THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

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Foreign Investment and innovation in regions across the globe

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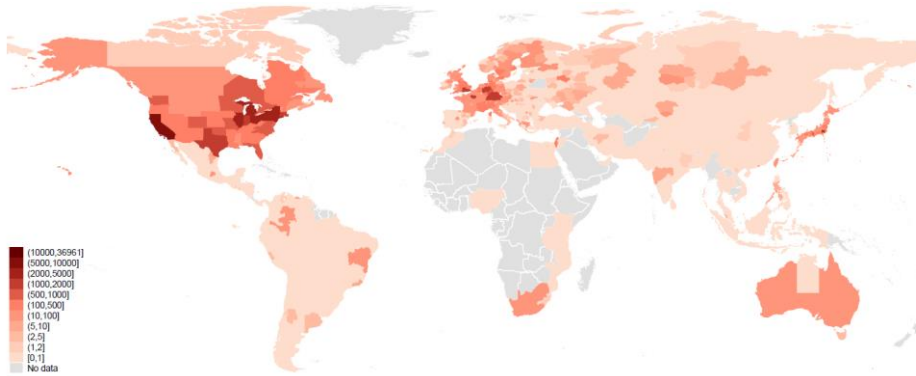
Innovation around the world

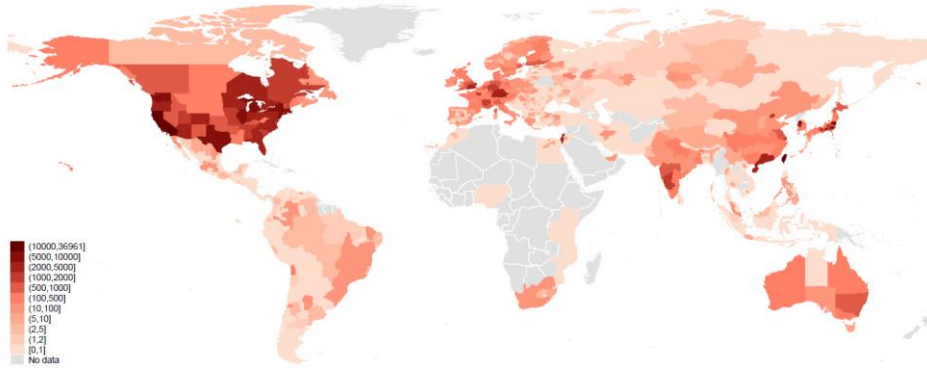
1975



