

# Review on the Impact of Ownership Structure on Enterprise Innovation Efficiency

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## Abstract

In the research on the relationship between equity institutions and enterprise innovation efficiency, scholars have paid a lot of attention. Taking this as an entry point, they have widely read and summarized the arguments of relevant domestic research, combed and found that there are many specific categories of equity structure, and the more comprehensive literature of existing research is mostly explored from the degree of equity concentration and the nature of equity.

## Keywords

Ownership Structure; Innovation Efficiency; Innovative Mechanism; Overview.

## 1. Definition and Classification of Ownership Structure

Existing studies have different definitions of ownership structure. Han Xu (2020) explained that ownership structure is also known as ownership structure, which is closely related to corporate governance, and specifically classified the ownership structure, including ownership nature, ownership concentration, employee shareholding ratio, equity check and balance, management shareholding ratio. Many measurement indicators such as the separation degree of controlling shareholders' control right and cash flow right [1], For the definition of ownership structure, some scholars also consider the "quality" and "quantity" of ownership [2-3]. For the classification of ownership structure, the ownership structure is divided into ownership concentration and equity check and balance, which are applied by many scholars [5]. Zeng Yi (2020) focused on the ownership concentration and equity check and balance in the ownership structure [4], and some scholars divided the ownership structure into ownership concentration and equity check and balance [6].

## 2. Impact of Ownership Structure on Enterprise Innovation Efficiency

### 2.1. Impact of Ownership Concentration on Enterprise Innovation Efficiency

The research on the impact of ownership concentration on enterprise innovation efficiency has always been a hot issue, but at present, there is no agreement among scholars. There are mainly the following conclusions: inverted U-shaped relationship, positive correlation and negative correlation. Firstly, many scholars believe that the ownership concentration and innovation efficiency of enterprises have an inverted U-shaped relationship. Li Shimei and Zhang Qian (2015) believe that the sample should be selected from representative industries. Therefore, they limited the sample to manufacturing industries and concluded that the two have an inverted U-shaped relationship. In the equipment manufacturing industry, when the ownership concentration reaches 41.2%, the innovation ability of enterprises is the highest, Reach the highest inflection point [8]. Gu Lulu et al. (2015) analyzed the data from 2005 to 2013 and concluded that the relationship between the equity share held by shareholders and enterprise innovation efficiency is a threshold effect. When the shareholding ratio is 25% - 51.36%, the equity concentration will promote the improvement of enterprise innovation ability. When this

ratio is not within the obtained range, the correlation coefficient between the two will no longer be significant [9].

However, some scholars in academic circles support that ownership concentration has a negative impact on enterprise innovation efficiency. Yafeh and Yosha (2013) collected and sorted out the data on the operating conditions of chemical enterprises in the past ten years, and found that the expenditure of enterprise innovation activities did not increase with the increase of equity concentration, but had a significant negative correlation [10]. Tribo et al. (2017) used the data of Spanish enterprises from 2000 to 2016 as the research object and found that major shareholders would pay special attention to realizing their own private interests after mastering the power of enterprise operation, so as to reduce the expenditure on Enterprise R & D Investment [11]. Choi et al. (2011) took Chinese companies as the research object, and concluded that the shareholders' meeting with more equity interests pays more attention to their own interests. In order to achieve the goal, they can not blindly improve the equity concentration, and this may even reduce the existing innovation level of enterprises [12].

However, some scholars believe that the improvement of ownership concentration can alleviate the agency problem. Wen (2012) believes that Japan is the country with the highest innovation performance in Southeast Asia. Therefore, in their research, they selected Japan as the research sample and found that there is a positive correlation between ownership concentration and enterprise innovation efficiency [13]. When sun Zao and Xiao Liping (2015) explored the relationship between the two, they found that in technology intensive industries, enterprises' increasing equity concentration will promote the investment of enterprise R & D expenditure. It can be said that the relationship between the two is positive promotion, that is, the relationship between equity concentration and enterprise innovation efficiency is positive correlation [14].

