

## **The Compilation Method of 2012 China's Multi-regional Input-output Model**

Topic: IO Data: Annual, Regional, and Multiregional Input-Output Accounts and intra- and international Trade

Author: Jianqin YUAN

Co-Authors: Jifeng Li, Yaxiong ZHANG

With the constantly improving of marketization and the growing linkages between regions, the value-added distribution of regions in the industrial chain is constantly changing. It is not enough to accurately understand the characteristics of regional economy on the basis of the single administrative region. Therefore, the compilation of coordinated national, provincial and, in particular, inter-provincial input-output models has become a frontier method adopted by international organizations, governments and research institutions to do the regional researches. According to the error analysis of China multi-regional input-output models (CMRIO) in 2002 and 2007, it is found that the inconsistency between national and provincial tables is one of the main sources of the error. So, based on the national and 31 provincial input-output tables of 2012, firstly, this paper conducted a comparative analysis of the national and provincial tables from the perspectives of conceptual inconsistency, structural inconsistency and trade inconsistency to provide the basis for balancing and analyzing the error sources of CMRIO. Secondly, the improved Chenery-Moses model was adopted to estimate interregional trade flow and then the CMRIO model was developed. Finally, based on the CMRIO, the employment matrices of 31 provinces with 42 sectors and four types of labor force in 2012 were compiled. The results showed that most provinces had the largest proportion of agricultural labor force and rural non-agricultural labor force, while developed city, such as Beijing and Shanghai had the largest proportion of labor force with high or low skill in urban non-agricultural industries. Final consumption had the strongest pull on total employment, while exports had a weaker pull on employment than domestic demand. Finally, the degree to which the final demand of different industries drives the four types of labor force varies greatly.