

Discussion of Construction Pricing System of Public Projects

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Abstract. To improve the quality of public goods and services, a large proportion of public projects to construct, it is very important to pricing public programs. This article reviews the pricing principle, pricing methods and influencing factors of public projects, outlines the national public pricing model, for problems of public projects pricing, I propose improvement measures.

Keywords: Public project; Public pricing; Pricing principle; Pricing methods and models.

1. Introduction

Public pricing is a way of government decision-making of charges in public goods or services. Reasonable and effective public pricing mechanism can not only overcome the monopoly caused all the disadvantages of public programs to promote productivity and service quality improvement, encouraging the public sector to play the advantages of public projects, and actively develop value-added services, in order to gain more income. Also, because public goods are closely related with people's lives, but also closely related with market prices of other goods and services. A considerable part of public goods is the upstream product, through public pricing and pricing control by government, this can provides explicitly charges of public goods and services, to a certain extent, play a role in stabilizing the market price [1].

2. The Basic Theory of Pricing in Public Projects

2.1 The pricing principles of public projects

When determining the price level of public projects, to follow the seven principles.

First, the principle of zero price. It applies to those pure public goods provided free by government, such as defense, foreign affairs, justice, public security, administrative, ecological and environmental protection, to provide these public goods is the bounden duty of government, in addition to taxation by state tax laws to ensure that the full cost, government providing these public goods should not be charged extra.

Second, the principle of profit and loss balance. Public goods provided by government, the pursuit of profit target is not appropriate. Price higher than cost, equivalent to the beneficiary tax. Pricing too low, on the one hand government must implement a large financial subsidies and increased financial burden; on the other hand, public will inevitably affect the quantity and quality of products. Therefore, compensation cost is the main basis for pricing of public goods is one. Compensation cost should be loss of public goods means that the principle of balancing pricing, that average cost pricing.

Third, the benefits principle. On city buses, subways, water, civil gas, electricity and other public benefit principle of public goods at reasonable pricing. Only when a consumer of public goods can be used to measure the specific monetary benefits, but the standard fee does not exceed the amount of benefits when the pricing of the product is reasonable.

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Fourth, the principle of supply and demand balance. Can not be stored for some goods and services, such as electricity, telephone and transport services, according to the principle of supply and demand balance is conducive to maintaining a reasonable pricing structure of consumption.

Fifth, conducive to development principles. People's livelihood, public projects, adjusting the price of course, fully consider all aspects of affordability, but if the price is too low to compensate for public projects and business units of production cost, its production and management will become increasingly shrinking, eventually restricting its development.

Sixth, the principle of rational use of resources. Public goods such as water and gas development and production of not only the city an indispensable basis for people's living conditions, and is a very important resource, public goods price adjustment, should be conducive to rational allocation of resources and conservation use.

Seventh, the principle of distinction. Some public goods, both for residents living services, but also for the development of production services, to distinguish between different objects to develop differentiated consumer price level Fangxian Gong Ping reasonable. Generally speaking, the service life for the residents is lower than the price level of production services.

2.2 The pricing method of public projects

To determine the price of public projects, not only depends on the pricing principles, but also by the direct impact of pricing. National public project there are three main pricing methods: a single pricing method, two pricing and peak load pricing. Pricing method adopted, not only by the specific characteristics of public sector projects, beneficiary groups, the market supply and demand, resources and environment and other factors, but also to some extent reflects the government's financial situation and the macroeconomic policies and public administration Goals. Typically, with the majority of residents living close to, the use of a wide range of infrastructure or services, a single pricing is conducive to social equity. As a result of a single pricing possible loss of certain areas or departments, for which the Government assumes the risk of financial subsidies. For scarce resources with congestion costs or need to curb consumption and prevent waste of public goods, according to two pricing or peak-load pricing method for pricing, easy to improve the efficiency of resource allocation. In addition to these three types of pricing methods, pricing in public practice, there are still many flexible forms, such as the amount of difference in price, seasonal price, time price, price, price in the form of social welfare.

