Exchange Rates and Monetary Policy with Heterogeneous Agents: Sizing up the Real Income Channel

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Discussion by Benjamin K. Johannsen
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The analysis and conclusions set forth are my own and do not indicate concurrence by the Board of Governors or anyone else associated with the Federal Reserve System.

Model intuition for contractionary depreciations

Complete asset markets

- Income is completely insured.
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I will try to illustrate why I find these topics interesting using a TANK model.
Debortoli and Galí (2024, Macro Annual) discuss closed-economy TANK.

Same channel in HANK and TANK

The authors show that the same channel operates in TANK

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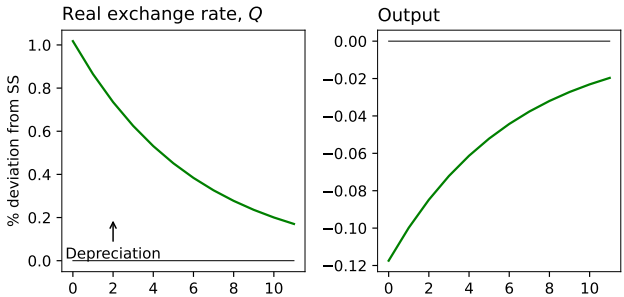

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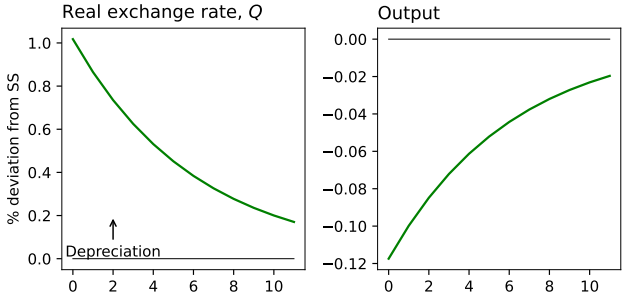


