


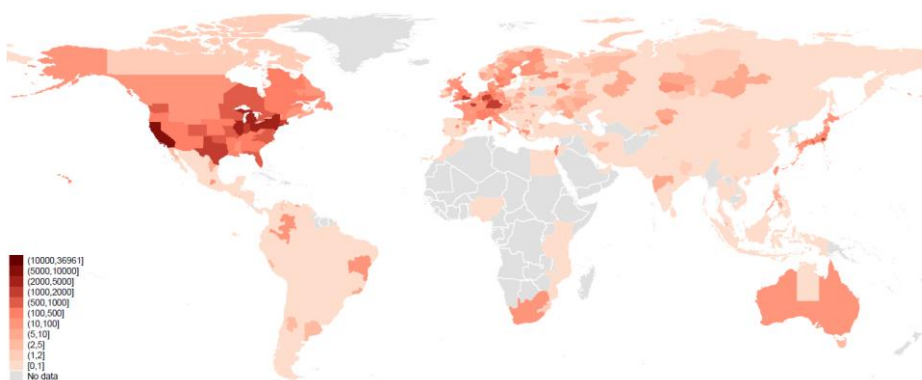
Foreign Investment and innovation in regions across the globe

Riccardo Crescenzi
London School of Economics

 @crescenzi_r

Innovation around the world

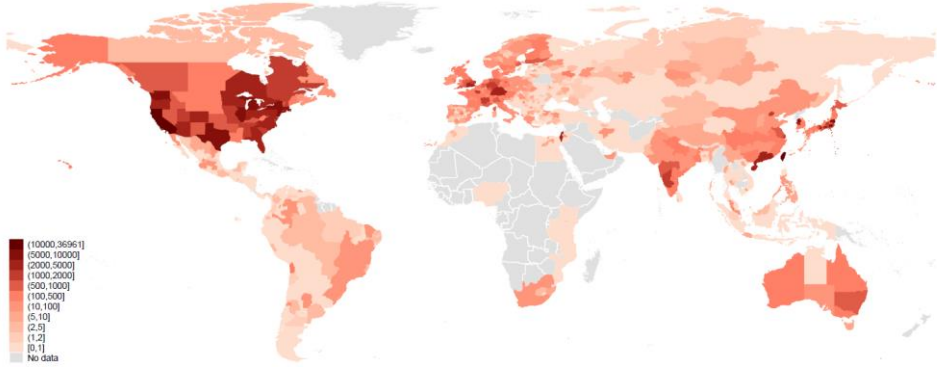
1975



Regional Patent Count – Own Elaboration - USPTO data

Innovation around the world

