Discussion: "Discouraging Deviant Behavior in Monetary Economics"

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October 18th, 2018

New Keynesian Economies

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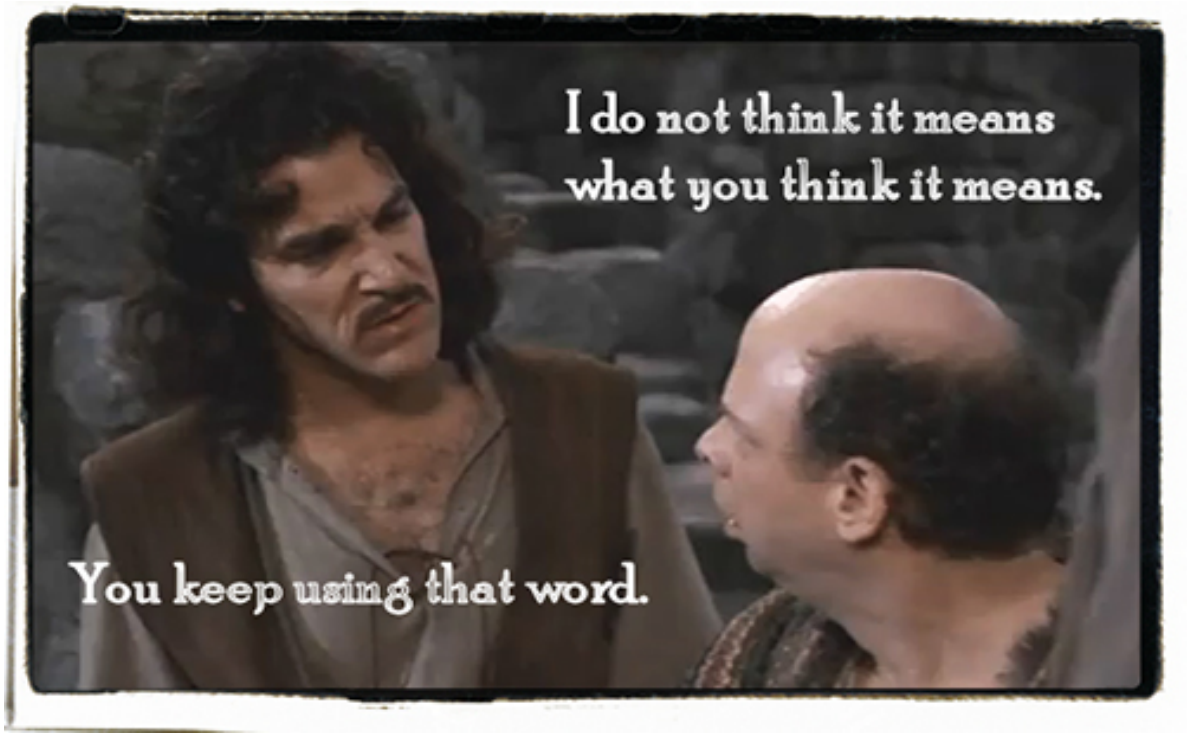
- NCG economy with
  - Nominal rigidities
  - Monetary authority
  - Simple rule for monetary policy
- Classic feature: 'Taylor Rule'
  - Monetary policy responds *more* than $1:1$ to inflation
  - Generates (bounded) determinacy in model
  - Lines up with intuition/policy-maker advice/historical evidence

The "Taylor Rule"



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- Pair of influential papers (Atkeson et al. [2010] and Cochrane [2011]) criticize standard NK set-up

- Taylor Rule not what it appears. According to Cochrane...
  - Old (incorrect) logic:
    1. Fed raises nominal rates in response to inflation
    2. Tamps down 'demand,' and thus future inflation
  - Actual model mechanics:
    1. Fed sets nominal rate to ensure *even higher* future inflation in response to current inflation
    2. Only one value of inflation fails to explode $\Longrightarrow$ Determinacy

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  - Nominal variables explode, but not real (TVC holds)
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  - Almost always require non-credible threats
  - Monetary authority 'blows up world' if economy does not coordinate on desired equilibrium
    - Implement policy that violates private sector eq'm conditions

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- Atkeson et al. (2010) provide alternative, implementable monetary policies
  - No need for Taylor rule

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- Demonstrate in simple, NK-style model with no uncertainty and a stylized Taylor rule
  1. Equilibrium uniqueness (global)
  2. Implementability

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- Attempts to revive usefulness/plausibility of Taylor rule
- Motivation: Undesirable equilibria require complicity of government
- Demonstrate in simple, NK-style model with no uncertainty and a stylized Taylor rule
  1. Equilibrium uniqueness (global)
  2. Implementability
- Key ingredients
  1. Taylor rule with 'escape clause'
  2. Production economy

Model Features

1. Representative, infinitely-lived household with CIA money constraint
2. CES final goods firm
3. Monopolistically competitive intermediate goods firms (flexible pricing)
4. Government raises lump-sum taxes, subsidized production, controls money supply
5. Gov't follows Taylor Rule with 'escape clause'
   - If $\pi_t \in [\pi_L, \pi_U]$, follow Taylor rule
   - If $\pi_t \notin [\pi_L, \pi_U]$, switch to constant money growth from $t+1$ onward

Model Results

1. Equilibrium exists, is unique, and is bounded in $[\pi_L, \pi_H]$

2. Equilibrium implementable without 'blowing up world'
   - Requires a few more assumptions/bit more nuance about structure of pricing game
   - 'If everybody else is following expected high-inflation trajectory, I do not have an incentive to raise prices that high.'

Responses to Literature

- Response to Cochrane (2011)
  - Threat to 'blow up world' not here
  - Threat is credible: Rules out high inflation as an equilibrium response
  - Largely due to (1) new timing and (2) production economy

Responses to Literature

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- Response to ACK (2010)
  - They propose similar framework but without Taylor rule
  - Show that equilibrium in their non-linear environment not trembling-hand perfect
    - Welfare-inferior money-growth regime implemented

Overall Goal

- Nice paper: Step in the right direction
  - ACK (2010) and Cochrane (2011) dealt serious blow to whole NK structure
  - But linearized NK models are tractable, intuitive, popular, and ring true with historical evidence/policy-maker advice
  - 'Deserve a defense'

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- Nice paper: Step in the right direction
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  - 'Deserve a defense'

- Couple of suggestions for how to advance argument

Suggestion 1

- Model relatively simple: Some elaboration useful
  1. Deterministic economy
  2. Stylized/unique price-setting game
  3. No nominal rigidities
  4. Money growth rule and Taylor rule *both* achieve same allocation
  5. ACK result only holds in non-linear version; linearized equilibrium is trembling-hand perfect

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- ACK present more general model with uncertainty
  - Would be good to try to generalize to their environment to shore up argument
    1. Including liquidity shocks in benchmark model rather than as extension
    2. Nominal rigidities on supply side
    3. Some other extension that drives wedge between implied allocation under Taylor rule vs money growth rule

Suggestion 2

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- Devotes a large section to difficulties with empirical inference
  - "NK models specify policy rules that are a snake-pit for econometricians."
  - Regression analysis 'cannot be trusted' if NK model correct
  - Empirically found 'successful Taylor rules' may not actually be as such

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- Devotes a large section to difficulties with empirical inference
  - "NK models specify policy rules that are a snake-pit for econometricians."
  - Regression analysis 'cannot be trusted' if NK model correct
  - Empirically found 'successful Taylor rules' may not actually be as such
- Some response to these claims would bolster strength of paper as a 'defense of the Taylor rule'