Constructing a China's Multi-Year Multi-Provincial Input-Output Table

Topic:

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Unlike small-sized countries, China has a large territory and numerous provinces with different resource endowments, locational conditions, and development foundations. Therefore, when investigating China's issues, not only the nation-wide but also the regional analysis should be involved. As the nation-wide data have been well developed, the regional data are still fragmental. There is a lack of a consistent and complete regional database with a long time span, especially the data about the inter-provincial economic links. To fill this gap, we aim to construct a China's multi-year multi-provincial input-output table. We collecte Chinese provincial IO tables for 1987, 1992, 1997, 2002, 2007, and 2012, and re-construct the data of international trade and domestic trade for each province in the provincial IO tables using the customs data. We then use the method of minimising cross entropy and gravity model to estimate interregional trade flows based on the railway transportation data. With all these information, we finally build a multi-year multi-provincial input-output database of mainland China covering 30 provinces (except for Tibet due to data limitation) and 33 sectors. We also apply this database to analyse the economic links between Chinese provinces and sectors throughout the historical years. This database could provide a foundation of regional data to those who focus on issues about China's economic development.