

Research Summary on the Influencing Factors of Enterprise Innovation

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Abstract

Under the new pattern of dual-cycle development, China's economy is recovering rapidly, corporate technological innovation is becoming more and more important, and the requirements for corporate innovation are becoming more and more urgent. The article sorts out the research literature of Chinese scholars on the factors affecting enterprise innovation from different angles in recent years, and analyzes the factors restricting and affecting the innovation of Chinese enterprises from the perspectives of the enterprise's internal and external aspects, from the macro, meso and micro levels. Through the systematic sorting out of the influencing factors of enterprise innovation, the development trend and research direction are predicted, and the path choices for Chinese enterprises to break through barriers layer by layer and give full play to their own advantages in the process of technological innovation are clarified. The research will help improve the ability of enterprises to resolve a series of systemic risks such as major crises and technological blockades, consolidate enterprises as an important force in technology and economy, and open up the economic double cycle.

Keywords

Enterprise Innovation; Internal Factors; External Factors.

1. Introduction

Since 2011, my country's economy has entered a new stage of development, shifting from high-speed growth to medium-to-high speed growth, from factors and investment-driven to innovation-driven. Innovation has become the primary driving force for economic development, and building an innovative country is an important direction for my country's current and future economic transformation. In the report to the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping once again emphasized the goal of accelerating the construction of an innovative country, and pointed out that "innovation is the first driving force leading development and the strategic support for building a modern economic system." In this context, innovation is becoming more and more important to the survival and development of enterprises. Enterprise innovation has significant positive significance for both the enterprise itself and the macroeconomic development. Exploring the influencing factors of enterprise innovation will help enterprises improve their innovation level. At present, the existing domestic literature mainly explores the influencing factors of enterprise innovation based on the internal and external governance mechanism of the company.

2. Internal Factors of Enterprise

From the perspective of enterprise internal factors, at the manager level, executives are the decision-making bodies of enterprise innovation, and the characteristics of executives will significantly affect the innovation activities of enterprises. Zhang Zhaoguo et al. (2018) found that the stability of the top management team is positively correlated with the performance of corporate technological innovation; in the impact of the stability of the top management team

on the performance of corporate technological innovation, the positive adjustment effect of equity incentives and fellow villagers is more significant. He Ying et al. (2019) found that the richer the CEO's career experience, the higher the level of corporate innovation, among which cross-enterprise experience has the most significant impact on innovation level, followed by cross-industry experience and cross-organizational experience, cross-functional department experience and cross-regional experience. Experience has the least impact on the level of firm innovation.

At the firm level, corporate internal governance factors have an important impact on corporate innovation behavior. In terms of equity incentives, Liu Baohua and Wang Lei (2018) found that performance-based equity incentives can help stimulate corporate innovation. More importantly, the exercise time limit can enhance the equity incentive effect. Guo Lei et al. (2019) found that non-executive employee equity incentives can promote innovation output, and innovation output is significantly positively correlated with the incentive ratio. The research results of Zhou Donghua et al. (2019) and Meng Qingbin et al. (2019) both show that the implementation of employee stock ownership plans has promoted the innovation output of enterprises. In terms of promotion tournament incentives, Zhang Rui et al. (2020) found that the greater the salary gap between key subordinate executives and CEOs, the higher the innovation output of the enterprise. Furthermore, compared with the salary gap within the entire top management team, the salary gap between the key subordinate executives and the CEO has a stronger impact on corporate innovation. In terms of ownership structure, Li Wengui and Yu Minggui (2015) found that the proportion of non-state-owned equity is significantly positively correlated with the innovation activities of privatized enterprises; Firms are more innovative. Zhu Bing et al. (2018) found that compared with a single shareholder, there will be an over-regulatory effect among multiple large shareholders on corporate innovation decisions, and controlling shareholders may not engage in high-risk innovation projects. In terms of institutional investors, Wen Jun et al. (2012) found that the shareholding of institutional investors in private enterprises promotes the innovation activities of enterprises, and the shareholding of institutional investors in state-owned enterprises has a significant negative correlation with enterprise innovation. In terms of political connection, Dang Li et al. (2015) found in an empirical study that anti-corruption significantly increases the innovation incentives of companies because it increases the relative cost of companies seeking political connections. After the introduction of the anti-corruption policy, the research and development expenditure of politically connected enterprises increased significantly, and anti-corruption promoted enterprise innovation. Yuan Jianguo et al. (2015) found that corporate political connections hinder corporate innovation activities and reduce innovation efficiency, and this negative effect will last until the third year after the company acquires political connections, thus confirming the existence of political resources in Chinese companies. Curse effect.

