

# Market Failure - The Origin of Government Regulation on High-tech Industry

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**Abstract:** *In the process of promoting the reform of the market economy system, China's comprehensive strength has been improving very fast. All along, China has paid great attention to the adjustment and reform of the market economy, focusing on the current situation of economic development, and through the analysis and research of the development law to better improve its comprehensive competitive strength, so as to effectively meet the challenges of the times and achieve good and fast growth. The market and the government play a key role in the reform of the market economy management system. The government needs to take the initiative to focus on the spirit of the development of the times, strengthen macro-control and management, build perfect management rules and systems, and flexibly use economic and administrative means to promote the smooth development of economic activities. The market is an invisible hand, which can better compensate for the various deficiencies of government management. However, the frequent emergence of market failure makes the government start to readjust its working mode and management means, focusing on the realistic conditions of high-tech industry development, understanding the specific causes of industrial regulation, and then better realize the right remedy to truly achieve effective interaction between the market and the government, so as to create a good external space and environment for the positive and stable operation and development of the market.*

**Keywords:** *Market failure; High-tech; Industrial regulation*

## 1. Introduction

In the era of informationization and technology, China's comprehensive strength has been significantly improved, and high-tech industries have emerged and proliferated, developing very rapidly. Many regions focus on the real conditions of high-tech industry development, actively combine with the development concept of keeping pace with the times, in the process of comprehensive adjustment and improvement to enhance the development strength, effectively meet the challenges of the times. Compared with other development modes, the development of high-tech industry is faster and can better contribute to the national political, economic and cultural construction. On the one hand, the management staff needs to pay attention to the innovation and reform of management strategies and methods, on the other hand, they need to analyze the various problems and contradictions in the development of high-tech. Among them, the phenomenon of market failure seriously affects the stable construction and development of high-tech enterprises, in this regard, the state needs to address the substantive causes of various problems, to better achieve stable operation on the basis of comprehensive adjustment and improvement, to fully highlight the important role and advantages of high-tech industry, to ensure the close integration of the government and the market, to truly create a good for the stable construction and development of high-tech industry The government and the market are closely integrated to create a good external space and environment for the stable construction and development of high-tech industry.

## 2. Government regulation

Today, with the rapid improvement of market economy system, the regulation of market economy has been put on the agenda. The market is an invisible hand that helps the stable operation of the economy, fully constructs the perfect management mechanism and realizes comprehensive development, and the market competition helps to promote the rational allocation and optimization of resources. However, the rapid development of the market economy has led to many problems and contradictions, among which the Great Depression has led to significant changes in people's perception of the market, and there are many shortcomings and defects in the market mechanism, which may not be able to directly solve the various problems that exist in the current market operation, and cannot simply define different efficiency

and economic problems, so the market failure The analysis of market failure cannot be ignored. In the analysis and study of market failure, scholars clearly suggest that the government needs to take the initiative to adjust its working mode and strengthen the analysis and study of market failure, on the one hand, it needs to pay attention to the effective play of market mechanism and give more space to the market. On the other hand, it is necessary to put forward corresponding countermeasures and opinions to solve the problem of market adaptation and adjust the working mode and practice strategy in order to achieve the optimal state. In order to ensure the maximum social welfare, the state needs to actively participate in the operation of the market economy, actively intervene in economic life, make corresponding adjustments through the analysis of the market failure segment, and strengthen the effective control and regulation of the market [1]. Most economists believe that market failure is an economic reason for government regulation, and if the stable operation of economic life is affected in some way, such as the emergence of market failure problems, then the government needs to take relevant solutions to further regulate as well as guide to ensure the stable development of the market.

### ***2.1. Incomplete competition***

There is a certain link between the completeness of market competition and efficiency. A perfectly competitive market operates more efficiently, while the market price can be controlled at the lowest level and the output is larger. But the non-existence of perfect competition, which is only an ideal state, is likely to lead to a certain impact on efficiency, in which imperfect competition is of great concern. For a brand new market, imperfect competition has the lowest efficiency, which is closely linked to the existence of monopoly monopoly, leading to rising prices, while making the original competition directly ignored and restricted, seriously affecting the fair operation of society, there are many welfare losses. Therefore, when analyzing and researching government regulation, it is necessary to focus on the actual causes of government failure, understand the realistic conditions for the emergence of various monopoly problems, pay attention to the effective use of resources, and adjust the working ideas through the analysis and research on the efficiency and the current situation of resource allocation to guarantee the right remedy.

