

# Foreign Direct Investments, innovation and connectivity

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INNOVA MEASURE IV online Final Workshop  
The impact of innovation on firms and regions

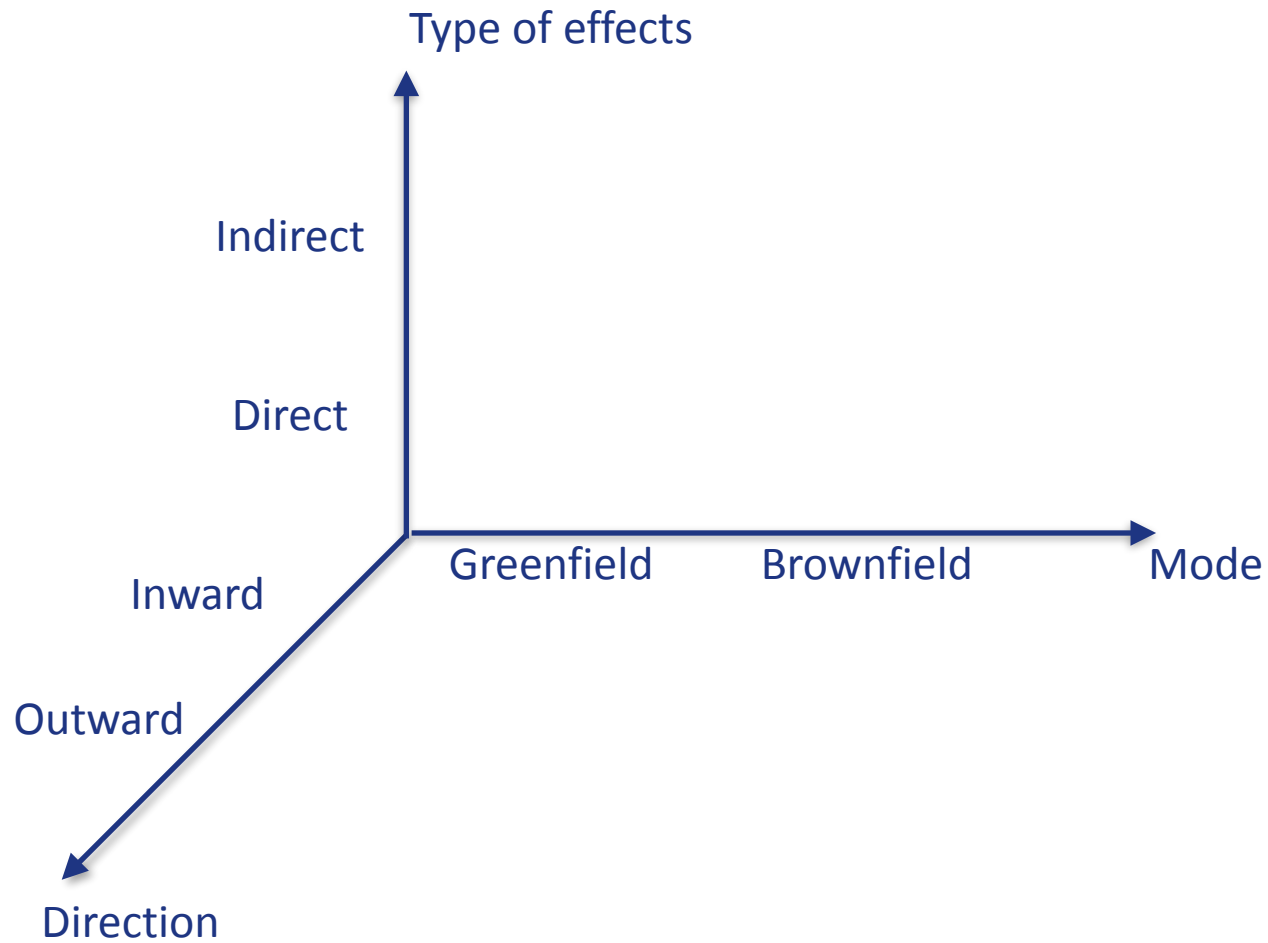


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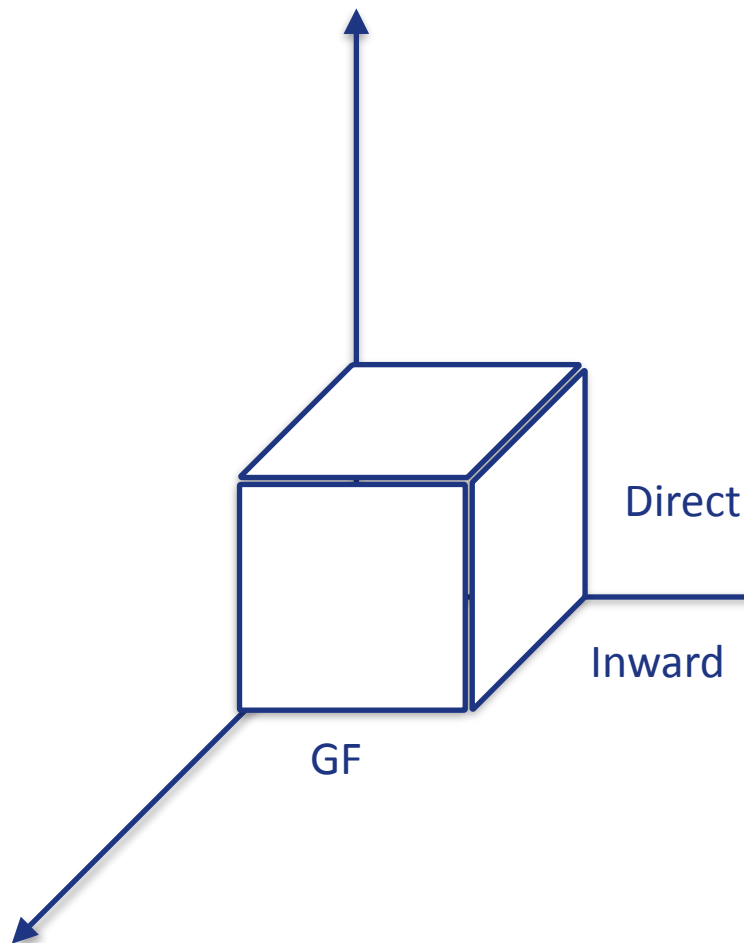
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Where business comes to life

