

# Behavioral Macroeconomics and Finance: Implications for Central Bankers

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# Inflation Expectations and the Phillips Curve

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  - choosing systematically more inflationary policy should **raise inflation expectations**, shifting Phillips curve adversely
- If one instead rejects RE: should one be **less concerned** with the inflationary consequences of more expansionary policy?

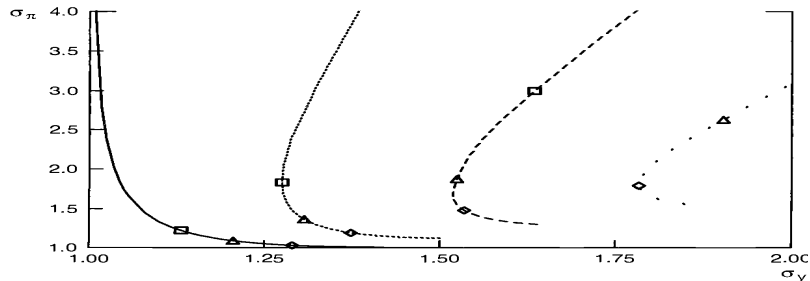
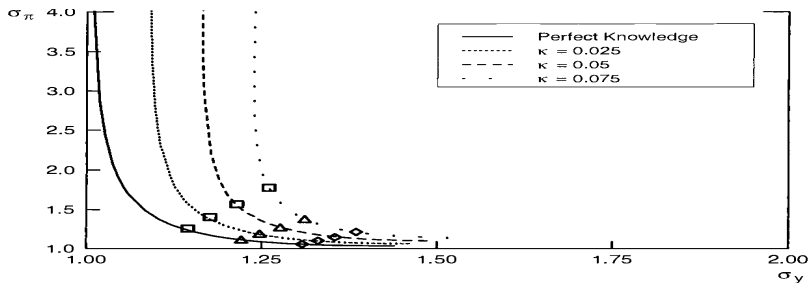
# Inflation Expectations and the Phillips Curve

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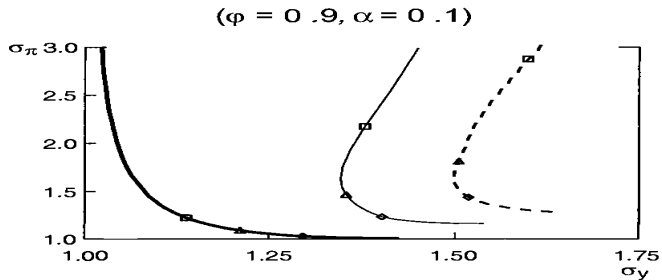
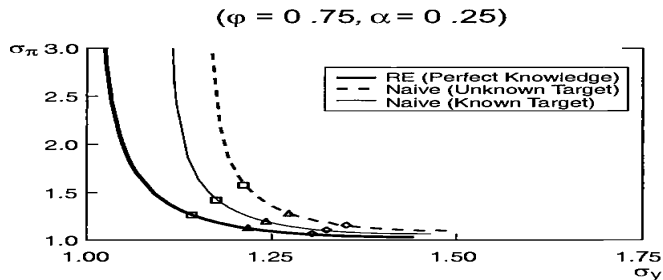
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- Orphanides and Williams (2005): compare the trade-off between **inflation variability** and **output variability**, under alternative assumptions about expectation formation
  - ① **rational expectations**
  - ② people forecast inflation using (constant-gain) least-squares **learning**

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# Inflation Expectations and the Phillips Curve

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    - a reason for **tighter control of inflation** than optimal policy under RE analysis



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    - a reason for **tighter control of inflation** than optimal policy under RE analysis
  - ② increases the value of commitment to an **explicit inflation target**

# Monetary Policy when the ELB Sometimes Binds

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- RE literature: can obtain a better stabilization outcome by committing to a period of **temporary over-shooting** of LR inflation target in period following an ELB episode
  - commitment to a **price-level target** can be superior to a purely forward-looking inflation target
- But benefits of not pursuing one's LR stabilization objectives after the ELB episode derive solely [**in the RE analysis**] from the **anticipation** of such policy, during the period when policy is constrained by ELB
  - if one doubts the realism of RE, should one be content with forward-looking inflation targeting?

