Comments on “Utilization-Adjusted TFP Across Countries: Measurement and Implications for International Comovement
By Huo, Levchenko, and Pandalai-Nayar

Galina Hale
UCSC, NBER, CEPR
I will talk about

A couple of stylized facts for context
- GDP synchronisation appears to increase in recent decades
- TFP growth fluctuates a lot

Some concerns about measurement issues

Interpretation of Utility-Adjusted TFP measure

A suggestion to contextualize the results
Increased GDP synchronization from early 1980s on

Roughly same sample as the paper.

Kalemli-Ozcan, Papaioannou, and Peydro´ (JF, 2013)
Idiosyncratic component is responsible for most increase

From: Cesa-Bianchi, Imbs, and Saleheen (JIE, 2019)
TFP growth fluctuates a lot

- TFP is measured as a residual
- Utilization rates are important (COVID crisis is an extreme example)
Chipping away at Solow residual helps us understand the role of TFP

- What explains business cycle comovement?
  - Common shocks
  - Trade
  - Financial linkages
  - ...?
- Isolating actual TFP from capacity utilization can help answer the question

This paper:

1. Extending BFK approach to other countries
2. Using new data to study comovement
TFP: still a residual

Approach:

- allow for factor utilization variation in the production function
- Use structural model to proxy for utilization given data constraints
- TFP as a residual for this function
- Solow residual is from full-utilization

=> Solow residual = Utilization + TFP

What else might be entering the utilization-adjusted TFP measure?

(acknowledge this interpretation challenge)
Cross-country heterogeneity in data quality/composition

- G-7 results are probably fine given high-quality data source
- Larger sample might have heterogeneous biases, e.g.
  - Size of informal sector varies by country and industry
  - Given broad industry definitions, can composition effects be important?
  - Capital and labor quality is likely to vary

Given that TFP is computed as a residual, this heterogeneity will create a bias toward *not finding the effect of TFP on synchronization* in the empirical analysis - an important conclusion of the paper
Should intangible capital be added?

- Increasing importance
- Some data availability
- Will it change the measure if included in the model?
UA TFP is different than Solow residual

- As expected
- In terms of business-cycle synchronization it does not contribute much (but utilization does)
- One conclusion: don’t look for technology factors to explain synchronization

However, utilization can be affected by technological factors (as authors acknowledge)

Hard to appreciate the importance of the distinction between series
A replication exercise?

- There is a literature that is relying on Solow residual to measure role of TFP in synchronization.
- Can you replicate some of the empirical papers using utilization-adjusted series you created to show qualitative and quantitative differences?
Conclusion

- Very well researched and written paper
  - Lots of work !!!
- Important contribution to the profession - I imagine data series will be widely used to answer many questions
  - Why stop in 2007?
  - COVID crisis episode shows the importance of capacity utilization
- Important contribution to understanding business cycle comovements