Comments to "Fiscal Policy and Real Interest Rates" by Francesco Bianchi, Renato Faccini, and Leonardo Melosi

Juan Pablo Medina Universidad Adolfo Ibáñez

Summary (1)

- Away from a dichotomy view between fiscal dominance and no fiscal dominance
 - Fiscal dominance may depend on specific states or shocks.
 - Some shocks transmit under fiscal dominance, while others do not.
- Key insights:
 - Expansive fiscal shock in a regime of fiscal dominance: inflation and inflation expectations rise; real interest rate (r) falls; Debt/GDP falls
 - Expansive fiscal shock in a regime without fiscal dominance (monetary dominance): less movement in inflation, inflation expectations, and **r**; **Debt/GDP rises**
- Using a standard model extended with this logic, they estimate the role of unfunded fiscal shocks in US in shaping the evolution of **r during 1960:1-2024:2**

Summary (2)

- Very good explanations from simple models to more complex model
- Contrast with an **exogenous time-varying latent inflation target** ($\overline{\pi}_t$) in the Taylor-Type rule (e.g. Castelnuovo,2010; Cogley, Primiceri, and Sargent, 2010; Leigh, 2008; Haque, 2022):

$$\hat{R}_{n,t} = \rho_r \hat{R}_{n,t} + (1 - \rho_r) [\phi_\pi (\hat{\pi}_t - \bar{\pi}_t) + \phi_\pi \hat{y}_t]$$

- Now, time-varying latent inflation target is related to unfunded fiscal shocks: $\bar{\pi}_t = \hat{\pi}_t^F$
- Nice work based on Bianchi et al (2023), where the focus there was the effect of unfunded fiscal shocks on inflation. Here the focus is on the real interest rate

Main comments (1)

- Nice representation of the model economy with log-linear approximations
- Separation/sequentially/orthogonality between the unfunded fiscal shocks and the rest of shocks



- Correlation between unfunded and funded fiscal shocks?
- Does the size of debt/GDP ratio affect the process for unfunded fiscal shocks? For example:

$$\zeta^F_t = \left(1-\rho^F_{eZ}\right)\bar{\zeta}^F + \rho^F_{eZ}\zeta^F_{t-1} + \varpi_G\hat{s}_{b,t-1} + \varepsilon^F_t$$

Main comments (2)

- Size of the fiscal multiplier of the funded and unfunded fiscal shocks? (see next slide)
 - Presumably small for funded fiscal shocks given the small fraction of Hand-to-mouth households
 - Also, the comparison with the estimated fiscal multiplier in recessions (e.g. Auerbach and Gorodnichenko, 2011) and for unfunded fiscal shocks in the model.
- How and who determine when a fiscal shock is funded or unfunded?
 - Belief of the private sector could generate the same results?
 - Only transfers shocks can be funded or unfunded. Govt consumption; taxes and other type of shocks could feature a separation between funded and unfunded?

Main comments (2, cont.): size of fiscal multipliers?



Main comments (3)

Extension to open economy settings

- Role of the exchange rate; and role of fraction in domestic vs foreign currency
 - **Mitigation**: Still the exchange rate can be a shock absorber for unfunded fiscal shocks like any other shock?
 - **Amplification**: unfunded fiscal shock operate more intensively since the same increase in inflation reduce less the public debt-to-GDP ratio because a fraction is denominated in foreign currency.
- A note on Chile: huge inflation surge with funded transfers.

Main comments (4)

Identification within the estimated model

- Role of several parameters in the monetary and fiscal rules $\hat{g}_t = \rho_G \hat{g}_{t-1} - (1 - \rho_G) \gamma_G (\hat{s}_{b,t-1} - \hat{s}_{b,t-1}^F) - \theta_G \hat{s}_{b,t-1}^F + \zeta_{g,t}$ $\hat{R}_{n,t} = \rho_r \hat{R}_{n,t} + (1 - \rho_r) [\phi_\pi (\hat{\pi}_t - \hat{\pi}_t^F) + \phi_\pi \hat{y}_t + \phi_F \hat{\pi}_t^F]$
- The estimated model imposes $\theta_G = \phi_F = 0$
- There is a continuous of alternatives for $heta_G < \gamma_G$ and $\phi_F < 1$
 - Can θ_G and ϕ_F be estimated with these constraints?
 - Similar questions apply for the specification in the other fiscal rules.

Main comments (5)

Identification within the estimated model (cont.)

- Does blue line in the top panel of figure 6 correspond to $\hat{\pi}_t^F$? [see next slide; variation of inflation due to unfunded fiscal shocks]
- Comparison with other studies that estimate the implicit time-varying inflation target.
- Plot with the smoothed series for $\hat{s}_{b,t}^F$

Identification outside the estimated model

• Are there other source of information to separate funded and unfunded fiscal shocks? (for instance, narrative)

Main comments (5, cont.). Blue line is $\widehat{\pi}_t^F$?



Main comments (6)

- Include other factors considered to affect the low frequency movements in the real interest rate
 - Persistent changes in the productivity growth. The estimated process for productivity growth reverts fast to the unconditional mean ($\rho_a=0.31$)
 - Saving glut of emerging economies (e.g. China)
- Is always a slowing-moving process the role of unfunded fiscal transfers? Note the previous chart since 2010
 - The effect of the unfunded fiscal shocks in the real interest rate is part of the same channel on inflation
 - Cyclical vs trend factors for the real interest rate

Minor comments

- Figure 2: Do funded fiscal shocks have permanent effect on debt-to-GDP ratio?
- Superscript M denotes Monetary-led policy regime and funded fiscal shocks; while F denotes Fiscally-led policy regime and unfunded fiscal shocks
- Transition dynamics? The median for the steady state value for the Debt/GDP ratio is 245% (compare to the path in figure 4)

Minor comments (cont.). Permanent effects on D/GDP?



Estimated model



Minor comments (cont.) Where is the unconditional mean for D/GDP?



The unconditional mean is 245 (or 81) for this variable

Final comments

- Very nice framework to analyze the macroeconomic impacts of fiscal shocks when not backed by future fiscal adjustments
- Natural extension of the Bianchi et al (2023) to understand the role of unfunded fiscal transfer shocks to the real interest rate
- Many avenues to refine and extend the analysis
- Many thanks!