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- Not necessarily! If people form expectations in a backward-looking way [e.g., adaptive learning as assumed by O&W], one can't expect that just because the **CB decides** to “let bygones be bygones,” that people's **expectations** will be correspondingly unaffected by the ELB experience

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  - sustained undershooting of target can cause persistently lower inflation expectations, persistently excessive desire for saving, unless **counteracted** by subsequent **overshooting**

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- Some have argued that one can achieve all of the advantages of PLT in ELB episodes, without having to constrain policy in this way most of the time, by announcing a **“temporary PL target”** on an ad hoc basis when ELB binds
  - commitment to maintain accommodation until PL target is reached, but **no advance promises** about policy after that

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- True under RE: no difference between a systematic **rule**, and a systematic policy of announcing the right **ad hoc response** to each individual shock, if and when it occurs
- But announcing an ad hoc policy in response to an unusual situation [esp. when the policy is a significant **departure from normal policy, and would take effect only off in future**] should only have the RE effect if
  - the policy change is **noticed**
  - the announced change is **credible**, and its implications are **correctly understood**
  - people use their understanding of the new policy to **deduce** the consequences of future courses of action, looking **far enough** into future for the new policy to matter

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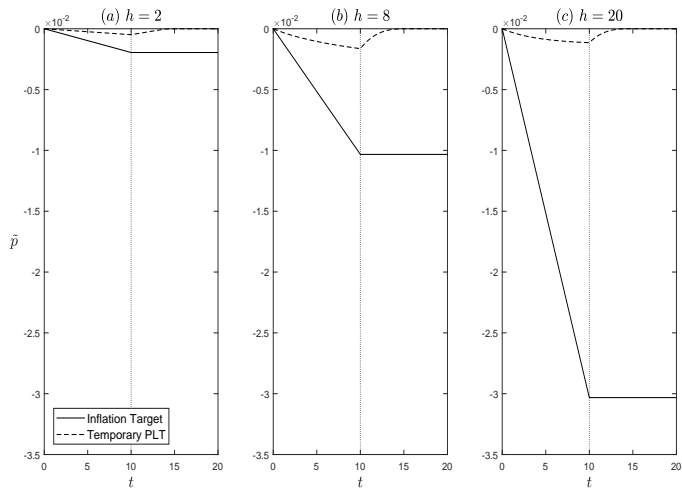
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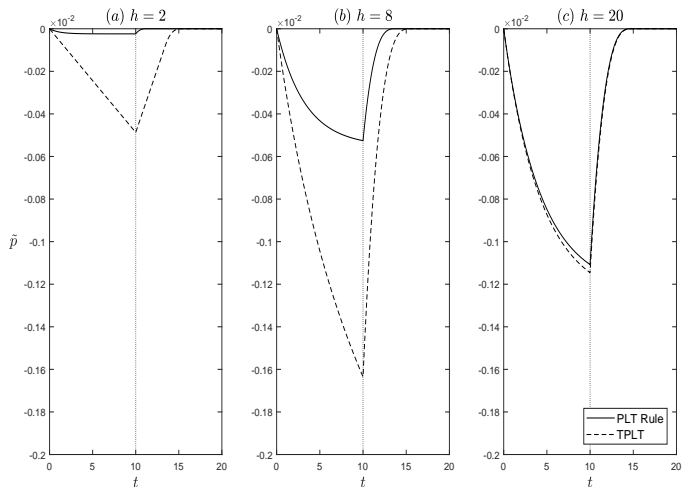
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  - interim situations that they can anticipate reaching by end of planning horizon are evaluated using a **value function** learned from **past experience**
- Limited forward planning **weakens** effects of **ad hoc** forward guidance (like TPLT)
  - while **increasing** the importance of choosing a good (and simple) **systematic rule**, the implications of which can be learned inductively from experience, rather than relying upon deductive reasoning

# Planning Horizons and TPLT (Woodford and Xie, 2019)



# Temporary PLT vs. PLT Rule (Woodford and Xie, 2019)



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- Important to consider the **robustness** of policy rules to (plausible) departures from fully rational expectations
- Many of the lessons of the RE literature for monetary policy remain important [**with certain qualifications**]
  - but some of the conclusions are more robust than others
- Often, taking into account bounded rationality strengthens the case for **simple rules**