

Discussion “Expectations-Driven Liquidity Traps: Implications for Monetary and Fiscal Policy” Nakata Schmidt

SUERF Bank of Italy Conference

Discussant: Juan Passadore (EIEF)

November 19, 2020

Intro

- Interesting Paper. Important question. **In a nutshell:**
 - Theory: Textbook NK model. Central Bank lacks commitment.
 - **Equilibrium multiplicity.** Construct an equilibrium that switches between two states. Sunspot: No change in fundamentals, coordination failure.
 - Many results in the paper. Two of them subject to recent policy discussions:
 - Raise the inflation target?
 - Expansionary fiscal policy.
- **Discussion:**
 - Commitment.
 - Alternative explanation. Secular Stagnation: low real rates.
 - What can we learn from data?
 - Fiscal policy.

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Policy Problem: Unconstrained

- Programming problem of Central Bank. No commitment, Markov policy problem, government optimizes given current conditions:

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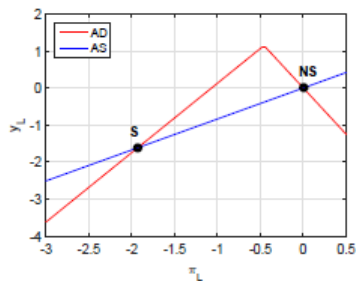
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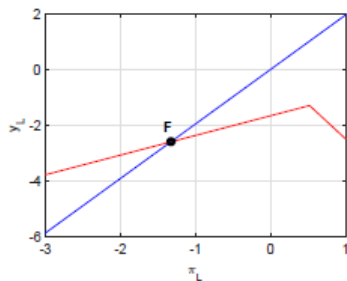
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Sunspot vs Fundamental

Figure 1: Aggregate demand and aggregate supply in the low state



(a) Model with sunspot shock

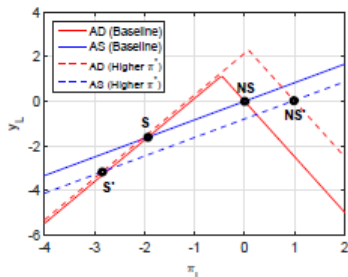


(b) Model with fundamental shock

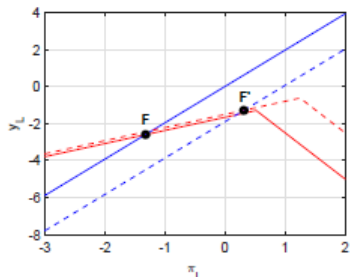
Note: In the left panel, *S* marks low-state output gap and inflation in the sunspot equilibrium and *NS* marks low-state output gap and inflation in the no-sunspot equilibrium. In the right panel, *F* marks low-state output gap and inflation in the fundamental equilibrium. Inflation is expressed in annualized terms.

Sunspot vs Fundamental: Raise the target? Depends...

Figure 2: The effect of increasing the central bank's inflation target



(a) Model with sunspot shock



(b) Model with fundamental shock

Note: Solid lines: $\pi^* = 0$; dashed lines: $\pi^* = 1/400$. In the left (right) panel, S (F) marks output gap and inflation in the sunspot (fundamental) equilibrium in the baseline and S' (F') marks outcomes in the sunspot (fundamental) equilibrium in the case of a higher π^* . NS marks output gap and inflation in the no-sunspot equilibrium in the baseline, and NS' marks outcomes in the no-sunspot equilibrium in the case of a higher π^* . Inflation is expressed in annualized terms.

1. Commitment

- Optimal policy with **commitment**. Key: **ability to make and fulfill promises**. Central Banks are currently engaged in: Forward Guidance, Unconventional monetary policy, Long run targeting...
- Some of these policies involve some degree of commitment to future policies. Why it matters? Werning (2012). NK model in a liquidity trap.
 - **Optimal policy lack of commitment**. Recession. Even Depression.
 - **Optimal policy commitment**. Optimal Policy: low rates for a long period of time. Promise a boom. Stimulates output today.
- **Question**: What do we know about the existence of the self-fulfilling liquidity trap with commitment? About the policies to mitigate this trap (fiscal and monetary)?
- **Hard problem**. **History matters**.

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- Among other reasons (for pushing real rates down)
 - large crisis and deleveraging
 - aging population
 - scarcity of safe assets
 - excess savings from corporations
 - inequality
 - downward trend in the price of capital goods
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- How can **data + model** help us to **distinguish between these two scenarios**?
 - Aruoba Cuba Borda Schorfheide (2018). Yes Japan. Not in the US.
 - Caramp Singh (2020), **bond premium cyclical**. Yes the US.
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- Example: Hawkish Dovish Fed chair. Asset prices. COVID.

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 - This paper: hold on, multiplicity, contractionary.
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 - Regional multipliers. Positive, and larger in the liquidity trap. Nakamura Steinsson (2014), Sarto (2020) methodology to estimate the intercept.
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