Complexity of Chinese economy and its evolution: Measurement based upon 1987-2007 National and Provincial I/0 Tables

Topic: Input-Output accounts and statistics 1
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This paper presents measurement of complexity of Chinese economy and its evolution through the application of method of average propagations lengths based upon the data of national and provincial 1987-2007 I/0 tables. Results of study shows:

(1) Overall Complexity of Chinese economy is increased explicitely, industrial chain is extended continuously within the period of 1987-2007. The complexity index of Chinese economy is increased from 2.69 in 1987 to 3.63 in 2007, an increase of 34.9%. There is minor decrease of economic complexity index in the period of 1997-2002 due to structural change brought from mergers and re-organization of SOEs.

(2) Basic position of energy and resource mining industry in China's industrial chain is further strengthened while the terminal end sectors of industrial chain such as warehouse and retail, real estate and social service have more broad effect on backward pull to industries.

(3) There are explicite differences of economic complexity and its evolution of various regions of China. The economic complexity of Guangdong, Zhejiang and Jiangsu province of Eastern region is higher than Jiangxi, Hunan, ShaanXi and Xiangjiang provinces and autonomous region of Central and Western region, and the rate of increase of Economic Complexity Index is more explicitly.

Key Words: Economic Complexity; Average Propagations Lengths; Production Chains

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