

# Reflection and Reconstruction of the Administrative Protection Path of Trade Secrets from the Perspective of National Security

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## ABSTRACT

In the context of the information age, this paper elaborates on the significance of trade secrets to enterprises and national security. It analyzes the relationship between their value connotations and national security, covering multi - dimensional value manifestations and strategic positions in economic, technological, and national defense security aspects. The current situation of administrative compliance and supervision of trade secrets is reviewed, and problems such as the difficulty in implementing compliance systems, coordination barriers among regulatory departments, and lagging technological supervision means are pointed out. Improvement strategies are proposed, including optimizing the legal system and compliance standard system, strengthening administrative supervision coordination and efficiency improvement, and cultivating corporate compliance culture and social integrity atmosphere. The importance of these strategies for maintaining national security and future development directions is emphasized.

## KEYWORDS

Trade Secrets; Value Connotation; National Security; Administrative Compliance; Administrative Supervision

## 1 Introduction

In the information - saturated era we live in, trade secrets have emerged as the linchpins that hold together enterprises' innovation feats and core competitive edges. Their technological, economic, and strategic values are on an upward trajectory. The protection of trade secrets is not merely a matter that impacts the survival and development of individual enterprises; it is intricately woven into the fabric of national security.

The international landscape today is characterized by its complexity and volatility. As the lifeblood of enterprises' innovative growth, the level of trade secret protection directly influences a country's security and its standing in the global competitiveness race. The eruption of the China - US trade war served as a wake - up call, highlighting the criticality of having independent and controllable key industrial technologies. In sectors like high - end chip technology, the core processes of advanced manufacturing, and key R & D achievements in biomedicine, China is confronted with the risk of being "strangled" technologically.

Under such circumstances, bolstering trade secret protection, especially enhancing administrative protection measures, is of paramount strategic significance. It is a crucial step for China to break through technological blockades, drive industrial upgrading, and safeguard national security. Strengthening administrative protection can create a more secure environment for enterprises to innovate, which in turn is essential for the overall development of the country's economy and its position in the international arena.

## 2 The Relationship between the Value Connotation of Trade Secrets and National Security

In China, the legislative protection of trade secrets is mainly stipulated in the Anti - Unfair Competition Law amended in 2019. Trade secrets include technical information and business information, and they exist in various industrial fields, such as source codes in high - tech industries, unique production processes in manufacturing, and customer information in the service industry. These pieces of information are the unique advantages formed by enterprises through long - term investment. They are the key resources for enterprises to compete and also the micro - foundation for national industrial development and economic growth. The uniqueness and scarcity of trade secrets enable them to bring competitive advantages to enterprises and influence the industrial ecosystem and the national economic pattern.

### 2.1 Multi - dimensional Value Manifestations of Trade Secrets

For enterprises, trade secrets can build competitive barriers, bring economic benefits, and promote innovation and development. To maintain the advantages of trade secrets, enterprises constantly explore new technologies, improve processes, and innovate business models. The knowledge and experience contained in trade secrets also drive the sustainable development of enterprises.

From a national perspective, trade secrets are of great significance. They can enhance a country's economic

competitiveness. Enterprises and industries with high - value trade secrets have more advantages in the global market, which affects the national economic strength, trade surplus, and other aspects. In international trade, the advantages of trade secrets in high - tech industries determine a country's position in the global industrial chain division of labor and profit distribution.

Trade secrets also safeguard national economic security. Trade secrets related to key national industries such as national defense and military industry, and information technology are crucial to national economic security and strategic interests. Protecting these trade secrets ensures the country's independent and controllable key technologies and avoids potential industrial and economic security risks. For example, the leakage of technical secrets in the national defense and military industry will weaken national defense capabilities, and the theft of core algorithms in the information technology industry will impact information and economic security.

In addition, trade secrets promote the construction of the national innovation system. A sound protection system encourages enterprise innovation and enhances the overall national innovation ability. The innovation achievements accumulated by enterprises under the protection of trade secrets provide resources for the national innovation system, accelerate the transformation of scientific and technological achievements, create a good innovation ecosystem, and support the stable growth of the national economy.

## **2.2 The Strategic Position of Trade Secrets from the Perspective of National Security**

In terms of economic security, the protection status of trade secrets affects the national industrial structure. The leakage or infringement of trade secrets of Chinese enterprises will weaken their competitiveness, hinder industrial development, and affect national economic stability and risk - resistance ability. During the China - US trade friction, Chinese enterprises were frequently involved in trade secret infringement disputes, highlighting the inadequacies in the management and protection of trade secrets.

