Policy insight from EFIGE

Micro-data for fact-based trade, growth and jobs policy design

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3. The relationship between firm characteristics and internationalisation is highly non-linear ('threshold effect')
4. Across countries, firms with the same characteristics tend to behave in the same way vis-à-vis international competition ('composition effect')
5. To let domestic firms grow is one of the surest ways to improve international performance

Three key points

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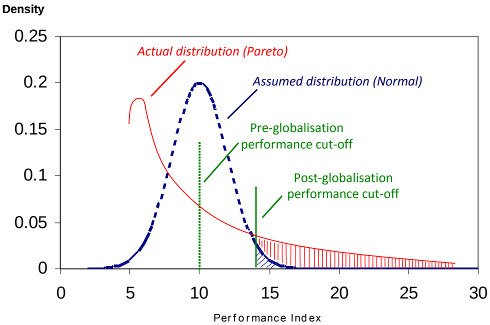
2. Internationalization and firm producivity => 'threshold effect'
3. What are the features of 'competitive' firms and which policies can promote them?

International competitiveness: from micro to macro - 1

- In most industries rather than few ‘weak’ firms, few ‘strong’ firms and many ‘intermediate’ firms (Normal distribution in blue) there are instead few ‘strong’ firms, many ‘weak’ firms and only some ‘intermediate’ firms (Pareto distribution in red). Take productivity:



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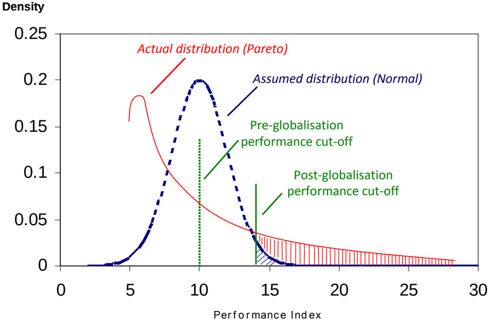

- Only firms above a survival threshold ('performance cut-off') are active in international markets, and globalization has raised this survival threshold

International competitiveness: from micro to macro - 2

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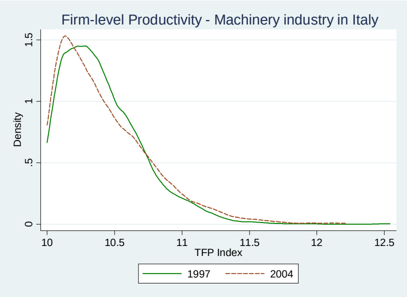
- In other words, not only the average but also the dispersion (tails) of the firms' distribution matter

International competitiveness: from micro to macro - 3 (example)

- The average productivity of this Italian industry has decreased through time but its share of the international market has increases. A paradox? Not really, given that the right tail of the firms' distribution has become thicker



- Policies aimed at increasing international competitiveness should promote the reallocation of resources from the left to the right tail; policies aimed at social cohesion should take care of the left tail => two objectives = two distinct policies: a single 'average' policy for the entire industry does not work

Internationalization and productivity

- There is a clear relation between firms' performance and the complexity of their internationalization market
- Internationalized firms are bigger, in terms of employment and turnover, and more capital intensive. The more so the more complex their internationalization: from exporters, to importers of intermediates, to importers of services, to multinationals (FDI). Passive outsourcers within global value chains (GVC) are smaller than other internationalized firms but bigger than purely local firms
- The 'productivity premium' grows with complexity, even after controlling for country, industry and size
- Beware of causality: from productivity to internationalization, not vice versa => promoting the internationalization of inefficient firms does not make them competitive

The characteristics of 'winners'

- A higher probability of switching from from below to above the internationalization threshold is associated with firms that:
  - Have more human capital, have managers that do not belong to the family of the owner, pay wages linked to productivity ('bonuses')
  - Invest more in R&D and adopt quality certification
  - Have better financial stability maggiore and rely less on bank credit
  - Are linked to foreign groups

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- SME are 'special' only if they grow but not if they remain small
- International competitiveness can be promoted by fostering the exit of less efficient firms with stagnant productivity, freeing up resources for firms that are more efficient or with growing productivity ('threshold effect')

Conclusions (continued)

- Promising policies include those that promote a better management of human resources (human capital, external managers, produttivity bonuses), innovation (R&D, quality certification) and financial independence from bank credit ('equity financing')

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- How to tear down barriers to growth is, however, a country-specific question. Obstacles can be of different natures – they can originate in product, labour, technology and financial markets – and the binding constraints may be different from one country to another. So there is no one-size-fits-all recipe to firm growth and export, rather each government must do its homework and identify domestic roadblocks

References

- Altomonte, C., Barba Navaretti, G., Di Mauro, F. and Ottaviano, G.I.P. (2011) "Assessing competitiveness: how firm-level data can help", Bruegel Policy Contribution 2011/16, November 2011, Brussels
- Altomonte, C. Aquilante, T. and Ottaviano G.I.P. (2012) "The Triggers of Competitiveness: the EFIGE Cross Country Report", forthcoming
- www.efige.org