A method to identify key sectors and their feedback loops for a certain industry in one economy and its application in the evaluation of the role of real estate industry in Chicago

Topic: 814D  Region/country-specific Analysis
Author: Xiuli LIU
Co-Authors: Geoffrey J.D. HEWINGS

This paper explores the possibility of merging into a 'combined' proposal three standard I-O methods identifying key sectors and their feedback loops, namely Hypothetical Extraction, Field of Influence and the Hieratical Feedback Loop Method. The novelty of the combined formulation allows us to disaggregate the backward stimuli of one certain sector into total, internal, external backward indicators and the corresponding feedback loops. With Chicago input-output tables, we applied this method to single out key sectors that connected with real estate industry in Chicago economic system-specifically. In addition, the approach provides insights into the feedback loops of the industrial linkages that are associated with the production and distribution of real estate industry. From this analysis, the sectors that impact the intensity of the backward effects of the real estate industry and their feedback loops can be identified, thereby providing a more comprehensive set of perspectives for the evaluation of the role of real estate industry in the economy.