# FDI and local innovation

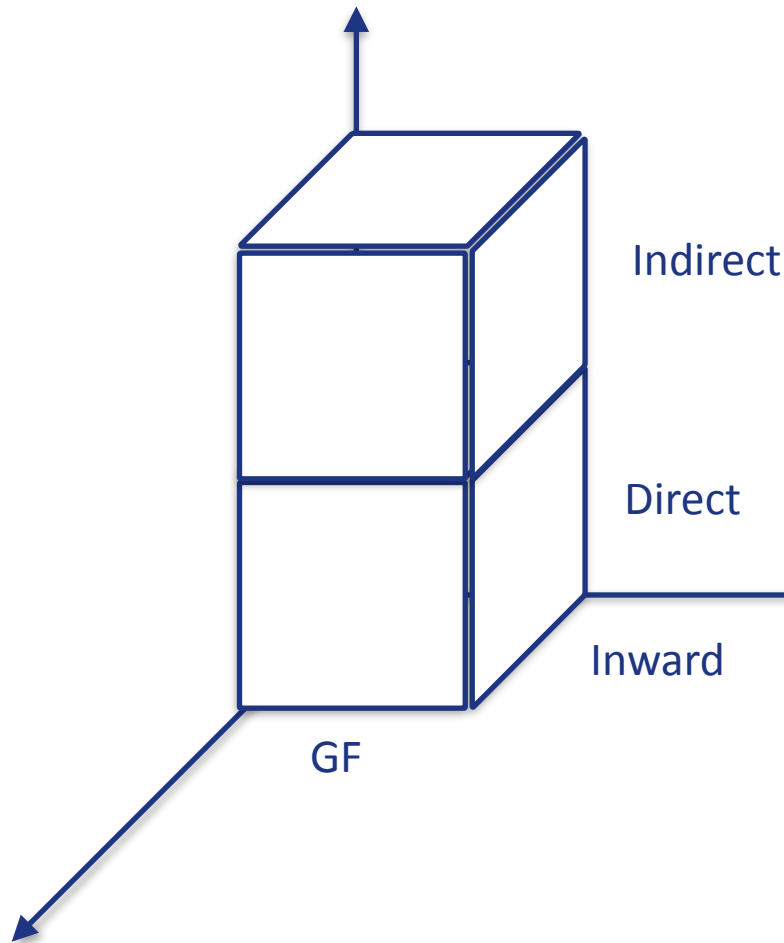


# FDI and local innovation



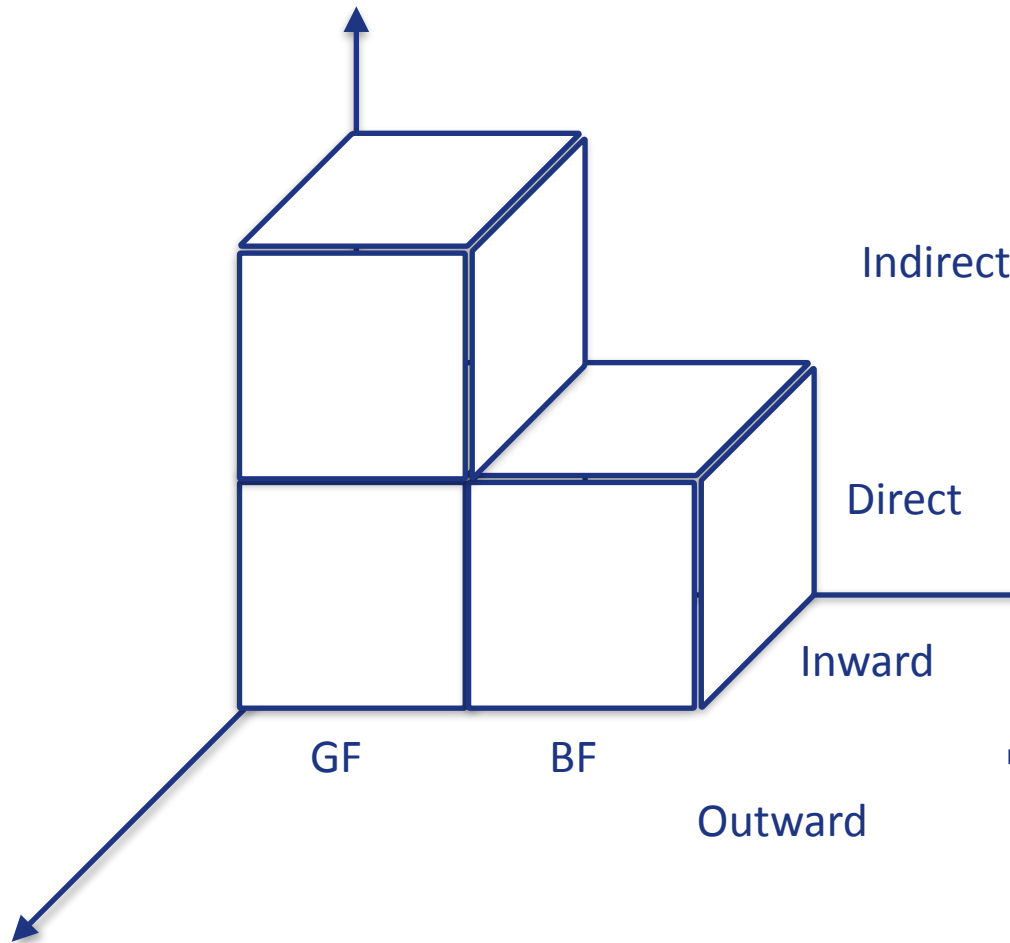
- Foreign MNEs are generally more innovative than local firms, hence when they enter they increase innovation
- But they need to build capacity, and this may:
  - ✓ require hiring local inventors
  - ✓ these inventors may eventually have more resources to do research and a more conducive environment, but it may take time to adjust

