Discussion of “News Shocks and Asset Prices” by Bretscher, Malkhozov and Tamoni

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- **News** = anticipated innovations to fundamentals (TFP)

\[
\Delta \ln(A_t) = (1 - \rho) \mu + \rho \Delta \ln(A_{t-1}) + \epsilon_{0,t} + \epsilon_{1,t-1}
\]

\[\epsilon_{1,t-1} \in \mathcal{I}_{t-1}\]
What’s news?

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- Why news? (for macroeconomists)

  **Empirics**: measured TFP innovations do not induce business-cycle comovement (Basu, Fernald and Kimball, 2006)

  **Theory**: fluctuations without large movements in fundamentals (Pigou, 1927)
The goal of this paper

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  Kurmann and Otrok (2013): term structure of interest rates
What the paper does

1. Construct TFP news from an estimated DSGE model
   - estimation: GMM w/ aggregate data (including IR, PD ratio)
   - filter innovations to structural shocks — $\epsilon_t$

2. Use $\epsilon_t$ to price the cross-section of stock returns
   
3. Slightly separate: effects of $\epsilon_t$ on natural rate $r^*_t$
   - $\text{cov}(\epsilon_t(\text{news})_t, r^*_t) > 0$
   - $\text{cov}(\epsilon_t(\text{news})_t, r_t) \approx 0$
   - monetary policy is excessively accommodative
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2. Use $\epsilon_t$ to price the cross-section of stock returns
   - $\mathbb{E} [r_{i,t}^e] = \lambda_0 + \beta_i \lambda_1$
   - $\beta_i$ is loading of portfolio $i$ on $m_{t,t+1} - \mathbb{E}_t[m_{t,t+1}] = m_\epsilon' \epsilon_{t+1}$
   - $m_\epsilon$ from structural model
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3. Slightly separate: effects of $\epsilon_t$ on natural rate $r_t^*$
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   - monetary policy is excessively accommodative
The cross-section of stock returns

A CAPM.

B C-CAPM.

C Consumption innovations.

D SDF innovations.
Comment 1: a more systematic approach

- Quite a bit of disagreement in the macro literature on:
  
  how to estimate news shocks

  how important they are for business-cycle volatility
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- How do the shocks estimated here compare?
  impact comovement puzzle still there
  what about LR FEV? (Beaudry and Lucke, 2010)
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  what about LR FEV? (Beaudry and Lucke, 2010)

- Effect of other news shocks on cross-section of returns?
  understudied question
  for total effect, need both $\epsilon_t$ and $m_\epsilon$
  but could see if priced in isolation, as in the paper
- Paper convincingly shows that the findings extend to:
  - industry portfolios
  - bond returns (though weaker)
Comment 2: what do we learn from the cross-section?

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  industry portfolios
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- What do we learn from this? (for macro)
  
  good news lower MU of current and future consumption
  assets that covary more with news command higher ER

Which assets covary more with news, and why?
does cross-sectional variation in $\beta_i$ "make sense"?
e.g.: which industries covary more strongly with news?
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- Long-run risk: small but persistent shocks to consumption growth

Bansal, Dittmar, Lundblad (2005): cross-section of returns

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Reduced-form news shocks

Consistent with model predictions, both rise on impact (figures omitted). The real wage is estimated to be significantly higher for a number of periods and its long horizon response is of similar magnitude to the response of output. While statistically insignificant, the interest rate response is economically large and positive for a number of periods after impact.

3.3. Sensitivity

The result that our news shock induces negative impact comovement among aggregate variables is robust to alternative lag structures in the reduced form system as well as to various different assumptions and/or specifications concerning the long run relationships among the series.

In the interest of space, these results are only described qualitatively here. At all tested lag lengths, output, investment, and hours decline on impact in response to a favorable news shock, while consumption rises. With more lags in the reduced form system the impulse responses are less smooth and there is more evidence of reversion in all series at longer horizons, but the basic qualitative nature of the responses is unchanged. The results are also similar with fewer lags. Similar results obtain when estimating VECM models with either assumed or estimated common trends. We prefer the levels specification because invalid assumptions concerning common trends can yield misleading results (Fisher, 2010). Nevertheless, our results about the effects of news shocks are qualitatively similar when estimating VECMs. The main differences in the VECM specifications concern the quantitative contribution of news shocks to the variance decomposition of the variables at medium and low frequencies. The impact effects of news on aggregate variables are always very similar, and the reverting behavior of TFP to the surprise technology shock continues to manifest itself.

\[ \mathbb{E}_t \ln(A_{t+k}) - \mathbb{E}_{t-1} \ln(A_{t+k}) \]


Potentially similar to \( C_t \) IRF in Bansal and Yaron (2005) case I model
Comment 3: the relationship with long-run risk

- Long-run risk: small but persistent shocks to consumption growth
  Bansal, Dittmar, Lundblad (2005): cross-section of returns
  how different are the two mechanisms?

- Is it just about the horizon/frequency?
  model short-run (1 to 8-quarter) shocks
  but reduced-form IRFs suggest much slower diffusion
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- Or is there a substantial (economic) distinction?
  
  news: all changes in $C_t$ growth need not be priced (e.g. if they’re expected)
  does this make a difference? model-based comparison?
Comment 4: implications for monetary policy

- Natural rate moves substantially more than policy rate
  gap is largely driven by news

- Problem 1: how to measure news shocks?
  this paper (and the rest of the literature): asset prices
  other forward-looking variables (quantities)? e.g. inventories
  (Crouzet and Oh, 2016)

- Problem 2: how to react to news shocks?
  news are “supply-side” shocks — i.e. expansion + deflation
  tightening in the face of (expected) deflation? (see paper)
  react to asset prices?
Conclusion

- Great paper — a new macro to finance “bridge”
- Super clear, super well-executed
- Lots of open questions:
  - are “other” news shocks priced in the cross-section of returns?
  - what do we learn about news from the cross-section?
  - what is the relationship between news and long-run risk?

Smaller comments:
- why GMM?
- report times series for $\epsilon_t^{(\text{news})}$