Discussion on the Related Issues of Insufficient Funds for the Deadline of Toll Collection on Operating Toll Roads

Yue Yu, Xinyun Cai

School of Traffic & Transportation, Chongqing Jiaotong University, Chongqing 400074, China

Abstract

Along with our country highway construction intensity and financial investment increase. China's expressway develops rapidly, toll road from scratch has also been rapid development, the article mainly on the operating toll road toll expiry is not enough to pay the road maintenance fund situation analysis and put forward some solutions.

Keywords

Toll Roads; Expressways; Maintenance Fund; Franchised Roads.

1. Introduction

Toll road is a sustainable, healthy, green development of the big topic, the development of China's toll road from scratch to the end of 2020 179,200 kilometers, this paper mainly from China's franchised roads and then the toll expiry of the solution ideas to explore.

2. Toll Road Related Theoretical Research

2.1 Toll Roads in General

According to the 2020 Chinese national toll road Statistical Bulletin, by the end of 2020, the national toll road mileage of 179,200 kilometers, accounting for 3.45% of the total highway mileage of 5.198 million kilometers. The length of toll roads nationwide increased by a net 8,149 km from the end of the previous year. Among them, the net increase of expressways was 10,079 kilometers, the net decrease of primary roads was 1,214 kilometers, the net decrease of secondary roads was 760 kilometers, and the net increase of independent Bridges and tunnels was 44 kilometers.

Toll road construction investment By the end of 2020, the cumulative investment in toll road construction nationwide totaled 10,807.51 billion yuan, of which the cumulative capital investment was 3443.25 billion yuan, accounting for 31.9%; Total debt-related capital input reached 7.364.25 trillion yuan, accounting for 68.1% of the total [1].

2.2 The Composition of Toll Roads

According to the different uses of toll revenue, China's toll roads include government loan toll roads and operating toll roads. Article 10 of the Regulations on the Administration of Toll Roads stipulates that the roads constructed by the transportation departments of the local people's governments at or above the county level using loans or compensated funds from enterprises and individuals are toll roads for government loan repayment, and the roads invested by domestic and foreign economic organizations or authorized by the government-repaid toll road refers to the road built by the transportation department using loans or funds, and directly involved in the operation and management of the road, which belongs to the administrative organization form. The transportation department or its affiliated organs set up an independent legal person organization according to law, which is the main body of the project toll collection. The toll management is incorporated into the financial management system according to the nature of the administrative charge, and the two lines of revenue and expenditure are implemented. Fees are used to repay loans and raise funds, not for profit. The operational toll road refers to the road built by the transportation authorities using loans or funds, and the right of road toll collection is transferred to other economic organizations at home and abroad, and the toll road toll collection right is transferred by domestic and foreign economic organizations, or the road is invested by them in accordance with the law.

2.3 Classification of Toll Roads

Toll roads can be divided into two categories. The toll collection subject of the public (called the government loan repayment road in China) is a government-affiliated organization, while the toll collection subject of the private (called the operational road in China) is a profit-oriented enterprise legal person. The main difference between the two is that the toll revenue and expenditure of public toll roads need to be included in the government budget, while the toll period, pricing and profit level of private toll roads need to be regulated by the government.

According to the different ways of collecting vehicle tolls, toll roads can be divided into two categories: open and closed. Open toll roads, also known as fence tolls, toll stations are usually set on the main line of the highway, vehicles pay tolls according to the number of passes, which can be divided into one-way tolls and two-way tolls, open tolls are mostly used for independent Bridges, tunnels and non-controlled access roads. Closed toll roads are mostly used to control access to highways, where vehicle users pay tolls based on the distance traveled on entering and exiting sections.

According to the different purpose of vehicle toll collection, toll roads can be divided into two categories: recovery of construction and maintenance costs and congestion pricing. Among them, congestion pricing, also known as congestion charging, is to internalize the external cost of road traffic congestion and adjust the road traffic demand reasonably by pricing and charging the road during peak hours.