TANK result is related to Kollmann (2012) *Canadian Journal of Economics.*

Policy rules and welfare

The paper focuses on a rule so that

$$i_t = r_{ss} + \pi_{t+1}.$$

I want to also consider consider

$$i_t = r_{ss} + \phi \pi_{H,t}$$

and

$$i_t = r_{ss} + \phi \pi_{t+1}.$$

Welfare of constrained

$$W^c = \sum_{t=0}^{\infty} \beta^t \left\{ u(C_t^c) - v(N_t^c) \right\}$$

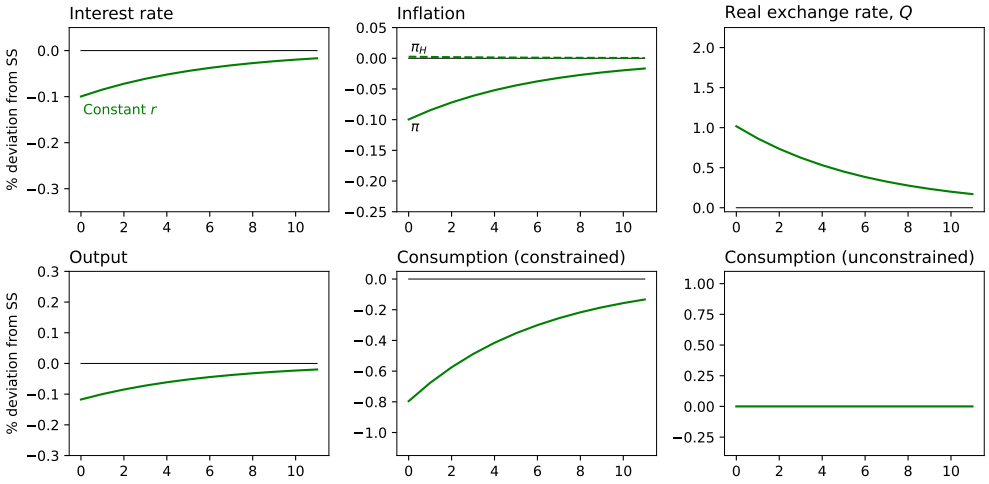
Welfare of unconstrained

$$W^u = \sum_{t=0}^{\infty} \beta^t \left\{ u(C_t^u) - v(N_t^u) \right\}$$

Social welfare

$$W = \lambda W^c + (1 - \lambda) W^u$$

Outcomes under different policy rules



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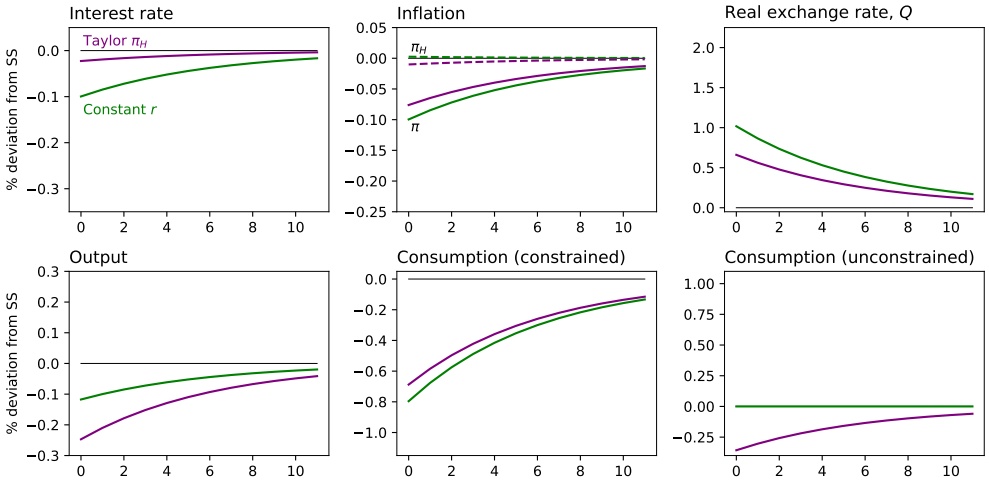

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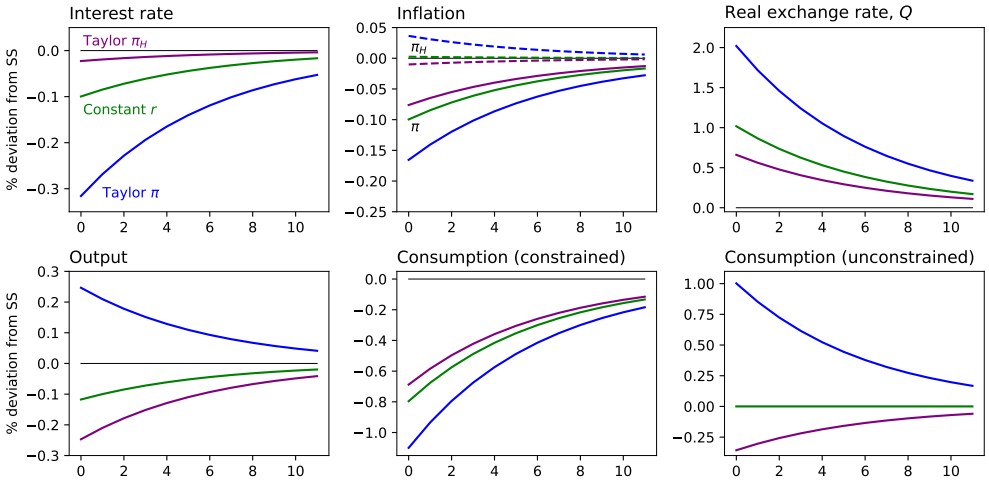

Model-implied welfare under different rules

$\lambda = 0.4$	W^c	W^u	W
Constant real rate	-0.68	0.45	0
Taylor rule ($\pi_{H,t}$)			
Taylor rule (π_{t+1})			

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$\lambda = 0.6$	W^c	W^u	W
Constant real rate	-0.67	1.00	0
Taylor rule ($\pi_{H,t}$)	-0.66	0.99	0.001
Taylor rule (π_{t+1})	-0.71	1.06	-0.002

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Changing model features like λ could affect policy analysis.

Concluding thoughts

This is a very nice, thought provoking paper!

A number of questions might make interesting future research, including:

- What is missing in TANK relative to HANK?
  HANK is much richer, but TANK is more tractable. Would be great to have more insight as to what TANK is missing in this context.

- What further empirical evidence could speak to the real income channel?
  Recent example of empirical work on the effects of interest rate shocks on SOEs: Camara, Christiano, and Dalgic (2024, Macro Annual).
  How could one empirically analyze the importance of heterogeneity?