# FDI and local innovation



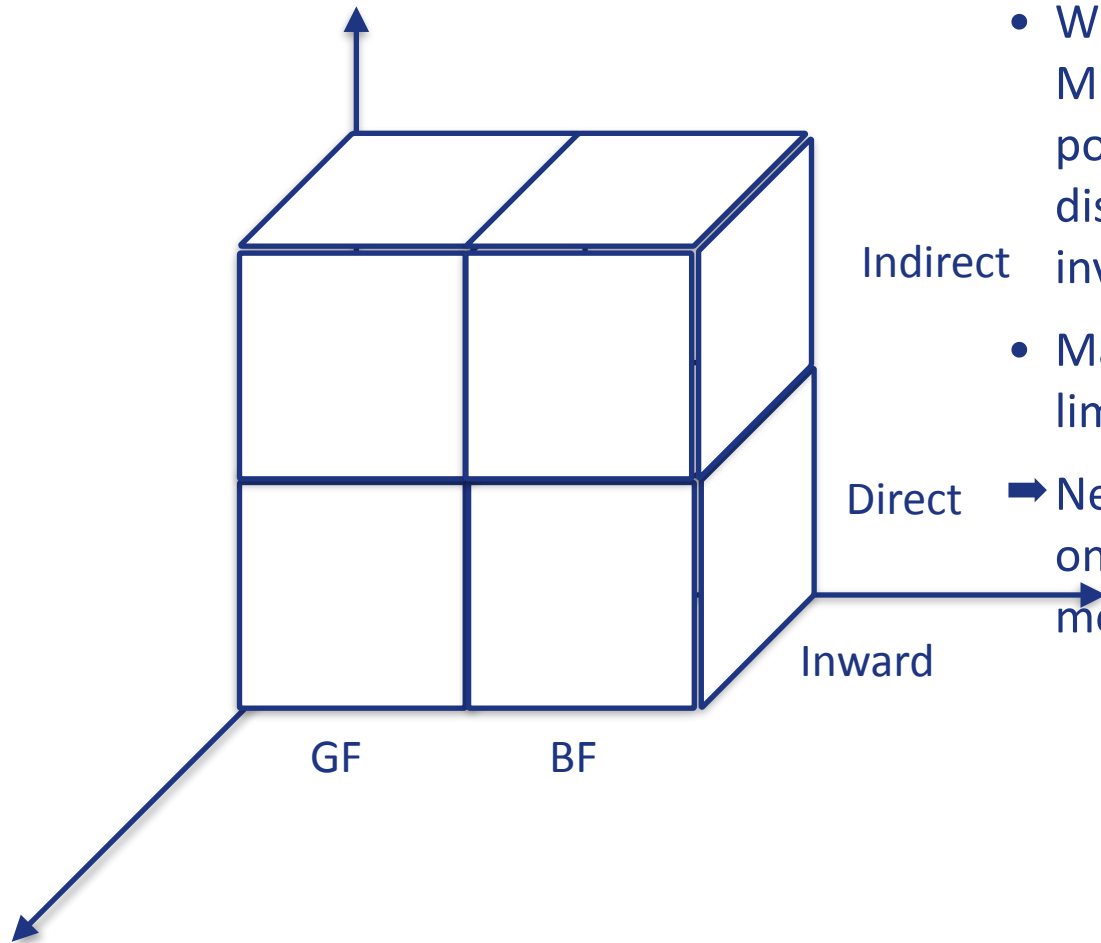
- Foreign MNEs can affect innovation in local firms
    - + knowledge spillovers
    - + backward/forward linkages
    - + labour mobility
    - market stealing
    - poaching inventors (war for talent)
    - disrupt innovation networks
- ➔ In the short run, negative effect may prevail