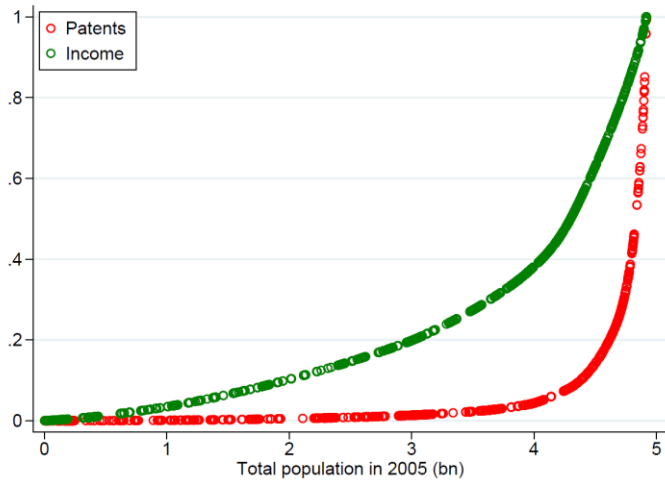
2012



Regional Patent Count – Own Elaboration - USPTO data

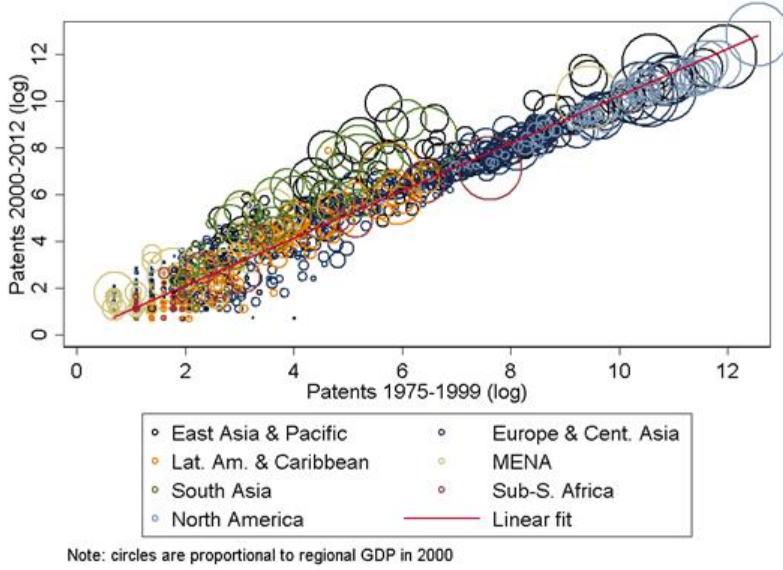
Innovation around the world:

Regional Income vs. Patents

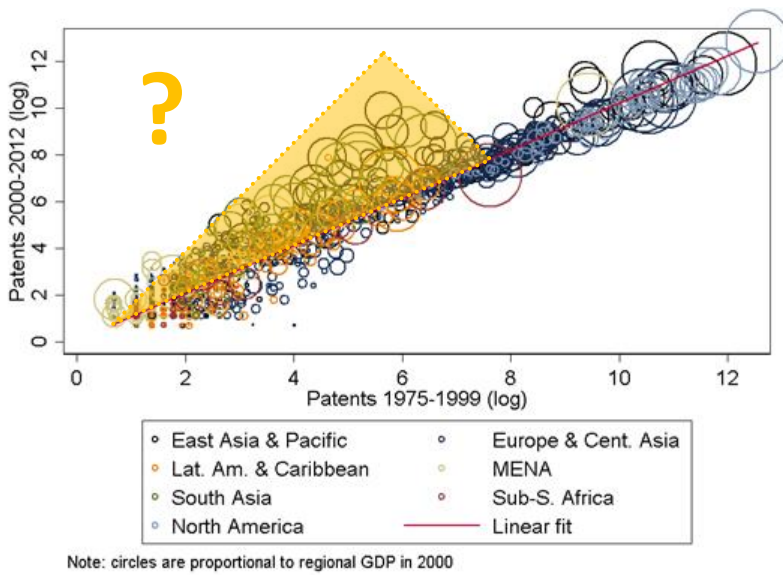


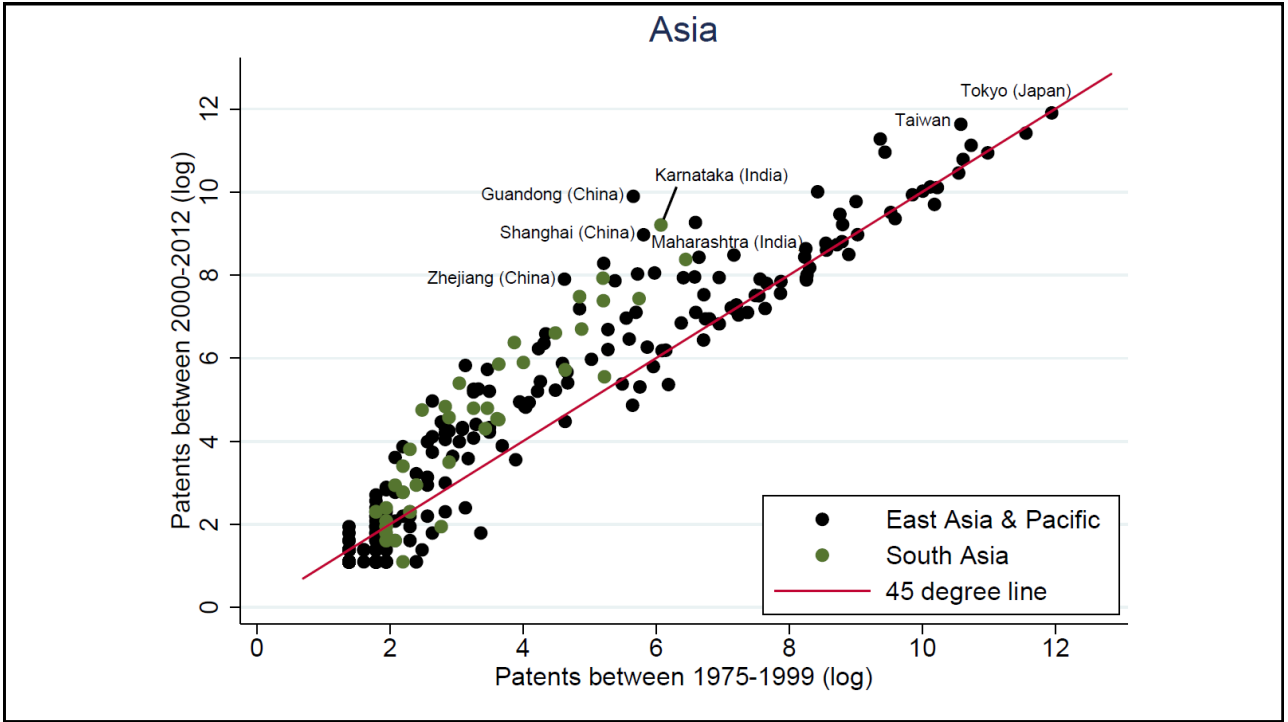
Own Elaboration (US States Excluded) - USPTO data