3. Franchised Highway Theory

3.1 The Concept of Franchise

Franchising is a unique management mechanism developed in the western commercial marketing field, and it has been rapidly developed in the global economic field in the 20th century. The International Franchise Association defines franchising as: A franchise is a contractual relationship between the franchisor and the franchisee, an area of operational know-how and training in the franchisee's business in which the franchisor provides or is obligated to maintain an ongoing interest; The franchisee's operations are conducted under a common mark, operating model and process owned and controlled by the franchisor, and the Franchisee invests in its business from its own resources. Franchising constitutes the legal and contractual relationship between franchisor and franchisee. The legal definition of franchising by the Chinese government is as follows: Franchising means that the franchisor grants its own trademarks (including service marks), trade names, products, patents, proprietary technologies and business modes to the franchisees in the form of franchise contracts, and the franchisees engage in business activities under the unified business model of the franchisor according to the contract provisions. And pay the corresponding fees to the franchisor [2].

3.2 The Emergence and Development of Franchising

Franchising originated in the United States, including government franchising and commercial franchising. In 1851, in order to promote its sewing machine business, the Singer Sewing machine Company began to grant the right to distribute sewing machines and set up franchised stores across the United States. He wrote the first standard code book, Gong Baiwen T5, which is recognized in the industry as the origin of commercial franchise in the modern sense. In fact, the franchise system was adopted by European countries very early on. As early as the 17th and 18th centuries, the French used this model to attract private capital to build warships, ports, canals and Bridges. In the 19th century, this model was used to develop and operate urban utilities such as railways, water supply, lighting, and transportation. At the end of the Qing Dynasty, the construction of waterworks by

"official supervision and commercial operation" is also the application of franchise mode, and these words have a good interpretation of the characteristics of government franchise mode. Since the 1970s, this franchising practice has formed a model and theory, and has been widely used in the construction and operation of highways, power supply, communications, cable television, urban heating, garbage disposal, sewage treatment, parking lots and other facilities, including the construction and operation of prisons [2].

3.3 Government Franchise System

Government concessions mainly refer to the use of concessions to exploit state-owned mineral resources, or the construction of government-regulated public infrastructure projects, such as highways. The construction and operation of oil and gas exploration and exploitation, power projects, expressway, railway, port construction and other such projects are not completely open to the market, and are generally invested by the government and operated by state-owned enterprises. Or a company authorized by the government to operate under strict government supervision. However, the government's investment, operation and management of these infrastructure projects or the development and utilization of national resources are often insufficient and inefficient. Therefore, it can be considered that government franchise refers to an organizational form and special mode of operation in order to attract society, enterprises, private funds and foreign capital to invest in domestic public infrastructure construction and improve management efficiency through the introduction of competition mechanism. The government adopts the franchising method mainly in the hope that through the introduction of private capital and market mechanism, it can effectively solve the problems such as the shortage of funds or the inefficiency of operation in the construction of public infrastructure and the development of state-owned mineral resources, so as to maximize the public interest. According to the different responsibility and risk borne by the franchisor, the operation mode of government franchise can be divided into investment government franchise mode and management franchise mode. In the investment-type franchise model, the franchisor bears the double responsibility and risk of project investment and operation, which has the following characteristics: (1) The responsibility and risk of investment and operation are borne by the franchisor. (2) The franchisor is responsible for raising funds in connection with the investment. The introduction of competition mechanism and social investment more thoroughly requires a sound policy and legal environment. Depending on the circumstances, the franchisor receives operating income from the government or from the end user.

In the operating franchise mode, the franchisor only bears the operating risk, which has the following characteristics: (1) The investment of public facilities and the corresponding fund raising are mainly responsible by the government. (2) The government entrusts specific public facility assets to the franchisor for operation within a certain period of time, and the franchisor either obtains management fees from the government or collects fees from the end user [3].

The government franchise has the following characteristics: (1) The legal status of the franchisor and the franchisee is equal; (2) Government franchise is based on the willingness of franchisor and franchisee, which is characterized by mutual choice and compromise. (3) The process of government franchising is open and competitive; The fact that government franchise contracts invoke civil or private law (such as the Contract Law) does not mean that such contracts are therefore private law contracts [4].