In the aspect of scientific and technological security, trade secrets in cutting - edge technology fields reflect a country's scientific and technological strength and are the core driving force for scientific and technological innovation. Inadequate protection of trade secrets of key technologies will put China in a passive position in global scientific and technological competition. Taking chip technology as an example, the foreign technological blockade has made us aware of the urgency of mastering relevant trade secrets. Strengthening protection can create a good R & D environment for scientific and technological enterprises, safeguard scientific and technological security, and maintain the country's rights and interests in the global scientific and technological field.

In the field of national defense security, trade secrets of military enterprises and national defense research institutions are important guarantees for national military security. The leakage of these secrets will put national military strategic deployments and national defense construction at risk, weakening national defense deterrence and defense capabilities. For example, if an adversary obtains the key technical parameters of advanced weapons and equipment, it will affect the maintenance of national sovereignty and territorial integrity.

## **3 Analysis of the Current Situation and Problems of Administrative Compliance and Supervision of Trade Secrets**

### **3.1 Review of the Current Legal and Institutional Framework**

China has initially established a legal system for the administrative protection of trade secrets, with the Anti - Unfair Competition Law at its core, combined with relevant laws, regulations, and judicial interpretations.

#### **3.1.1 Laws or Other Normative Documents at the Central Level**

The Anti - Unfair Competition Law, enacted by the National People's Congress, lays the legal foundation for the administrative protection of trade secrets. Article 9 of this law clearly defines that the infringement of trade secrets belongs to unfair competition. Article 3 stipulates that governments at all levels have the responsibility to stop unfair competition and protect trade secrets. Article 4 points out that departments performing administrative functions in industry and commerce at or above the county - level are responsible for investigating and handling unfair competition acts. Article 13 empowers the supervision and inspection department with the right to take various administrative measures during investigations, such as entering the site, interrogating relevant personnel, and requires that work be carried out in accordance with laws and regulations, and the investigation results be publicly announced in a timely manner. Article 21 sets penalties for infringers, with a maximum fine of up to 5 million yuan. Article 25 further stipulates that operators who actively reduce the harmful consequences of illegal acts can be given lenient or mitigated administrative penalties, highlighting that administrative supervision aims to maintain an orderly market.

Industry - specific authorities have also taken active actions. The Interim Provisions on the Protection of Trade Secrets of Central Enterprises (Guozi Fa [2010] No. 41) issued by the State - owned Assets Supervision and Administration Commission of the State Council emphasizes the need to strengthen the protection of trade secrets of central enterprises. This document classifies the trade secrets of central enterprises into different confidentiality levels and adopts different confidentiality periods and measures, which not only reflects special administrative protection but also strengthens administrative supervision over the data management of central enterprises.

In terms of national standards, in 2023, the National Intellectual Property Administration and the National Technical Committee for Standardization of Knowledge Management revised and issued the Requirements for Enterprise Intellectual Property Compliance Management System (GB/T 29490 - 2023). Based on the PDCA cycle concept, this standard added specific content related to trade secret management. Together with the Requirements and Guidelines for the Use of Compliance Management Systems (GB/T 35770 - 2022), it provides important references for enterprises to carry out trade secret compliance management.

### **3.1.2 Local Documents**

Local management departments are also actively promoting the protection of trade secrets. For example, in June 2024, the Market Supervision and Administration Bureau of Minhang District, Shanghai, jointly issued the Guide to Trade Secret Protection in Minhang District, Shanghai, with multiple departments. By strengthening the administrative guidance of the market supervision department and leveraging the "MIP Platform" to enhance the cooperation between judicial and administrative departments, it has improved the local trade secret protection rule system.

As a province with a strong private economy, Zhejiang Province is at the forefront of trade secret protection. In 2020, Zhejiang Province took the lead in issuing the Local Standard for Trade Secret Protection and Management, providing comprehensive guidance for enterprises and promoting their self - compliance development. During the "13th Five - Year Plan" period, Zhejiang Province established many trade secret protection demonstration bases, and from 2021 to 2023, a new batch of provincial - level demonstration bases were added. These bases have played a good exemplary and leading role, driving upstream and downstream enterprises to pay more attention to trade secret protection.

