

Research on the Influence Mechanism of Policy Implementation Effect Audit on the High-Quality Development of Manufacturing Industry

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Abstract: The policy implementation effect audit is an important way to give play to the government audit supervision function and serve the national governance, which is of great significance to the innovation and development of the national audit theory and the modernization of the national governance system. Based on China's macro institutional environment, this paper analyzes the impact mechanism of policy implementation effect audit on the high-quality development of manufacturing industry, and analyzes its heterogeneity in regions and industries. The research finds that government audit promotes the high-quality development of manufacturing industry through the deterrent effect and optimizing the enterprise innovation environment. Compared with the central and western regions, due to the high level of economic development, technological innovation, quality brand and integration of informatization and industrialization in the eastern region, the policy implementation effect audit has a greater incentive effect on the high-quality development of manufacturing industry. Compared with medium and low technology industries, high-tech industries have stronger independent innovation capacity and more R&D investment, so the incentive effect of policy implementation effect audit in high-tech industries is greater. Finally, this paper puts forward corresponding policy recommendations from the aspects of strengthening audit work, deepening regional cooperation, giving full play to spillover effects between neighboring regions and implementing differentiation policies.

1. Introduction

Report of the 19th National Congress clearly pointed out that China's economy has shifted from a stage of rapid growth to a stage of high-quality development. Scientific and technological innovation is the core driving force for high-quality development. Countries have implemented various support policies to support innovative activities and high-quality economic development [1]. Manufacturing industry is the key to the real economy, and also a new engine for future regional economic development. According to the three-dimensional theoretical model of manufacturing industry, manufacturing industry is affected by technology, mode and market network. At present,

many manufacturing enterprises are unable to innovate the advanced technology system, adapt to market changes in a timely manner, and optimize the internal resource allocation of enterprises, as well as form a networked market organization among enterprises in terms of input and output, which leads to the resource input of enterprises far greater than their benefits, and it is difficult to achieve high-quality development of manufacturing industry only by market mechanism adjustment. Therefore, enterprises need government incentives and guidance to achieve high-quality development of manufacturing industry. In recent years, various provinces and cities in China have implemented the support policy of strengthening the advanced manufacturing industry to promote the high-quality development of the manufacturing industry, especially the financial subsidies for enterprises' technological transformation, collaborative development, etc., but the actual effect is controversial.

At the same time, 90% of the achievement of the policy objectives depends on effective implementation. The State Council has proposed to implement the policy implementation effect audit for the implementation of major policy measures since October 2014. The implementation of major national policies and measures, including the policy of "high-quality development of manufacturing industry", will be audited and announced in the form of spot check. Audit institutions can track and supervise the whole process by using the policy implementation effect audit, ensure the effective implementation of various policies, and promote the policy to play its role and value. Moreover, through the implementation of policy implementation effect audit, we can find problems in the development process of manufacturing industry and put forward effective audit recommendations [2]. At present, the high-quality development of the manufacturing industry has received the attention of the government. All provinces and cities have accelerated the construction of an advanced manufacturing system around core standards, technologies and platforms, built a new digital driven industrial ecology, promoted the transformation and upgrading of traditional industries, and promoted the birth of new technologies, new formats and new models. However, from the perspective of high-quality economic development, high-quality development of the manufacturing industry is more technical and complex than other industries. Inadequate policy implementation will affect high-quality development. At the same time, China's provinces have different policy preferences for high-quality development of the manufacturing industry, and there are differences in enterprises' ability to master advanced technology and independent technology development. In addition, the advancement of enterprises' production models and the difference of enterprises' value added chains, industrial chains, etc. make different enterprises use government policies to improve high-quality development. So can the audit of policy implementation effect really guarantee the effective implementation of policies and promote the high-quality development of advanced manufacturing industry? In view of this, this paper mainly examines the impact mechanism of policy implementation effect audit on the high-quality development of manufacturing industry, analyzes the heterogeneity of regional and industrial heterogeneity on their relationship, and finally puts forward policy recommendations to optimize policy implementation effect audit and promote the high-quality development of manufacturing industry.

