Discussion of

by Kevin Aretz and Eser Arisoy

“Economic Links and Return Volatility”
by Xiao Yu, Keyi Zhang and Ramazan Gencay

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Summary

- Aretz and Arisoy (2016)
  - Prior literature uses indirect proxies of expected stock skewness
  - Skewness may not be priced in the cross-section of stock returns

- Yu et al. (2016)
  - Customer’s volatility forecasts supplier’s volatility
  - Link is stronger for companies that are more ‘transparent’.
Preference for skewness can explain why (individual) investors are under-diversified (Simkowitz and Beedles 1978; Conine and Tamarkin 1981).

Idiosyncratic skewness can be a priced component of stock returns (e.g., Mitton and Vorkink 2007; Brunnermeier, Gollier, and Parker 2007)

Can possibility explain why high idiosyncratic vol firms underperform (see Ang, Hodrick, Xing, and Zhang (2006, 2009))

Whether this is true is still an open empirical question
  - Idiosyncratic skewness difficult to measure, unstable over time
Aretz and Arisoy (2016)

Prior literature

- Boyer, Mitton and Vorkink (2010): OLS forecast of future skewness (‘OLSSkew’)
- Bali, Cakici and Whitelaw (2011) sort stocks by their maximum daily return during the previous month (‘MaxSkew’)
- Conrad, Kapadia and Xing (2014): probability of ‘jackpot’ returns logit model (‘LogitSkew’)

Aretz and Arisoy (2016): propose an unbiased estimator for future skewness
First comments

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What’s wrong with OLS? OLS is BLUE but …
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1. **Shouldn’t OLSSkew be unbiased for the short-term horizon?**
   - Aretz and Arisoy (2016) use the series provided by Boyer et al.
   - But this is not a good benchmark because Boyer et al. do not try to forecast Neuberger’s (2012) realized skewness
What’s wrong with OLS? OLS is BLUE but …

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1b. **Why not use OLS to forecast long-term skewness?**
Aretz and Arisoy (2016)  
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2. Aretz and Arisoy (2016) and Neuberger (2012) make two points
   (a) skewness changes with investment horizon
   (b) the representative agent has a long horizon and cares about long-term skewness only
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Even if the agent has a long-term horizon, changing skewness generate a hedging demand \( \Rightarrow \) agent cares about short-run skewness.
Aretz and Arisoy (2016)
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Bali et al. (2011): “A slightly different interpretation of our evidence is that extreme positive returns proxy for skewness, and investors exhibit a preference for skewness. [… ] However, we show that the extreme return effect is robust to controls for total and idiosyncratic skewness and to the inclusion of a measure of expected skewness.”
Aretz and Arisoy (2016)
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Conrad et al. use a logit model to relate jackpot returns to default risk.
Neuberger (2012) finds that the 1y skew is larger than the 1m skew, but Table 3 suggests that it decreases with horizon.

How persistent is skewness? How likely is a top quintile stock to remain in the top quintile?

Conrad, Dittmar and Ghysels (2013) propose a measure of risk-neutral ex ante skewness: relation with your (physical) measure?
Yu et al. (2016)

- **Research question:**
  - What is the impact of an increase in customer’s volatility on his supplier’s volatility?
  - Can customer’s volatility improve forecasts of supplier’s volatility out-of-sample?


Question on the question:
- Why predictive regression?
- Option trading? Is it priced in the option market?
- To assess econ magnitude, would be nice to consider contemporaneous correlations too.
- What about an effect of suppliers on consumers? (see e.g. Acemoglu, Akcigit, and Kerr (2016))
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Main result

A 1% increase in customers’ volatility increases supplier’s volatility by about 0.06% (0.03% after controlling for industry volatility).
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1. Is there any comovement in cash flows volatilities? (see Cohen and Frazzini (2008))
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2. **Where is the effect stronger/weaker?**
   - In add of weighting, it would be interesting to look at unweighted effects across industries. Is the effect stronger when the linkage is stronger? Which industries are more subject to spillovers?
Yu et al. (2016)

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- Information Transparency: Higher coverage implies a stronger channel
  
  "As indicated by the positive and statistically significant coefficients on the interaction term, higher number of analysts who cover a firm, on average, is associated with larger effects on suppliers from customers. This indicates that, there is stronger association between customer and supplier for companies that are more transparent."

- What about firm size? visibility? Looking at cash flow would help clarify where the effect comes form.
Other questions

- Why not use GARCH?
Other questions

- Why not use GARCH?
- The impact of volatility doesn’t decrease for higher order links. Interpretation?
Overall

- Promising papers — I enthusiastically recommend for reading
- Growing literatures, relevant contributions
- Good luck in publishing!