## **3.2 Dilemmas and Challenges in Administrative Compliance and Supervision Practice**

Despite the existence of a relatively comprehensive legal and institutional framework, there are still numerous challenges in the practical protection of trade secrets. These include weak awareness and capabilities among enterprises in trade secret protection, a need for improvement in regulatory services, non - standard confidentiality measures in units, and unreasonable systems.

### **3.2.1 Difficulties in Implementing Compliance Systems**

Although the legal framework is becoming more and more perfect, enterprises encounter many difficulties when implementing administrative compliance systems for trade secrets. Many small and medium - sized enterprises, due to resource shortages and weak awareness, have not established effective protection systems. Their internal management is chaotic, lacking confidentiality training and restraint mechanisms for employees. For example, some enterprises do not classify, label, and store trade secrets properly. Employees can access key technical information at will, and confidentiality agreements are not effectively implemented, making trade secrets vulnerable to leakage.

Even large enterprises with complete compliance systems may face problems such as "paper - only compliance" in actual operation due to factors like departmental conflicts of interest and high implementation costs, and thus cannot effectively prevent the risk of trade secret leakage.

### **3.2.2 Coordination Obstacles among Regulatory Departments**

The protection of trade secrets involves multiple administrative departments, such as market supervision, intellectual property, public security, and confidentiality - related departments. However, there are overlapping and ambiguous areas in the responsibilities of these departments, which makes it difficult to coordinate supervision. When investigating and handling infringement cases, the market supervision department is responsible for overseeing unfair competition. But for professional issues related to intellectual property infringement, it needs the technical support and identification from the intellectual property department. When the infringement is suspected to be a criminal offense, the involvement of the public security department requires the transfer of clues and evidence among different departments. Due to the lack of a unified coordination mechanism and an information - sharing platform, problems like departments shirking responsibilities, inconsistent law - enforcement standards, and untimely case transfer are likely to occur. These issues

seriously affect the efficiency and effectiveness of supervision and make it difficult to form a joint regulatory force.

### **3.2.3 Lagging Technological Supervision Means**

With the rapid development of digital and network technologies, the forms of existence and dissemination channels of trade secrets have undergone significant changes. Traditional supervision means are difficult to adapt to the new situation. Trade secrets are vulnerable to leakage in the network environment, and infringement acts are more covert and difficult to trace. Currently, administrative supervision departments lack sufficient technical equipment and professional personnel. They are short of the capabilities for network monitoring, data analysis, and technical identification. As a result, they cannot effectively screen the vast amount of network information to timely detect the risk of leakage and clues of infringement. For example, when it comes to acts of stealing and spreading trade secrets using new technologies such as cloud storage and encrypted communication, supervision departments often find themselves at a loss.

## **4 Strategic Suggestions for Improving Administrative Compliance and Supervision of Trade Secrets to Ensure National Security**

### **4.1 Optimizing the Legal System and Compliance Standard System**

First, the laws and regulations on trade secret protection should be further refined and improved, and the standards for identifying trade secrets and infringement should be detailed to provide pre - order legal support for administrative law - enforcement. Then, in combination with the characteristics and development needs of different industries in China, detailed administrative compliance standards and guidelines for trade secrets should be formulated, clearly defining the specific requirements and operating norms for enterprises in the identification of trade secrets, protection measures, personnel management, and emergency response. For example, for high - tech industries, measures such as encrypted storage of electronic data, access permission management, and network security protection should be emphasized. For traditional manufacturing industries, guidance should be provided on strengthening confidentiality management at production sites, storage, and circulation control of technical drawings, etc. This will promote enterprises to establish a scientific, systematic, and highly operable compliance management system for trade secrets, ensuring the security of trade secrets from the institutional source, providing a solid legal and institutional support for the development of key national industries, and enhancing the country's risk - resistance ability in international competition.

