CHIOT: Estimating Historical Environmentally Extended Input-output Tables of China

Topic: Tracing Carbon Emissions in Global Value Chains II
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The objective of the project called China historical input-output tables (CHIOT) is to estimate input-output tables (IOT) of China for every five years from 1952 to 1972. Because the economic growth theory is about long-term issues, analyzing only the post-reform-and-open era is hard to give a panorama of the base of economic growth of China. However, except for a trial version of IOT compiled for the year of 1973, there exist only IOTs of China for the post-reform-and-open era. Based on this background, we initialized the CHIOT project. The project starts from the estimation of sectoral direct input coefficients. The estimation is mainly based on firm-level technical data that we obtained from representative firms of each industry. By adding few reasonable assumption, we obtain average direct input coefficients at the national level. Based on this, the flow tables are generated by using national statistical data. In order to understand the environmental impact of production and consumption in the early period of the P.R.C., we also estimate several key environmental pollutions by IO sectors, which make our tables be environmentally extended IOTs.