Research on the Reform of Mixed Ownership by Natural Monopoly Enterprises in Developed Countries

Xiaobin Lin, Jianhui Liao, Haiyun Song and Hanxiong Xiao

State Grid Energy Research Institute CO., LTD., Beijing, China

Abstract. The paper finds that mixed ownership is an important form of natural monopoly industries to introduce private capital and promote industry development. At the same time, compared with other privatization reform models, mixed ownership also has its inherent shortcomings, so it needs a series of prerequisites and supporting conditions. China is vigorously pursuing mixed ownership reforms in natural monopoly industries such as power grids, oil and gas, and railways. However, as China has less experience in reforms in this area, it is necessary to study the reform experience of foreign natural monopoly industries to learn lessons.

Keywords: mixed ownership; mixed ownership reforms; reform experience.

1. Introduction

From a global perspective, due to the special nature of natural monopoly services, the government has the responsibility to guarantee, so for a long time, most countries have established state-owned enterprises to provide them directly. In order to solve the pressure on construction funds and improve operational efficiency, starting from the late 1970s, many developed and developing countries have carried out various forms of privatization and marketization reforms. How to meet the needs of society for infrastructure and public services is an important challenge facing governments in all countries. Most countries have experienced three stages of nationalization, privatization reform, and PPP model. Among them, public-private partnership (PPP) is the typical model. The reform of mixed ownership has gradually become the main reform model since the 1990s, because it can take advantage of public and private parties and share risks reasonably.

Nationalization is the first stage. In the initial stage, decentralized infrastructure and public services were mainly provided by private providers. After World War II, with the increase in social demand, the effect of network scale has become increasingly significant. Many European countries have been unified by governments and nationalized. In Latin America, the recovery of private property rights after the liberation of colonial countries is the main reason for promoting nationalization.

The second stage of privatization. Beginning in the late 1970s, in order to improve operating efficiency and broaden the source of funds, and at the same time affected by the current trend of liberalization, represented by the United Kingdom, many countries have carried out privatization or privatization reforms in natural monopoly industries, increasing the number of private enterprises in Participation in the field of natural monopolies. Narrow privatization refers to the sale of all assets to the private sector, which was only implemented in very few industrialized countries, such as the United Kingdom and New Zealand in the 1980s. However, it has been widely practiced in developing countries and Eastern Europe. This is related to the compulsory implementation of international financial institutions such as the World Bank and the IMF, and is actually mainly affected by ideology.

The third phase of the PPP model is widely adopted. In the reforms of the 1980s, because the views on infrastructure were too simple, many countries encountered serious technical, economic, and political obstacles, and they began to adjust their direction or even reversed. After the 1990s, innovations in financial instruments provided conditions for private sector participation in infrastructure, and most countries adopted a more compromised or improved reform approach—public-private partnerships (PPPs), even some that initially adopted full private ownership. Countries have also begun to shift to the PPP model.

2. Practice of Mixed Ownership in Natural Monopoly Industries in Developed Countries

The mixed reform of foreign natural monopoly industries was generated in the context of the natural monopoly reform. It originated from the government's sale of state-owned shares and has a wide range of applications, including water supply, sewage discharge, railways, telecommunications, electricity, and natural gas (including gas field development). There are four main ways to implement mixed ownership reform.

2.1 Partial Privatization Reform of State-owned Enterprises

Germany, Italy, and some other European countries, initially set up state-owned enterprises to provide utility services, and later sold some or all of their equity to the private sector. Deutsche Telekom and the Post also partially privatized. Japanese state-owned telecommunications companies were partially privatized. The proportion of state-owned shares in Japan in 1985 was 51%, and by 2003 it had fallen to 45.95%. OECD countries such as France, Austria, Poland, Denmark, Finland, the Netherlands, Italy, and South Korea have carried out partial privatization reforms of state-owned enterprises in the reform of the natural gas and power industries. The EU requires member states to introduce competition in natural monopoly industries, which objectively has also caused some privatization.

2.2 Joint Venture between the Government and the Domestic Private Sector

Many European countries have directly established some public utilities. In the water supply industry in countries such as Hungary and the Czech Republic, the establishment of public-private joint ventures is one of the ways to involve private companies in public services. Japan adopted the "third sector" approach in the 1980s, calling on the public (first sector) and private (second sector) to jointly form project-based companies. By 1995, there were about 7,580 such companies in Japan Entities, where the local government's capital ratio exceeds 25%. France has established a Comprehensive Development Agency (SEM) that allows municipal agencies to set up trading companies with the participation of private companies. In some PPP projects in Singapore, the government owns land and some assets, thus forming equity cooperation.

