

Incremental Market-Oriented Reforms, Industrial Policies and Economic Growth in China

Topic: Input-Output Analysis: Industrial Policies and Prices

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(1) The research question: Since China's reform and openness in 1978, it has adopted incremental rather than radical market-oriented reforms. Compared to radical market-oriented reforms, adopting incremental market-oriented reforms could accumulate experience, and avoid the risk of overall failures, and a rapid distortion in income distribution. China's rapid growth has proved that the way of incremental market-oriented reforms is successful. Incremental market-oriented reforms mean taking reforms in some sectors firstly, and then the other sectors. For China, incremental market-oriented reforms have been implemented in downstream sectors before upstream sectors. On the contrary, China taking industrial policies to support the development of upstream over downstream sectors. So, China has adopted the policy combination of market-oriented reform in the downstream and industrial policy in the upstream sector. There are two questions this paper tries to answer, the first one is how this policy combination affects economic growth in China. The other question is whether this combination is the most suitable for China, what if China takes the policy combination of market-oriented reform in upstream and industrial policy in downstream sectors.

(2) The method used: this paper studies the above questions theoretically and empirically. On one hand, we extend the production network model developed by Liu (2019) and apply this model to analyze how the position of the sector in the production chain affects the effect of market-oriented reform and industrial policy. On the other hand, we estimate the effect of China's actual policy combination, which is market-oriented reform in downstream and industrial policy in upstream sectors. After that, we also construct three counterfactual facts of market-oriented reform in downstream and industrial policy in downstream sectors, market-oriented reform in upstream and industrial policy in upstream sectors, and market-oriented reform in upstream and industrial policy in downstream sectors. Comparing the effect of actual policy combinations with three counterfactual policy combinations, we can find which policy combination would increase China's economic growth the most.

(3) The data used: this paper has two main data sources. The first one is firm data called the Annual Survey of Industrial Firms for the period 1998-2007, which is collected by the National Bureau of Statistics (NBS). This data includes all industrial firms that are either state-owned firms or non-state firms with sales above 5 million RMB. With this firm data, we estimate the firm's markup to measure the intensity of market-oriented reform across sectors in different years. Annual Survey of Industrial Firms also includes the information on the subsidy received from the government in each firm, which could be viewed as the support by industrial policy.

The second data used in this paper is the Input-output table in China. To match the firm data, we use the Input-output table in 1997 and 2007 to measure the linkage across sectors. The input-output table in 1997 contains 124 sectors, and the input-output table in 2007 contains 135 sectors. In order to match these two input-output tables, we decompose and merge sectors in input-output tables. Finally, we get two input-output tables containing 107 sectors.

(4) The novelty of the research: there is two-strand literature related to our paper mainly, the first one is about the equilibrium model with production network, and the second one is about China's market-oriented reform and industrial policy. Compared to the existing literature about the equilibrium model with production network, this paper is applied research, we applied this model to study an interesting and important question in China. We also extend this model to analyze how the

position of the production chain would affect the effect of markup decreasing. This research is also closely related to studies on the effects of market-oriented reform or key industrial policies in China. However, existing literature tends to discuss the economic impact of incremental market-oriented reforms and key industrial policies separately, and the conclusions are mixed. While the incremental market-oriented reforms and key industrial policies both have obvious sector characteristics. Incremental market-oriented reforms have been implemented in downstream sectors before upstream sectors, whereas industrial policies have primarily supported the development of upstream over downstream sectors. We combine these two policies together and analyze how the interaction of these two policies affects the economic growth in China. Then, we construct a counterfactual analysis to explore whether these policies' combination is best for China. What we find provides a new perspective to understanding the rapid economic growth in China.