# FDI and local innovation



- When entering via M&As, MNEs do not need to build capacity and poach inventors
  - They just need to introduce better incentives and managerial practices
  - Maybe they will dismiss the less productive inventors/workers
- ➔ M&As may lead to faster manifestation of positive direct effects

# FDI and local innovation



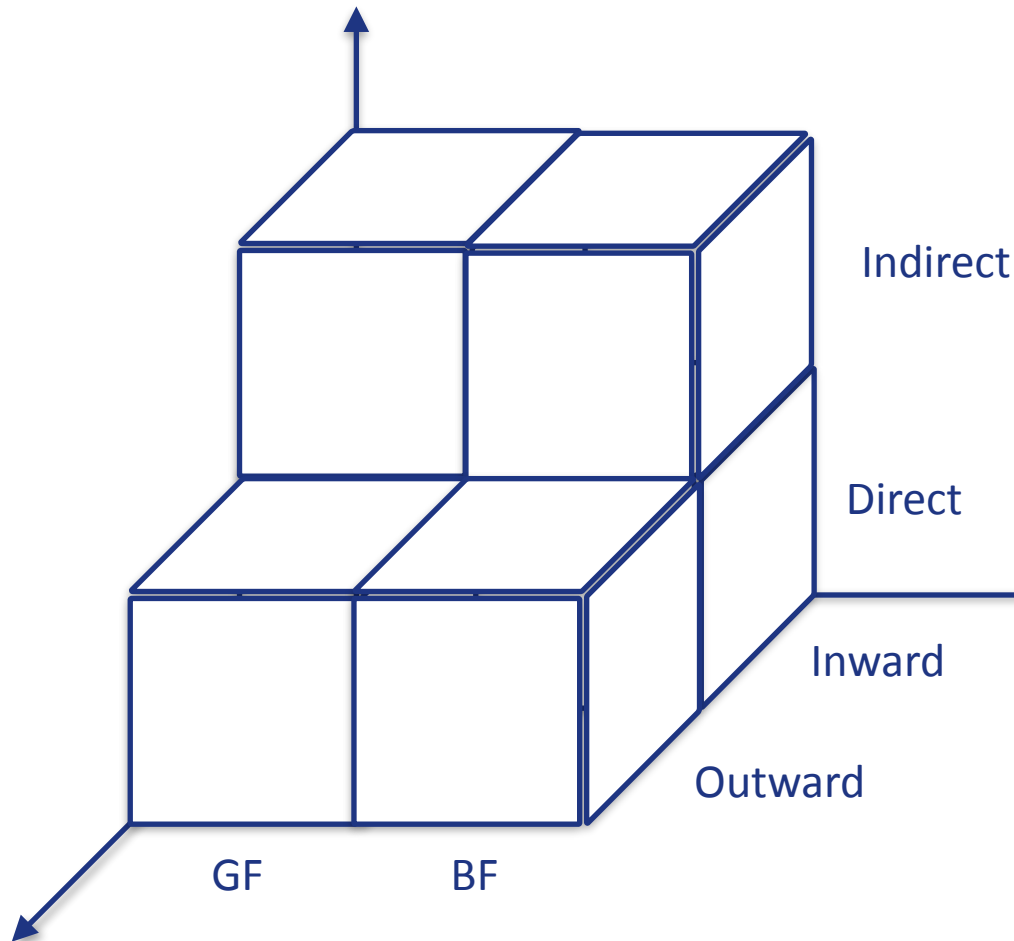
- When entering via M&A, MNEs do not need to poach inventors and disrupt existing teams of inventors
  - Market stealing effects are limited
- ➔ Negative indirect effects on innovation may be more limited