### ***2.2. Incomplete information***

In the background of the information age, the problem of incomplete information is more prominent, which makes technological progress and innovation hindered, insufficient information mainly refers to the quantity and quality of information can not meet the actual needs of economic operation, it is difficult to provide a lot of convenience for the decision-making of market players, can not ensure the scientificity and rationality of information decision-making, it is difficult to propose the best economic decisions, the contact and interaction between different economic players is more frequent. The interaction between different economic agents is frequent, but the amount of information they have differs, and there is an extremely obvious asymmetry. The information-advantaged party tends to take corresponding strategies and means to make decisions and choices, which leads to the economic interests of the information-disadvantaged party being greatly impacted and affected, and the information monopoly position makes the competitive balance of the market directly broken, which cannot really realize the stable operation of the market, and many problems of undesirable competition also appear. The government needs to take the initiative to strengthen macro-control, analyze and study from different perspectives, fully demonstrate the important role of market economy, and ensure that the government can assume the corresponding responsibility.

### ***2.3. Riskiness***

In the process of participating in various economic activities, economic agents will face many risks, and external uncertainties will lead to a continuous increase in risk. Through the analysis and study of the realization of economic activities can be seen that the level of substantial earnings differ, the volatility of future earnings is more significant, this point leads to the constant generation of risk, for the private enterprise economic system, the ability of substantial capital liabilities is more limited, so the risks faced are greater, you can directly cancel the risky investment, through this form to achieve their own stable operation [2]. If analyzed in the context of the entire social economy, a part of the economic agents will directly expand their investments, so the substantial risks are getting bigger and bigger, and at the same time the final income will not reach certain standards and purposes. The economic cycle of production, exchange and consumption is the most critical, but the whole balance is directly disturbed, and the substantial risk is relatively high. The government needs to focus on this segment to make targeted

adjustments and introduce corresponding management regulations and policies, so as to ensure the stable operation of the whole market economy and truly achieve the stable improvement of comprehensive competitive strength.

#### **2.4. Externalities**

For production and consumption activities, in the actual operation of the process is likely to appear different levels of benefits, including positive and negative effects are the main body, the main body of production and consumption activities are different, punishment and compensation mechanism is the most critical, so the externality is more significant, the externality will directly affect the private costs and the actual benefits, resulting in a certain difference between social costs and private costs. Thus, externalities are more rapid in economic activity and are also directly related to and differentiated from real demand, and they help to further strengthen incentives for bad habits, such as environmental pollution. In contrast, internalities help to promote good behavior, such as innovation and environmental protection, which are directly related to the stable operation of the market. In the process of promoting the operation of the market, it is necessary to focus on the inherent defects, and to analyze and study the free behavior of economic people to understand the substantive reasons for the emergence of various monopoly problems, among which externalities, risk and incomplete information are the most critical, which makes the market failure problems appear frequently, so that in the process of promoting market economy reform, it is not possible to completely let the market to use the allocation, but needs to. Therefore, in the process of promoting market economy reform, the market should not be completely used for allocation, but needs to be adjusted with an eye on the economic efficiency of the market, fully reflecting the important role and advantages of government regulation, and making up for the various deficiencies in the allocation of resources in the market, so as to enhance the comprehensive strength and operational efficiency of the economic market.

#### **2.5. Public goods**

As an important part of the whole market economy, the importance and necessity of public goods are self-evident. Public goods are services and products that can be provided to many people at the same time, and their effectiveness and cost are not affected by the number of users [3]. In addition, public consumption of public goods does not affect the consumption behavior of others, such as environmental protection, public facilities, health care, culture and education, science and technology, and diplomacy and national defense, and it is easy to find that if a complete supply model has been formed, it is impossible to analyze the right of attribution in the decision-making process, and it does not directly affect other paying consumers. This shows that the non-exhaustive and non-competitive nature of public goods affects the internal stability of public goods in terms of market failures. The state needs to focus on optimizing and upgrading public goods in light of the realities of subjective consumption, make full use of the government's role and power to strengthen social management, ensure the active participation of different identity organizations, implement the later supervision and management, and actively promote the further development and growth of public goods.

