Discussion of

Kaplan, Moll and Violante:
Unconventional Monetary Policy in HANK

Workshop on Current Monetary Policy Challenges

Jirka Slacalek

European Central Bank
www.slacalek.com

ECB, December 2016

The views expressed are mine
and do not necessarily reflect those of the ECB.

Key Contribution

- Analyze effects of forward guidance in Het Agent New Keynesian framework
- Announcement of future IR cut has smaller effect on current C than contemporaneous cut
- Similar to McKay, Nakamura & Steinsson,
  BUT very different from Rep Agent NK and DSGE
- In HANK, indirect effects of FG dominate direct effects, like for standard MP

Heterogeneous Agent New Keynesian Framework

- ▶ Realistic household heterogeneity in income and liquid + illiquid assets
  ⇒ Precautionary saving, realistic MPC
- ▶ Combined with sticky prices (due to nominal rigidities & adjustment costs)

Monetary Policy in HANK

- Direct response to r (intertemp substitution) makes up roughly 1/3, while indirect GE effects through Y, W roughly 2/3 of total response
- ie Direct: 30%, indirect: 70%
- MP in HANK less powerful, has to rely on indirect channels (eg through fiscal pol)

RANK/DSGE

- In contrast, in RANK/DSGE:
  Direct: 95%, indirect: 5%
- RANK/DSGE at odds with large micro evidence on C behavior
  (small response of C to r, large MPC of trans shocks, MPC heterogeneity,...)

Forward Guidance (FG) in HANK

Results

- Current impact of FG lower than in RANK/DSGE
- Indirect channel only works when r actually lower, not at announcement, because fiscal stimulus only happens in future

Comments

- What if fiscal stimulus at announcement?
- Fiscal policy can be targeted to high-MPC households

Comments on HANK—Convex Adjustment Costs

- ▶ Elegant continuous time setup
- ▶ Convex, quite large adjustment costs on illiquid assets prevent jumps in assets
- ▶ Allowing for jumps eg in cars, housing could matter for MPC (indirect effect)
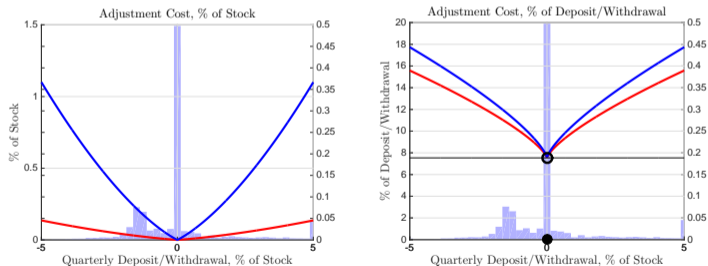- ▶ Eg large response of car sales to tax rebates (Parker et al., AER2013)

Figure D.4: Calibrated Adjustment Cost Function

Comments on HANK—Earnings Process

- Income data available annually
- Paper targets moments in SSA data (Guvenen et al.):
  Variance and kurtosis of 1yr and 5yr changes
- Does HANK income resemble persistence and othe moments of actual data?
- Persistent component arrives every 38 years, half-life 18 years;
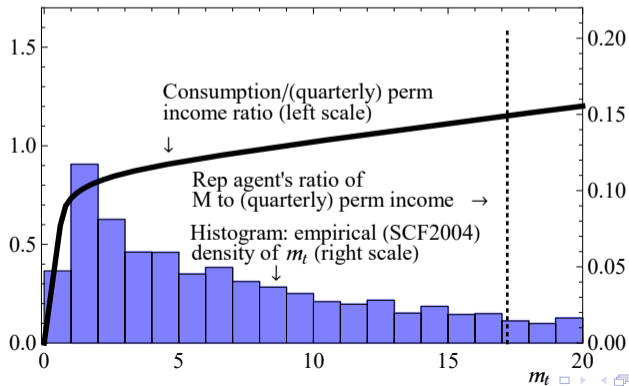 transitory arrives every 3 years, half-life 1 quarter

Comparison with Effects of FG in McKay et al.

McKay, Nakamura, Steinsson (2016)

- ▶ Effects of FG under incomplete markets & borrowing constraints only 40% of those in standard NK model
- ▶ Due to precautionary saving (Hhs dislike to decumulate wealth buffers)
- ▶ GE effects (due to $Y = C$) small b/c extra income goes disproportionately to rich (lower taxes)
- ▶ In contrast Werning (2015): individual income proportional to aggregate
  $\Rightarrow$ effect of FG like in RANK /DSGE
- ▶ In HANK GE effects large? [2/3] Where does the extra income go?
- ▶ Are precautionary motives weaker in HANK than in McKay et al.?

Takeaway: Effects of Monetary Policy

- ▶ Effects of MP depend on whether it affects rich vs poor—low vs high MPCs
- ▶ Empirics: Di Maggio, Kermani, Palmer (2016)
  US QE 1 worked because affected holders of mortgages (high MPC),
  while QE2 did not because affected holders of Treasuries (low MPC)

Consumption/(quarterly) perm income ratio (left scale) ↓

Rep agent's ratio of M to (quarterly) perm income →

Histogram: empirical (SCF2004) density of m_t (right scale) ↓

m_t

Summary

- Important quantitative analysis of FG in realistic setup
- New insights into how FG works (direct vs indirect channels)
- Importance of fiscal–monetary interactions
- Implications for QE?