# FDI and local innovation

“It may be useful to draw an analogy between learning about foreign technology and learning a foreign language. I might learn a foreign language from foreigners living in my country (“inward FDI”), or I might learn it by living in a foreign country (“outward FDI”). Both are potentially useful and important methods of foreign language (knowledge) acquisition, although the latter perhaps tends to be more effective (it is more likely to involve “total immersion”).”

Potterie, B. V. P. D. L., & Lichtenberg, F. (2001). Does foreign direct investment transfer technology across borders?. *Review of Economics and statistics*, 83(3), 490-497.

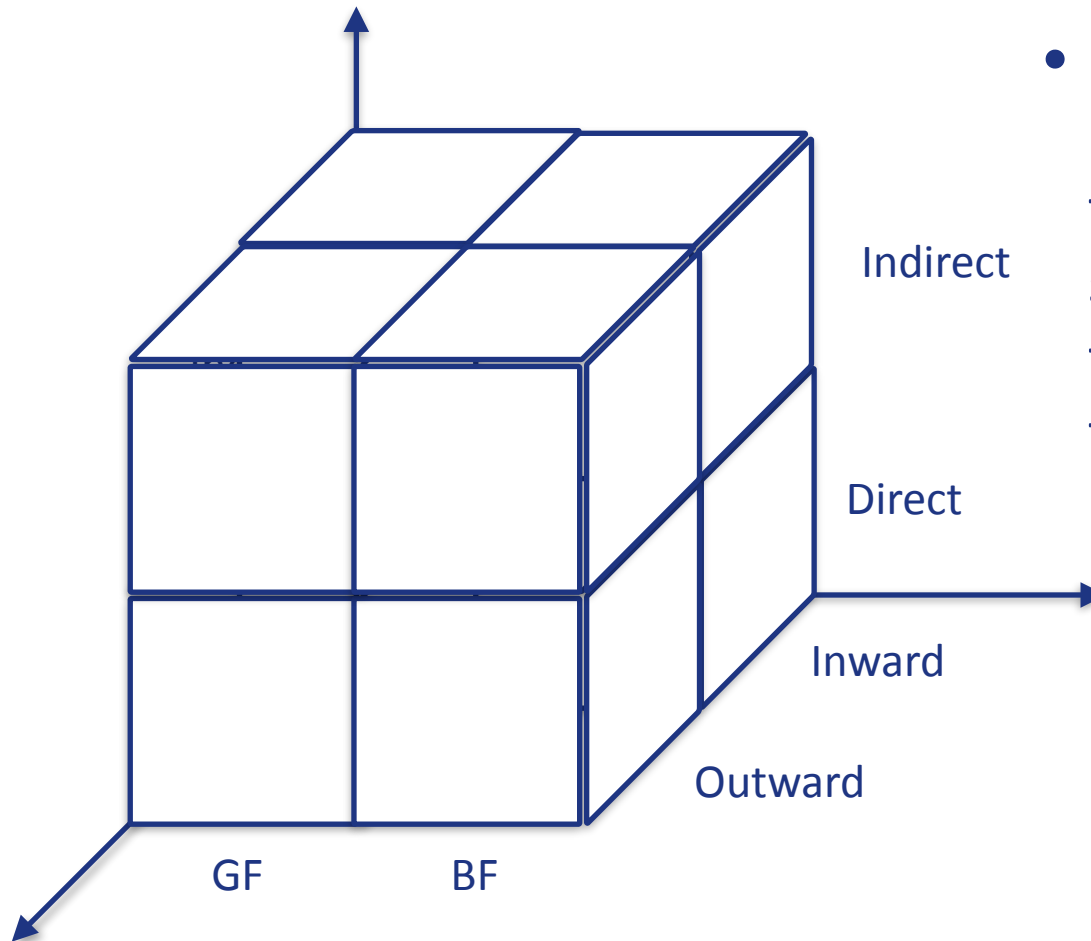
# FDI and local innovation



- Offshoring of innovation is often seen as leading to 'hollowing out'
- Instead, there is ample evidence that it could lead to 'reverse knowledge transfers'
- These are the direct effects of outward FDI on local innovation



