Discussion of Gürkaynak, Kıscıkoğlu and Wright
“Identifying the Effects of Partially-Measured News Surprises”

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Bank of Canada/FRB San Francisco/Simon Fraser Conference on Fixed Income and Macro-Finance

August 17, 2017
Motivation

Every month, the Employment Report contains information on:

- Nonfarm Payroll Employment
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- Unemployment Rate
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- Average Hourly Earnings

We only observe market expectations and surprises for a few of these components.
Every month, the Employment Report contains information on:

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- Average Hourly Earnings
- Average Weekly Hours
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- Revisions to previous months’ payroll numbers
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Eric Swanson (UC Irvine)  BoC/FRBSF/SFU Macro-Finance Conference  Discussion of Gürkaynak et al.  3 / 13
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\[ y_t = \alpha s_t + \varepsilon_t \]

where

- \( s_t \) is the observed surprise in the announcement
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Problems:

- \( R^2 \) can be low (40%)
Some authors have argued for a “measurement error” approach:

\[ y_t = \alpha s_t^* + \varepsilon_t \]
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- this approach implies \( s_t \) is systematically biased (anti-attenuation bias)
- but market survey data show no sign of bias
Burçin and coauthors argue instead that:

\[ y_t = \beta s_t + \gamma f_t + \epsilon_t \]

where

- \( s_t \) is the observed surprise
- \( f_t \) is a latent factor capturing the additional, unobserved components of the release
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Advantages:

- now \( s_t \) is rational, bias-free
- \( R^2 \) substantially higher than traditional method (90%)
- straightforward to estimate using Kalman filter for \( f_t \)
Spend more time comparing and contrasting your results to the measurement error approach.

Can you explicitly reject the measurement error approach?

Assuming your model is true, explain why coefficients in Table 2 are systematically larger than in Table 1.
Spend more time comparing and contrasting your results to the measurement error approach.

In particular:

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Comment #1

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Results in the paper suggest all of these factors are statistically significant and important.
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Yet most of the paper focuses on a specification with “One Latent Factor to Rule Them All”, $f_{0,t}$. 
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Why?
It’s important to include all of the observable surprises $s_t$ for each announcement type, e.g.:

- Employment Report:
  - Nonfarm Payrolls
  - Unemployment Rate
  - Average Hourly Earnings
- CPI Report:
  - Headline CPI
  - Core CPI

The traditional approach often omits some of these if they are not statistically significant, but they could be important in the estimation of the latent factors $f_i$. 
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Comment #4

Present more useful graphs and statistics for the latent factor(s) $f_{i,t}$. 
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Currently, the authors just report:

![Graph showing time series data with dates from 1985 to 2015 and a y-axis labeled Macro Factor ranging from -5 to 5.](image)
Instead, it would be useful to get some information about the behavior of $f_{i,t}$, such as:

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- Is $f_{i,t}$ positively correlated with the observable $s_t$?
- What do the different latent factors $f_{i,t}$ look like?
- Is there a way to plot them that conveys useful information?
The paper presents newspaper quotes to argue that large market responses as measured by $f_{i,t}$ were in fact driven by non-headline components of the release, e.g.:

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But these quotes do not look unusual at all, despite the large estimates of $f_{i,t}$. 
Summary of Comments

1. Basic idea of the paper is appealing, seems to work well
2. Try to refute the measurement error approach more conclusively
3. Include a full set of latent factors (one for each announcement), not One Latent Factor to Rule Them All
4. Include the full set of observable surprises for each announcement
5. Provide more information about the latent factor estimates
6. Newspaper quotations are not very convincing