3. External Factors of Enterprise

From the perspective of external factors of enterprises, Li Wei'an et al. (2016) found that tax incentives have improved the innovation performance of enterprises to a certain extent, and innovation investment has played a completely intermediary role in this. Liu Xing and Zhao Jianyu (2019) found that the innovation output of enterprises (enterprise patents) increased significantly after the value-added tax transformation reform. Bai Xuyun et al. (2019) used 505 high-tech enterprises as a sample and found that the government's preferential tax policies are conducive to the improvement of enterprise innovation performance and high-quality innovation output; Has an extrusion effect. Hu Kai and Wu Qing (2018) found that compared with manufacturers that did not receive R&D tax incentives, manufacturers that received R&D tax incentives did not have higher patent output. From the perspective of mechanism, although

R&D tax incentives have a significant effect of additional R&D expenditure, this effect does not directly increase the patent output of enterprises. In terms of industrial policy, Yu Minggui et al. (2016) found that industrial policy can significantly increase the number of invention patents in encouraged industries, and this positive relationship is more significant in private enterprises. Li Wenjing and Zheng Manni (2016) found that companies motivated by industrial policies have significantly increased patent applications, but only non-invention patents have increased significantly, pursuing "quantity" and ignoring "quality"; companies are expected to receive more government subsidies and tax incentives. At that time, its patent applications, especially non-invention patent applications, increased significantly, and the fiscal and taxation means of selective industrial policies made enterprises innovate in order to "seek support". In terms of legal protection, Pan Yue et al. (2015) found that capital lawsuits have a significant negative inhibitory effect on corporate innovation activities, on the contrary, product lawsuits have a significant positive incentive effect on corporate innovation activities; judicial local protectionism. Not only will it greatly intensify the inhibitory effect of financial litigation on the innovation activities of the accused enterprise, but it will also significantly weaken the incentive effect of product litigation on the innovation activities of the accused enterprise. Wang Haicheng and Lv Tie (2016) based on the quasi-natural experiment of "integration of three trials" in intellectual property criminal, civil and administrative cases started in Guangdong Province in 2006, the empirical research found that "integration of three trials" has significantly promoted enterprise innovation effect.

At the market level, in terms of media attention, Yang Daoguang et al. (2017) found that the number of negative media reports is significantly negatively correlated with the level of corporate innovation, and negative reports of a serious nature are more damaging to corporate innovation. In terms of analyst tracking, Chen Qinyuan et al. (2017) found that analyst tracking significantly improved the innovation performance of the tracked companies, manifested as an increase in patent output. In terms of corporate financing, Zhang Xuan et al. (2017) found that both credit rent-seeking and financing constraints can significantly inhibit corporate innovation. When companies encounter credit rent-seeking, financing constraints have a stronger restrictive effect on corporate innovation. Chen Si et al. (2017) found that the entry of venture capital has promoted the innovation of invested companies, which is manifested in a significant increase in the number of patent applications. The venture capital with foreign capital background and the joint investment of multiple venture capitals have a stronger promotion effect on the innovation activities of the invested enterprises; and the longer the venture capital investment period, the stronger the promotion effect on innovation. In terms of the degree of financial development, Tang Song et al. (2020) found that the development of digital finance does have a "structural" driving effect on technological innovation of enterprises. In terms of informal systems, Wu Chaopeng and Jinxi (2020) found that in provinces with high social capital, the higher the innovation level of listed companies, the specific performance is that the output and citations of patents are higher; further research found that social capital can promote enterprise innovation by easing financing constraints and reducing the risk of intellectual property infringement. Bi Xiaofang et al. (2020) found that corporate customer-oriented culture has a significant role in promoting the number of corporate patent applications; reducing the volatility of major customers, increasing customer heterogeneity, and easing corporate financing constraints are intermediaries for customer-oriented culture to promote corporate innovation path.

4. Summary and Conclusion

With the continuous evolution and development of corporate finance theory, the assumption of complete rationality for market economic entities has gradually been relaxed, and many new

research directions have been derived from the factors affecting corporate innovation. According to the research literature of domestic scholars, whether an enterprise innovates and its innovation intensity are affected by both internal and external factors of the enterprise. The internal factors can be divided into two levels: the manager and the enterprise. The manager level includes the manager's salary, the manager's career experience, the manager's talent and the stability of the executive team. The enterprise level includes equity incentives, employee stock ownership plans, promotion tournament incentives, political connections, nature of property rights, equity structure, institutional investors, etc. External factors can be divided into two levels: government and market. The government level includes tax policies, financial subsidies, credit policies, industrial policies, and legal protection. The market level includes market competition, financing constraints, financing channels, financial development level, analyst follow-up, media attention, informal system, etc. Follow and follow the research line from microcosm to macrocosm, from inside to outside, from rational to irrational. For the investigation of the influencing factors of enterprise innovation, the existing domestic literature is mainly limited within the framework of traditional economics, based on the high-level echelon theory and behavioral finance theory, focusing on the research on the influence of managerial characteristics on enterprise innovation, and based on the principal-agent theory focusing on the research from the company. The impact of contractual factors such as internal and external governance on corporate innovation is examined. Among the internal and external governance factors of enterprise innovation, there are more researches on the impact of formal institutions (including laws, regulations, and guidelines, etc.) on enterprise innovation, and the influence of informal institutions (including culture, religion, customs, traditions, etc.) on enterprise innovation performance. Research results have gradually increased, including external factors such as social trust, social capital, and internal factors such as customer culture. However, there is a lack of empirical evidence supporting the impact of external cultural factors on corporate innovation. Informal systems such as culture, religion, customs, and traditions accumulated in the long-term historical development of our country are effective supplements to formal systems. As a very important informal institution, culture is an important factor affecting our social, political and economic behavior. Culture can directly or indirectly affect the company's economic activities, play a "cognitive map" function in the organization, and play a "social control" role in the behavior of organizational members.

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