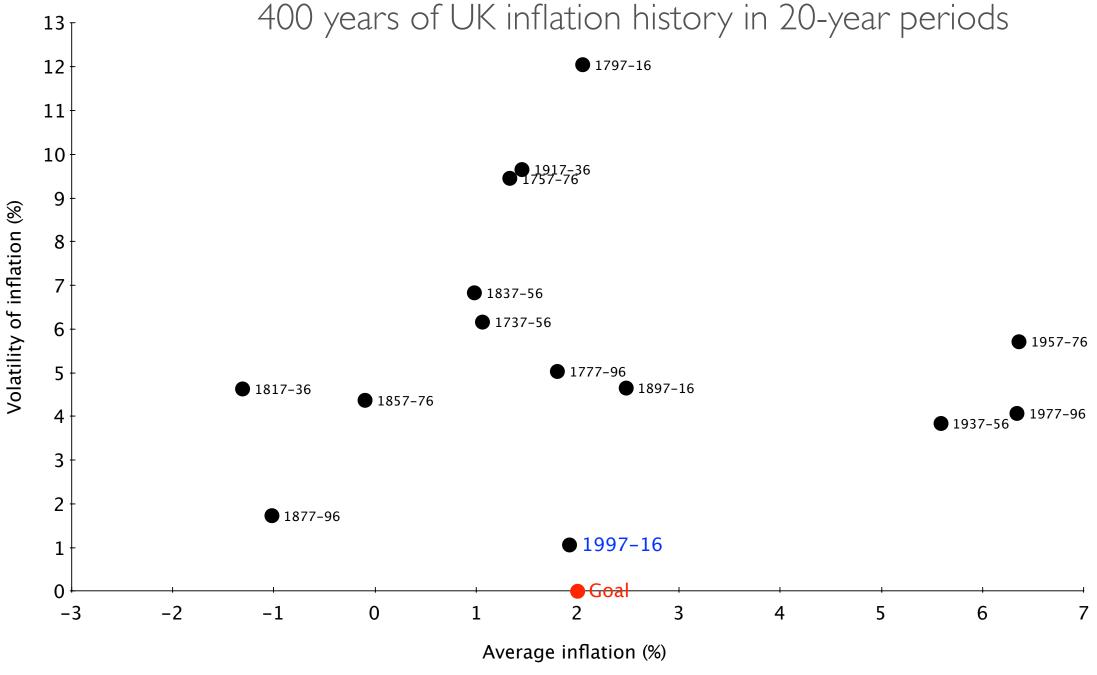
Monetary Policy Doesn't Matter†

American Economic Review: Papers & Proceedings 2013, 103(3): 55–60 http://dx.doi.org/10.1257/aer.103.3.55

By Christina D. Romer and David H. Romer*

Fiscal policy may give give tail/head-winds, but "The (E)CB's mandate for price stability is unconditional" (Lane, 2019). And can do it.





Fiscal footprint CB: relax budget constraints

Budget constraint of the fiscal authority

$$V(\text{surplus}) \ge \frac{B}{P} - V(\text{CBdividends}) - V(\text{Bpremium})$$

• Budget constraint of the central bank

$$\mathbb{V}(\mathsf{CBdividends}) \leq \mathbb{V}(\mathsf{seignorage}) + \frac{B^c - V}{P} + \mathbb{V}(\mathsf{VBpremium})$$

Combined budget constraint

$$\mathbb{V}(\text{surplus}) \ge \frac{B + V - B^c}{P} - \mathbb{V}(\text{seignorage}) - \mathbb{V}(\text{Bpremium}) - \mathbb{V}(\text{VBpremium})$$

Negative footprint of too low inflation

$$\mathbb{V}(\text{surplus}) \ge \frac{B + V - B^c}{P} \qquad \Rightarrow \text{Reflate the debt}$$

− V(seignorage)