2. Literature Review

Under the requirements of the new era of the 19th National Congress, audit supervision still needs to be committed to promoting the implementation of major national policies and measures, and promoting the high-quality development of China's economy. Many studies have focused on the role of national audit, mainly involving the impact of national audit on economic growth and the governance effect on state-owned enterprises [3,4]. Recent research shows that policy implementation effect audit is the most important and effective way for national audit to play the

role of “immune system”. The development of foreign policy implementation effect audit is accompanied by the promotion of performance audit. In recent years, most of the researches on the audit of policy implementation effect in China’s academia have summarized the concept, objectives, requirements, methods and other contents of policy implementation audit, taking performance audit and tracking audit as the starting point, and put forward suggestions to adapt to different development periods. There are a few empirical studies on the audit of policy implementation effect. The research on high-quality development of advanced manufacturing industry is mainly reflected in the connotation characteristics of high-quality development of advanced manufacturing industry, qualitative descriptions such as mechanism research and promotion path [5,6], but quantitative discussion on high-quality development of advanced manufacturing industry is slightly insufficient. Scholars theoretically build an indicator system. Some literatures select a single indicator to measure high-quality economic development, such as TFP, GDP per capita or labor productivity, It fails to reflect the comprehensiveness of high-quality economic development, and there is less literature to comprehensively build an indicator system for high-quality development of advanced manufacturing industry.

In view of the high-quality development of manufacturing industry, the academic community has discussed its development evaluation and path. In measuring the high-quality development of the manufacturing industry, most scholars use corporate financial performance indicators, non-financial performance indicators, or both innovation behavior and quality behavior [7], as well as a single indicator such as total factor productivity or labor productivity, but a single indicator is one-sided and high-quality is multi-dimensional, an indicator system should be established for evaluation. There is also a small amount of literature [8] to build an evaluation index system for high-quality development of manufacturing industry, focusing on economic benefits, technological innovation, resources and environment. In terms of factors affecting the high-quality development of manufacturing industry, the existing literature reviews the macroeconomic environment and the micro characteristics of enterprises themselves. The macroeconomic environment includes government governance, market structure, market demand, financial development level, etc. [9]; The micro characteristics of enterprises include the nature of property rights, enterprise confidence and innovation ability [10].

To sum up, at least the following two aspects are worth studying: first, from the perspective of research, most studies still focus on the governance function of national audit and the high-quality development path of manufacturing industry, and there is little literature to systematically analyze the relationship between policy implementation effect audit and high-quality development of manufacturing industry. At the same time, due to the heterogeneity of economy, market degree and technological innovation among regions and industries, what is the impact of regional and industrial heterogeneity on their relationship? Second, in terms of theoretical research, the mechanism of the impact of policy implementation effect audit on the high-quality development of manufacturing industry remains to be clarified. The previous studies mostly focused on the micro mechanism of the effect of the fiscal subsidy policy, ignoring the analysis of the external supervision mechanism of the policy effect. A few of the analysis involving the impact of external supervision on high-quality economic development only examined the direct effect of national audit on high-quality economic development, and few involved the impact mechanism of policy implementation effect audit on high-quality development of advanced manufacturing industry.

3. Impact Mechanism Analysis

3.1 Direct Impact Mechanism

In the 1970s, the American public policy research field first proposed a theoretical model to

analyze the factors of policy implementation, called the “Smith Model”. At the same time, GAO included the performance evaluation into the investigation of the project implementation effect, initially reflecting the idea of policy implementation effect audit. The related work in China started relatively late. After entering the 21st century, the domestic attention to follow-up audit has been continuously strengthened, which puts forward higher requirements for audit work, and the requirements for promoting policy benefits have been deepened and clarified. In recent years, scholars have agreed that conducting policy implementation effect audit is the inevitable result of the development of national audit and the inevitable choice for stable economic growth and high development. However, in the environment of imperfect market mechanism, the high-quality development of enterprises is faced with many problems such as more uncertainties, large input costs, and incomplete transformation. It needs the support of the audit supervision system. The implementation of the policy implementation effect audit can effectively promote high-quality development. Academics have conducted in-depth research on the role of policy implementation effect audit on high-quality development. Currently, there are two perspectives for its research.