Innovation and the Middle Income Trap ...



... some regions escape the trap!





Guangzhou 2017



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Bangalore 1999

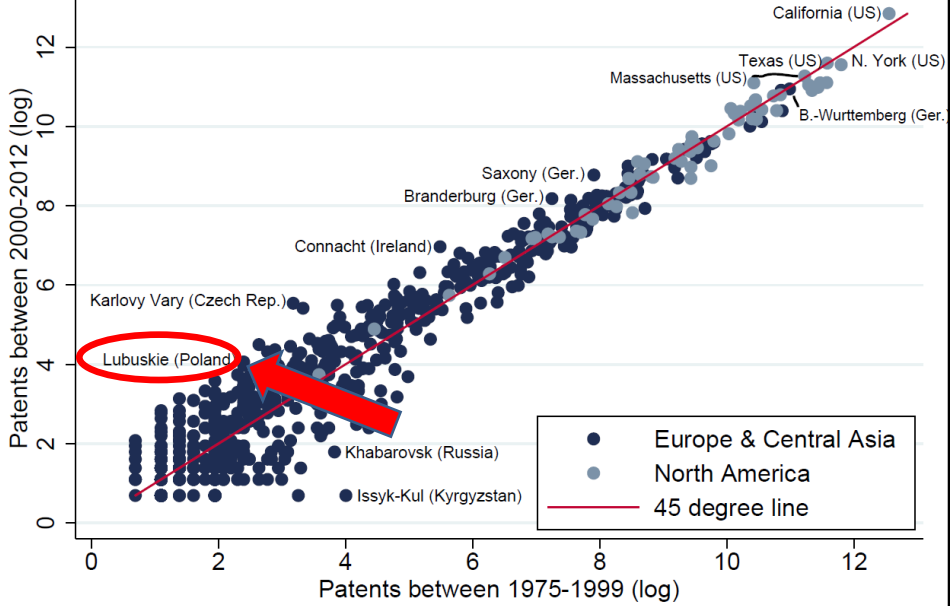


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Bangalore 2017



Europe and North America



Lubuskie 1994



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Lubuskie 2017



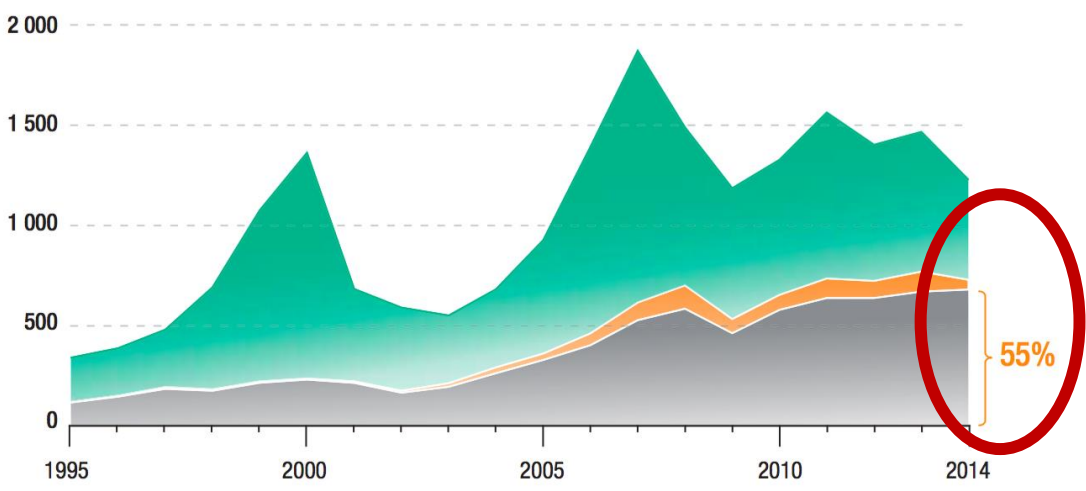
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Some regions have escaped ... How?

Global inflows of Foreign Direct Investment (FDI)

Billions \$ - 1995-2015

Developed economies Transition economies Developing economies World total



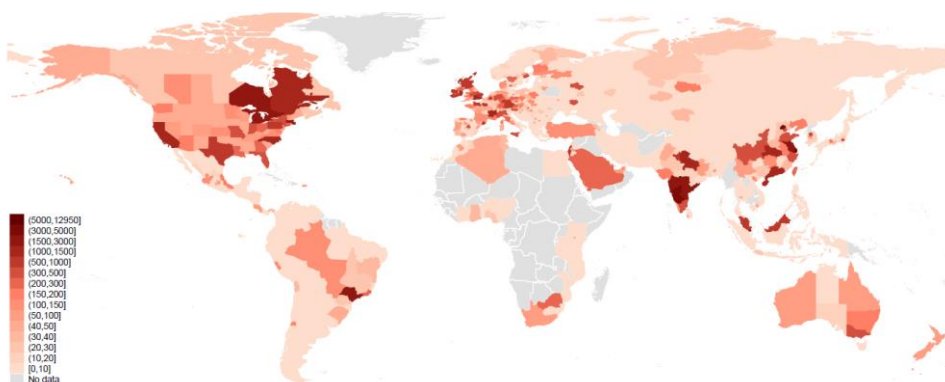
Source: UNCTAD - World Investment Report 2015

“Between 2000 and 2015 the number of MNE R&D centres in emerging countries grew by a factor of five, while in the Triad countries this number merely doubled”

