Forecasting in a World of
Disparate Confounding Dynamics

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CFE/JHU/NBER
PSA

- CFE blogs on these topics at http://cfe.econ.jhu.edu
  (mainly Faust and Bob Barbera)

- Email me if you’d like to be on the notifications list
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Two claims and a question
Two claims and a question

1. Business cycle dynamics are worthless for predicting GDP growth and inflation

2. Disparate confounding dynamics are the reason

Q: What does this mean for monetary policy?
A simple view of forecasting
A simple view of forecasting
A simple view of forecasting

1. A nowcast
A simple view of forecasting

1. A nowcast
2. Current Normal
A simple view of forecasting

1. A nowcast
2. Current normal
3. A glide path
Now start mumbling incantations:

..., momentum, overheating, Phillips curve, consumer confidence,...
And poof!

... you get extra wiggles (the business cycle!?!)

data

inflation

last observed

forecast date

time
Our point: the wiggles significantly degrade the forecast
A sophisticated benchmark forecast

1. Take the best nowcast you can

2. And the best assessment of ‘current normal’

3. Draw a smooth line between them

And then you are done.
General findings

- 1. Benchmark performs as well as best forecasts
  benchmark often a bit better

- 2. Benchmark is roughly half as variable as standard forecasts
  benchmark omits the extra wiggles
Fed and BOE inflation forecasts

<table>
<thead>
<tr>
<th>Forecast</th>
<th>RMSPE Orig.</th>
<th>RMSPE Bench.</th>
<th>Rel. SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB, CPI</td>
<td>1.10</td>
<td>0.85</td>
<td>0.45</td>
</tr>
<tr>
<td>GB, GDP Def.</td>
<td>0.78</td>
<td>0.79</td>
<td>0.62</td>
</tr>
<tr>
<td>MPC</td>
<td>0.60</td>
<td>0.56</td>
<td>0.57</td>
</tr>
</tbody>
</table>

WEO forecast: same result across 20 stable-inflation countries
Remarkable!?!  

- Benchmark uses no information at all pertaining to horizons +1 to +12 quarters.

- It’s worse than you think: benchmark gives the real forecasts an important edge

  (benchmark ignores ad hoc stuff)
Greenbook forc. (dash) and actual (solid)
What accounts for this result?
Disparate confounding dynamics (DCDs)

- Jackson Hole paper: Myth of Normal, with Eric Leeper

- Stole the idea from Victor Zarnowitz
Key: At any given time, myriad variables that are largely omitted from standard analyses are showing *non-business cycle variation* that may be affecting current normal and may interact with any business cycle variation.
Example

Term Premium, 10–Year

pct. pts.

Example

Household Debt–Income Ratio

ratio

Example
Real Price of Oil

Dollar price, PCE deflator
Aside: My December joke Fed watching note

- Our contacts suggest widespread support for permanently including in the statement that inflation will run below target due to recent declines in energy prices.

- We believe that the FOMC will hold off on this move until we see this for one more year.
More seriously

- In the face of longer-term moves that interact with the business cycle, the standard ‘look through’ reasoning is grossly inadequate.
Example: Labor’s share
Doing better

- Times were never normal in the sense of standard business cycle dynamics being the main driver of inflation and GDP

- But the present is different: The values of current normal seem uniquely uncertain for advanced economies
Doing better

- But you knew that: sec. stag., anchored inflation expectations, ... 

- Central banks and others are shifting the focus
But. . .

- These DCDs still often viewed as technical/background issues to ‘filter out’ or ‘look through’ before the ‘serious analysis’—aka incantations—begin.

- Time to admit that the incantations step mainly adds noise.

- Focus on the more important part.
Not nihilism

- Nowcast and current normal quite amenable to analysis
- And more limited statements about dynamics make sense
Sensible Phillips curve talk!?!  

- At some point as resource utilization tightens and policy remains accommodative, there will be upward pressure on inflation.

- We have little basis for asserting when this pressure will rise above the DCDs,

- But we know the direction to push.
A comment about policy communication
Modal-forecast-based communication more likely to confuse than clarify at present

More simply: ignore the SEP