A Goldilocks Theory of Fiscal Policy by Mian, Straub and Sufi

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Background

- What is a sustainable debt/output ratio b?
- We know answer depends on
 - Public deficit z
 - Interest rate (nominal) R
 - Growth rate (nominal) G
- From government budget constraint:

$$\dot{b} = z(b) + [R(b) - G(b)] \cdot b$$

Note: if

- R(b) > G(b): debt servicing requires public resources
- R(b) < G(b): debt is a source of resources for government

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• Set $\dot{b} = 0$ and differentiate government budget constraint:

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- Potential stories for G'(b)
 - ► G'(b) < 0: crowding-out (Reinhart-Rogoff 2010), debt overhang</p>
 - G'(b) > 0: liquidity provision (Woodford 1990), infrastructure (IMF 2020)
- Potential stories for R'(b)
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- Potential stories for R'(b)
 - R'(b) > 0: crowding-out (e.g. Broner et al. 2021, Reis 2021)
- This paper: Nominal rigidities (ZLB) plus convenience yield of public debt

At ZLB
$$(R(b) = 0)$$
: $R'(b) = 0$ and $G'(b) > 0$
Outside of ZLB $(R(b) > 0)$: $R'(b) > 0$ and $G'(b) = 0$

Debt-deficit diagram



Debt-deficit diagram for specific economies: US



• R'(b): estimates on response of convenience yield to increase in b

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- In paper: Japan, Italy, Germany

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General reaction

- Welcome contribution to debate on debt sustainability
 - Take general, well-known insight
 - Cast it within specific model (nominal rigidities+convenience yield)
 - "Calibration" to US, other countries
- My (personal) quibble with the model
 - How can we be at ZLB indefinitely, with permanent effects on output?
 - But this is not very relevant for the authors' main results
 - Stick to general comments

Stress insights: convenience yield matters

• Traditional debt sustainability analysis

$$z(b) + [R - G] \cdot b = 0$$

• In authors' US calibration:

- G R = 2% (pre-pandemic, suppose constant)
- ▶ b increases from 100% to 126% due to pandemic
- Maximum deficit consistent with debt sustainability?
 - * If convenience yield constant: z = 2.52
 - * If convenience yield adjusts as in data: z = 1.97

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• Model/calibration can be interpreted as favorable baseline

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 - ▶ No private asset creation (e.g. bubbles that "compete" with debt and raise R)
 - No sovereign risk (may lead to multiplicity / erode convenience yield)
- Yet, US debt seems unsustainable given deficit projections (despite R < G)!
 - Is a massive fiscal adjustment looming?

International dimension

- Paper contains interesting discussions of:
 - Domestic vs. foreign currency debt
 - Currency union
- Throughout, convenience yield depends only on local debt b
- This may not be the case in practice
- E.g. in euro area, convenience yield affected by euro-wide supply of debt
 - Fiscal space of any one country affected by others' supply of debt (b^*)
 - b^* may create or reduce fiscal space depending on whether economy is at ZLB
 - Scope for coordination (see Broner et al. (2021) for related analysis)
- Individual countries may not supply globally optimal amount of debt (e.g. Bolton and Jeanne 2011)

Taking a step back

- Broad view: world with large demand for (safe) assets (R < G)
 - Rents for whoever can supply them
- Private sector (bubbles)
 - But they can burst!
- Public sector (debt)
 - This paper: watch out for convenience yield
 - More broadly: sovereign risk
- How should the global supply of safe assets be structured?

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