Regional Patent Count – Own Elaboration - USPTO data

Innovation around the world

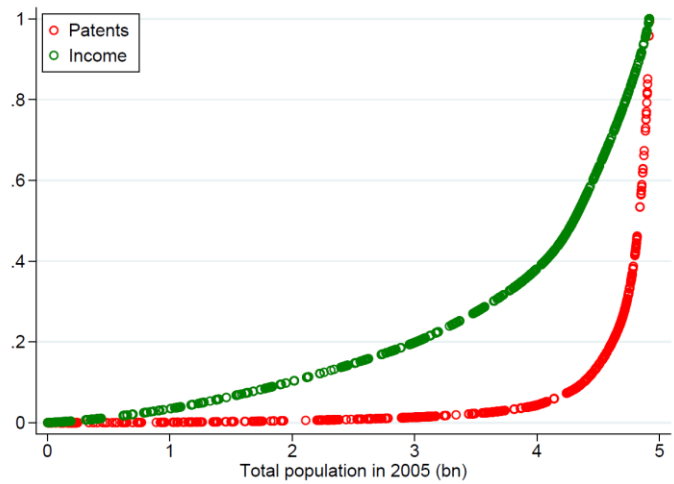
2012



Regional Patent Count – Own Elaboration - USPTO data

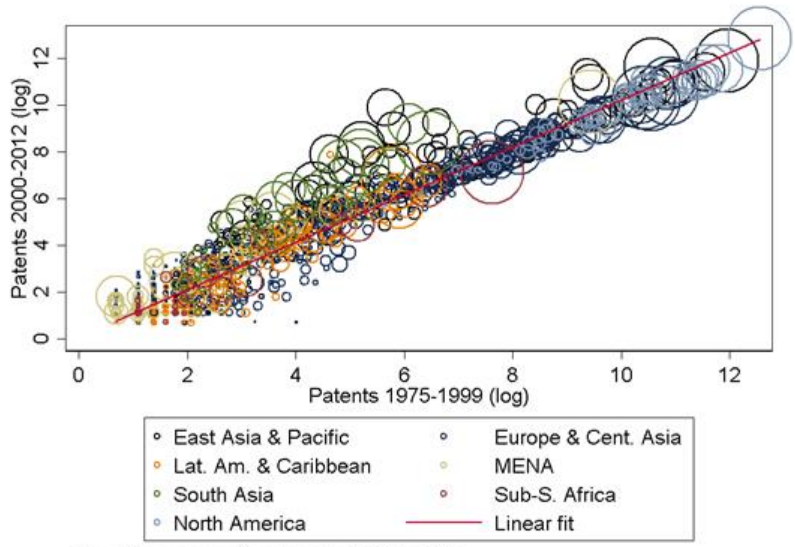
Innovation around the world:

Regional Income vs. Patents



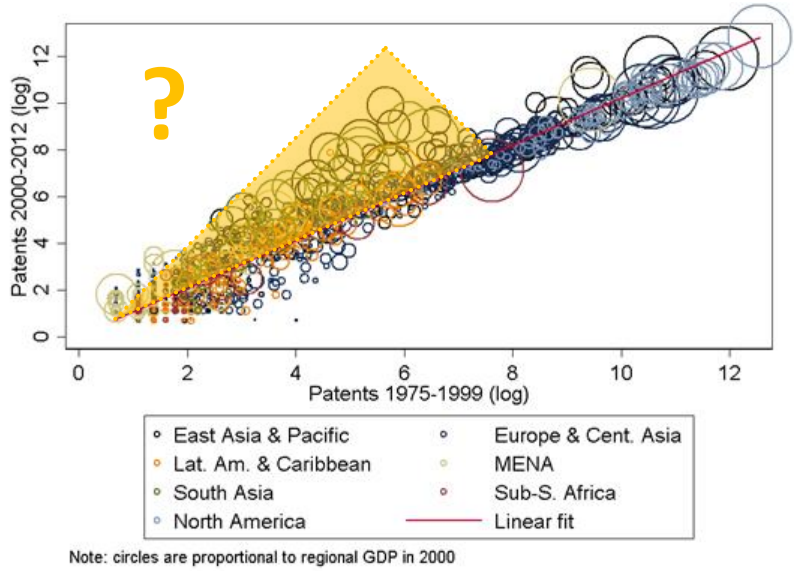
Own Elaboration (US States Excluded) - USPTO data

