

Research on Reform of Governmental Regulation of Natural Monopoly Industries

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Abstract The natural monopoly industries are characterized by scale economy and scope economy, and seriously undermine the interests of consumers because of such negative effects as decrease in production efficiency, loss in social welfare and low efficiency in organization and management, which are caused by monopoly. So it is necessary that the natural monopoly industries shall be regulated by the government. Taking advantage of the modes and experience of regulation of developed countries. The paper put forward relevant recommendations on governmental regulation on China's natural monopoly industries.

Key words Natural monopoly; Governmental regulation ; Economic regulation; Social regulation

1 Introduction

Analysis on natural monopoly is derived from market failure questions at the beginning in the west. The existence of economies of scale leads to market failure in natural monopoly industries, which produces the governmental regulation in natural monopoly industries. The related study mainly includes how the government controls natural monopoly. Of that, Stiglitz believes that there are three solutions to solve such problem: firstly, the ownership of an enterprise is taken over or nationalized by the government; secondly, let the government control such enterprise while a private company operate it; thirdly, to encourage competition. Deregulation and competition theory under regulation frame represent to study governmental regulation of natural monopoly industries from the point of view of inspecting the effect of regulations, in which theories of deregulation include Regulation Failure Theory, X Low Efficiency Theory and Regulatory Capture Theory, and the competition theory under regulation emphasis that competition mechanism should be introduced into regularity reform in progress at present, in other words, to avail competition to achieve the goal of the maximum of social welfare, which mainly include Franchise Rights Bidding Theory, Yardstick Competition Theory and Contestable Markets Theory etc.

Governmental regulation refers to the general summary of a series of administrative management and supervisory acts which relatively independent governmental administrators (institutions) with legal status take on the regulated entities (mainly enterprises). The governmental regulation involves politics, economy, law and administrative management, but from the main aspects of influence and the main fields in which the governmental regulation takes action, the restricting and regulating of the natural monopoly industries is the starting point of the governmental regulation as well as its goal and final destination. Therefore, the important theoretical and practical meaning can be granted to the research on the reform of the governmental regulation, which aims at the restricting and regulating of the natural monopoly industries based on the actual conditions of the present stage in China.

2 Analysis of the Meaning of the Monopoly and Natural Monopoly

Many economists have comments about the monopoly. Adam Smith, the classical economist, thought that the monopoly is to use different political power and law to limit free competition and free trade, i.e. the monopoly caused by the government protection. Ricardo cared more about the monopoly caused by limits of natural conditions, especially influence of limited supply of land on grain price and land rent. Mill brought forward the concept "natural monopoly", i.e. the monopoly situation of only one supplier. Marshall, new classical economist, thought that the monopoly means that one person or one group has the rights to decide the quantity or selling price of the sold goods, so it is easy to generate the monopoly on the sale of scarce goods. After Marshall, American economist Chamberlain and British economist Robinson founded the theory of monopoly competition and incomplete competition, laying a foundation for theory of the firm and theory of industrial organization of modern micro economics. From the cause of monopoly generating, the monopoly is divided into natural monopoly, administrative monopoly and market monopoly. Natural monopoly is formed because of natural causes; administrative

monopoly is caused by intervention of administrative power; market monopoly is formed by survival of the fittest in competition. If allocation of scarce resources is decided by the market, optimized allocation and reasonable use of resources can not be realized. Therefore, to avoid resource waste and overuse caused by competition, certain regulation or license of property rights shall be adopted to implement some kind of intervention in the industry, so natural monopoly is, through administrative means, obligated to meet the industry in which external effect, scale economy and scope economy exist. The nature of the industry determines that free competition forms the market structure of the monopoly in the end. In this situation, the monopoly is realized through competition and natural selection. This is natural evolution of the industrial organization, which complies with the law of nature of survival of the fittest, and also provides fair entry and competition opportunities for the participants. Natural monopoly industries must have the following characteristics: (1) effect of scale economy is very obvious. Effect of scale economy means that the cost of the product shall decrease with the increase of the production scale of the enterprise. (2) Effect of network. Natural monopoly industries form the network system when providing service. Such industries as power, gas, heat supply, water, telecommunication, railway and postal service are network industries, which must have an integrated network to provide socialized service. (3) Obvious effect of relevant economy. Natural monopoly industries have a series of complicated processes for service supply. These processes need to be connected stably, i.e. connection in technology. (4) Rigid sedimentation of large amount of capital. Because of dedicated nature of assets, the capital invested in natural monopoly industries is hard to take back, and is also difficult to change to other usages. If many enterprises compete freely, destructiveness and lethality will be enormous, and the final result is either failure of enterprises or merger and combination.