First, market pricing (profit maximization pricing). Public projects is a quasi-public goods, in a mixed mode of delivery, part of the general revenue financing and funding with subsidies to maintain, the other by way of charging consumers to ensure normal operations. Charge of that part of the consumer market exchange rules mainly take payment directly benefit and voluntary principles.^[2]

Second, the average cost pricing. This is a break in the case of public projects to ensure that as far as the pricing to maximize economic welfare. This pricing method is better in the consolidated level, so that a full cost recovery of public projects to achieve financial goals, but at this price above marginal cost, the utilization of public resources than efficient level.

Third, the marginal social cost pricing. Marginal cost pricing by the market economy the opportunity cost of the party the best sequence, in the prevailing socio-economic pricing guidelines. However, operations in public projects, more directly reflect the marginal cost pricing is an occasional occurrence, such as roads, electricity, drainage, fire and other public projects, high cost of its construction and operating costs are lower, their marginal Cost curve is always less in the average cost curve.

2.3 The considerations of public projects pricing

Pricing of public projects by many factors. First, investment in public projects and operating costs, which is the main influencing factors of public pricing. Investment in public projects in different scale and operating costs are different, such as highway project investment and the operating costs low, highway project payback period is longer, less investment in urban sewage treatment projects and high operating costs. Second, the price index. It reflects changes in operating costs of social trends and consumer ability to pay. Third, the state

tax policy. Fourth, quality of service. Quality of service not only affects the level of demand also affects the cost should be considered when setting prices the quality of services and incentives through the price mechanism to improve the quality of service. Fifth, the industry's average profit level. Investors should have a reasonable profit.

3. The Pricing Model of Public Projects in other Countries

American model (investment rate of return price regulation model). It is the production cost plus return on investment to determine the control of prices. It investigated corporate income as a direct object, indirect effect of performance pricing. Model: If the firm produces a product: $R(\Sigma P, Q) = C + S(RB)$; if companies produce a variety of products: $R(P_i, Q_i) = C + S(RB)_{i=1 \dots, N}$. Where, R is corporate income function, from the P, Q decided; C as the cost function (fuel, wages, taxes, depreciation); S is the return on investment required by the Government; RB for the base rate of return, that business capital . The difficulty is to determine the model S and RB. In different industries and different technical and economic characteristics, S and RB are not the same necessity, need to be judged and determined regulators. The model return on investment through the direct control, indirect control of prices.^[3]

UK model (RPI-X model). The method that the price control should be with the "rate of inflation minus X" changes and changes, so the manufacturers to develop a price cap: The maximum price range = RPI-X, where RPI inflation rate that is, X developed by the regulators, That productivity growth in the percentage of a given period. This approach applies not only to a single product (or service), also applies to multiple products (or services), obtained in this way at this time the ceiling price of controlled products is a comprehensive variety of price ceiling, the weighted average Forms, and weights are the product benefits. X value is determined by the regulator based on the natural monopoly of the technical and economic characteristics of the decision. Britain in the 20th century, 80 years ago on public projects to implement government pricing, with the state-owned enterprises after the privatization reform, and gradually laissez-faire, the government is no longer specific pricing.

Japanese model. Fees charged by public projects by the Japanese government directly involved in the decision and determined that roughly divided into the decision by Congress and the Government by the Central Government's decision by the local government decided three categories. Government fees and charges for public programs based primarily on the beneficiaries pay principle decision and the production costs of the principle of compensation. However, the Japanese government has been declining in the direct management of the types of prices, while Japan is one of the three pricing policies of public expenses policy of bad decisions on the market of goods, services, prices, government policy to intervene. Decision-making body for the public costs of the central and local governments, as well as relevant government departments, in the form of divided government pricing pricing, government-approved price.

France monopoly, public goods and service prices for government pricing, government guidance. Pricing is a Government agency in charge of the business of government departments and industry associations. Price ceiling is currently developed by the Government only tobacco and drugs, other goods and services are business development.

Relatively wide range of public pricing of Italy, the central level of government to the railways, shipping, broadcasting, postal rates, drugs, medical fees and prices of the government-priced tickets, the local government on urban public transport, taxis, water, drainage, urban waste , Sewage treatment, the implementation of public pricing.