First, the audit of the effect of policy implementation can play a deterrent effect, supervise the way and extent to achieve the economic benefits of enterprises, deter the actions that do not implement policies and harm the interests of the masses, and create a good business environment for the manufacturing industry to achieve high-quality development. And then promote the high-quality development of manufacturing industry. By auditing and supervising the production and operation results and capital use effect of manufacturing enterprises, we can reflect the real situation of the audited objects, timely discover and expose the problems in all aspects of business management, supervise the way and extent to realize the economic benefits of enterprises, promote manufacturing enterprises to grasp the healthy development of economic status, and then promote the high-quality development of manufacturing industry. Because the enterprise needs to invest a lot of resources in the process of achieving high-quality development, and the return that the enterprise can harvest is still facing uncertainty, the enterprise has limited ability to bear risks, which makes the enterprise maintain a cautious decision-making attitude towards achieving high-quality development. The audit of policy implementation effect can analyze whether the enterprise’s economic decisions are effective, and review the basic economic activity process of the enterprise, timely identify and improve the weak links in the operation and management, and promote the manufacturing enterprises to improve the system, standardize the mechanism and improve the system through punishment, suggestions, public supervision and rectification, so as to suppress various “diseases” in the development of manufacturing enterprises, improve the economic benefits of enterprises to achieve high quality, and promote the manufacturing industry to achieve high-quality development in all aspects. And the greater the government audit, the more conducive to promoting high-quality development of enterprises.

Second, policy implementation effect audit can optimize the innovation environment of the manufacturing industry, promote the transformation and upgrading of the manufacturing industry with innovation driven and industrial integration, and achieve high-quality development. National audit can optimize and upgrade the manufacturing industry by releasing system dividends, improve the quality of enterprise policy formulation and implementation, accelerate the structural adjustment of enterprises with excess capacity, use audit supervision to guide enterprises to focus on supporting technological innovation, resource conservation and environmental protection, improve the level and efficiency of enterprise governance, optimize the internal and external environment of the manufacturing industry, and ultimately promote high-quality development of the manufacturing industry. Due to the limitation of information asymmetry, it is difficult for enterprises to grasp the policy dividend in time and achieve overall optimization and upgrading, and there are certain technical limitations in resource saving, which increases the restrictions on high-quality

transformation of the manufacturing industry. The policy implementation effect audit can play an important role in grasping the policy dividend and technological innovation. In order to ensure that the manufacturing industry can achieve high-quality development, the policy implementation effect audit can ensure that enterprises can achieve technological innovation, significantly optimize the industrial structure of the manufacturing industry, effectively improve the business environment, and achieve the long-term healthy development of the manufacturing industry. Based on the above analysis, this paper believes that the policy implementation effect audit can promote the high-quality development of the manufacturing industry by exerting the deterrent effect and optimizing the innovation environment of the manufacturing industry.

3.2 Heterogeneity Analysis

3.2.1 Analysis of Regional Heterogeneity

The overall level of high-quality development of manufacturing industry presents a normal distribution, showing an obvious regional heterogeneity of “strong in the east and weak in the west”. Different regions in China have different levels of enterprise development, competition, policy implementation and demand for resources, which makes the effect of policy implementation audit different. Compared with the relatively backward central and western regions, the eastern coastal regions with relatively developed economic development have a higher degree of marketization, and high-quality development has been popularized. Xu Bing et al. [11] The geographical location of an enterprise will affect its resource endowment. For example, regions close to minerals or energy have comparative advantages in obtaining raw materials; However, enterprises in areas close to big cities and convenient transportation are closer to developed consumer markets. In the environment of fierce market competition, enterprises pay more attention to technological innovation and resource conservation, which can better integrate with the service industry. Jiang Xiaoguo (2022), by spatially dividing the evaluation of high-quality development of manufacturing industry, draws a conclusion that China’s manufacturing industry is now in the situation of “strong in the east and weak in the west”, technological innovation, quality brand The eastern region of integration of industrialization and industrialization is much higher than other regions [12]. Shi Bo and Ren Baoping (2018) built an inter provincial high-quality development indicator system based on the fundamentals of growth and social achievements. It was found that the quality distribution of economic growth in the east, middle and west of China was unbalanced, and it was difficult to bridge it in the short term [13]. According to this, this paper believes that the role of policy implementation effect audit is different in different regions, and the role of policy implementation effect audit in developed regions is stronger than that in backward regions.

3.2.2. Analysis of Industry Heterogeneity

The degree of industrial concentration, competition, industrial agglomeration, average size of enterprises and technical level of different industries will affect the external environment of enterprises’ production and operation, thus making the effect of policy implementation effect audit different. Compared with medium and low technology industries, high-tech industries invest more in technology, pay more attention to independent innovation, and transform and upgrade more successfully, so high-quality development is easier to achieve in high-tech industries. Wang Fang and Shi Xin (2020) concluded that the high quality development level of high-tech industry in manufacturing industry is the highest, the high quality development level of medium technology industry is in a steady upward trend in the sample period, and the high quality development level of low technology industry is relatively low, with large fluctuations, and the gap with other industries