Innovation and the Middle Income Trap …

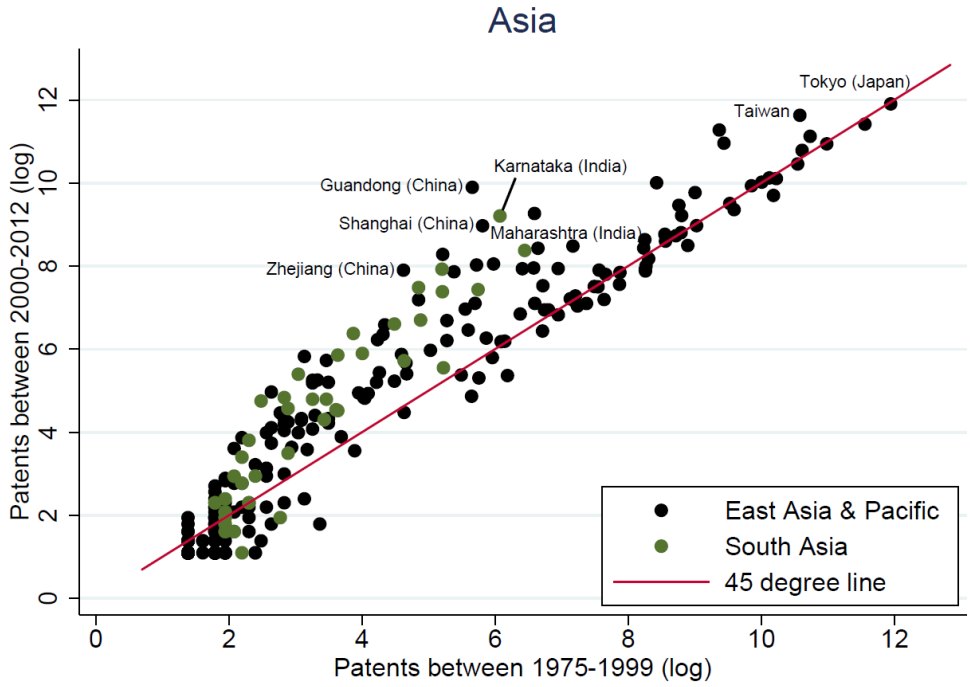


Note: circles are proportional to regional GDP in 2000

… some regions escape the trap!



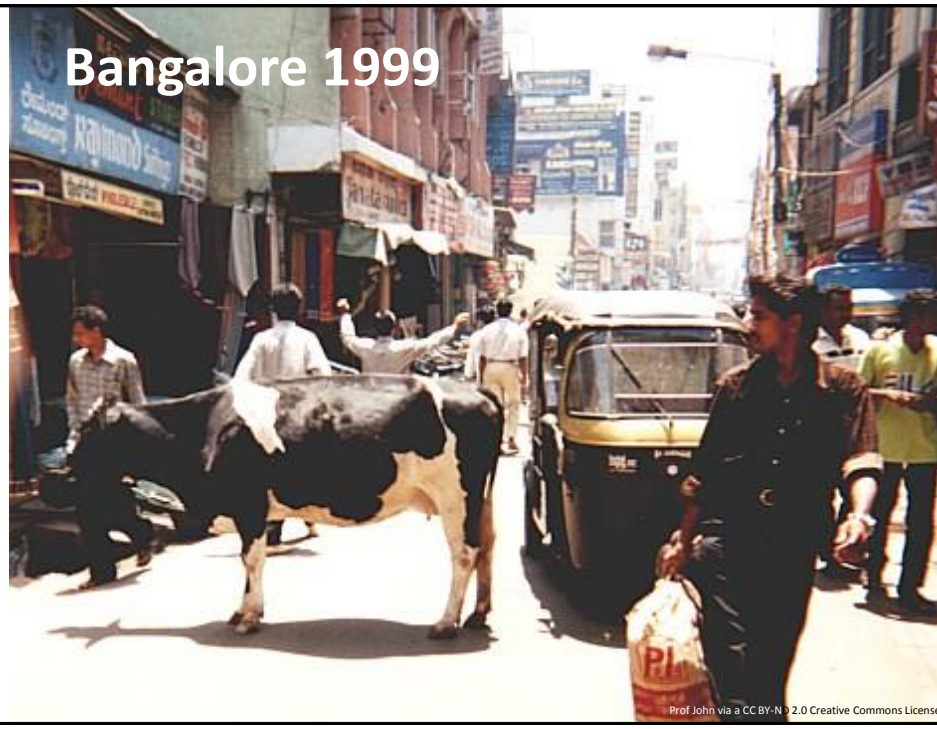
Note: circles are proportional to regional GDP in 2000


Asia
Tokyo (Japan)
Taiwan
Karnataka (India)
Guandong (China)
Shanghai (China)
Maharashtra (India)
Zhejiang (China)
East Asia & Pacific
South Asia
45 degree line
Patents between 2000-2012 (log)
Patents between 1975-1999 (log)
0
2
4
6
8
10
12