# FDI and local innovation



- Eventually, these 'reverse knowledge transfers' can spillover onto local firms, thus leading to indirect effect on local innovation

# FDI and local innovation

Damioli and Marin are not able to distinguish between direct and indirect effects specifically, but their result are consistent with:

- greenfield inward FDI lead to a reduction in local innovation, as leading inventors are poached to work in newly created MNE subsidiaries
  - ▶ this may disrupt innovation networks and negatively affect innovation in local firms
  - ▶ in the short-run, poached inventors are less productive in new firms (MNE subsidiaries)
  - ▶ in the medium-run, positive externalities (including knowledge spillovers and mobility from MNEs to local firms) may occur
- M&A may have some positive effect in the short-run, since they do not disrupt local innovation networks and do not induce a war for talent
- Innovative outward FDI may be more effective in producing positive effects for local innovation

# FDI and local innovation

These results

- strike a more negative tone than other studies on FDI and local innovation (e.g. Crescenzi, Dyèvre and Neffke, 2020; Crescenzi, Gagliardi and Iammarino, 2015), but Damioli and Marin's analysis:
  - spans a much shorter time than Crescenzi, Dyèvre and Neffke, (2020)
  - is not limited to one country as in Crescenzi, Gagliardi and Iammarino (2015)
- align with evidence on reverse technology transfer (Criscuolo, 2009; Hsu, Lien and Chen, 2015) and on the effect of R&D offshoring on productivity growth of EU regions (Castellani and Pieri, 2013)

# FDI and local innovation

## Policy takeaways

- when it comes to contribution to local innovation, M&A may not be a curse and GF may not be a boon
  - negative short-run effects may be compensated by medium-run
  - hollowing out is not the more likely outcome of offshoring of innovation
    - ▶ ‘reverse knowledge transfer’ is highly likely
- ➡ short-termism and populism do not chime well with good innovation policy

# FDI and connectivity

- The potential importance of both inward and outward FDI for local innovation highlight their role as connectors of places across space
- Innovation evolves in very path dependent and localised patterns, thanks through dense a web of local interactions (“local buzz”)
- This create a highly polarised geography of innovation, with only a few innovation hotspots/clusters.
- To break this polarisation, places/clusters need to build ‘global pipelines’ that help them tap into knowledge bases outside the region and mitigate against both cognitive gaps and lock-ins.
  - Places which are left out can try and connect to these hotspots
  - Local buzz can become redundant and need to be fed with knowledge external to the cluster

# FDI and connectivity

Aquaro, Damioli and Lengyel show that

- European regions are indeed part of a dense network of M&As
  - the network of innovative M&As is more sparse and international
  - this is consistent with the view that
    - ▶ there are fewer places to connect to in the case of innovation activities
    - ▶ these are likely to be more distant and abroad
    - ▶ EU regions can use M&As to connect to these sources of knowledge
- Investing in R&D is crucial for EU regions to be able to connect to the rest of Europe (and the world)

# FDI and connectivity

The analysis in Aquaro, Damioli and Lengyel could be extended to:

- drill down into the nature of the innovative vs. non-innovative M&A network, by highlighting the extent to which they connect EU regions to more proximate vs. distant regions (e.g. other countries within the EU or outside the EU)
- investigate whether the more peripheral EU regions connect directly to distant hotspots, or rather use national or continental ‘bridging regions’