

Original Article

Rights-Ethics Public Goods: Based on the Expanded-Definition of Public Goods

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Abstract - Based on related literature, the authors consider that basic education, basic medical services, and low-rent house are special kinds of public goods and name them “rights-ethics public goods”. On this basis, getting some reference from Buchanan and others, the authors revise and expand the classic definition of public goods and develop a new one: the expanded-definition of public goods, and give the related theoretical explanation. Further, the authors discuss the inherent requirements of rights-ethics public goods, namely redefining the democratic and legal mechanisms of the boundary periodically.

Keywords - Classic public goods; Rights-ethics public goods; Expanded-definition of public goods

I. INTRODUCTION

The theoretical cognition of public goods (also known as public products, public utilities, public property, etc.) is a major issue that is closely related to the government functions, the positioning, and boundary for the allocation of public finance, and the relationship between the government, the market, and the enterprise, etc. in real life, and is also discussed repeatedly by various parties since the reform and opening up. Making an investigation of the practice according to the theory, we can find that in addition to the detailed differences, there are still blind areas in the definition and cognition of public goods in the existing research literature that cannot be ignored. Generally, public goods have two basic characteristics: non-competitive and non-exclusive in consumption. The two characteristics of the quasi-public goods are weakened but are not weakened to the private products that are “completely” without two characteristics or only with one characteristic. This further leads to a series of theoretical cognition on the main body of supply and the way of supply of relevant products. However, the “public goods”, such as the basic education, basic medical services, low-rent houses, etc. that the governments in many countries generally provide in contemporary and the Chinese government also strengthen their supply in the construction of “public finance”, do not have any of the above two characteristics, let alone both of them at the same time. The classic theory of public

goods based on “two characteristics” cannot make a logical explanation for this. Thus, it is necessary to further examine the existing literature and attach importance to the expanded definition of public goods and its theoretical exploration and interpretation.

II. A BRIEF REVIEW OF THE CLASSIC THEORY OF PUBLIC GOODS

The theories involving public goods or public products can be dated back to David Hume (1739) and Adam Smith (1776). But in a more complete form, it is generally believed that modern public goods theory dates from Samuelson (1954, 1955, 1958). In the *Pure Theory of Public Expenditure*, he gave a classic definition of public goods, “each individual’s consumption of such a good leads to no subtraction from any other individual’s consumption of that good”, namely the so-called collective consumption goods, which was expressed in the formula as $X_{n+j} = X_{n+j}^i$. Thereafter, Musgrave (1959, 1969) introduced the non-applicability of the price exclusion principle into the definition of public goods and summarized the characteristics of public goods into two essential characteristics of public goods that were accepted widely later, non-competitive and non-exclusive in consumption.¹

According to the different expressions of these two characteristics, all items are generally divided into three categories: pure public goods, quasi-public goods, and private goods. Among them, quasi-public goods can be further divided into two categories: exclusive but non-competitive “club goods” and competitive but not exclusive “common supplies” (also known as common-pool resources, such as public fisheries, public grassland, etc.). Many scholars further describe the categories in the form of

¹ Refer to Paul A. Samuelson, *The Pure Theory of Public Expenditure*, *The Review of Economics and Statistics*, Vol. 36, No. 4. (Nov., 1954), pp. 387-389; Michael Pickhardt, Fifty years after Samuelson’s “The Pure Theory of Public Expenditure”.



tables, coordinates, etc., and intuitively locate the products that are common in life.²

In addition to the definition and classification of public goods, the classic theory of public goods has also made a series of progress in the financing and cost-sharing of public goods, the effective supply of public goods, etc., and has integrated with the previous exploration of many economists on taxation and public expenditure into a well-defined an informative theoretical system. Among them, Lindahl Equilibrium, Pigouvian Tax, Public Choice Theory, and multi-subject provision of public goods (government, private, collective, voluntary, etc.), etc. have had a tremendous impact on subsequent academic research and practical policies.

With the deepening of research and the application of the theory of public goods into practice, a widely accepted view has emerged. Due to the non-competitive and non-exclusive nature of the consumption of public goods, the market mechanism has failed in its provision. Thus, the government logically replaces the market to be the main responsible body for the provision of public goods.³ This is both the reason for the emergence of the government and a basis for defining the scope of government functions. That is to say, the theory of public goods provides a theoretical basis for the division of labor between the government and the market — the government provides public goods and the market provides private products and has become the theoretical basis for government intervention and the public finance function positioning for a long time. In the process of China's reform and opening up, the theory of public goods was introduced into the country and was quickly accepted by the academic community to be the standard textbook theory. In recent years, the theory of public goods has received more and more attention in the whole society. "Government should provide public goods and public services" has become a broad consensus. The cornerstone of this understanding is generally considered to be "two basic characteristics".

III. THE EXPANDED-DEFINITION OF PUBLIC GOOD

² Refer to Ma Jun, *The Value of the Concept of Public Goods*, Finance & Trade Economics, No.11, 2005, P28; Zhou Yicheng and Yan Juan, *What is Public Goods*, a *Literature Review*, Academia Bimestris, No.1, 2008, pp. 104-105.

