DISCUSSION SESSION I: COMPETITION, REGULATION AND PRODUCTIVITY

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Unique data: plant level price deflators for manufacturing firms in Chile

Estimates of TFPQ rather than TFPR!

Can look at impact of competition on firm productivity growth via innovation

- Thanks to match to Innovation Survey
  - “larger firms”

Policy conclusions: “pro-competitive policies may reduce laggards’ incentives to efficiency-enhancing activities and thus distance them further from leaders....”

Counterintuitive (thinking of results in Andrews, Criscuolo and Gal, 2017)
Estimated contribution to the annual change in the MFP gap of the slower pace of reform relative to the fastest reforming industry (telecoms)

- Observed increase in gap
- Increase in gap due to slow deregulation

But here focus is on services across 26 countries and captures within firm productivity growth and reallocation effects ...likely that explains it...
• Nonlinearities?
  – Inverted U relationship (Aghion et al., 2005)?
• Look at heterogeneity across sectors and firms (laggards/leaders; age; size; etc...)
  – Might give more nuanced policy message...
• Other extensions:
  – Patents as additional proxies for innovation output (Chile matched ENIA-CIS-patent data)
  – Alternative Competition measures?
  – Reallocation effects – to give aggregate productivity effects?
DIGITAL GAP IN MARK-UPS EARLY 2000S AND 2013-14

Source: Calligaris, Criscuolo and Marcolin, 2018
Deciles of the mark-up distribution in the year-industry (A38), then averaged across sectors.

Dynamics not due to a particular country.

Source: Calligaris, Criscuolo and Marcolin, 2018
• Diff-in-diff approach to estimate the impact of the GR on investments in intangibles by financially vulnerable firms using cross-country firm-level data,

• Look at the role of (unexpected expansionary) monetary and competition and the combination of the two

• higher competition associated with lower investment in intangibles for more vulnerable firms during the crisis
  – But compensated by strong countercyclical macro policies

• Need both countercyclical macro and structural reforms
**Balance Sheet Intangibles Often Reflect M&As**

- Internal intangibles usually not on the balance sheet, purchased intangibles can be (partially)
- Orbis intangibles mix purchased identifiable intangibles & goodwill - paying above fair value for acquired assets
- Goodwill can be enormous

**Facebook Bursts With Goodwill**

- and have nothing to do with intangibles e.g. overpayment

**Microsoft writes off $7.6B, admits failure of Nokia acquisition**

- Intangibles growth may simply reflect new M&As
  - Looser monetary policy may lead to more M&As, particularly from vulnerable firms with more severe financial constraints
- Or may reflect endogenous accounting treatment of old M&As
  - Vulnerable firms may postpone writing off overpayments for past acquisitions to shore up balance sheet during the crisis
**STRONG M&A GROWTH IN DIGITAL SECTORS**

Ongoing work with M. Bajgar and J. Timmis based on Zephyr
Mark-ups and different dimensions of digital:

Changes in log mark-ups following a 1-standard-deviation increase in log(X). Holds true also controlling for age, TFP, capital intensity.

*Source: Calligaris, Criscuolo and Marcolin, 2018*
INTERNAL INTANGIBLES MIS-MEASURED OR MISSING...
NOT RANDOMLY IN TIME AND ACROSS FIRMS

- Internal intangibles usually not on the balance sheet, some accounting regime exceptions (e.g. IFRS)

- Where R&D is capitalised, this is mis-measured:
  - Only “D” - Development costs (not Research)
  - Only “successful” R&D (technical & commercial feasibility tests)

- Intangibles growth may also reflect changes in R&D strategies in response to crisis
  - Vulnerable firms may switch to safer R&D or development of existing ideas
  - Measured intangibles may increase, but less beneficial for growth

- Or possibly endogenous adoption of accounting standards over time
  - Non-listed firms in most countries can choose to adopt IFRS or national rules (UK, US, Italy etc.). Vulnerable non-listed firms may choose a more favourable regime in response to crisis.

- NB internal intangibles that are on the balance sheet often dwarfed by goodwill
Who are “financially vulnerable firms”?

Diff-in-Diff SUTVA assumptions?
- Common trends between treated and non-treated companies
- Common support
- Matching?

Placebo tests

Other measures of intangibles (R&D; patents)

Bang for the buck – Back of the envelope calculations? Is it value for money?

Is it really a Diff-in-Diff setting?
- Alternative: IV for GR across countries and sectors?
Very interesting:

– To HsiehKlenow” or not to “HsiehKlenow”?
– Very broad (>60) cross-country data with rich information at the firm level
– Direct investigation of the role of policy “distortions” on productivity vs indirect (HK)
  • Interesting comparisons of different policies for different country groups and firms –sometimes unexpected…
  • Indirect approach performs pretty poorly….
– Critical view of HK in line with Syverson, Haltiwanger and Kulick [Misallocation Measures: The Distortion That Ate the Residual]: deviation from strict HK assumptions imply that estimated “distortions” may not be signs of inefficiency especially for “better businesses
  • Perhaps could be tested with these data too?