

Discussion of “Misallocation or Mismeasurement” and “Industry Concentration”

discussant: Eric Bartelsman

Vrije Universiteit Amsterdam and Tinbergen Institute

From Micro to Macro
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- Macroeconomics is about aggregate welfare, GDP (growth), inflation, and unemployment
- EIB cares are investment that creates jobs and promotes equality
- Q: So why a session about mismeasurement of output and employment at firms and about firm concentration?
- A: It looks like micro and statistics, but it's about macro
- Methodology for measurement and analysis is evolving, but improvements still needed in data comparability, design of indicators, and analysis of results.

- Empirical macro has worked with traditional macro timeseries and representative agent paradigm
- These indicators provide very little to answer questions on slow productivity growth, low investment-output ratio, decreasing labor share, increased profit skewness, higher mark-ups.
- 'Secular Stagnation' story has very little to offer in terms of policy options.
- Micro-evidence on supply-side of the economy, evaluated using appropriate theoretical framework, is more likely to provide a coherent view, along with policy trajectories
- But, hard work is required to generate statistical measures and theoretical frameworks before we can return to macro questions, let alone policy trajectories.

Summary of Findings: BKR

- “Misallocation or Mismeasurement” paper attempts to provide context to empirical observations from firm-level data.
 - Dispersion of 'revenue productivity' (RP) has been increasing slightly in the US.
 - Cross-sectional correlation between growth in RP and level of RP has been declining.
- Following Hsieh-Klenow framework, the slight increase in dispersion of RP is interpreted as a severe increase in misallocation of resources across firms (from 60% efficient to 30% efficient).
- Following BKR, the reduction in correlation between growth in RP and RP is interpreted as an increase in 'additive measurement error' in production data.
- After correction for measurement error, dispersion in RP is reduced, so misallocation is reduced in US.

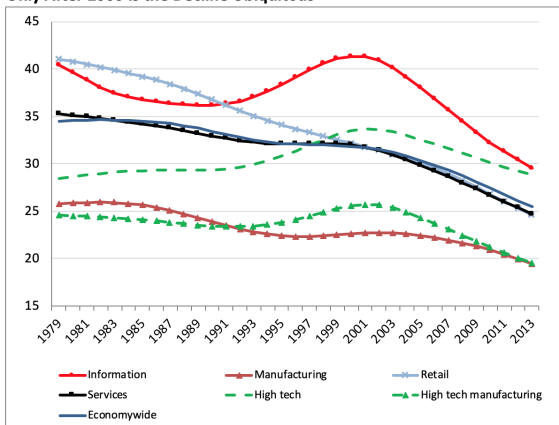
Summary of Findings: BBCCT

- “Industry Concentration in EU and NA” paper attempts to provide facts concerning industry concentration in OECD countries.
 - Using national firm-level data, results from MultiProd project show that top 10% firms increase market share about 2-3 percentage points from 2001-2010.
 - Using global Orbis et al. data, concentration ratio of top few enterprises in each country-industry is seen to increase 10 percent over the period.
- The paper does not provide an interpretation of the finding, but points to different possible avenues to explore.
 - Increasing Market Power (entry barriers, product market regulation, network externalities, anti-competitive behavior)
 - Increased optimal scale (associated with technology, intangibles, globalization)

What can we learn about methodology

- The BKR paper contributes to the literature by showing the difficulty in going from micro data to useful information for macro analysis.
- A simple measure computed from firm-level data (RP dispersion) decomposed into an indicator, ie how much higher would output be if resources were allocated efficiently, by appealing to HK model.
- The resulting puzzle of declining Allocative Efficiency (also relative to India) in the US leads to exploration of another interpretation of increasing dispersion, in this case measurement error.
- In the BBCCT paper, aim is to provide clean facts about concentration.
- A large volume of useful work done to prepare and merge Orbis et al. data sources, partly following footsteps of others, to generate a robust measure of industry-concentration.
- No model is needed to convey what the computed indicator 'means'.
- The MultiProd data requires harmonization at stats agencies, but the resulting computation of the concentration measure not as clean an 'indicator'.

