

Institute for European Analysis and Policy

Jean Monnet Centre of Excellence on EU Inclusive Open Strategic Autonomy

Abstract: research proposal "National competitiveness with international productivity: technology and cost determinants of economic performance across Global Value Chains", Dr. Ariel Luis Wirkierman, Senior Lecturer in Economics, Institute of Management Studies (IMS), Goldsmiths, University of London

International economic performance – as measured by (final) export market share dynamics – is key to assess the relative success of national industrial strategies across sectors. However, while competitiveness remained a *national* concept, production fragmentation made productivity an *international* one: when minimising global production costs, firms operating in a sector take as given the unit (labour) costs of inputs from different countries and articulate a global value chain (GVC, hereinafter), with a resulting inter-country productivity to produce a final product. In such a context, *global* inter-sectoral linkages of costs and technology may play a prominent role in explaining market share dynamics.

However, the relative importance of cost differentials $vis-\alpha-vis$ technological gaps as determinants of economic performance possibly depends on the type of sector considered (e.g., in the sense of Pavitt, 1984), with ensuing implications for the formulation of industrial and innovation policies at a sectoral level.

Covering the 1973-1991 period, Laursen and Meliciani (2000) found a significant role for national intersectoral technology linkages across scale-intensive and specialised supplier sectors, but less so for science-based and supplier-dominated industries. Given the radical changes in production techniques within the latest 30 years, the proposed research aims to revisit the work by Laursen and Meliciani (2000) with three additional considerations:

- To account for global inter-sectoral technology linkages and adopt the GVC as a unit of analysis;
- 2. To expand the coverage to service sectors, expanding the taxonomy in Pavitt (1984) on the basis of Bogliacino and Pianta (2016);

Project Ref.: 101127624

Luiss

Libera Università Internazionale degli Studi Sociali Guido Carli

Viale Romania 32, 00197 Roma T +39 06 85 22 54 47 croie@luiss.it

LUISS T

3. To incorporate a spatial dimension to the analysis – albeit if at the country level – following Meliciani and Savona (2015).

Data to perform the proposed project can be sourced from the OECD's ICIO, STAN and ANBERD databases¹, covering – at least – the 1995-2018 period (and possibly more recent years, hopefully available at the time of carrying out the research). While the project intends to study global dynamics, a specific focus on identifying and analysing divergent (or convergent) European country-level trajectories will be considered.

The project would enormously benefit from the possibility to collaborate with Prof. Valentina Meliciani and Prof. Maria Savona, given their expertise and previous research on the topic.

References:

- Bogliacino, F. and Pianta, M. (2016). e pavitt taxonomy, revisited: patterns of innovation in manufacturing and services. Economia Politica, 33(2):153–180.
- Laursen, K. and Meliciani, V. (2000). e Importance of Technology-Based Intersectoral Linkages for Market Share Dynamics. Review of World Economics, 136(4):702–723.
- Meliciani, V. and Savona, M. (2015). e determinants of regional specialisation in business services: agglomeration economies, vertical linkages and innovation. Journal of Economic Geography, 15(2):387–416.
- Pavitt, K. (1984). Sectoral patterns of technical change: towards a taxonomy and a theory.
 Research policy, 13(6):343-373.

¹ Accessible at http://oe.cd/icio, http://oe.cd/stan and http://oe.cd/anberd, respectively.