### **3. Market Failure - The Origin of Government Regulation on High-tech Industry**

It is easy to find that the emergence of market failure has made the government realize its important responsibility, actively adjust its working mode, improve the quality and efficiency of its work, actively face the challenges of the times, and actively realize the reasonable allocation and utilization of management resources. For the high-tech industry, the development speed is fast, which is the product of the development of the times and can better reflect the concept of economic development with the times. The government needs to focus on the substantive causes of market failure, based on government regulation, strengthen the guidance and education of high-tech industry, further adjust the work ideas and work direction, ensure the effective implementation of different management modes, and do the preliminary paving work for the improvement of national comprehensive strength.

#### **3.1. Regulation of monopoly in high-tech industry**

When analyzing and studying the anti-monopoly laws of different countries, it can be found that the analysis of monopoly structure, abuse of monopoly rights and the trend of monopolization is the main subject, and the government regulation also needs to be based on this and specify the specific objects of

regulation. In the context of knowledge-based economy and market economy, the monopoly problem in high-tech industry is significant, and the development trend is changing with time. Therefore, the government should pay attention to the analysis and research on the structure of high-tech industry, understand the important contents of industrial organization theory, focus on the specific development status, and seize the key points and difficulties of monopoly regulation policy based on further adjustment and improvement. The implementation of structuralism is the most crucial, and the government needs to always stand in the perspective of the development of the times to analyze the specific causes of monopoly, and through the analysis of the characteristics of high-tech industries and the law of development to make effective adjustments, fully highlighting the monopoly rights of knowledge products and the exclusive use, so as to better clarify the later work ideas and paths and ensure the right remedy. The analysis of technological superiority and the study of patent rights are also crucial, which are directly related to monopoly status. The government needs to focus on the substantive causes of market failure and pay attention to further regulation and guidance of high-tech industries based on the analysis of monopoly problems. It should ensure that the high-tech industry can actively participate in the market competition, regulate its own words and behaviors, assume certain social responsibilities, and set an example for other enterprises.

### ***3.2. Regulation of information asymmetry in the field of high-tech industry***

At present, China's high-tech industry is developing very rapidly, and the connection and interaction between different industries are becoming more and more frequent, and the difference between each industry is more significant, which makes the problem of information asymmetry arise. The state, on the other hand, needs to pay attention to the substantive root cause of these problems, increase the investment and support for high-tech industries, take the initiative to introduce more preferential policies, and understand the relevance between high-tech enterprises and business incubators. The problem of information asymmetry between these two is relatively common, and the state only needs to focus on the benefits and the implementation of the expected benefits, analyze the substantive causes of the information asymmetry problem, understand the specific risk-reward situation as well as the benefits, combine economic strategies and administrative means to ensure that both parties have access to true and comprehensive information, and try to avoid uncertainty as well as monopoly [4]. Third parties also need to be actively involved in the process, implementing post-monitoring as well as management, and taking the initiative to strengthen the links between different management links. In addition, there is an obvious information asymmetry between high-tech enterprises and consumers, and the regulation of this problem should not be ignored. The government needs to focus on the actual situation of different products and services, and strengthen the analysis and research of the market operation mode. The government needs to develop and improve the product level regulation system, understand the substantive level of technical content of high-tech products and classify them into levels, and clarify their technical content indicators, so as to better realize the reasonable allocation and utilization of information resources.

### ***3.3. Regulation of the riskiness of high-tech industry***

The risks faced by the high-tech industry are more prominent and diverse. The state needs to focus on the substantive reasons for this problem, strengthen the analysis and research of the risk industry, understand the substantive conditions for the use of funds, ensure that the information technology industry can gain more competitive advantages, actively respond to the challenges of the times, and actively avoid various risks. The legal regulation of venture capital is the most important, and on this basis, the state also needs to focus on the real conditions of venture capital, clarify the requirements of guidance and incentive regulation, and guarantee the stable implementation of different aspects based on the regulation of the exit guarantee of venture capital, so as to truly achieve a comprehensive breakthrough and improvement of the work.

## **4. Conclusion**

In the context of the new era, the market failure problem has been widely concerned by the public, and the government can effectively avoid the loss of market failure and actively strengthen the effective control and coordination of the market. The state needs to focus on the real conditions of high-tech industry regulation, analyze the substantive causes of market failure, and take the initiative to assume certain responsibilities and obligations. On the basis of further adjustment and improvement, the important advantages of the development of high-tech industry can be fully demonstrated, and the

government can play a corresponding role.

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