Retraction

Retraction: Research on the Impact of Institutional Environment and Corporate Governance on Enterprise Performance and Competitive Advantage Based on Big Data Analysis (J. Phys.: Conf. Ser. 1992 022108)

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This article has been retracted by IOP Publishing following an allegation that raises concerns this article may have been created, manipulated, and/or sold by a commercial entity. In addition, IOP Publishing has seen no evidence that reliable peer review was conducted on this article, despite the clear standards expected of and communicated to conference organisers.

The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on the Impact of Institutional Environment and Corporate Governance on Enterprise Performance and Competitive Advantage Based on Big Data Analysis

Lixin Meng1,*
1Jiaotong University of Beijing, Beijing, China, 100192

*Corresponding author e-mail: menglixin@bjtu.edu.cn

Abstract. In the era of big data, the highly developed information technology and the ever-increasing speed of product upgrading make enterprises face more turbulence. Good institutional environment and effective corporate governance can improve the competitive advantage of enterprises. The source of sustainable competitive advantage of enterprises should include macro-level institutional competition with government as the main body and micro-level corporate governance competition with enterprises as the main body. How to continue the competitive advantage of enterprises through the arrangement of external system and internal system is the core problem faced by Chinese enterprises under the background of institutional change. The problem of competitive advantage of enterprises is accompanied by the objective problem of market economic system, which is the logical result of the arrangement of competitive system. The institutional background of China's accession to WTO has changed the competitive environment of enterprises, and made the competitive advantage of Chinese enterprises based on the original foundation facing threats. The essence of introducing WTO rules is a kind of institutional change. When the specific framework of laws and regulations supporting the system changes, enterprises need to follow this change to carry out institutional transformation at the micro level.

Keywords: Institutional Environment, Corporate Governance, Corporate Performance, Competitive Advantage, Big Data

1. Institution and competitive advantage of enterprises

The central idea of system-based theory is that enterprise performance is influenced not only by industry and inherent resource endowment, but also by the institutional framework at the social and economic levels. The institutional framework consists of formal system and informal system, which influence or restrict the behavior of enterprises as participants in social and economic activities through regulation, norms and cognitive systems such as laws and regulations, internal charters, even values and corporate culture. Therefore, different institutional frameworks embedding in enterprises lead to different strategic choices, and then different sources of competitive advantage, which leads to different performance of enterprises.
2. Corporate governance and competitive advantage of enterprises

The various impacts of WTO on China's economy are fundamentally reflected by the organizational efficiency of enterprises. Effective system brings adaptive efficiency to enterprises. Therefore, system design or rebuilding enterprise resource allocation mechanism not only becomes an important part of enterprise strategy, but also extends the general competitive advantage mechanism. As corporate governance is a set of institutional arrangements concerning the distribution of stakeholders' interests in economic organizations, corporate governance reflects the path of sustainable competitive advantage from the micro-institutional level [1]. As shown in Table 1.

![Figure 1. Corporate governance and competitive advantage of enterprises.](image)

2.1. The impact of external governance environment on corporate performance is weak, and shows a weakening phenomenon year by year

The improvement of external market environment can improve enterprise performance, but the improvement of legal environment has no obvious effect. The improvement of government intervention has a negative impact on enterprise performance. External governance environment has the greatest impact on the performance of enterprises in that year, and then decreases year by year [2].

2.2. Internal governance structure has no significant impact on corporate performance

Independent directors do not play a positive role in supervision, while external auditing plays a weak role. The proportion of controlling shareholders, the degree of decentralization of major shareholders, the board of directors and the board of supervisors have no significant correlation with corporate performance. Compared with state-owned enterprises, most private enterprises have the characteristics of small scale, short history and low professional management. Therefore, the corporate governance level of private enterprises is poor, and most of the corresponding supervisory institutions have been set up, which play a very limited role [3].
3. Suggestions on enterprise policy

3.1. Correctly dealing with the relation between institutions and managers
The two kinds of social relations between formal institutions and managers represented by institutional norms are negatively correlated, and the two kinds of social relations between informal institutions and managers represented by institutional cognition are negatively correlated. The other dimension of informal system is that the relationship between institutional norms and managers' social relations is not significant. This shows that in the process of market economy transformation in China, the lack of market system and people's low awareness of the institutional environment directly result in managers having to seek private relations with government officials and other managers of enterprises, so as to avoid institutional risks and seek market opportunities for enterprises [4].

3.2. Accelerating the change of government functions
We should optimize the supervision and restraint mechanism of the government, strengthen the control of the power boundary of the government, reduce the direct interference of the government in enterprises, and accelerate the transformation of government functions from "intervention-oriented" to "service-oriented", such as further reducing administrative examination and approval matters, simplifying the administrative examination and approval process, deepening the reform of political system and improving the integrity and efficiency of the government, so as to effectively enhance the government's service ability and service level. Promote the development and perfection of market intermediary organizations, ensure and maintain the independence and detachment of market intermediary organizations, so that market intermediary organizations can truly become the backbone of effective restraint of direct government intervention in enterprises [5].

3.3. Optimizing the system of corporate governance
We should further optimize the institutional mechanism of corporate governance participation of all stakeholders, cultivate the professional ethics and contract spirit of all stakeholders involved in corporate governance, and at the same time, all stakeholders involved in corporate governance should have a certain "spirit of compromise" to maximize common interests, so as to truly realize the scientific decision-making of the company.

4. Conclusion
Technologists are the main force in enterprise technological innovation and product innovation. The application and development of emerging information technologies such as big data make the development and management of enterprise human resources based on data, and using data to speak for the enterprise and realize decision-making automation has become the future trend. Therefore, on the basis of understanding the role of corporate governance, Chinese enterprises need to construct a competitive advantage view of corporate governance, make a more in-depth international and domestic comparison of the basic institutional arrangements in corporate governance structure, establish the behavioral model of strategic governance, realize the effective match between corporate
governance and corporate strategy, and internalize the institutional arrangements of corporate governance into an important source of corporate competitive advantage. Finally, the competitive advantage of macro-level and micro-level coordination in international competition will be formed.

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