The Utilization Premium

Grigoris & Segal

Discussion – UT Dallas – Fall 2019

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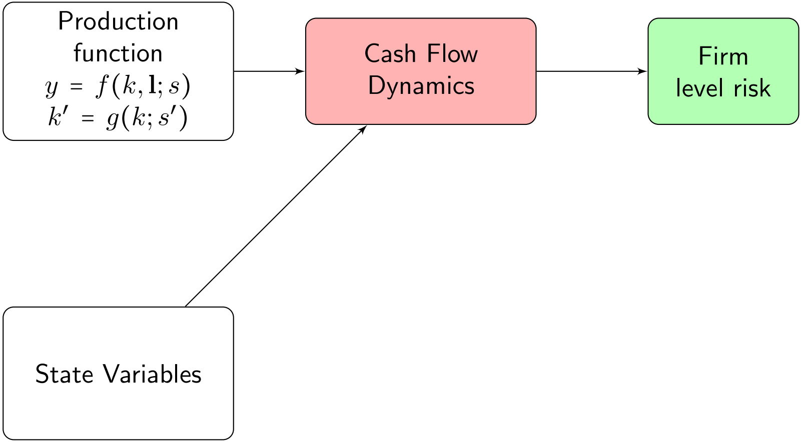
Motivation


Production function
$y = f(k, \mathbf{l}; s)$
$k' = g(k; s')$
Cash Flow Dynamics
Firm level risk
State Variables

Standard Production Based Literature

Production function

- Microfoundation of production function: f and g
- How do changes in production f or factors accumulation g affect dynamics of cash flows
- Examples:
  - Labor: Belo / Favilukis / Lin
  - Networks: Segal et al.!

Capital Accumulation: State Variables

- Kogan & Papanikolaou

This Paper

Measurement

- Measure ~~firm~~ industry characteristics based on utilization data
- Industries with low utilization have high returns going forward

Mechanism

- What happens to firms with low utilization?
- In bad times: high operating leverage because production is irreversible in the short run
- Time variation in β: amplification of downside risk
- Downside risk is amplified with countercyclical risk premia
  - In good times ... not so much (asymmetric response)

A few comments

Model misspecification

- Utilization is a new measure: but is it capturing exactly what the authors say it is?
- How about market power varying over the cycle?
  - Hard to raise markups in bad times, increase operating leverage

Measurement

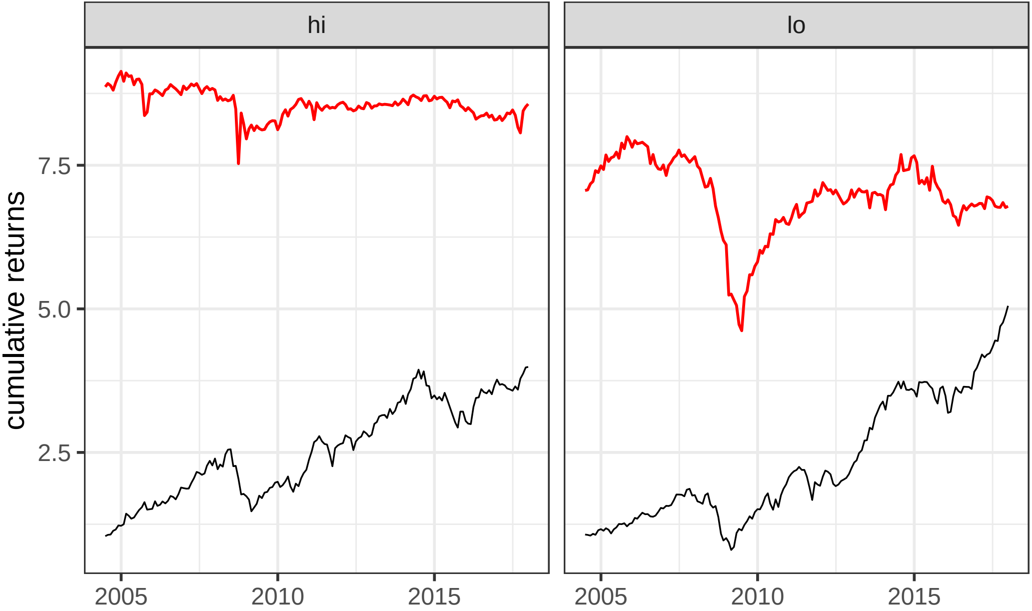
$$\text{Capacity Utilization} = \frac{\text{Industrial Production}}{\text{Industrial Capacity}}$$

- Where is the variation coming from? numerator or denominator
- Firm Industrial capacity is very slow moving: e.g. Cobb-Webb model
- Think a little more about the real origins of utilization fluctuations

Private Equity

-

Is it robust?



hi
lo
cumulative returns
7.5
5.0
2.5
2005
2010
2015
2005
2010
2015

What is utilization?

Why are some firms running low in bad times?

- Utilization a feature of industry or firm production function?
- Fixed costs vs. flexibility
- Not only about flexibility: flexible utilization mixed with cyclicality
- How does your indicator fare with other predictors?
- Do the behavior of expected returns on industry factors follow similar patterns?

Inventories?

Moving the production function across time

- Varying utilization is a way of moving fixed capital across time
- Other way of smoothing capital over time: inventories
- Inventories act as buffer in sales: production stays the same but sales fluctuate
  - See how inventories help GM bargaining against United Automobile Workers Union
- Highlight differences in mechanism with Jones and Tuzel paper that shows inventories predict returns.
  - Same mechanism but different firms?
- What do we learn from this wealth of evidence on alternative *capital accumulation* or dynamics of fixed factors.

Final Thoughts

Very Polished Paper!

Take away

- Utilization is an important factor in capital adjustment
- Matters a lot when we think about firms operating leverage

Great Paper!