

“Forward Guidance and
Heterogeneous Beliefs”
by Andrade, Gaballo, Mengus &
Mojon

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What Do We Learn?

- ▶ Nice empirical work
- ▶ Uses Survey of Professional Forecasters & Michigan surveys of households to document. . .
 1. Forward guidance reduced uncertainty about paths of short-term interest rates
 2. QE announcements induced disparate consumption & inflation forecast revisions, despite similar views about interest rates
 3. Optimistic households more likely to buy durable goods

What Do We Learn?

- ▶ Heterogeneous beliefs require new modes of central bank communication
 1. Optimal policy choice depends on nature & degree of disagreement across private agents
 2. Disagreement among agents becomes part of the central bank's problem
 3. Unfettered transparency—filling the bathtub—may not be optimal communication

Issues With the Model

- ▶ Heterogeneous beliefs are hard. Simplifying assumptions essential
- ▶ Some simplifications better than others
- ▶ Model includes several not-so-hot simplifications

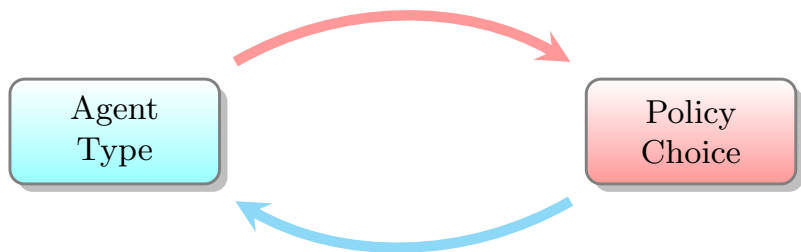
1. One-shot game

- ▶ economy hits ELB & after exit, it never will return
- ▶ uncertainty about CB type fully resolved once ELB shock dissipates
- ▶ model cannot have tensions due to time inconsistency, so probably shouldn't discuss them
- ▶ true of entire literature: treatment of ELB inconsistent with caring about the ELB

Issues With the Model

2. Exogenous agent types

- ▶ economy endowed with constant α fraction of pessimists; $1 - \alpha$ share optimists
- ▶ eliminates CB's ability to influence the population's belief types
- ▶ no interesting fixed-point problem of the form



Issues With the Model

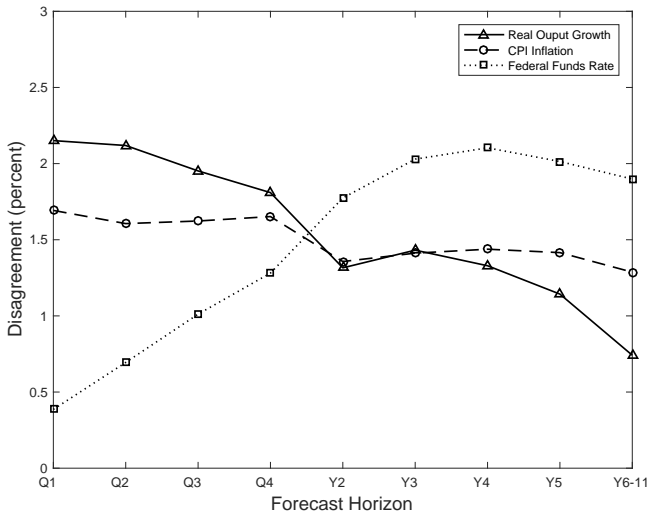
3. Date-dependent policy announcements

- ▶ did anyone take the date-dependent announcements literally?
- ▶ surely, the Fed's decisions depended on economic developments, not calendar time
- ▶ state-contingent, but with uncertain criteria, would be more interesting
- ▶ example: announce $r_t = R$ until $\pi_t > \bar{\pi} > \pi^*$ and you're done
- ▶ I suspect state-contingent announcement would reveal the CB type immediately

