

Tracing policy effects using firm-level data

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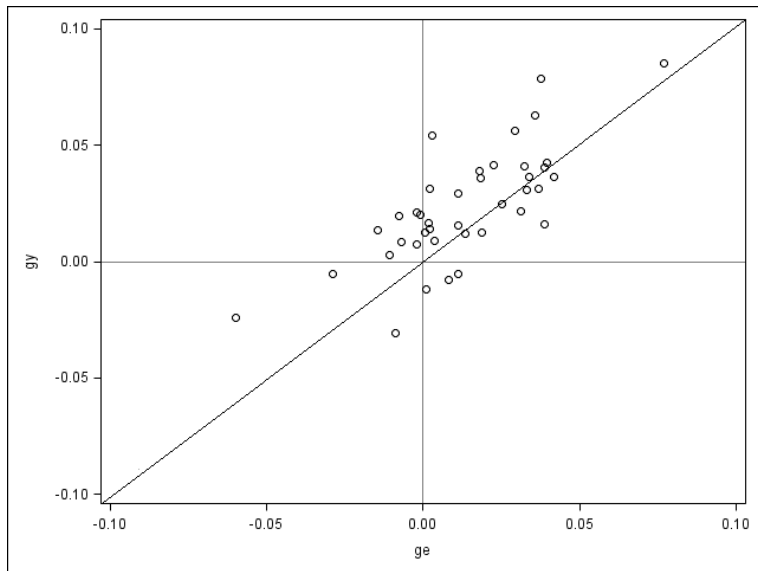
CompNET, Rome

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- 3 papers from research that incorporate firm-level (or sub-industry) data using a macro perspective
- Examples of work informing a wide range of policy areas
 - Which policy environments are conducive to long-run growth
 - What indicators can track effects of structural policy reform
 - How to track impact of financial frictions
 - Understand quantitative link between wages/prices and external balance
- The common element is tracing effects of policy on macro performance, through heterogeneous firm behavior

- Andrews, Criscuolo, Menon, “Do resources flow to innovative firms”
 - Orbis firm-level data, PatStat, regulatory indicators
 - Patenting \Rightarrow Growth
 - Regulatory environment affects relationship: e.g. high bankruptcy costs reduces capital allocation to patenting firms
- Firm-level data in cross-country setting allows identification of policy effects
- Careful analysis needed to go beyond correlation to causality: IV analysis of effect of patents on resource flows
- Do we need to instrument for policy decisions?

Resource flows to 'innovative' firms, 1996-2010



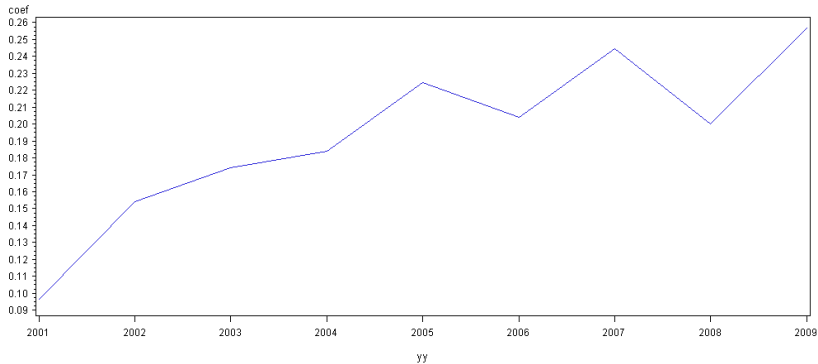
Output, employment, and productivity growth of ICT-intensive vs non-intensive firms. Source: ESSLait 2013

- Canton, “Business churn, sectoral performance and economic policy”
 - Eurostat, firm dynamics and country/industry/size data
 - Analysis of entry/exit patterns
 - Allocative efficiency affected by entry/exit
 - Role for financial frictions in allocation
- Easily accessible data provides for immediate policy needs
- Policy worry about recession distorting 'proper churn'
- Policy worries about bottlenecks for future growth improvements
- Desire to track effects of PMR

- Dhyne, Fuss, Sevestre: “Export markets as Olympic games”
 - National firm level data in BE and FR, with links to detailed trade
 - Explore FR firms in BE product markets (why not vice-versa?)
 - Differential role for macro vs firm-level characteristics in extensive vs intensive margins
 - Domestic conditions matter for number of firms above threshold for extensive decision. Firm-specific characteristics compared to foreign market matters for intensive margin
- The paper provides a very inciteful way to understand link between 'competitiveness' and trade
- Good way to understand the role of wages/product quality: Olympic winners have high wages
- Likely provides framework for providing policy relevant indicators (and solving puzzle of Milesi-Ferretti)

Wages grow more in innovative firms

- $\log(w^{ICT=1} / w^{ICT=0})_{c,i,t} = \alpha + \gamma \text{ time-trend} + FE + \varepsilon_{c,i,t}$
- $\gamma = 1.4(3.95)$: each year 1.4% larger wage difference
- Instead of time-trend, time dummies: coefs shown below



Policy relevance of firm-level perspective

- Product, labor, and financial market conditions affect both within-firm decisions and market selection mechanism
- Selection mechanism potentially important: estimation of policy elasticities on incumbent firms misses effect on firms that do not operate in that environment
- Research not just to increase understanding of policy makers about mechanisms in economy: but also
- Relevance of heterogeneity for policy effects: depending on circumstances (traceable through CompNet database), differences in elasticities can be large

- Collaboration between policy users of firm level data should move forward: sharing of networks, methods, results
- Getting Eurostat/NSIs involved should improve quality of data
- Increase cross-country micro studies, and start using micro-aggregated dataset in cross-country panel analysis
- Don't forget: researchers want to improve data and methods, but policy makers need information yesterday
- If good researchers won't deliver timely, policy relevant output, others will!!!