### **4.2 Strengthening Administrative Supervision Coordination and Efficiency Improvement**

Establish and improve an administrative supervision coordination mechanism for trade - secret protection. Set up a special coordinating body composed of relevant departments, clarify the division of responsibilities and cooperation processes of each department in trade - secret protection, and enhance information sharing and law - enforcement collaboration. For example, establish a unified trade - secret protection information platform to realize functions such as the transfer of case leads, sharing of law - enforcement data, and notification of supervision dynamics among departments, break the information barriers between departments, and improve supervision efficiency and coordination effects. Meanwhile, strengthen the cooperation between supervision departments and social forces such as enterprises, industry associations, and scientific research institutions, and give full play to the roles of industry self - discipline and social supervision. Encourage industry associations to formulate industry norms and self - regulatory conventions for trade - secret protection, and organize enterprises to carry out training and exchange activities to improve enterprises' self - protection awareness and capabilities. Support scientific research institutions in conducting R & D and innovation on trade - secret protection technologies to provide technical support and intellectual guarantee for administrative supervision. In addition, increase the technical investment in supervision departments, cultivate and introduce a group of professional talents with multi - disciplinary knowledge in information technology, intellectual property, law, etc., and equip them with advanced technical equipment and monitoring tools to enhance the technical supervision capabilities of supervision departments. For example, use big - data analysis technology to conduct real - time monitoring and risk early - warning of enterprises' online trade - secret activities, and apply blockchain technology to conduct encrypted authentication and traceability management of the storage and circulation of trade secrets, ensuring that trade - secret infringement acts can be detected and investigated in a timely manner, and effectively maintaining the trade - secret security environment on which national security depends.

### **4.3 Cultivating Corporate Compliance Culture and Social Integrity Atmosphere**

Strengthen publicity, education, training, and guidance on trade - secret protection for enterprises. Through activities

such as special lectures, seminars, and case - analysis meetings, improve the awareness of enterprise management and employees about the importance of trade secrets, and enhance their legal awareness and moral responsibility for protecting trade secrets. For example, carry out trade - secret protection campaigns in enterprises, provide face - to - face consultation services and training courses for enterprises, help enterprises establish a sound confidentiality system and employee training mechanism, and guide enterprises to incorporate trade - secret protection into the important content of corporate culture construction, creating a compliance - culture atmosphere of full - staff participation and voluntary compliance.

At the same time, incorporate trade - secret protection into the construction of the social integrity system. Establish a credit file for enterprises' trade - secret protection. Give recognition and credit points to enterprises that abide by the law and have outstanding trade - secret protection work, and provide policy support and preferential treatment in government procurement, project bidding, bank loans, etc. Implement joint punishment for enterprises that infringe on trade secrets, publish their bad - behavior records to the public, restrict their market access and financing channels, etc., so that they are restricted in economic activities. In this way, create a good social atmosphere of honesty, trustworthiness, respect for intellectual property, and trade secrets, provide strong support for trade - secret protection from the cultural and moral levels, and ensure the safe and stable development of the country in the fields of economy, science and technology, and national defense.

## 5 Conclusion and Outlook

In the complex and volatile international situation, administrative compliance and supervision of trade secrets are of crucial significance for safeguarding China's national security. Through the implementation of a series of measures such as optimizing the legal system, strengthening supervision coordination, and cultivating corporate compliance culture, China's trade - secret protection level can be effectively improved, the country's core competitiveness in key industrial fields can be enhanced, and various security risks caused by trade - secret leakage can be prevented and resolved.

Looking forward, with the intensifying global technological competition and the continuous development of China's economy and society, trade - secret protection will face more challenges and opportunities. China should closely monitor the cutting - edge trends of international trade - secret protection, continuously learn from foreign advanced experience, continuously improve the administrative compliance and supervision system for trade secrets, strengthen international exchanges and cooperation, and actively participate in the formulation of international rules. This will create favorable conditions for China to achieve technological self - reliance and self - strength on the global stage, safeguard national security, and promote high - quality economic development, and lay a solid foundation for realizing the Chinese Dream of the great rejuvenation of the Chinese nation.

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## References

- [1] Research Group of the Institute of Industrial Economics and Technical Economics, National Development and Reform Commission, Ren Wangbing, Qiu Ling. Protection of Trade Secrets and Industrial Innovation and Development: Mechanisms, Practical Dilemmas and Strategic Orientations [J]. *Macroeconomic Research*, 2024, (2):106 - 107.
- [2] Du Lingdong. Research on the Problems of Trade Secret Protection Work of the Market Supervision Administration of H District in Wenzhou City [D]. *Changchun University of Technology*, 2024:1 - 2.
- [3] Sun Hui. On the Management of Trade Secrets under the Modern Enterprise System [J]. *Legal System and Society*, 2010, (17):202.
- [4] Xia Wei. Construction Paths of Enterprise Trade Secret Compliance Management Systems [J]. *China Tendering*, 2024, (5):47 - 51.
- [5] Qin Zongwen, Zhang Zhuoni. On the "Paper - based" Risks of Proving the Effectiveness of Compliance of Enterprises Involved in Cases [J]. *Journal of the Party School of CPC Qingdao Municipal Committee & Qingdao Administrative College*, 2023, (5):91 - 99.