Bringing In New Evidence

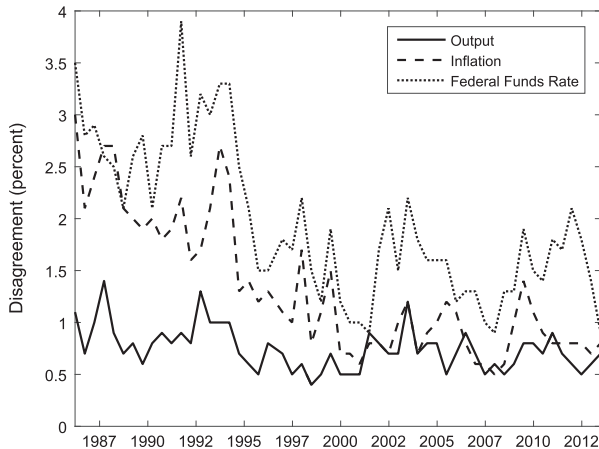
- ▶ “Fundamental Disagreement” (Andrade, Crump, Eusepi, Moench)
- ▶ Examine *term structure of disagreement*
- ▶ This paper all about expectations of T_{cb} , date of exit from ELB
 - ▶ term structure contains information about expectations of T_{cb}
- ▶ ACEM updated their data for me: little change from published results
- ▶ But their Blue Chip Financial Forecast surveys a bit different from SPF

Bringing In New Evidence



1986Q1–2015Q1 (provided by Andrade, Crump, Eusepi, Moench)

Bringing In New Evidence



1986Q1–2013Q4 (6 to 11 years ahead; in ACEM)
Even during ZLB period, substantial disagreement about
medium-run federal funds rate

Endogenous Beliefs (Ruoyun Mao)

- ▶ Examines optimal MP when firms are rationally inattentive
- ▶ CB internalizes private sector's attention-allocation mechanism
- ▶ Yields tradeoff between MP's "direct" and "informational" effects
- ▶ Firms receive noisy signals about supply, demand, & MP shocks
- ▶ Allocate information attention across all shocks, including policy
- ▶ Not about CB with superior information
- ▶ Emphasizes *incomplete*, rather than heterogeneous information
- ▶ Disagreement is endogenous, time-varying & influenced by MP

Endogenous Beliefs (Ruoyun Mao)

- ▶ Attention allocation
 - ▶ if pay more attention to a shock, it becomes less noisy
 - ▶ allocation depends on relative volatility of shocks
 - ▶ very volatile shocks get lots of attention
 - ▶ a shock's impacts depend on the degree of attention it receives
- ▶ Upshot:
 - ▶ strength of CB reactions to shocks & volatility of CB's shock affect attention allocation
 - ▶ this feeds into the nature of equilibrium & optimal CB behavior

Messages for CB Communication

1. Recognize private sector's limited attention
2. Limited attention alters tradeoffs CB faces
3. Core dumps of information in the name of transparency may not be optimal
4. Central banks seem to be aware of this
 - ▶ they direct attention to specific information through policy statements
 - ▶ policy interventions tend to be modest (unless shocks unusually large)

Invoking Faust: The Literature Generally

Das ist von der Realität losgelöst

- ▶ 2015 Riksbank conference paper “Did We Avoid ‘It’? And Other Mid-Recovery Questions”
 - ▶ asks: “Was forward guidance Delphic, Odyssean, or other?”
 - ▶ answers: Very clearly “other”
- ▶ Not Delphic
 - ▶ no evidence central banks have private information to reveal
 - ▶ central banks’ advantages in forecasting “so small as to be of questionable importance”
 - ▶ policy announcements not usually taken as signals of state of the economy

Invoking Faust: The Literature Generally

Das ist von der Realität losgelöst

- ▶ Not Odyssean
 - ▶ policymakers have explicitly denied trying to engineer an inflationary boom
 - ▶ Coeuré: policy lacks credibility
 - ▶ Bernanke & Yellen: rejected overshooting
- ▶ Why not Odyssean?
 1. Some banks' mandates have asymmetric inflation targets, which Odyssean violates
 2. Independent monetary policy boards designed specifically to preclude tying hands of future boards
 3. Current models abstract from these bits of **der Realität**
 4. In the crisis, CBers tried hard to implement time-consistent policies in ever-changing, highly-uncertain economies