4. The Solution Idea of the Deadline of Charging Period

4.1 Improve Regulations

It is necessary to use the favorable opportunity of amending the Regulations to further enrich and improve the laws, regulations and policy guidance on the implementation of "unified loan and unified return" for government loan-repaid roads, and completely solve the problem of repayment of the principal and interest of outstanding construction debts after the expiration of the government's loan road toll period. In fact, the revised "Regulations" (hereinafter referred to as the "New Regulations")

has a clear expression for the implementation of the "unified borrowing and return" (that is, the "unified lending and return" in the "Regulations") policy, but it has not yet been transformed into a formal regulation through official announcement. The policy of "unified loan and unified return" of toll highways in Japan is to implement the whole country as a complete region. Different from it, our country has a vast territory, uneven economic development, and the implementation of the local government management of the highway system, so the implementation of the "unified loan and return" policy in the provincial region is generally scientific and reasonable. However, it is still necessary to combine the actual situation of different provinces, specifically clarify the responsibility of the implementation of the "unified borrowing and unified return" policy, and strive to improve the operability of the "unified borrowing and unified return" policy.

4.2 Improve and Implement the New Charging System

According to the expression in the New Regulations, since the toll period has expired, the highway can also be recovered by the government to continue to implement maintenance charges, which means that the toll highway will be in a continuous toll or sustainable toll state.

In this case, it is necessary to learn from the management of the government toll road in the United States and cancel the limit on the toll period. No distinction will be made between charges for repaying the principal and interest of construction debts and charges for highway maintenance and management; The collected vehicle tolls will be integrated into the financial budgets of provincial and municipal people's governments, and used for the construction, debt repayment and maintenance management of local government toll roads and the construction and maintenance management of ordinary roads.

4.3 The Mechanism of Toll Collection Period of Franchise Toll Road is Deeply Explored

With the highway network construction policy gradually extending to mountainous areas, hills and economically less developed marginal areas and poor areas, the limitations of unsatisfactory financial benefits of highway projects have become increasingly prominent, and the maximum toll life of 30 years seems unrealistic. Drawing on the practice of Western countries, it is necessary to appropriately extend the maximum charging period to 50 or 70 years.

For the toll years of franchised motorways, the practice of Italy and France can be learned.

For highway projects with ideal financial efficiency, the toll period can still be determined according to the principle of recovering investment and having a reasonable return. However, the local people's government is allowed to select new operators through bidding again in the way of TOT for the expired expressways to continue to implement franchise charging. Funds raised for the transfer of toll rights and subsidies for highway projects with unsatisfactory financial performance, or for the construction and maintenance of general highways. The maximum period of transfer of toll rights can be set, and the transfer period of 50 years, 70 years or even longer can be flexibly defined according to the need to raise funds for road construction.

At the same time, we can learn from the practice of France, not for specific highway projects, but for the investment in the construction and operation of highway projects to set the franchise toll period. The comprehensive toll collection period can be calculated according to all the operational toll road projects undertaken by the road management enterprises. With the investment of enterprises in the construction of new toll road projects, or the expansion and renovation of existing toll road projects, the franchise toll life of enterprises can be appropriately extended according to the time required for the recovery of additional investment and obtaining reasonable returns.

References

- [1] National Toll Road Statistics Bulletin 2020[J]. Transportation Finance and Accounting, 2021(11):93-96.
- [2] Tao Yi. Research on Highway Franchising Issues[D]. Nanchang University.
- [3] Wang Yingwei. Research on Highway Franchising [D]. Nanjing University of Science and Technology, China Knowledge Network, 2004, 12.

- [4] Xing Hongfei. On the Contractual Nature of Government Franchise Agreements, Nanjing Social Science
 [J]. 2005, 9: 74~77. 2005, 9: 74~77.
- [5] Zhou Guoguang. Policy Discussion on the Expiration of Highway Tolls [J]. China Highway, 2022(20):16-19.