Global Innovation Index Report, 2016

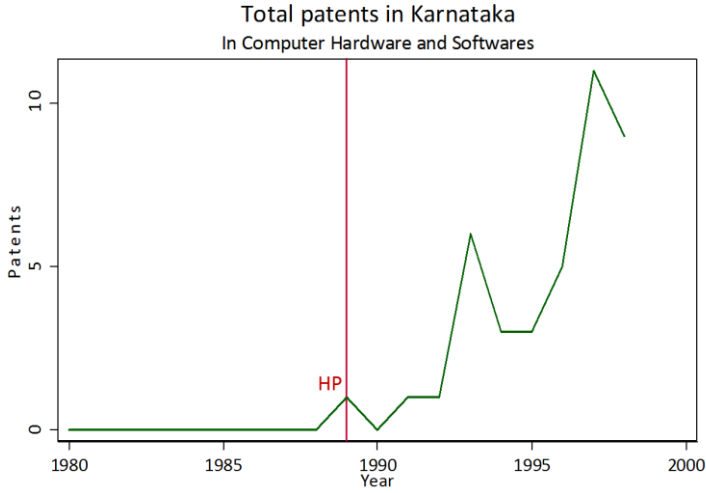
Foreign Investment in R&D activities

2004-2014

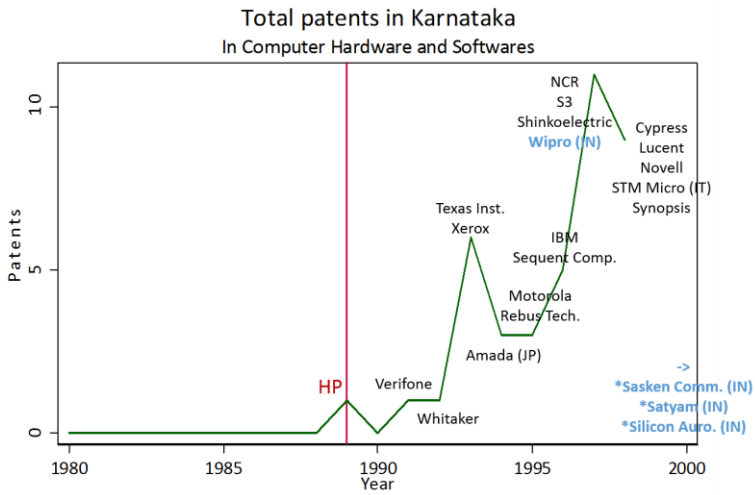


Inward FDI projects, Regional Cumulative Capex, Millions \$ – Own Elaboration – FDI Markets Data