2.3 Joint Venture between Government and Multinational Company

The Hungarian sewage project in Budapest was partially privatized in November 1997 by transferring a 26% share agreement to an enterprise group consisting of two multinational companies, French General Water and Berlin Water. In Mali, Africa, the production, distribution, and charging of water and electricity are the sole responsibility of Mali Energy. The government and French multinational Saur International hold 40% and 60% of the shares, respectively. Some Russian companies participate in the infrastructure industry in the Middle East Asian countries through loans or joint ventures with the government.

2.4 While Deregulating Oil and Gas Resources, the Government Holds Some Equity in Private Companies

The Japanese oil, gas, and metals company JOGMEC is mainly responsible for promoting the exploration and exploitation of oil and gas, and supporting private companies. The government holds a minority stake in each company. Since 1997, natural gas exploration rights have been granted to one or more companies through an "open procedure", and 20% of the property rights of each company are owned by the state.

3. Conclusion

3.1 Mixed Ownership is an Important Form of Introducing Natural Capital and Promoting the Development of the Industry in Natural Monopoly Industries

The main reason why mixed ownership can become an important form of promoting the development of natural monopoly industries is that it has unique advantages over full nationalization and other privatization and privatization reform models.

First, compared with the completely state-owned state-run model, mixed ownership replaces the traditional state-owned enterprise management model through public-private cooperation and joint governance, which is conducive to reducing financial pressure, raising construction funds, improving operating efficiency and service quality.

Second, compared with full privatization, mixed ownership can effectively reduce risks and political resistance. First, in special circumstances, the government can intervene in a timely manner to ensure the continuous supply of natural monopoly services and avoid the damaging consequences of complete privatization. Second, direct government ownership can enhance investor confidence, thereby promoting financing and reducing financing cost.

Finally, compared with contract-based PPP, the government can reduce information asymmetry in costs, prices, and technology by directly holding part of the equity of mixed-ownership enterprises, and better safeguard public interests; by sharing costs after the event, Profits and risks can enhance communication between the two parties and increase flexibility in handling issues; for some incremental projects with large investment scales, private investors may not be able to undertake them independently, and the establishment of joint ventures will facilitate the smooth implementation of projects. For example, the United Kingdom is one of the earliest countries to implement PPP. It has been implementing contract-based PPP. However, in recent years, it has also begun to refer to foreign experience to introduce government equity capital in the project and become an investor holding a small amount of public equity capital. Therefore, it has the right to obtain project operating costs and profitability, reduce information asymmetry under the traditional model, strengthen supervision of PPP projects, and protect public interests.

3.2 The Introduction of Mixed Ownership Requires a Corresponding Institutional Environment

Compared with other privatization reform models, mixed ownership also has its inherent flaws. If the government holds a large amount of equity, it may weaken the willingness of minority shareholders to invest. The shareholder status of the government will increase direct intervention in the enterprise and reduce the efficiency of corporate decision-making. The public sector is both a shareholder and a regulator, and these two identities may conflict, such as to increase profits or to protect public needs.

Therefore, although the scope of application of mixed ownership in natural monopoly is wide, it needs a series of prerequisites and supporting conditions. First of all, it is necessary to take the premise of system reform and promotion of competition. For example, after part of the privatization of Japanese state-owned telecommunications companies, the initial monopoly operation did not achieve the goal of reform and improve efficiency. Therefore, industry reforms were conducted to break its monopoly position and establish a new Enterprises to promote competition; most European countries carried out mixed ownership reforms on state-owned enterprises during power and natural gas reforms. In order to promote competition, natural monopolies and competitive links were first separated. Second, the process of selling state-owned assets must be open and transparent, establish a trust relationship with the public and private partners, reduce resistance to reform, form a reasonable plan, and prevent the loss of state-owned assets. Finally, many countries have established independent regulatory agencies during the reform process, with the goal of properly handling conflicts between the dual status of governments as regulators and shareholders through a degree of separation.

Acknowledgements

This research was financially supported by the project of Research on the Reform Method, Scheme and Effectiveness Evaluation of Corporate Mixed Ownership.

References

[1]. Baumol, W.J. and R.D. Willig,Fixed Cost, Sunk Cost, Entry Barriers and Sustainability of Monopoly, Quarterly Journal of Economics, 1981 (96): 405-432.

[2]. Baumol, W.J., J.C. Panzar and R.D. Willig, Contestable Market and the Theory of Industry Structure, 1982.

[3]. Daniele Calabrese, Strategic Communicationfor Privatization, PublicPrivate Partnerships, andPrivate Participation inInfrastructure Projects, WORLD BANK WORKING PAPER NO. 139, 2008.

[4]. Maria Vagliasindi, Revisting Public-Private Partnerships in the Power Sector, AWorld Bank Study, 2013.