Chinese Provincesâ€“Embedded Inter-Country Input-Output Datasets with Firm Ownership Heterogeneity

Topic: Extending the Inter-Country Input-Output Framework: Updated OECD Datasets, Methods, and Policy Applications

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Understanding how domestic and foreign-invested firms across Chinaâ€™s provinces participate in domestic and international production networks has become increasingly important for both scientific research and policy analysis. However, existing data infrastructuresâ€”most notably inputâ€“output (IO) datasetsâ€”do not adequately support this line of inquiry. Conventional inter-country IO (ICIO) databases treat China as a single, homogeneous economy and therefore overlook substantial variation at the provincial level, while Chinaâ€™s inter-provincial IO tables provide no direct linkages between individual provinces and their foreign trading partners. Moreover, firm-ownership heterogeneity is largely absent from most available ICIO datasets. To address these limitations, we construct a new ICIO dataset that integrates Chinaâ€™s inter-provincial IO tablesâ€”disaggregated by domestic and foreign-invested firmsâ€”with the OECDâ€™s Activities of Multinational Enterprisesâ€“ICIO data and detailed Chinese customs statistics, all within a globally consistent accounting framework. The resulting database comprises 26 sectors, 107 regions, and two ownership categories for the benchmark years 2007, 2012, and 2017. This data offers a new foundation for empirical work in economics, environmental assessment, network analyses, and their interdisciplinary applications, particularly for studies examining how firms with different ownership structures across Chinese provinces engage in global supply chains.