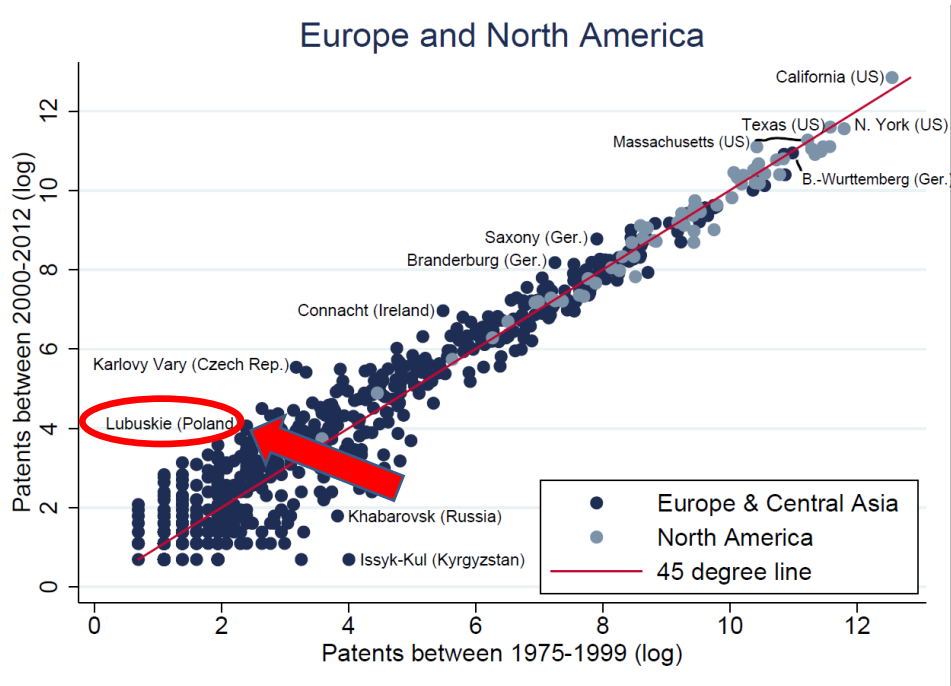

Guangzhou 1984
Kattebelletje via a CC BY-NC 2.0 Creative Commons License

Guangzhou 2017

Bangalore 1999



Bangalore 2017



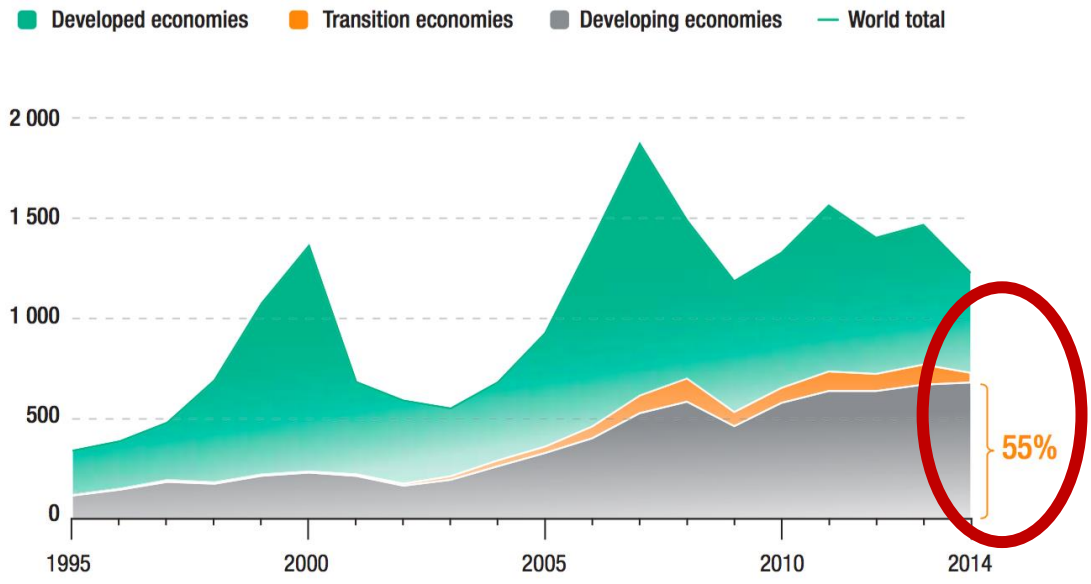
Lubuskie 1994

Lubuskie 2017

Some regions have escaped … How?

