Inflation and Interest Rates

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Discussion by Bruce Preston

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For its part the Government endorses the inflation objective and emphasises the role that disciplined fiscal policy must play in achieving medium-term price stability.

– The Statement on the Conduct of Monetary Policy

Cochrane's Paper

- Monetary and fiscal policy determine the price level
- Suggestive evidence supporting one particular implication
- Sketches unified theory of interest-rate pegs

The Conventional View

- Models and policymakers assume
  - Monetary policy can and does control inflation
  - Fiscal policy can and does ensure solvency
- MP does this using ‘Taylor rule’: unconstrained or ‘active’
- FP does this taking MP and private behaviour as given: constrained or ‘passive’
- Does it makes sense?
  - In normal times, maybe—embedded is almost all textbooks and evaluation of monetary policy
  - But: tends to trivialize fiscal policy

The Conventional View is Precarious

- Monetary economists tend to ignore that with rational expectations the Taylor Principle does not uniquely determine inflation
  - Hyperinflationary and deflationary paths are possible
  - Ruling them out requires specific assumptions about fiscal policy
- Even the conventional view requires appropriate fiscal backing
  - For higher interest rates to lower inflation, fiscal policy must eliminate positive wealth effects
- Fiscal policy is central to price-level determination

Should we Care

- Perhaps simply a failure of economic models?
- But the basic logic seems inescapable
  - At a minimum we should understand their implications given their pervasive use
  - Even better, design fiscal rules/institutions immune to this criticism
  - Empirical evidence that fiscal backing constrains inflation policy

Asset Pricing Equation

- Suppose government issues nominal debt B_t

- Common to all intertemporal models of government debt is the valuation equation

$$b_{t-1} - \delta\pi_t = \beta E_t \sum_{T=t}^{\infty} \beta^{T-t} \left[s_T - \delta \left(R_T - \pi_{T+1} \right) \right]$$

where

$$\beta = \frac{1}{R} \text{ and } \delta = \frac{P^b b}{Y}$$

  - Often called an “intertemporal budget constraint”

Conventional View: Monetary Policy

$$b_{t-1} - \delta \pi_t = \beta E_t \sum_{T=t}^{\infty} \beta^{T-t} \left[s_T - \delta \left(R_T - \pi_{T+1} \right) \right]$$

Conventional View: Fiscal Policy

$$b_{t-1} - \delta \pi_t = \beta E_t \sum_{T=t}^{\infty} \beta^{T-t} \left[s_T - \delta \left(R_T - \pi_{T+1} \right) \right]$$

What is Going on?

- The standard logic assumes that fiscal policy adjusts in the right way in response to interest rate changes
  - Raise interest rates to restrain inflation
  - Higher interest rates increase debt service costs and reduce the present discounted value of surpluses — this generates a positive wealth effect
  - Surpluses must eliminate this effect else the price level will rise!
  - Nothing a central bank can do prevent this
  - Not a statement about short-run stabilization policy

Unconventional View

$$b_{t-1} + \delta R_t - \delta \pi_t = \beta E_t \sum_{T=t}^{\infty} \beta^{T-t} \left[s_T - \delta \left(\beta R_{T+1} - \pi_{T+1} \right) \right]$$

Even More Unconventional

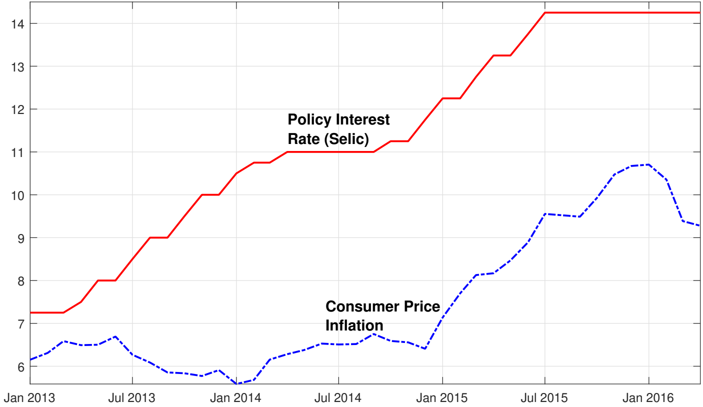
$$b_{t-1} - \delta\pi_t = \beta E_t \sum_{T=t}^{\infty} \beta^{T-t} \left[s_T - \delta \left(R_T - \pi_{T+1} \right) \right]$$

– Conventional view rests on rational expectations
– With non–rational expectations, same wealth effects as unconventional view
– Eusepi and Preston 2018

Brazil

- Structural surpluses unresponsive to debt
  - 1988 constitution indexed government benefits to inflation
  - Tax increases considered politically infeasible
- Inflation rose, so too debt with higher cost of service
  - Rising interest rates generated positive wealth effect
  - Drove up aggregate demand and inflation
  - In December 2015: primary deficit 1.88% of GDP — gross deficit 10.34%!

Brazil



14
13
12
11
10
9
8
7
6
Jan 2013
Jul 2013
Jan 2014
Jul 2014
Jan 2015
Jul 2015
Jan 2016
Policy Interest
Rate (Selic)
Consumer Price
Inflation

Jacobson, Leeper and Preston 2023

- FDR committed to raise the price level by achieving "... the kind of dollar which a generation hence will have the same purchasing power as the dollar we hope to attain in the near future"

- Abrogated the gold clause; pegged interest rates

- Three strategies to persuade higher debt didn't imply higher taxes

  – State-contingent reflation: bond-financed deficits until recovery

  – Distinguished recurrent and emergency budgets

  – Raised political stakes by claiming recovery was a "war for the survival of democracy"

Going Forward

For its part the Government endorses the inflation objective and emphasises the role that disciplined fiscal policy must play in achieving medium-term price stability.

- Deeper understanding of "disciplined"
- Serious modelling of fiscal policy; better data—market values of debt, fiscal expectations, ...
- Fiscal rules/institutional reform—political economy constraints?
- Improved fiscal communication
- From this perspective, RBA review recommendations about collaborative Treasury-RBA research effort welcome