

EAEPE Symposium 2016 - The role of industrial policy in European re-industrialisation

Krakow, Poland, Campus of Cracow University of Economics, May 12th and 13th 2016

Proximity, Innovation and Industrial Policy

Yeoryios Stamboulis and Chrysi Stathaki

University of Thessaly

Aim and Objective

- ❑ Starting from a growing discourse on the relationship between innovation and proximity
 - How “space” matters?
- ❑ Given the rising importance of innovation for industry
- ❑ We inquire into the implications for industrial policy
 - How can industrial policy respond to the challenges?

The evolution of industrial policy and the significance of innovation

- ❑ **from** “a traditional approach based largely on product market interventions” (Warwick, 2013) **and** “the traditional static argument of allocative efficiency” (Peneder, 2016) **to** a dynamic rationale of “interventions that help build systems, create networks, develop institutions and align strategic priorities” (Warwick, 2013)
- ❑ Innovation, technological improvement & the promotion of national innovation systems as central objectives of industrial policy
- ❑ Industrial policy cannot afford to discount the spatial dimension

Proximity and Innovation

- ❑ Geographical bias in the explanation of innovative activities
- ❑ How can heterogeneous innovation players be coordinated?
 - proximity means more than just geography
 - proximity constitutes of physical and relative elements (space, cognition, culture, norms, laws, hierarchy, trust etc)
- ❑ Fivefold typology: geographical, cognitive, organizational, social and institutional proximity (Boschma, 2005; Mattes, 2012)

The five types of proximity

Type	Emphasis	Significance
Geographical	Space	Face to face interactions, easier transfer of tacit knowledge, timely responses to potential conflicts, knowledge externalities
Cognitive	Knowledge	Mutual understanding, networking, communication for the effective identification, interpretation and exploitation of new knowledge
Organizational	Control, hierarchy & coordination	Coordination of knowledge transmission, hierarchy between actors, monitoring information exchange, ownership rights and rewards
Social	Trust	Social relations, trust, easier exchange of tacit knowledge
Institutional	Framework	Common institutions and rules of the game, coherence with regard to laws, values and culture

Sources: Boschma, 2005, Mattes, 2012, own elaboration

The interplay between types of proximity

- ❑ Geographical proximity is not a sufficient condition for innovation
 - it may facilitate innovation in an indirect way
 - cognitive, organizational, institutional & social elements may substitute it
- ❑ Geographical and cognitive proximity represent the sufficient conditions for learning and innovation to take place
- ❑ Organizational proximity may not necessarily require social proximity
- ❑ Social proximity is closely related to the other proximity forms
- ❑ Institutional and geographical proximity are strongly interrelated, etc

Innovation viv-a-vis types of knowledge

	Synthetic	Analytical	Symbolic
“Core idea of innovation”	Incremental innovation, application or novel combination of existing knowledge	Creation of new knowledge	Recombination of existing knowledge
Dominant focus of activities	Applied, problem-related knowledge	Scientific knowledge and principles	Recombination of existing outcomes
Dominant knowledge fields	Tacit knowledge, practical skills, know-how	Codified knowledge, know-why	Tacit knowledge, practical skills, socialization, know-who
Dominant forms of learning	Learning by doing, trial and error, feedback loops, informal coordination with clients and suppliers	Co-operations between firms and research organizations	Learning through interactions and observations, and interactions within the professional community
Representative industries	Engineering manufacturing, automobiles etc	Pharmaceuticals, life-science industries, software and IT in automobiles	Cultural and creative industries

Sources: Asheim et. al., 2007, Mattes, 2012, own elaboration

Proximity viv-a-vis types of knowledge

	Synthetic	Analytical	Symbolic
Geographical	Important	Important	Crucial
Cognitive	Crucial	Crucial	Limited
Organizational	Limited	Crucial	Limited
Social	Crucial	Important	Crucial
Institutional	Important	Limited	Important

Sources: Asheim et. al., 2007, Mattes, 2012, own elaboration

Proximity industry and innovation: Ramifications for policy

- ❑ What policy should focus on in the context of different industries?
- ❑ How should policy differentiate and focus across the production sphere?
- ❑ As different types of proximity should be promoted, how should this take place, which instruments could deliver this?
- ❑ Policy should seek instruments aimed at enhancing specific types of proximity

Ramifications for policy

❑ Cognitive proximity

- focus on activities that involve interaction at the stages of investment & operation

❑ Organizational proximity

- intervention in the formation & evolution of value chains,
- priorities with respect to the sharing of the innovation dividend, the allocation of activities, the “sharing and access” to knowledge

❑ Social proximity

- facilitation of interaction on industrial matters (quality circles, hackathons in ICT and so on)

❑ Institutional proximity

- “transfer of good practices” across industries at a local level
- development of tools aiming at the institutional convergence of industries along with the “transfer of good practices”

Conclusion

❑ Industrial policy:

- should facilitate the creation of qualitative characteristics that boost innovation and eliminate relative barriers, both in absolute and relative terms
- can be more effective if it encompasses the concept of proximity
- Address space by enriching the policy mix with mostly soft instruments

❑ “One size does not fit all”

Thank you!