3 The Present Situation of China's Natural Monopoly Industries

China's natural monopoly industries have their own characteristics, but the monopoly is caused by the sole operation of some department of the government, not by concentration of production because of competition, and implemented by the government's power. Since reform and opening-up, drawbacks in natural monopoly industries are exposed gradually, which mainly include: first, the enterprise lacks necessary competitive mechanism, so forms the working mode of inefficiency, and incurs serious loss. According to China's administration system on natural monopoly industries, main businesses of natural monopoly is operated by the central government or local government, while the enterprises don't have market principal status and managerial decision making power. The government is not only the policy-maker and supervisor of regulatory policies, but also the real operator of actual business; the government directly manages the enterprises, and intervenes in the routine business activities of the enterprises. This strict regulation limits the operating energy of the enterprises greatly, and makes the enterprises lose aggressiveness and competitiveness. Second, high service price and poor service quality, which limit the rapid increase of resident consumption demand, and make consumption's contribution ratio to economic growth decrease year by year. Third, the price-forming mechanism can not stimulate the production efficiency. The power, gas, water, telecommunication and railway transportation in China mainly adopt "cost-plus pricing", i.e. the cost plus certain profit. This price-forming mechanism can not stimulate the enterprises to lower the cost and increase efficiency for more profits. Fourth, singular investment entity, thus leading to demand-supply gap. Natural monopoly industries provide fundamental and scarce public goods and service, which is invested mainly by the government. The singular investment channel and limited government finance result in lack of investment in infrastructure industry. In a word, the singular investment channel leads to the capital bottleneck of industry development, limits development of the industry, and at the same time reduces the investment (another important factor which impels economic growth). After entry to WTO, the enterprises in China's natural monopoly industries show less competitive than foreign enterprise when participating in fair competition.

4 System Design for the Reform of the Governmental Regulation to the Natural Monopoly Industries

The goal of the reform on the natural monopoly industries is to realize effective competitiveness and increase efficiency. To reach the goal, the author recommend that China's reform on the governmental regulation system shall be conducted through the following several aspects:

Firstly, further loosening the economic regulation, and gradually strengthen the social regulation on natural monopoly industries. During the reform of the governmental regulation, the main reason why it

is necessary that the economic regulation on natural monopoly industries by the government shall be eased is: inefficient operation and lack of competitiveness in natural monopoly industries over a long period, have made this kind of behavior, which emphasizes the application of market competition mechanism and the increase of economic benefits and aims at loosening the economic regulation by the government, as a global trend for implementing the reform of natural monopoly industries. It can be said that the variability of the characteristic of technical economy for natural monopoly industries, in fact, is the underlying reason for the reform of the governmental regulation system. Furthermore, the inefficiency that exists in the current economic regulation system of natural monopoly industries in China, also require us to expedite and deepen the reform of the governmental regulation system. Compared with the economic regulation, the social regulation is more abundant in the content, which, according to Uekusa Masu, the Japanese scholar, consists of the four parts: ensure health and hygiene, ensure safety, prevent public hazards and protect environment, ensure education, culture and social welfare. The regulation on safety of food and medicines was launched in early twentieth century, but was emphasized only in 1970s. Due to the increasingly serious air pollution and water pollution, plus influence of property rights and information asymmetry, people urgently require that the government can regulate these social issues by means of legislation and law enforcement on behalf of public rights and interests. Since the eighties of the twentieth century, China started to stress the social regulation on natural monopoly industries, and strengthened the management in terms of the regulation after the nineties, especially doing a lot in protecting environment, increasing the quality of product and service, maintaining social security and health.

Secondly, establish and improve the corresponding law and regulation system, and practically enhance the scientificness and effectiveness, so as to provide fundamentals for the reform of the regulation. Many western developed countries emphasize that the legislation as the lead shall be the basic principle in the reform of the governmental regulation system. For example, the British government instituted strict laws on four major natural monopoly industries (telecommunication, power, gas and water): Telecommunication Law in 1984, Gas Law in 1980, Water Law in 1989, and Power Law in 1989. Furthermore, the British government set up corresponding regulatory institutions to monitor the implementing of such laws, thus laying a solid foundation for the sound development of these industries. Since the reform and opening-up, China established Railway Law, Aviation Law, Power Law, and Telecommunication Administration Rules successively. However, we followed the tradition of "first reform, then legislation". So the establishment of laws falls behind, and moreover, poor operability and compatibility exist in the present promulgated laws. Therefore, the establishment of the regulatory law system on natural monopoly industries shall be speeded up in accordance with the provisions of the Legislation Law, and furthermore, the coordination shall be improved with such relevant laws as the Constitution Law, Antimonopoly Law, Administrative Procedural Law and Contract Law. It shall be noted that the 29th Session of the Standing Committee of the Tenth National People's Congress adopted the Antimonopoly Law on 30th August 2007, which has taken effect on 1st August 2008. The Antimonopoly Law is the right response to China's economic situations: it opposes abuse of market ascendancy, in favor of regulating the behaviors of the monopoly enterprises (especially state-owned enterprises); it stipulates the review of merger and acquisition by foreign capital, in favor of China's participation into the global competition; it takes a clear stand to forbid such administrative monopoly behavior as local protectionism, in favor of regulation of market order. However, it shall also be noticed that the monopoly phenomena currently existing in China, except for some competitive monopolies formed during market competitions, are non-competitive administrative monopolies. The core of the Antimonopoly Law stipulated currently is against the economic monopoly, not administrative monopoly, so this law is just a staged antimonopoly achievement and the foundation for deepening the antimonopoly, while the final goal of the antimonopoly is against administrative monopoly.