**Patterns of Decline in Reallocation Differ Substantially Across Sectors
Only After 2000 is the Decline Ubiquitous**

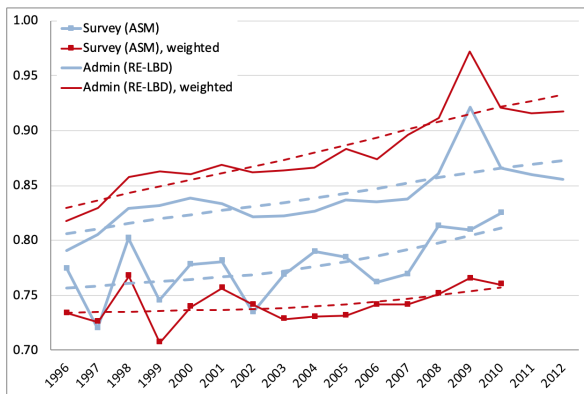


Source: Decker et al., 2019

- Precise link between distortions and AE depends strongly on specification of production technology and demand system (see e.g. Mrazova and Neary (AER 2017; JEEA 2018) on role of elasticity and convexity of demand, and on selection effects)
- Without mismeasurement, TFPR dispersion is proportional to distortion
- Additive mismeasurement (and fixed overhead costs) can be distinguished from distortions through moment conditions. (In paper, simple case of regressing growth in RP on level of RP).
- The paper has nice example on mismeasurement of age and BOY/EOY variables in India. Does the mismeasurement of these worsen over time in US?
- What in statistical process worsened (increased variance of additive errors) in US relative to India?

US Dispersion: Survey vs Admin

Rising labor productivity dispersion (std dev of log real labor productivity) in Manufacturing



Robust to ASM vs. Admin Data, Robust to weighted vs. unweighted

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Source: Decker et al., 2019

TFPR, Misallocation, and Policy Distortions

- Brown et al. (2016) have variant of Hopenhayn, with rich set of distortions: entry fee, fixed costs, exit costs, and restructuring costs.
- Not just allocation but also selection (of entrants, entry-type, exit) plays a role in TFPR and agg. productivity (welfare).
- reducing policy-induced barriers (e.g. entry fees, admin burden, exit costs) is ambiguous for dispersion of tfpr but increases welfare.
- empirical work in us and eastern europe: no clear link between policy and dispersion of tfpr.
- changing nature of technology and production may be changing tfpr (and tfpq) distribution.

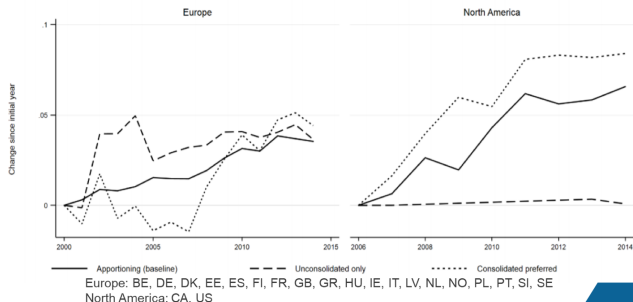
- Important to do apportioning group information. (see chart).
- Industry concentration vs market concentration
- Can we do more to distinguish domestic market conditions?
 - From compnet or multiprod: export intensities at different points in size distribution
 - In analytical use: add country/industry information from wiod on apparent consumption.
 - In next round of multiprod, link in trade information.

Apportioning Group Activity:

Looking only at HQ or only subsidiaries or apportioning?

Change in the share of sales due to 8 largest groups (rel. to 2000)

Orbis-Worldscope-Zephyr data, average across industries



Source: BBCCT, 2019

Considering Evidence and Possible Causes

- Many new features of facts about firm-level dynamics are emerging that related to more macro related puzzles
- Many possible hypotheses could explain
 - Changing tech for transferring primary inputs to final demand (production function, business model)
 - Changing market structure (market power, entry barriers)
 - Changing nature of external shocks
 - Changing frictions and distortions
- Cross-country evidence as promising route to identification.
- Careful data work, as well as modelling with an open mind, is needed.