→ Lower seignorage

 $-\mathbb{V}(VBpremium) \rightarrow Low investment profits$

 $-\mathbb{V}(Bpremium)$

→ Demand for government bonds

Central bank policies (to stimulate inflation)

$$\mathbb{V}(\text{surplus}) \ge \frac{B + V - B^c}{P}$$

- → Reflate the debt
 - Need unexpected persistent low inflation + long maturity
 - Since $B/P = \sum_{i} Q^{j}B^{j} = \mathbb{V}(B^{j}/\pi_{j})$
- − V(seignorage)
- → Lower seignorage
 - Low for long interest rates, less seignorage from currency
 - Combined with downward trend if cash less used
- -V(VBpremium)
- → Low investment profits
 - Short-long balance sheet, earns term premium
 - Low term premium, no gains

- $-\mathbb{V}(Bpremium)$
- → Demand for government bonds
 - Opposite direction: force banks to hold government bonds
 - Create safety premium, financial repression, but less credit

Future blurring the monetary/fiscal separation

Dominance of inflation on CBs choices was sustainable in the past 30 years since:

- Yes, central bank <u>can</u> generate fiscal resources (alleviate fiscal burden). But...
- <u>small</u> effect: need persistent and unexpected to inflate away, need triple-digits inflation for seignorage, need anti-Friedman rule for investment profits, need financial repression for B premia.
- and <u>side</u> effects on: long-term financing costs through inflation risk premia, hyperinflations, contractions in credit, lower output.

Myopia was the justification when it happened as: fast, elastic, not legislative.

But in fiscal crisis times...

$$\mathbb{V}(\text{surplus}) \ge \frac{B + V - B^c}{P}$$

- → Inflate away the debt
 - More debt, more base to inflate away
 - QE determines effective maturity
- − V(seignorage)
- → Raise seignorage
 - Large changes in demand for currency
 - Safe haven if default without inflation
- -V(VBpremium)
- → Investment profits
 - V if unit of account shielded from default: safety premium
 - V is held by banks: provides default insurance for them.

- $-\mathbb{V}(Bpremium)$
- → Higher demand for government bonds
 - Tighten macropru, help fiscal authority roll over its debt
 - Loosen macropru, spur lending and tax collection

And in joint fiscal-financial crisis

$$\mathbb{V}(\text{surplus}) \geq \frac{B + V - B^c}{P}$$

- → Inflate away the debt
- → Raise seignorage
- − V(seignorage)
- → Investment profits
 - Lender of last resort actions, effect on bailout costs.
 - CB as supplier of safe asset, significant profits
- -V(VBpremium)
- → Higher demand for government bonds
 - Tighter macropru can lower incidence or size of financial crisis, it attenuates fiscal crisis associated with it.
- But tighter macropru, makes banks hold more bonds, worsens the diabolic loop
- W(Bpremium)

General point: in fiscal-financial crisis, separation of monetary and fiscal policy is moot.

Conclusions on the footprint

- Immediate future: central bank actions to push for higher inflation in the face of tight fiscal policy have a negative fiscal footprint. Compromise facing fiscal policymakers.
- Far future: on average, in normal times, ignoring the footprint is fine—small and bad side effects—with non-myopic government. Independent inflation-focussed central bank
- Far future usage of fiscal footprint, fear will move to fiscal focus:
 - If <u>fiscal crisis</u>, appealing. Mix of inflation, seignorage, QE, financial repression.
 - If financial-fiscal crisis: what separation? Macropru/LOLR plays centre stage

Points based on:

- "Can the Central Bank Alleviate Fiscal Burdens" In The Economics of Central Banking, edited by Mayes, Siklos, and Strum, OUP 2019.
- "QE in the Future: The Central Bank's Balance Sheet in a Fiscal Crisis." IMF Economic Review, I-42, 2017.
- "The Second Decade of the Euro: New Challenges in Old Clothes" ECB Sintra Forum, 2019.
- "The Fiscal Footprint of Macroprudential Regulation." Working paper: June 2019.