Global inflows of Foreign Direct Investment (FDI)

Billions $ - 1995-2015



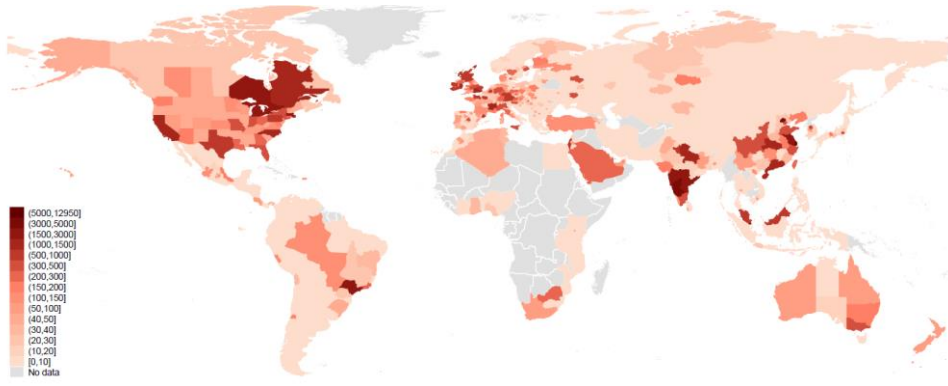
Source: UNCTAD - World Investment Report 2015

"**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

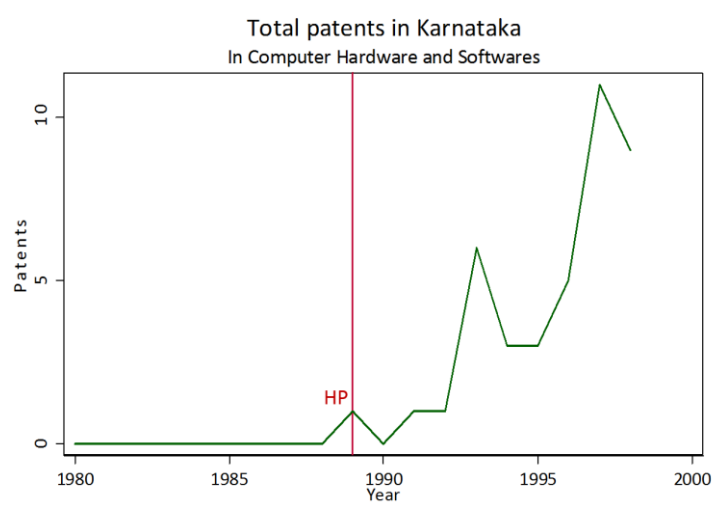
Foreign Investment in R&D activities

2004-2014

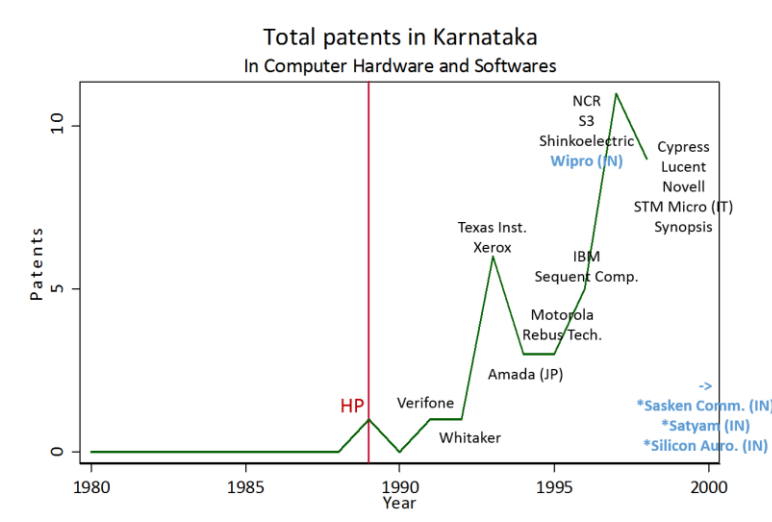


Inward FDI projects, Regional Cumulative Capex, Millions $ – Own Elaboration – FDI Markets Data

