

Discussion of the paper by Davide Castellani and Torben Schubert

“Technical Efficiency, productivity, R&D and multinationality”

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# Objectives

- Impact of globalisation and industrial diversification on efficiency and productivity
- R&D industrial scoreboard EU MNEs and subsidiaries from ORBIS database
- 2012 snapshot
- Results in line with Cincera and Ravet (2014)

# Questions

- Use an unified framework to analyse efficiency and productivity: SFA
- Difference between branches and subsidiaries?
- Table 5: efficiency measures by country =? Averages of firms' efficiencies?
- Random vs. fixed effect: Hausman test
- Endogeneity: use initial values of  $X_{it}$  as instruments?
- Cross section 2012 vs. between model vs. pooled data: F-test

# Questions

- How do you explain such a large difference between efficiency of EU and JP efficiencies?
- JP firms are more efficient and productive: How to reconcile these results with the relative performance of the JP economy over the last decade?
- North-South divide: did you consider other groupings of EU countries?
- What is the impact of the 2 diversification's activities of US, JP firms?

# Suggestions

- Econometric analysis with control variables to assess the causality! e.g.:
  - Age of male professors;
  - Rank of university;
  - Quality of publications (in IT or UK? Impact factor, citation);
  - CV of candidates
- Diff-in-Diff estimator?
- Explain more in details the Gelmini reform and the decree  
law n°180 of 11/2008
- Add a 4<sup>th</sup> group to divide women economists, i.e. women who left academia
- Add more descriptive stats, e.g. number of commissions