Thirdly, set up relatively independent regulatory institution, realize the separation of government and enterprise, and really improve the effect of law enforcement. For a long period, main businesses of natural monopoly industries in China are operated monopolistically by the central government or local governments. The government is not only the policy-maker and supervisor of regulatory policies, but also the real operator of actual business, so the government and the enterprise are not separated, and administrative monopoly is very serious. Within such system, the production and operation activities of enterprises are planned and arranged by the government, and enterprises don't have the managerial decision making power and don't assume any risk either. This is the main reason of inefficiency in natural monopoly industries, so separation of the government and the enterprise is the key to release the

operating energy of the enterprise. Scientifically-configured and reasonable regulatory institutions are the prerequisite to realize separation of the government and the enterprise in natural monopoly industries. In terms of the basic mode of the regulatory institution, there are three modes in the world: the first mode is the independent regulatory institution with centralized power, such as America; the second mode is the relatively-independent regulatory institution established under the relevant department of the government, such as U.K., Australia and Malaysia; under the third mode the government directly assume the control functions in natural monopoly industries, such as Japan and Korea. For China's current situation, if the traditional system of combination of the government and the enterprise is to be destroyed, the relatively independent regulatory institution must be established beyond the corresponding competent authority for every natural monopoly industry. So China plan to choose the second mode.

Fourthly, implement the incentive regulation. Because the applicable regulatory system can not prevent inefficiency inside the enterprise from happening, regulation-related fees from increasing, loss caused by regulation lag from occurring, the regulatory authority's power of free judgement and rent-seeking cost from happening, Uekusa Masu think that only the incentive which increases the efficiency can be provided to the enterprise while no solution can work, which is called the incentive regulation. The methods include: (1) franchise bidding system. The franchise power for the given industry shall be limited within the certain period, and shall be given to specific enterprise through competitive bidding system after the franchise period is expired. (2) Regional competition. The regulated national monopoly enterprise is divided into several regional enterprises, so the regional enterprise in certain region will increase its internal efficiency under the stimulation of other regional enterprises' achievements. (3) Social contract system. The regulatory authority and the regulated enterprise shall sign the contract on equipment running efficiency, thermal efficiency, fuel cost, outsourcing power price and construction fee when revising the charges and fees. If achievements better than the contract is realized, the enterprise shall be awarded, otherwise be punished. (4) Price-cap regulation. The regulatory authority and the regulated enterprise shall sign the contract on price change in form of the above-mentioned social contract system, and establish the price ceiling, below which the price can change freely. These four methods have advantages and disadvantages, of which the social contract system has been applied by many countries as a good policy. China can improve the system for contracted responsibility in different form, clarify the relationship between duties, rights and benefits, and provide the inducement of economic interests for the enterprises to reduce the cost and increase internal efficiency. Of course, it shall reflect the sociality of such system for contracted responsibility.

5 Conclusion

This paper analyse some questions in natural monopoly industries of the present stage in China through thorough discussion on the definition and characteristics of monopoly and natural monopoly in this thesis. The goal of the reform on the natural monopoly industries in China is to realize effective competitiveness and increase efficiency. To reach the goal, the author recommend that China's reform on the governmental regulation system shall be conducted through the following several aspects: System Design for the Reform of the Governmental Regulation to the Natural Monopoly Industries; further loosening the economic regulation, and gradually strengthen the social regulation on natural monopoly industries, establish and improve the corresponding law and regulation system, and practically enhance the scientificness and effectiveness, so as to provide fundamentals for the reform of the regulation; set up relatively independent regulatory institution, realize the separation of government and enterprise, and really improve the effect of law enforcement, implement the incentive regulation.

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