Discussion:

Eusepi and Preston's

Stabilizing Expectations under Monetary and Fiscal Policy Coordination

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Outline

Mains questions

Importance of analysis for fical-monetary policy (FP-MP) mix, especially, when policy regimes are not perfectly observed.
Results:

1. When private sector learns and central bank has imperfect measure on current state, there is additional constraints on what FP-MP mix can induce stable learning equilibria.
2. Endowing central bank with perfect knowledge returns to "Leeper"-style E-stability conditions.
3. Endowing private sector with correct FP-MP rules relaxes learning constraint and expands set of E-stable FP-MP mix.
4. Learning and subjective intertemporal optimization consistent with subjective limiting conditions on assets (TVC) $\Rightarrow$ debt dynamics matter for E-stability analysis.

NK model with no Ricardian equivalence

$$\hat{x}_t = \delta\beta^{-1}\left(\hat{b}_t - \hat{\pi}_t\right) - \beta^{-1}\delta\hat{s}_t + \hat{\mathbb{E}}_t\sum_{T=t}^{\infty}(1-\beta)(\hat{x}_{T+1} - \delta\hat{s}_{T+1}) + \hat{\mathbb{E}}_t\sum_{T=t}^{\infty}(1-\delta)(\hat{i}_T - \hat{\pi}_{T+1} + r_T) \qquad \text{(IS curve)}$$

$$\hat{\pi}_t = \kappa\hat{x}_t + \hat{\mathbb{E}}_t\sum_{T=t}^{\infty}(\alpha\beta)^{T-t}\left[\alpha\beta\kappa\hat{x}_{T+1} + (1-\alpha)\beta\hat{\pi}_{T+1}\right] \qquad \text{(Phillips curve)}$$

$$\hat{b}_{t+1} = \beta^{-1}(\hat{b}_t - \hat{\pi}_t - (1-\beta)\hat{s}_t) + \hat{i}_t \qquad \text{(Seq. GBC)}$$

$$\hat{s}_t = \phi_\tau\hat{b}_t \qquad \text{(Tax policy)}$$

$$\hat{i}_t = \phi_\pi\hat{\mathbb{E}}^{cb}_{t-1}\hat{\pi}_t. \qquad \text{(MP rule)}$$

Why no Ricardian equivalence

Nice resulting feature from subjective beliefs on aggregate state (including government policy):

- e.g. Tax cut today may not be fully offset by **subjectively** expected continuation primary surplus (contra. RE $\sim \delta = 0$).
- (Potential) **loss of Barro-Ricardian equivalence** when agents are adaptively learning, **off the REE path**.
- So key parameter in analysis is $\delta \propto$ steady-state debt-to-output ratio.
- Expectations-stabilization results hinge on aggregate-demand management, via the IS curve, and policy mix (ϕ_π, ϕ_τ).

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Comment 1

Why lump-sum taxes?

- We don't really see them in reality.
- Also alternative model using distorting taxes may create addition channel for fiscal policy dynamics.
- Example: Suppose taxes are levied by distortionary wage-income tax.
  - This distorts leisure-consumption margin.
  - Wedge will appear in derivation of labor market clearing.
  - Affects firm's real marginal cost.
  - Channel for $\hat{s}_t$ to appear in NK Phillips curve?
  - So far all $\hat{s}_t$ action is soaked up by the IS curve.

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Role of δ in alternative stabilization schemes?

- δ has no role in characterizing set of stabilizing FP-MP mix when the central bank also learns about current state of inflation. [Proposition 2]
- But δ appears in characterizing (**and parametrically enlarging**) set of stabilizing FP-MP mix when policy rules are known by agents. [Propositions 7, 9]
- Intuition for why it does not matter in [Proposition 2]?

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Log per-period utility of consumption (CRRA $\sigma \longrightarrow 1$). Convenient but crucial?

- If there is additional concavity (risk-aversion), say CRRA's $\sigma > 1$, would this affect E-stability results?
- Need to check for robustness to preference parameter?

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By restricting the central bank to observe current inflation imperfectly results in further restriction on "Leeper" set of E-stabilizing (ϕ_π, ϕ_τ) FP-MP mix.

- Compare Proposition 2 to Proposition 5.
- This is an important result which should be highlighted in Abstract and Introduction.
- The case with imperfect central bank knowledge of the current state is more realistic. So Prop. 2 may be quite important for policy design.

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Proposition 9, that communication of policy rules

$$\hat{s}_t = \phi_\tau \hat{b}_t$$
$$\hat{i}_t = \phi_\pi \hat{\mathbb{E}}^{cb}_{t-1} \hat{\pi}_t,$$

"unambiguously improves stabilization policy under learning dynamics."

- Crucial improvement region depends on $0 < \delta < 1$?
- Proposition should be refined to take into account the case that we may have Proposition 7.2(a) where the space of δ is further contracted by the "and" requirement for δ.
- So not all values of $0 < \delta < 1$ may fit the bill.

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Minor Comments

- Typo "benfefits" in Abstract.
- Last sentence on page 4 (intro.): "This gives greater force to the wealth effects generated by **passive** fiscal policy." Is it supposed to be "active"?
- Various references to "wealth effects" – e.g. in intro. second paragraph on page 4. May be useful to explain that these are wealth effects on consumption and hence output in the model.
- Typo: page 7 after equation (3): "household *í*'s ...". Should be "*i*"?
- Also (Section 6.2) studies the communication of rules:

$$\hat{s}_t = \phi_\tau \hat{b}_t$$
$$\hat{i}_t = \phi_\pi \hat{\mathbb{E}}^{cb}_{t-1} \hat{\pi}_t,$$

but this is not explicitly mentioned in the experiment apart from appearance in (21).

Minor Comments

- Page 8: Switch in notation from $\hat{b}_i$ to $\hat{b}$. Symmetry of identical agents?
- Equation (6): missing hats on b and π on RHS.
- Page 20, last paragraph. "If fiscal policy is non-Ricardian there are **greater incentives** to coordinate ... relative to a rational expectations analysis ...". This comment is pedantic, but really, there are no policy authorities' incentives that is being modelled here. So the sentence may be misleading to a picky referee.