HP in Bangalore



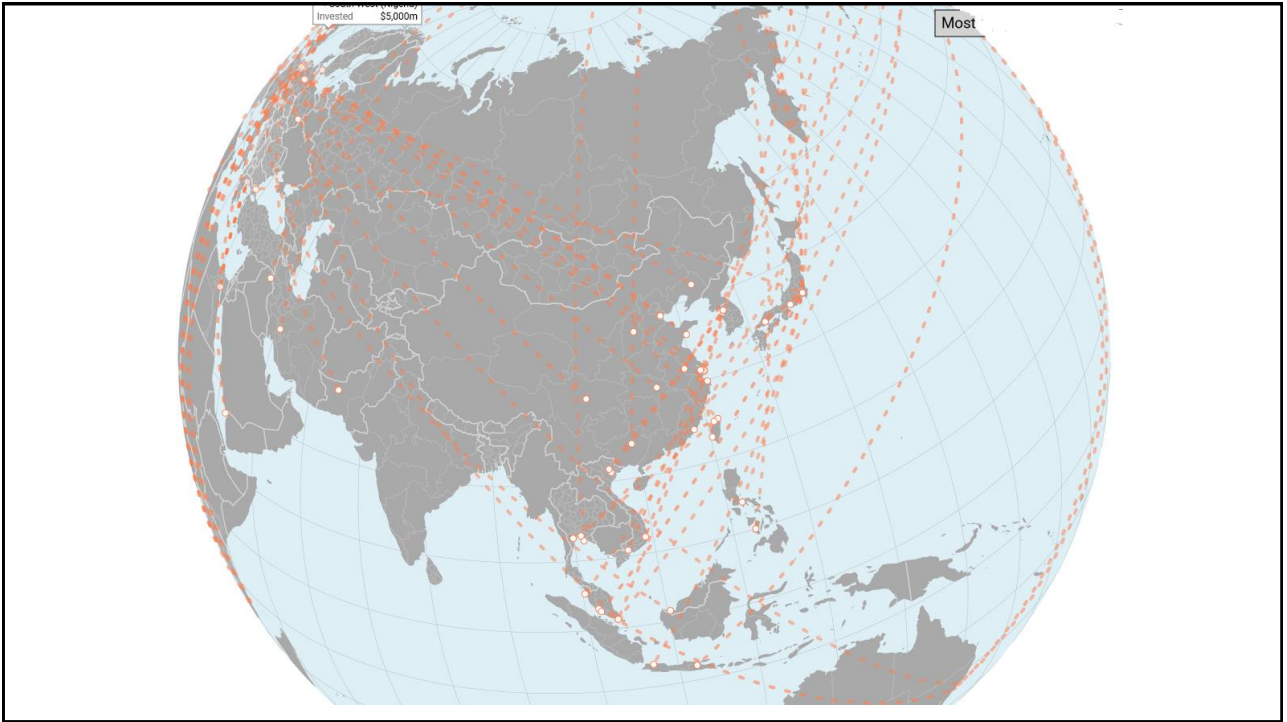
HP in Bangalore



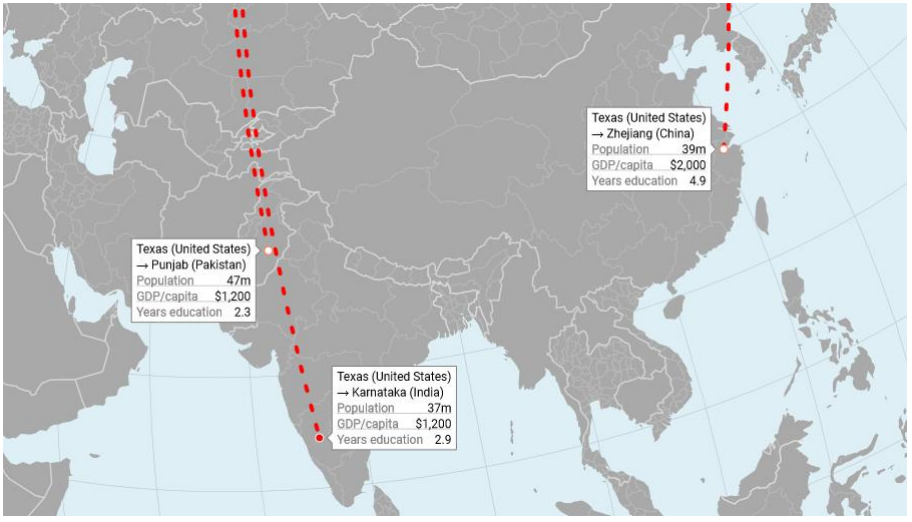
FDI to 'escape' the trap?

- **Crescenzi, Dyevre & Neffke** looked into the innovation performance of 1,528 regions, from 83 countries between 1975 and 2012
- We relied on **US Patent and Trademark Office data** on 3.6 million distinct inventors, 6.0 million patents from all over the world
- Patents in 1,240 3-digit patent classes
- 'Matched' regions receiving for the very first time a foreign firm pursuing innovative activities in their economy with a region very similar in terms of its observable characteristics and economic pre-trends but that did NOT receive any foreign investment leading to innovation



