

A Summary of the Frontiers of China's Industrial Organization Research: Fields, Issues and Methods

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Keywords: market structure, market control, enterprise mergers, technological change, industrial regulation

Abstract: This article first sorts out the development context of industrial organization theory and based on the research context of industrial organization theory, is divided into four major industrial organization research fields: market structure, market control, technological change, and industrial regulation. Network platform searches select high-level journal articles, project fund to support essential research papers related issues, were collated and analysed and reviewed to total knot 2010 annual forefront of the development of industrial organization to study Chinese.

1. Introduction

The germination of industrial organization theory originated from Plato's division of labour thought and Adam Smith's classical economic thought. "Marshall conflict theory", Chamberlain and Robinson monopolistic competition and imperfect competition theory, and Clark's "effective competition theory" have further enriched the connotation of industrial organization theory.

Industrial Organization theory originated in the 20 Century 30 American era, it has to form the Harvard School, Chicago School, a new approach of industrial organization school, the new system science camp. The development of industrial organization theory is gradually mature and perfect, and it is continually changing from theoretical research to empirical research. The empirical research mainly adopts the research methods of quantitative economics. Enter 21 since the century, new research progress mostly in industrial organization theory of industrial organization and other forms of economic management branch of applied interdisciplinary research methods, continue to broaden their field of study, continue to strengthen the depth of research. In this article, the author is divided into four major industrial organization research areas: market structure, market control, technological change, and industrial regulation. Through the search on CNKI platform, the author selects high-level journal papers and fund project supporting papers related to significant research issues, aiming to summarize the development frontier of China's industrial organization research since 2010.

2. Market structure: market concentration and spatial agglomeration

This part refers to Barriers to entry and market structure. Entry barriers are an essential factor in determining the market structure. Xia Jijun and Wang Lei (2015) used the industrial evolution model to analyse the effects of entry barriers on my country's manufacturing market structure and industry productivity by taking all state-owned and above-scale enterprises from 1998 to 2007 as the research objects. Impact. Moreover, further, examine the administrative barriers to entry and sunk costs with the proportion of state-owned economy as proxy variables. The analysis concludes that the decline in sunk costs has the effect of reducing the concentration of the manufacturing market. Administrative barriers to entry with the proportion of the state-owned economy as a proxy variable have no significant impact on the market structure. However, the decline in sunk costs and the proportion of the state-owned economy is both. It plays an essential role in improving industry productivity. It explained that reducing entry barriers, significantly reducing administrative entry barriers, and overcoming policy distortions in the factor market is to improve the market mechanism and an

effective measure to increase industrial productivity.

Market structure, efficiency and performance. The traditional SCP school represented by Bain believes that market structure determines market behaviour, which in turn determines market performance. However, as the representative of the Chicago school of thought that has a dual between market structure, conduct and understanding to the relationship, and proposed to improve the efficiency of the competitive market concentration increase that efficiency is a critical factor in the decision to market performance. Based on this traditional theory, modern empirical methods of China's wind power industry has been studied, mainly collected 2007 - 2015 years of relevant data of wind power listed companies in our country, the integrated use of market share, market concentration, the Herfindahl - He The Seaman Index analyses the market structure of the wind power industry. It conducts a Tobit regression on the relationship between the market structure, efficiency, and corporate performance of the wind power industry. It points out that in China's wind power industry, first, the relative market power hypothesis and the collusion hypothesis are established. Therefore, it is suggested that wind power companies should increase market concentration through high-quality products to improve market performance.

3. Market control: pricing and non-pricing strategies

This part refers to Prevent entry strategies and carbon reduction. The use in products will make it possible for consumers to obtain information on environmentally friendly carbon emissions of products, which will help consumers make decisions to purchase environmentally friendly products when buying products, thereby overcoming environmental damage. Externalities and market failure issues. Based on this, Mu Yanfen, and Niejia Jia, taking into account the impact of consumers' environmental awareness on demand, low-carbon production and low-carbon standards are used as an option for enterprises to enter and prevent entry strategies.

Non-pricing prevents entry strategies. The increase in innovation investment is considered to be one of the critical factors for companies to continuously improve their independent innovation capabilities, and it is also considered to be the result of the market environment's incentives for innovation. However, previous researches mainly focused on the innovation investment of incumbents, and there is less research on the impact of threats to potential entrants on the innovation investment of enterprises. Based on this, Ye Lin and Zeng Guoan (2013) From the perspective of an entry prevention strategy, the game theory was used to studying the innovation input and innovation behaviour of incumbent companies, and the Hausman test method was used to conduct empirical analysis. It is pointed out that incumbent companies with high entry barriers have little incentive to prevent potential entrants from entering through the strategic behaviour of innovation due to their strong deterrence capabilities.

