

Measuring the Industry Relocation at the Macro-level

Topic: Input-Output Analysis: Industrial Policies

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In recent years, the COVID-19 pandemic and the consequential disruption in the GVCs, the increasing geopolitical tensions and uncertainties (e.g., the Russia-Ukraine war and the Brexit), the rising trade protectionism (e.g., the US-China trade war), and the associated policies have strongly stimulated the global industry relocation in a reverse direction. As a result, the transformation of global and national industry relocation has been prompted in the recent past, and how it is and will be transformed has become an increasingly important question, drawing a great deal of interest among economists, policymakers, entrepreneurs, and the public. A proper discussion of that requires first and foremost an appropriate measure of industry relocation, which, to date, has been relatively poorly developed (see next section for more details). Thus, this paper has proposed a systematic approach to measuring the magnitude of industry relocation at the macro-level, drawing on data assembled in the inter-country/ inter-regional input-output tables and associated models. The approach overcomes the biases from the existing industry relocation measures, and thus, advances the toolset for capturing the evolution of production location.

In the empirical section, using the new measure, the paper investigated how the global and China's national industry relocation evolved from 2002 to 2017. The empirical findings show that Jones & Kierzkowski's (2005) hypothesis that "the production activities are more dispersed worldwide, while simultaneously agglomerated nationally" is only held during 2002-2007. However, after the shock of the global financial crisis in 2008, the premise of Jones & Kierzkowski's (2005) hypothesis has been challenged, and the patterns of industry relocation have changed. The dispersion pattern in global industry relocation weakened during 2012-2017. Meanwhile, within China, industry relocation experienced a transformation from slight agglomeration to dispersion. Such an evolution was a dominant feature of the technology-intensive industries, which is the most representative industry for the GVCs.