³ Elinor Ostrom, the Nobel Prize winner in 2009, pointed out that the third road of providing public goods was to provide by the collective through self-organizing. But she also spoke cautiously that this only applied to a part of public pool resources and there were various cases of success and failure in reality. Refer to her masterpiece *Governing the Commons: The Evolution of Institutions for Collective Actions*, SDX Joint Publishing Company, 2000.

Although the achievements of the theory of public goods are enough to make it popular all over the world when we use the classic theory of public goods to compare the vivid and rich policy practices of various countries in the contemporary, if we do a little bit of research, we still encounter some impediment that is difficult to explain and illogical.

A. The identification of "public goods" such as education, medical care, housing, etc.

In the contemporary, basic education, medical services and low-rent housing, etc. are public goods that are generally provided by the government. Almost no one disagrees with this. However, any of them, if judged strictly by the criteria of non-exclusive and non-competitive in consumption, are not public goods in the sense of classic definition. Taking basic education as an example, it is easy to achieve technically "exclusive". It only requires a school gate and the cost can be extremely low. In addition, for any school or class, the number of students that can accommodate is limited. In the marginal sense, if you accept Zhang San, you can no longer accept Li Si, and the competition is also obvious. The literature explains these in the following three ways.

1. They are not public goods, but quasi-public goods.
2. They have a strong positive externality.
3. They are Merit Goods.

In this regard, you can reverse the following as follows.

1. The so-called quasi-public goods refer to the goods that have at least one of the non-competitive and non-exclusive characteristics in consumption, such as the aforementioned club products and common supplies, while education, medical care, housing, etc. do not intuitively have any of the characteristics.

2. Not only do public goods have positive externalities, but quite a few private products also have positive externalities. Education, medical care, housing, etc. certainly have positive externalities. If a person has enough food, eats well, and is healthy, generally he has positive externalities to others and society. However, it seems that there has never been anyone, who considers it necessary to define food as public goods in general.

3. The connotation and extension of merit goods are not clear yet. Although Musgrave defines "merit goods" in "A *Multiple Theory of Budget Determination*" as "increasing the production of goods by formulating policies that intervene with personal preferences". In 1959, he once again pointed out in the "Theory of Public Finance" that merit goods refer to the items that are good for consumers but are inadequate in consumption due to the

ignorance of consumers. But the theoretical community holds different opinions on this.

It can be seen that the above efforts are to try to legalize the identification of public goods such as education, medical services, and housing from different perspectives. However, they have not yet given the key arguments that education, medical services, and housing are public goods rather than private products.

B. Education, medical services, and housing can be determined as private products according to the classic definition of public goods.

In fact, Harvey S. Rosen has long confessed that "...in some cases, health services and housing are private products provided by the public sector".⁴ When Inge Kaul categorizes global public goods, he also attributes "basic education, health care, and food safety" to "critical private products."⁵ Professor Howard Glennerste in the Department of Social Policy in the London School of Economics and Political Science also said: "Although the human services we care about also carry the nature of public goods, they are basically private products".⁶

Therefore, we can see that many influential scholars tend to "tighten" the boundaries of public goods and strictly adhere to the definition of "two characteristics". But in real life, the essence of this question is whether these products should or should not be provided by the government. Because in the logic of the classic theory of public goods, public goods are provided by the government, and private products are provided by the market. It is an established and widely accepted mindset. Once it is clear and acknowledged that education, medical services, and housing are private products, they immediately lose the theoretical cornerstone of provision by the government. This is inconsistent with the policy practice of various countries and the values of civil rights in contemporary. It is not feasible. This paradox is still a blind spot in the existing research literature that has not been positively explained.

C. Expanded-definition of public goods: improvement and supplement to the classic definition of public goods

When we reorganized the literature, we found that there was another definition of public goods that existed long ago, but it was far less widespread than Samuelson's classic definition of public goods. James McGill Buchanan argues in *Public Finance In Democracy Process* (1976) that "any item or service provided by a collective organization for any reason, as determined by a group or a social group, is defined as public".⁷ Malkin and Wildavsky (1999) argue that public goods are a social construct (which is translated as "social concept") and are a purely culturally conceptual identity. They say that a product cannot be defined as a public product based on objective criteria; or, it should not be defined by its own inherent properties. A product becomes public because it is decided by society to deal with it in this way.⁸ Hugh Stretton and Lionel Orchard (2000) said: "We will consider the supply that is not determined by individual market demand but by collective political choices, that is, any goods and services that are determined by the government to be provided to their users for free or at a low cost, as public goods".⁹

Compared with the classic definition of public goods, the difference of the above definition is obvious. The classic definition is defined by the "consumption attribute" of a product - whether it is non-competitive and non-exclusive in consumption, while Buchanan and others define according to "supply body" (the government or the market) and the decision-making mechanism ("determined by the collective political choice").

