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

Topic: Regional Modeling
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Abstract:
Unlike small-sized countries, China has a large territory and numerous provinces with different resource endowments, locational conditions and development foundations. Therefore, not only nation-wide investigation but also regional analysis should be involved when China's issues are studied. Nation-wide data has been well developed, while regional data is still relatively fragmental. There is a lack of a consistent and complete regional data base with a long time span, especially the data about inter-provincial trade. To fill this gap, we are working on constructing a China's multi-year multi-provincial input-output table.

We have collected Chinese provincial IO tables for 1992, 1997, 2002 and 2007, and re-construct the data of international trade and domestic trade for each province in the provincial IO tables according to the customs data. Then we use the method of minimising cross entropy as well as a 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 Tibet) and each province includes 33 sectors.

This database could provide a good regional data foundation to those who focus on Chinese economic development issues. Besides, we also apply the database to systematically analyse the economic links between Chinese provinces and its historical trend.

Key words: China's multi-provincial input-output table; Provincial trade flows; Chinese regional economic links

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