THREE ISSUES IN LEARNING AND MONETARY POLICY

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Learning and Macroeconomic Policy
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Views expressed do not necessarily reflect official positions of the FOMC or the Federal Reserve System.
Issue one: core versus headline inflation.
Learning and Monetary Policy

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- The role for learning: filtering.
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- Issue two: systemic risk.

Three Issues

1. A Core Issue
2. Systemic Risk
3. Non-Fundamental Equilibria

Some Comments
Learning and Monetary Policy

- Issue one: core versus headline inflation.
  - The role for learning: filtering.

- Issue two: systemic risk.
  - The role for learning: information revelation.
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  - The role for learning: filtering.
- Issue two: systemic risk.
  - The role for learning: information revelation.
- Issue three: optimal policy in an economy with non-fundamental equilibria.
Learning and Monetary Policy

- **Issue one:** core versus headline inflation.
  - The role for learning: filtering.
- **Issue two:** systemic risk.
  - The role for learning: information revelation.
- **Issue three:** optimal policy in an economy with non-fundamental equilibria.
  - The role for learning: coordination on preferred equilibria.
Why these three issues?

- Provide some focus.
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- Timely in current monetary policy discussions.
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- Welfare consequences in principle could be large.
- An opening for good research to impact economic outcomes.
### A core issue

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- Now I think the tide has turned and we need to think harder.
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- This is the conventional wisdom echoed at the FOMC.
THREE ISSUES

A CORE ISSUE

SYSTEMIC RISK

NON-FUNDAMENTAL EQUILIBRIA

SOME COMMENTS

Real Price of Oil

140
120
100
80
60
40
20
0


West Texas Intermediate/Headline CPI (2007$)
Some problems with the conventional wisdom

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- Empirical literature: what best predicts future headline inflation?
  - This may not work with the most recent data.
CPI-U: All Items Less Food and Energy
1980=100

CPI-U: Medical Care
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Source: Bureau of Labor Statistics / Haver Analytics
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This would itself influence the equilibrium.
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Needed: Some Theory, Continued

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  - Price stickiness.
ONE THEORY

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Retail prices are Calvo-sticky, wages are Calvo-sticky, energy prices are flexible. This means "core prices" are sticky. This makes core inflation the key to welfare maximization. This gives the main result.
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- Also, the final goods price contains the weighted energy input price.
The systemic risk story

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Rising or falling systemic risk is pushed into the stochastic terms.
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A slippery concept

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- The air of “collapse of the financial system” is worrisome.
- At the same time, all financial firms have incentives to tell this story when necessary in order to avoid losing money.
- Many genuinely believe it.
**HISTORY**


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- Of course, there is the Great Depression.
  - Interested listeners might consult Gary Richardson and William Troost, “Monetary Intervention Mitigated Banking Panics During the Depression.”
**Multiple steady states?**

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- This sounds like multiple steady states.
- Requires a notion of what drives the dynamics around each steady state.
**One theory**

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- No financial intermediation component.
NEEDED: SOME THEORY

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- They also understand the sequence of events if there is a default.
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  - The endogenous debt constraints literature emphasizes that the penalty for default influences the equilibrium level of credit.
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What should policymakers do?
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- It is not clear that this is the best policy.
**SOMETHING SENSIBLE**

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The theory literature has done something sensible on this question. It has focused on finding conditions under which non-fundamental equilibria may exist. The literature has then suggested policies that might eliminate the non-fundamental equilibria. This is reasonable, but very specialized to particular models. And, actual policymakers may be more circumscribed in what can be done.
Needed: Some Theory

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- Commentators were talking about housing bubbles for years before prices began falling. Similarly with recent commodity price increases.
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And a third was an appeal to provide advice from existing models on how to react to a non-fundamental shock, if policymakers were willing to bet that an observed price movement was not driven by fundamentals.

All of these topics are part of the current policy debate.