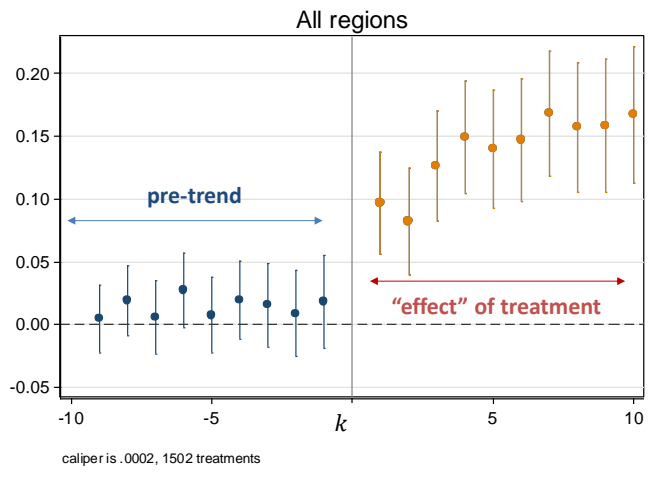


E.g. Texas Instruments in Bangalore



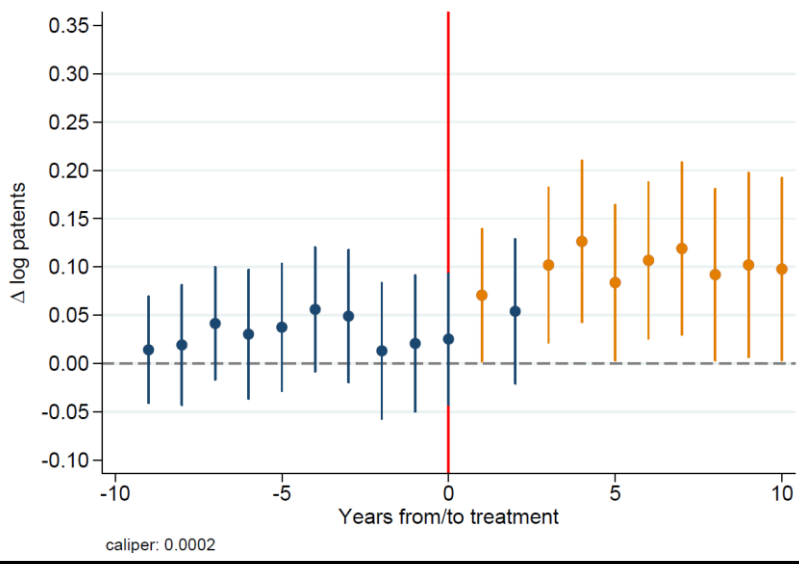
Difference-in-Differences

Patents by all firms



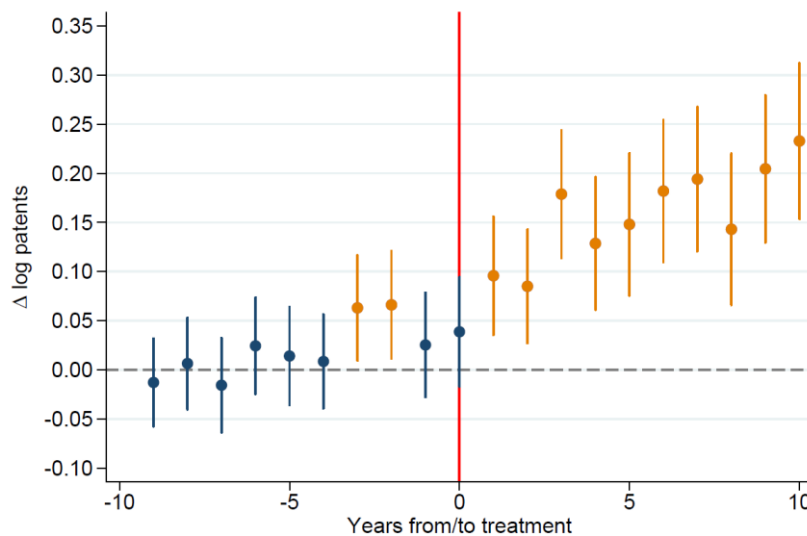
Difference-in-Differences

Patents by **all** firms – **Top 5% MOST INNOVATIVE Foreign Investing Companies**



Difference-in-Differences

Patents by *all firms* – *Bottom 80% Foreign Investing Companies*



Not all Foreign Firms are good partners

- It's not the usual suspects that matter!
- The top tech giants – that all countries and regions fight to attract (at a huge cost) – are less likely to generate local innovation
- Why?
 - We showed that they are more effective in retaining their staff and less likely to hire local workers (less circulation on the labour market)
 - New ideas generated by the 'giants' are less likely to be used and absorbed by local firms (technological distance)

Points for discussion

- Escaping the Middle Income Trap is far from easy ... but some regions and cities make it to the top
- It is hard to make it alone
- There is no alternative to openness and internationalisation
- The 'usual suspects' are not always the most helpful
- Regions and cities should embrace globalisation with a critical attitude and make evidence-based decisions on their future

The screenshot shows the website for the London School of Economics and Political Science (LSE) Global Investments & Local Development. The header includes the LSE logo and navigation links: Home, About, Latest, Publications and Writings, Events, and Subscribe by email. A search icon is also present.

The main content area features a featured article titled "Foreign Direct Investment and the world regions. Where? Why? And for Whom?". The article includes a world map and a chart titled "Number of patents by region (2012)". The text of the article discusses the impact of innovation and technological progress on economic development and growth, and how to measure the innovative capacity of cities and regions by counting the number of patents granted to their resident inventors. It also mentions that based on this statistic, local economies are extremely unequal in their innovation potential, and that the data on the globe represent regional patent counts in 2012. It notes that while some regions are innovation hubs, most of the emerging world has no patent at all.

Below the article, there are "Recent Posts" and a "Latest tweets from @LSE_GILD" section. The "Recent Posts" section includes three articles: "Recent trends in the internationalisation of Business R&D", "What do we know about FDI?", and "Connect or Perish! FDI and the resilience of EU regions". The "Latest tweets from @LSE_GILD" section includes a tweet from LSE - GILD (@LSE_GILD) about a new article on the globalisation of innovation and which countries are receiving R&D activities.

At the bottom right, there is a URL: <http://blogs.lse.ac.uk/gild/>

Acknowledgements



European Research Council

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All errors and omissions are our own




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