

Data-Rich Short Term Forecasting Methods: Appeal and Communication Issues

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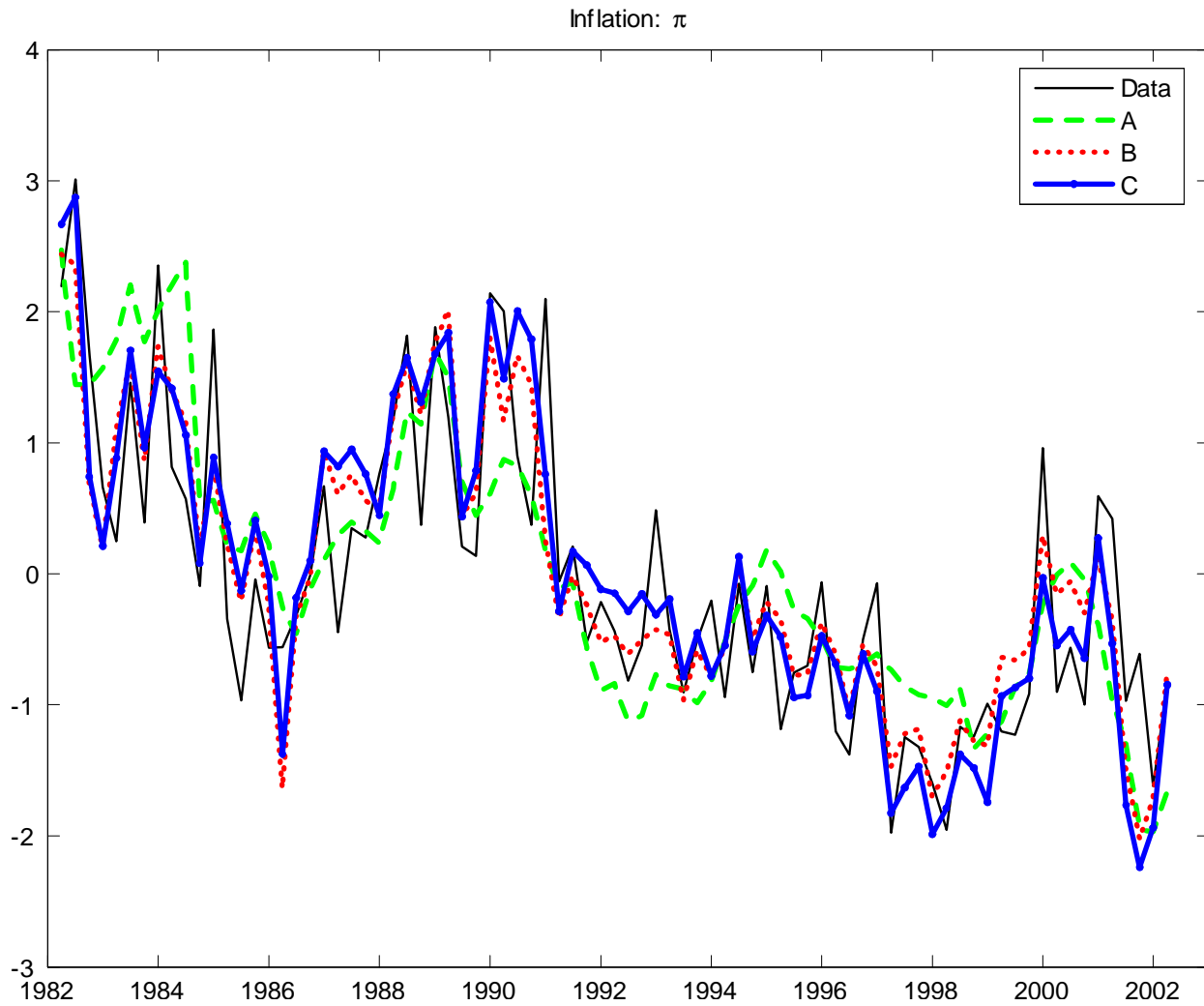
Data-rich environment

- State of the economy fundamentally unobserved. Data available merely indicators.
- Gives a role to a large amount of information
- Ways to deal with large amount of information
 - Judgment (“Greenspan in the bathtub”)
 - Formal statistical tools (e.g. DFM)

Formal data-rich methods: Appeal

- Can assess uncertainty surrounding state of the economy
- Large amount of information reduces this uncertainty
- Mitigate real-time revision/measurement error issues
- De-emphasize recent observations
- Could reduce the importance of judgment

Example: Headline vs Core Inflation



Issues: Communication/Interpretation

- Perceived as a “kitchen sink” approach. What variables should be included?
- Black box:
 - Difficult to answer “why...?” or “what if...?” questions

What variables to include?

Not convinced this is an important issue (Boivin and Ng (2006))

- Not clear there is a cost of including all information “in practice”
- Factors extracted from large data sets capture core dimensions of the macro-economy (Stock and Watson (2007))

Communication: Moving beyond the blackbox...

- Interpreting factor models based on the contributions of individual indicators is informative, but insufficient
- Need (complete) structure to answer “why...?” or “what if...?” questions
 - Important questions even for current analysis
 - Structure also important to evaluate sources of risk and design robust policies
 - Crucial for communication