HP in Bangalore

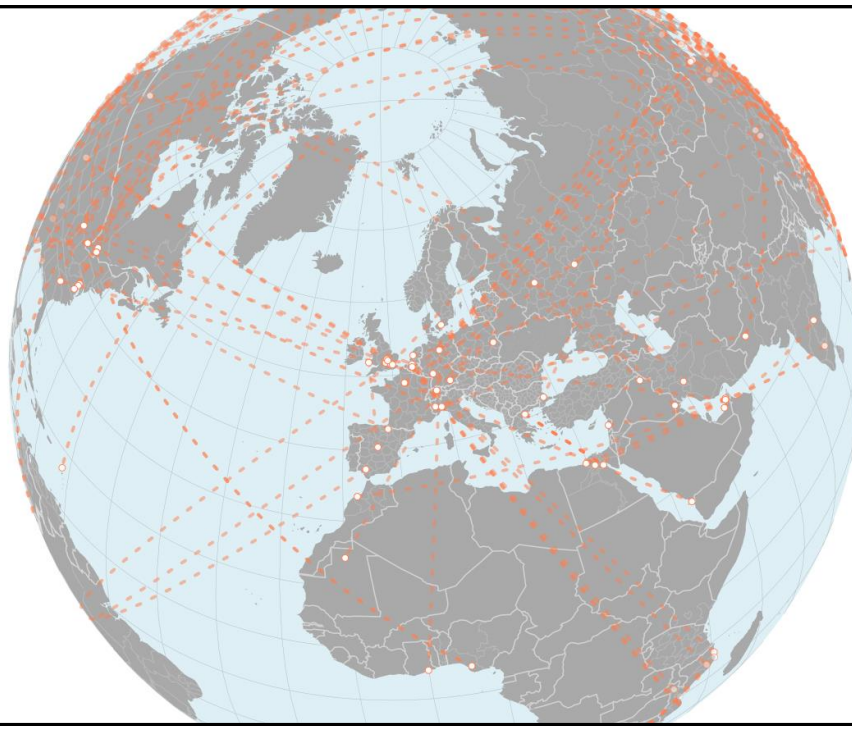


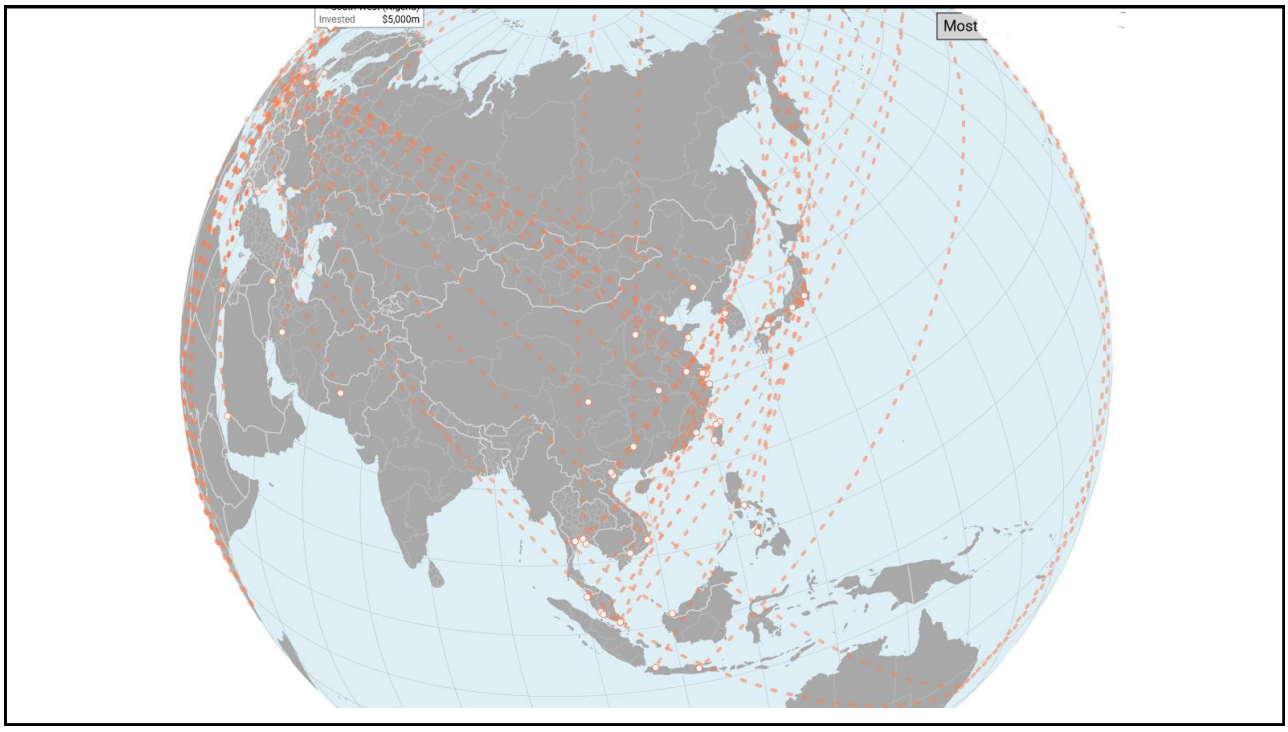
