

## Reshaping global production: knowledge-intensive activities as drivers of structural change in the post-2008 crisis

Topic: Classical IO applications: Economic Structural Change and Dynamics

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Focusing in the post-2008 crisis period, this article contributes, first, to analyse the missing link between the global trade slowdown and changes in global production by redefining the concept of "global production system" (GPS). Under this framework and according to recent studies, we identified changing growth patterns between developed and emerging economies as well as compensation effects in terms of job creation and business activities specialization, with a knowledge-intensive biased towards developed economies. Indeed, we found that, behind global structural change, two main phenomena are acting -or likely to act- as the main drivers of international business relocation towards advanced economies since mid-2000: 1) a short-term reversal due to misjudgement correction of initial offshoring decision; and 2) the centrality of knowledge economy led by requirements of technological change embodied in newer production technologies.

Based mainly on the latest, it is possible to state that there is an emerging accumulation pattern led by knowledge-intensive capabilities and its development, which, being mainly concentrated in advanced economies, seems to be behind on-going reconfiguration of the GPS. Based on national input-output tables from WIOD latest version, this article, then, presents an empirical corroboration. To do so, it takes in consideration two groups of countries in which developed economies are represented by Canada, France, Germany, Italy, Japan, the UK and the USA (G7 members) and emerging economies are represented by Brazil, Russia, India, China (BRIC countries). In order to test the main hypothesis, existing taxonomies for activities classification nurtured by complementary literature review allows adopting the following criterium for sectoral breakdowns: knowledge-intensive, medium-tech or low-tech. Additionally, input-output methodologies are applied for measuring structural change in the two countries' groups between early-2000 and 2014.

We conclude that developed economies have strengthened their specialization pattern in knowledge-intensive activities since early-2000s, whereas emerging economies have been growing in medium-tech and low-tech activities. Since these activities are related to a lower share of value added/gross output in comparison with the analogous coefficient for knowledge-intensive activities, current academic debate and global agenda should discuss issues related to international division of labour and its implications in order to contribute to a more comprehensive analysis for sustainable development. In this sense, a key question for further research is how far specialization in medium- or low-tech activities is likely to affect local capabilities for creating and scaling up complex technologies -rather than just adopting or using- without deepening polarization between advanced and emerging -or developing- economies as well as within them.

Alternatively, it may be considered for:

• Classical IO applications (1), Economic Structural Change and Dynamics or

• Thematic IO analysis (9) Technology/Innovation