Discussion of
Andrade, Gaballo,
Mengus and Mojon
"Forward Guidance
and Heterogenous
Beliefs"

A. Maršál

Discussion of Andrade, Gaballo, Mengus and Mojon "Forward Guidance and Heterogenous Beliefs"

Aleš Maršál

Madrid

9.10.2017
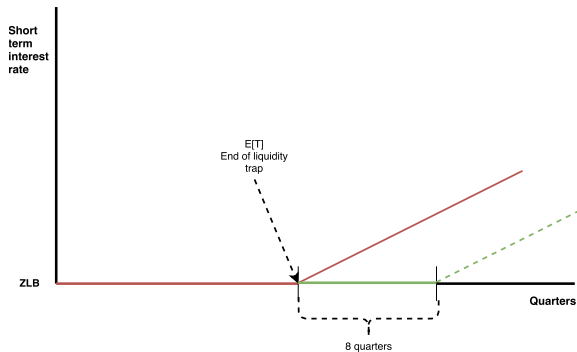
What is the paper trying to do?

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Brief Summary

Comment 1

Comment 2

Comment 3

Solve forward guidance puzzle.

Why is it trying to do this?

Solve forward guidance puzzle.

- ▶ Decades of research studying surprise changes in i_t on economy gives little guidance on MP at ZLB
- ▶ Eggertsson and Woodford (2003) and Carlstrom et al (2012) show that in the model of Smets and Wouters (2007) or Christiano et. al. (2005) forward guidance might have huge impact on the economy
- ▶ Carlstrom et al (2012): 8 quarters of FG predict explosive inflation
- ▶ Not observed in the data: Del Negro et al (2015) forward guidance puzzle
- ▶ Andrade et al. realistic framework to determine the optimal number of periods of extra accommodation

What's differentiates it from prior research?

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Heterogenous believes

- ▶ FG announcement may have two types of effects:
  1. lower market expectations about future federal fund rate
  2. expectations about future state of the economy
     - 2.1 bad news about state of the economy
     - 2.2 good news as extra MP accommodation

What's differentiates it from prior research?

Heterogenous believes - data

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Is there reason to be skeptical about the paper's results?

Heterogenous believes: Comment 1

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	Inflation +	Inflation -
Consumption +	Optimist	**C. Borio (BIS) view**
	25%	25%
Consumption -	**Stagflation**	Pesimist
	25%	25%

Comment 1 Cont

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- NKPC does not hold
- globalization, cheap labor, improvements in technology create pressure on prices
- Inflation is independent from MP thus decreasing i_t is like dog chasing his own tail, $i_t = r_t + E_t\pi_{t+1}$
- how did we end up here? Is Borio right or do the NK DSGE model have something to say? Is this the solution to FG puzzle?

Is there reason to be skeptical about the paper's results?

Solution methods: Comment 2

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1. Authors omit precautionary savings
   - Hanson and Stein (2015) FG affects real economy through term premia
   - Caballero and Farhi (2014) show that FG has sizable effect on term premia
2. linearized model: term premia = 0 by construction
3. i.e. Rudebush and Swanson (2012), Piazzesi Schneider (2006) show the importance $Cov(\pi, \Delta C)$
4. Can you go higher order approx?

Is there reason to be skeptical about the paper's results?
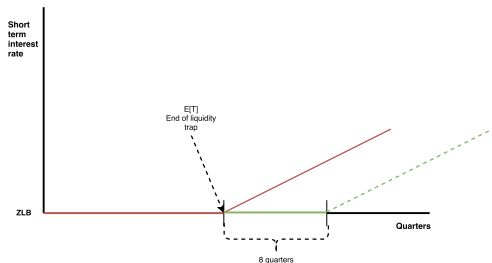
Solution methods: Comment 2 Cont.

1. Global methods and FG horizon
   - Cochrane (2017, JME) critizes FG in NK DSGE models for implying that the effect increases with longer horizon
   - Keen et al. (2016) use global methods - allows them to show that the cumulative effect of a longer FG horizon increases over short horizons but decreases thereafter. In line with my long-run money neutrality intuition.
2. Woodford says: FG should be interpreted as CB allowing to have inflation above target for some time, Cochrane (2017, JME) also asks what is the difference between FG and temporal increase in inflation target

What does the model tell us?

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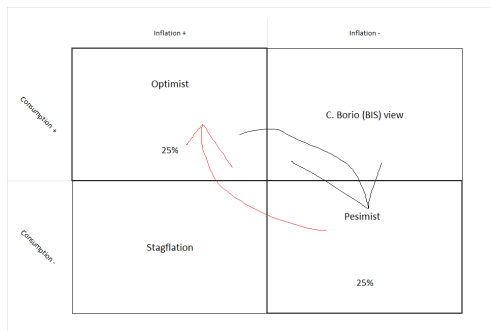"Forward Guidance
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▶ if there is too many pessimist (above certain trashhold) give up on forward guidance

▶ under this trashhold compensate the pessimist by prolonging the commitment

Mechanism

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$$c_{i,t} = \gamma^{-1}(E_{i,t}[\xi_{t+1}] - \xi_t + r_t - E_{i,t}[\pi_{t+1}]) + E_{i,t}[c_{i,t+1}] \quad (1)$$

▶ the starting point in the model is recession, $E_t(\pi_{t+n}) < 0$,
  $E_t(\Delta c_{t+n}) < 0$, everyone is pessimist - homogenous believe

▶ new policy (FG) is news shock to Euler equation which is
  interpreted differently creates heterogenous expectations:
  group of optimist (α...number of pessimist is calibrated)

▶ Don't the data suggest rather that there are heterogenous
  expectations

Comment 3

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- People have heterogenous expectations about the fundamentals and FG is actually changing α because it is hard to interpret FG and people have different opinion about it.
- Why do you think people do not agree on the length of the recession - evidence in the data? Or is it just modeling convenience? I did not find back up for this in the data analysis

Summary of Comments

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1. the idea of the paper is appealing, seems to work well

2. split between optimistic vs. pessimistic expectation might be too simplistic as data suggest

3. term premia seems to be crucial part of the link between FG and real economy but is missing in the model

4. people have heterogenous expectations even without FG