HP in Bangalore



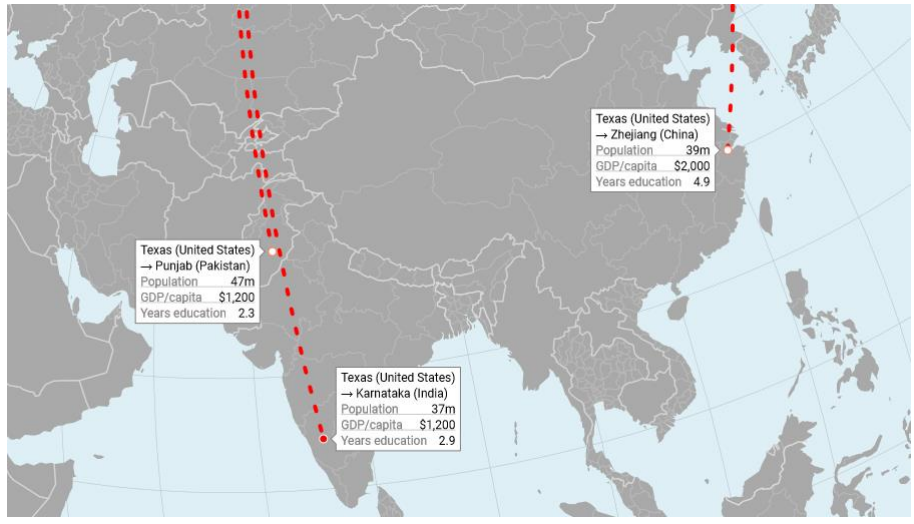
FDI to 'escape' the trap?