In contrast, companies with low entry barriers have weak deterrence capabilities to control behavior. , Resulting in excessively high innovation input costs, and there is no incentive to innovate; only incumbents with moderate entry barriers have strong incentives for innovation, because their innovation returns are relatively high. Therefore, Ye Lin and Zeng Guoan summarized this conclusion as the probability of incumbent companies using innovative methods to prevent entry into strategic behaviors has a nonlinear relationship with the height of entry barriers, or a significant "inverted U - shaped" relationship.

4. Technological changes: product development and patent system

This part refers to Entrusted agency and R&D outsourcing. The principal-agent relationship induced by product R&D outsourcing inherently has problems of adverse selection and moral hazard, which in turn makes product R&D outsourcing timelier and riskier. The outsourcing party can reduce the timeliness and risk of product R&D outsourcing through information screening. Based on this, Kening Liu and Song Huaming (2014) studied product R&D outsourcing based on the information screening model in the principal-agent theory. They concluded that The incentive screening contract is helpful to the conclusion that the contractor performs high-quality contract. It assumes that the cost

function of the contracting party in the market has two types: one is a high-cost coefficient; the other is a low-cost coefficient. The expected profit of the contracting party is the target value of the dependent variable and two types designed for the contracting party. Identify the contract and induce the contractor to disclose the actual cost information, to realize the incentive for the contractor to complete the R&D task with the best effort level.

The patent system and economic growth. The role of the patent system in promoting economic development has always been the focus of research by economists. Among them, utility model patents system is an effective institutional arrangement latecomer to catch up with developed countries, but the role of the patent system on the direction of economic growth still no consensus. The positive effects of the patent system are mainly manifested in encouraging innovation, protecting the investment, and promoting technology diffusion. The adverse effects of the patent system are primarily manifested in the net welfare loss, monopoly economy, and system costs brought about by the patent system itself. But whether the positive effect is large or the adverse impact is enormous, there is no conclusion. To further clarify the mechanism of the patent system on the economic growth of specific industries, Zhang Huiying and Wei Yanhui (2015) high-tech industry as the research object, the relationship between the number of patents and industry output. The study found that the effect of the patent system on the output value of different industries in the high-tech industry is both positive and negative. The impact of the patent system on industrial economic growth is dynamic and takes many forms. Mao Hao, Yin Zhifeng and Zhang Jin (2018) Further studied the impact of the utility model patent system on the continuous growth of the national economy after entering the high-income stage, suggesting that with the further development of China's economy, the utility model patent system should be dynamically adjusted. Invention patents should gradually replace utility model patents. To avoid falling into the "utility model patent system use trap."

5. Industrial regulation: natural monopoly, externality and public safety

Internet financial industry regulation. Internet finance is still the financing of funds. Therefore, it does not break away from the scope of finance and still has risk characteristics at the micro and macro levels. Market risk, liquidity wind risk, default risk, operational risk is still a significant risk factor for Internet banking presence. Besides, after the integration and development of financial formats and the Internet, there are new risk factors, such as platform security risks, network information security risks, and terminal security risks. Considering the dangers of Internet finance, Feng Qian, Wang Haijun (2017) Discussed the industry regulation of internet finance around the risk of misconduct in internet finance. Based on learning from Tirole's new regulatory theory, Feng Qian and Wang Haijun proposed that penetrating supervision should be implemented from the perspective of regulatory agencies, to plug regulatory loopholes and regulatory arbitrage, strengthen product governance and product intervention, and design an effective regulatory mechanism. Improve the integrity level of the Internet financial market, promote effective competition in the Internet financial market, strengthen the protection of the rights and interests of Internet financial consumers, and establish a third-party fund depository and risk compensation mechanism.

Administrative monopoly and government regulation. In the past 40 years of reform and opening up, despite the continuous deregulation of government and the strengthening of private investment, the monopoly system based on state ownership is still the main form of monopoly in China's key monopoly industries, and state-owned enterprises are still the main monopoly industries. However, while this monopoly has made significant contributions to China's industrialization and modernization, it also harms social equity and efficiency. He Yu (2016) by constructing studied static equilibrium problem with government regulation of administrative monopoly government utility function. The study points out that government preference is an important reason for the administrative monopoly of governments around the world. It is because of government preferences and path, "state-owned property" dependency inertia, the government is difficult to eliminate the drawbacks of administrative monopoly in the long-term economic development, restricted the independence and efficiency of the supply-side structural reforms of government regulatory agencies, mixed-ownership as Since China's reform and opening up, a system that has been adopted more

frequently is helpful to the deepening of supply-side reforms. It can not only satisfy government preferences but also reduce the transaction costs of administrative monopoly. However, the implementation of mixed ownership not only reduces the state-owned content but also makes The increase in the private sector will have a profound impact on government preferences and restraint and regulation.

Acknowledgement

This study supported by the project of the Shanxi Province Soft Science Research Project "Shanxi Province Key Industry Innovation Development Path and Countermeasure Research" (Project Approval No.2018041064-1).

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