In conclusion, full liberalization of price control countries is essentially abandoned the public pricing, rather than give up the price control and regulation. Full liberalization of price controls in many countries, the government generally does not directly develop specific price, that is basically no longer pricing in the form of government to manage the price. Sometimes a similar way of government guidance prices of goods and services related to the necessary intervention. Price controls in Western countries have a distinctive feature of the legislation for the pilot. Significant price reforms in the government before the introduction of regulatory reforms enacted laws and regulations, clearly defined objectives of the reform model, the main contents and

procedures and other issues, the formation of law. Industry organizations such as foreign non-governmental organizations developed to replace the control mode of public pricing.

4. The Problems of Public Projects Pricing

Currently, the pricing of the public projects follow the "cost plus reasonable profit" principle. Usually this kind of "reasonable profit" and in a certain predetermined period of time remains unchanged. Thus, the cost is almost become the main or even the public pricing is the only factor. As the cost of regulatory difficulties than price regulation, the current use of state-owned holding most public projects, equity participation and other business model, market, privatization is not yet high, the traditional "state-owned enterprises disease" in the performance of public programs who are more prominent. Operation of public projects in particular, policy-related losses and operating losses, regardless of policy losses and operational losses are often covered up, leading to a lot of the cost of public projects has become a Suanbu Qing's nobody knows for sure. In this case, the "cost plus reasonable profit" pricing principle is difficult to play the role of price controls. Coupled with the government for public projects costing companies reported mainly in the "cost" basis, and as companies reduce costs and improve the lack of innovation incentives, monopoly enterprises with high profit margins is a common phenomenon, Industry as a whole led to the high cost of public projects. In addition to the principle of reasonable pricing, the price regulation of public programs imperfect laws and regulations, public programs, pricing and price adjustment procedures for the oversight mechanisms are inadequate, the functions of a single pricing department, pricing, and more subjective, policy and operational reasons for price adjustment between the price adjustment Confusion.

5. The Improvement of Public Projects Pricing

In order to overcome problems of public projects pricing, we need to take action to improve.

First, enhance the transparency of public pricing, which is the government priority to promote the public welfare. Pricing process so that the public can truly and completely in the government departments, under the supervision of social and national, to prevent the use of monopoly rights, the inappropriately high prices put the community.[4]

Second, the supply of public goods in view of some of the costs on the grounds department is always one-sided to raise prices, it is recommended under the supervision of government departments to establish a reasonable cost restraint mechanism.

Third, the introduction of appropriate competition competitive field. Competition for suitable areas, the government should open more markets, so that more business entities to enter, and thus enhance consumer welfare.

Fourth, the main body of the public should return to the NPC price. Pricing of public projects in China should not be granted to market or the government. NPC is the representative bodies of our citizens, is the economic rights, the executive power, political power and other power sources, public programs to the National People's Congress should return to pricing power.[5]

Fifth, there should be supporting the main public pricing power. Public pricing are subject to various factors, pricing of commodity prices, the principal must follow the basic economic law. To ensure price stability and public goods, public goods, pricing the smooth realization of the need to configure the NPC three economic power: financial power that it can ensure the country could produce enough annual financial subsidies to public goods, to prevent the lack of public goods appears seller Market; money power, money supply and monetary value of public goods not only directly affects the price, but also affect the price of the whole society; tax rights.

Sixth, strengthen price regulation, establish a rational pricing system of public science. Pricing system in China can be divided public, "two-step." The first step in a certain period to maintain the existing "cost plus reasonable profit" pricing principles. Our current project is in early stages of reform of public and revitalize the state-owned assets to maintain and increase value-added is the key. The second step, do not set a "reasonable profit" for different industries to establish different pricing principles, government only requires a period of time "price cap index." [6]

Seven is to strengthen public projects costing and performance assessment. Cost of ownership advantages of the project company information more easily influence the price control department policy, one solution is to establish a scientific system of cost assessment and cost incentives. Improve the project construction and operation of services, fixed and standard, the establishment of project operation and service cost data, combined with social commodity retail price index, analysis of changes in cost, according to changes in cost of inputs to determine the price cap. Establish a sound performance evaluation system for public projects. A comprehensive grasp of the true effectiveness of the pricing of public projects and lack of timely and accurate views put forward rectification and improvement measures.^[7]

6. References

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