- **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



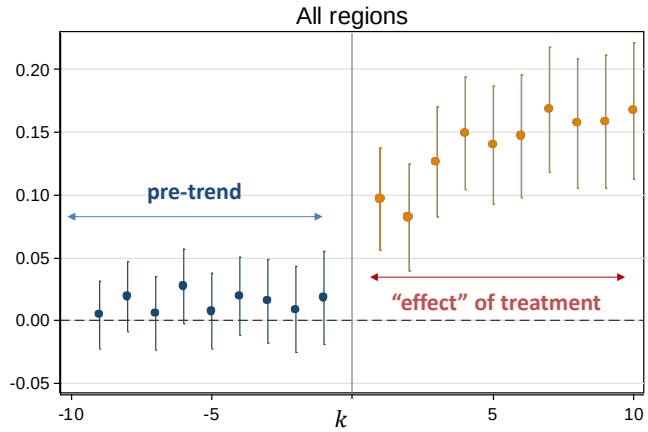


E.g. Texas Instruments in Bangalore



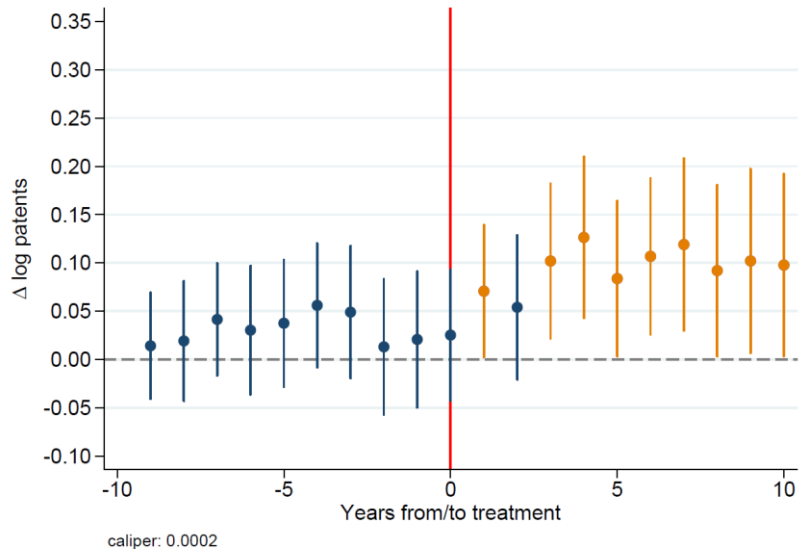
Difference-in-Differences

Patents by all firms



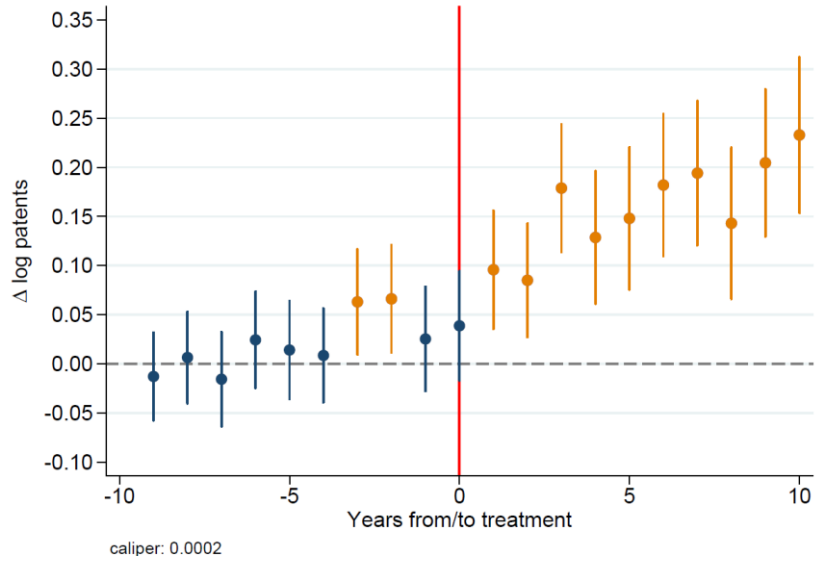
Difference-in-Differences

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



Difference-in-Differences

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

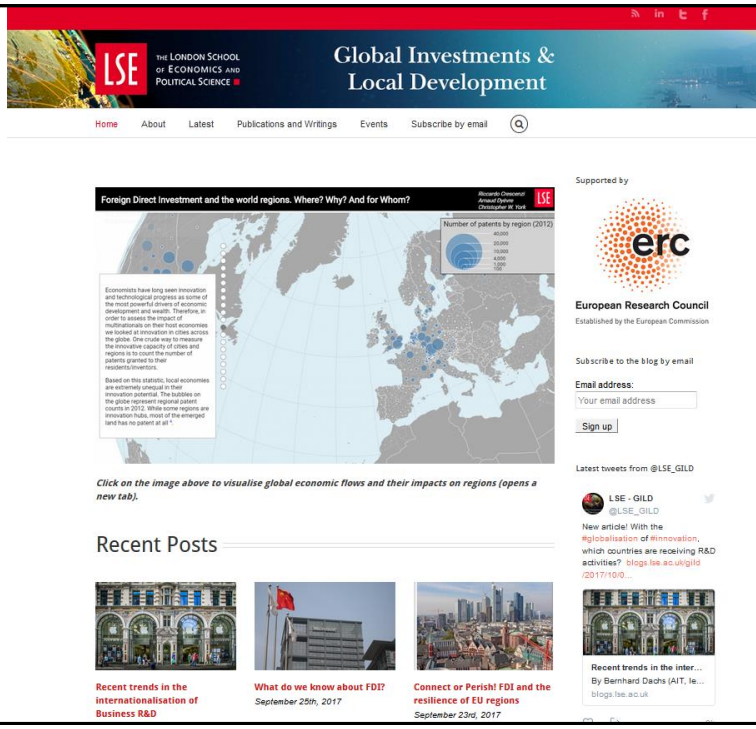


Not all Foreign Firms are good partners

- 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



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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