is expanding. Digital technology in the high-tech industry of manufacturing industry can generally bring more intuitive technological benefits such as product quality improvement, cost reduction and efficiency improvement compared with the medium and low technology industries of manufacturing industry [14]. Cao Wujun (2021) specifically analyzed the impact of independent innovation, domestic technology introduction and foreign technology introduction on the high-quality development of manufacturing industry from the perspective of the whole industry and manufacturing industry with different technology levels. Its most obvious role in promoting high-quality development is the high-tech industry, which is obviously superior to the medium and low technology industries [15]. According to this, this paper believes that: the role of policy implementation effect is different in different industries, and the role of policy implementation effect audit in high-tech industries is stronger than that in medium and low technology industries.

4. Conclusions and Policy Recommendations

Based on China's macro institutional environment, this paper analyzes the impact mechanism of policy implementation effect audit on the high-quality development of manufacturing industry, and further analyzes the regional heterogeneity and industry heterogeneity. The results are as follows: (1) The government audit promotes the high-quality development of manufacturing industry through the deterrent effect and optimizing the enterprise innovation environment. (2) The impact of policy implementation effect audit on the high-quality development of manufacturing industry in different regions is heterogeneous. Compared with the central and western regions, due to the high level of economic development, technological innovation, quality brand and integration of informatization and industrialization in the eastern region, the policy implementation effect audit has a greater incentive effect on the high-quality development of manufacturing industry. (4) The impact of policy implementation effect audit on the high-quality development of manufacturing industry with different technical industry characteristics is heterogeneous. Compared with medium and low technology industries, high-tech industries have stronger independent innovation capacity and more R&D investment, so the incentive effect of policy implementation effect audit in high-tech industries is greater. Based on the above conclusions, this paper proposes the following policy recommendations:

First, strengthen audit work and deepen regional cooperation. Audit institutions should make every effort to improve the effectiveness of audit supervision and implement audit tracking and rectification. Expand the audit scope of policy implementation effect, integrate financial audit and financial audit, audit work in the fields of leading cadres' economic responsibility, natural resource assets departure (middle term), government investment projects, and improve the audit rectification mechanism of "online early warning" and "offline supervision". Secondly, explore the new mode of regional collaborative audit. The policy governance of each province is different, and there are also differences in the high-quality development level of manufacturing industry in each province. The national audit institution should actively explore inter provincial collaborative audit, strengthen regional exchanges and cooperation by promoting a wide range of adjacent provincial cooperative audit mechanisms, and form a joint force of supervision. At the same time, the national audit resources should be inclined to regions with low economic quality to promote the overall improvement of the quality of manufacturing development. Promote the green innovation level of provinces with low economic development level through national audit, integrate regional development elements, increase the responsibility audit of local officials, strengthen policy implementation, create a positive market environment, and comprehensively promote the high-quality development of manufacturing industry.

Second, give full play to the spillover effect between neighboring regions, and remove the

explicit and implicit barriers that restrict the high-quality development of manufacturing. Backward regions should make rational use of the spatial spillover effect and policy bias of developed regions, improve new infrastructure, improve public service system, attract high-tech talents and capital, and accelerate the pace of high-quality development; Economically developed regions should take optimizing the industrial structure and improving the green innovation ability as the main thrust, Actively establish an efficient and collaborative promotion mechanism for the integration of “informatization” and “industrialization”, and orderly promote the manufacturing industry to the high-end of the value chain. The government should further promote the coordinated development between regions, strengthen the connection between regions, reduce the formulation of isolated policies, build an innovation exchange platform between regions, correctly guide and apply the positive role of policy implementation effect audit on cross regional coordinated development, and achieve high-quality development of the manufacturing industry in various regions.

Third, implement the differentiation policy and improve the pertinence of policy implementation effect audit. The government needs to adjust and optimize relevant policies for different industries, optimize and integrate various internal and external resource elements, encourage the high-tech manufacturing industry to focus on diversified development, constantly improve the core competence of the manufacturing industry, and actively develop core technologies and key technologies. Secondly, we should attach importance to the independent innovation ability of low and medium technology industries, guide them to enhance their core competitiveness under the pressure of market competition, and focus on improving the economic efficiency of the industry while increasing their green innovation development ability. At the same time, make good use of the audit function of policy implementation effect, formulate different audit objectives for different policies, promote the healthy development of all industries, and effectively improve the high-quality development of all industries in the manufacturing industry.

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