# Monetary Policy and Sentiment Driven Fluctuations Jenny Chan

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  - ► Strategic uncertainty:
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  - Firms commit to pricing decisions based on their signal (before shocks are realized).
- Firms actions interact with the precision of their signal.
  - As a result: sentiment shocks become endogenous to the stance of MP.
- ▶ New channel for MP: it can affect how firms use their signal.
- ► Volatility of sentiments is endogenous to policy:
  - ► Incentive for MP to eliminate the sentiment fluctuations.

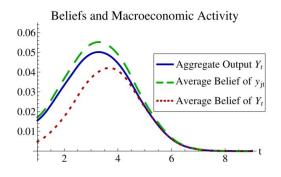
- ▶ MP becomes a source of fluctuations (through its information channel).
- ► The sentiment shocks acts like:
  - ▶ demand shocks  $\rightarrow$  creates co-movement between  $y_t$  and  $\pi_t$ .
  - supply shocks  $\rightarrow$  creates a trade-off between stabilizing  $y_t$  and  $\pi_t$ .
- New trade-off between inflation and output gap stabilization, even in the absence of supply shocks.

#### Some of the Main Results

- Inflation reaction has a de-stabilizing effect on output through the sentiment channel.
- ► Strong inflation reaction results in indeterminacy.
- ▶ In the presence of both fundamental and sentiment shocks:
  - MP cannot distinguish between the sources and therefore cannot implement the efficient allocation.

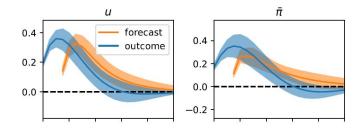
## Discussion: Impulse Responses

- ► Angeletos and La'O (2013): IRFs of output and output beliefs.
- ► The case with purely exogenous signals.



## Discussion: Impulse Responses

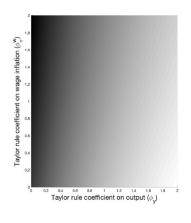
- ► Angeletos et al. (2020): impulse responses of inflation/unemployment.
- ▶ Emphasis of the delayed overshooting of expectations.

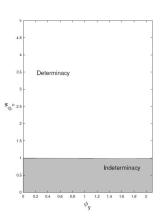


► Could this framework with the endogenous signal capture the overshooting effect?

## Discussion: Indeterminacy Regions

► The Taylor rule is no longer applicable:





#### Estimation

- ▶ Baseline results based on a weight of  $\lambda = 0.2$  for the idiosyncratic component of the signal.
- ► How does this weight affect the indeterminacy region?
- In a potential estimation of the model,  $\lambda$  could be pinned down via survey expectations.
- Related: would the model be easy to estimate with standard methods, or are the indeterminacy regions problematic?

#### E-stability

- ► Are the sentiment equilibria always E-stable?
  - ► This is true for the Beauty Contest example, but what about the New Keynesian model?
  - ▶ Indeterminacy regions are typically associated with E-unstable equilibria, how should we interpret the results in that context?

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- ► Can we say anything about the ELB in this context?
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  - New Keynesian models feature multiple steady states at the ELB, with an E-unstable low-inflation steady state.
  - ► Can we say anything about the impact of sentiment equilibria in such an environment?
- ► Is it feasible to incorporate CB uncertainty into this framework?