## **2.2. Impact of Equity Nature on Enterprise Innovation Efficiency**

For the relationship between the nature of equity and enterprise innovation efficiency, scholars mainly have two different suggestions, that is, some scholars support the view of state-owned equity companies to enhance enterprise innovation ability. Li Shimei and Zhang Qian (2015) put the research sample in the heavy equipment industry. When enterprises have state-owned equity, the improvement of innovation ability under the same conditions will be higher than that of enterprises without state-owned equity; Enterprises with state-owned equity have a poor foundation of innovation ability, which makes it easier for external stimulation to affect the improvement of enterprise innovation efficiency [8].

Contrary to the above views, some scholars in academic circles still believe that the nature of state-owned equity will have a negative correlation with the innovation efficiency of enterprises. Zhu Xingwen (2017) believes that the improvement of the overall profit of enterprises has the impact of R & D expenditure. Private enterprises have a stronger demand for innovation than state-owned enterprises. Therefore, under the same conditions, private enterprises pay more attention to the investment in innovation, so the innovation efficiency can be improved [15]. Zhang Yujuan and Tang Xiangxi (2018) divided A-share listed companies into state-owned and non-state-owned enterprises. They found that the different nature of equity will have different promoting effects on the improvement of enterprise innovation efficiency [16].

### 3. Conclusions and Research Prospects

#### 3.1. Conclusion

Through the collection and collation of the above literature, it can be concluded that more and more scholars in the academic community study the impact mechanism of ownership structure on innovation efficiency, but when summarizing the research results, it will be seen that scholars have their own opinions on their relationship research. In terms of ownership concentration, some scholars believe that the highly concentrated ownership structure will reduce the agency cost of enterprises and improve the innovation efficiency of enterprises, but some scholars found that there is a negative correlation between ownership concentration and enterprise innovation efficiency; In terms of the nature of equity, scholars agree that non-state-owned holding enterprises have stronger innovation ability; In terms of equity checks and balances, academia believes that equity checks and balances can not only help enterprises improve innovation efficiency, but an overly balanced equity structure will reduce innovation efficiency. Considering the differences of the above conclusions, this paper believes that the different conclusions may be caused by the different measures selected by different scholars or the differences of research objects.

#### 3.2. Research Prospect

##### 3.2.1. Research on How to Broaden the Influence Mechanism of Both

The improvement of innovation efficiency requires a large amount of innovation investment as resource support, and the improvement of innovation efficiency will undergo a long time evolution, with a certain lag and slow, so innovation investment is often the discretionary expenditure of enterprises, so the improvement of innovation efficiency has strong externality. When exploring the relationship between the two, most literatures directly study the ownership structure and enterprise innovation efficiency, and do not really clarify the impact mechanism behind them and the path of ownership structure affecting innovation efficiency. Only a few authors take government subsidies as intermediary variables and study the impact path of ownership structure on enterprise innovation efficiency, However, there is still less exploration of other paths. Therefore, when exploring these two objects, we can expand different innovation paths and unlock the real influence mechanism behind them, which plays a guiding role in the optimization of corporate governance structure and strategic deployment.

##### 3.2.2. How to Define the Ownership Structure More Accurately

Combing the relevant literature, it is found that when exploring the impact mechanism of ownership structure and innovation efficiency, scholars mostly consider the direction of agency cost. The academic community basically agrees that ownership structure will increase the sense of corporate responsibility of major shareholders. Therefore, it will give better play to the function of supervision and governance, Avoid that other shareholders or managers do not consider the future development of the enterprise for their own interests. However, it is undeniable that the risk preference and ability of shareholders will also have an impact on the business decision-making of the enterprise. If the timing and investment are appropriate, it will be of great significance for the enterprise to quickly expand its fields and realize the improvement of profits. Only the stable development of the enterprise can improve the innovation efficiency. Therefore, the characteristics of shareholders should be added to the research on the role of equity institutions and innovation efficiency, and how shareholders affect enterprise innovation efficiency should be the focus of the research.

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