However, we believe that the definition of Buchanan and others does not negate, but include the basic framework that is formed by the classic theory of public goods. This is because, according to the definition of public goods put forward by Buchanan and others, whether a product is a public product is fundamentally marked by whether the determined political decision is provided by the government, and when deciding whether to provide it or not by the government, the relevant subject will naturally consider two situations. One is that there are products that are both non-competitive and non-exclusive in

⁴ Harvey Rosen, *Finance* (The Fourth Edition), p59, Beijing: China Renmin University Press, 2000.

⁵ Inge Kaul, etc., *Providing Global Public Goods: Managing Globalization*, Beijing: People's Publishing House, 2006.

⁶ Tang Jun, The Basic Concept and Theoretical Framework of Social Policies, China Value, http://www.chinavalue.net/Article/Archive/2007/4/8/61689_14.html, April 12, 2009.

⁷ (USA) James M. Buchanan, translated by Mu Huaipeng, reviewed by Zhu Yang, The Commercial Press, 2002 Edition.

⁸ W. VerEecke. Public goods: An ideal concept [J]. *Journal of Social-Economics*, 1999(28), p142.

⁹ (Australia) Huge Stretton and Lionel Orchard, *Public Goods, Public Enterprise, Public Choice*, Beijing: Economic Science Press, p68, 2000.

consumption - from defense to environmental protection, streetlights, road signs, etc. - which can “only” be provided by the government for technical and cost reasons. This is the case under the classic definition of public goods. The other is that although there are no technical or cost barriers provided by the market, for some common values or political ethics about civil rights, there are products that “should” be provided by the government through collective decision-making procedures. It is in this sense that we accept the key points of Buchanan and others for the definition of public goods, which can be regarded as the key contents of the “extended-definition of public goods”.¹⁰

The Chinese scholar Qin Hui’s cognitive framework of “On Liberty” can also provide us with important enlightenment. In addition to the recognized rules of “the group domain must be democratic and the private domain must be free”, there are many fuzzy areas, which are difficult to be absolutely decided as group or domain. For this part of fuzzy fields, the public should be given the opportunity to re-select at intervals (such as several years).¹¹ In light of the above understanding, we can consider a framework in which one end (group domain) is pure public goods, the other end (private domain) is purely private products, and there are a large number of “quasi-public goods” in the middle. It can be argued that the classic definition of Samuelson solves the problem of “both ends” (namely pure public goods and private products), but in the vague fields of quasi-public goods, it needs to add the elements of Buchanan-style “public choice” (that is, the institutional elements that Qin Hui said to provide the public with the opportunity to re-select at intervals). Thus, it can be extended to the definition that is both logical and practical in reality to solve the problem of the blind zone, which is brought by the definition that most public goods are “quasi-public goods”. Therefore, in the theoretical interpretation of public goods, it is necessary to expand and supplement the classic definition based on reality and form an expanded definition and understanding.

IV. RIGHTS-ETHICS PUBLIC GOODS AND EXPANDED PUBLIC GOODS: A THEORETICAL FRAMEWORK

¹⁰ In welfare economics, education, medical services and public housing, etc. are often considered as “social welfare products”. We believe that the expression of welfare products highlights “low price” and “for free”, which covers the huge cost of producing various welfare products to a certain extent and causes further disorder in the concept of “public goods”. Therefore, we do not use the expression of “welfare” in this article.

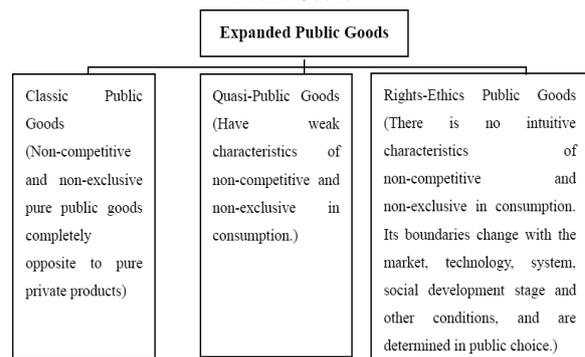
¹¹ Qin Hui, On Liberty: The Key to Integrating Personal Value Into Social Values, China and World Affairs, No.4, 2006.

Under the expanded definition of public goods, the government can provide both public goods and private products in an intuitive form, provided that the public selection process decides to do so.¹² Education, medical care, and housing can be exclusive and competitive. They are private products that can be provided by the market. However, when the society develops to a certain extent, every citizen can enjoy basic education, medical care when sick, basic housing security, a job, basic living goods when old, etc., which are regarded as the “fundamental rights” of human beings and also regarded as kindness and humane care that a civilized society should have. This kind of value will be transformed into real social policies through publicly chosen procedures after gaining broad consensus. As a result, these former private products will logically enter the list of public goods provided by the government.

It is undeniable that the provision of basic education, medical services, and housing by the government meets the demands of contemporary society for civil rights. While implementing the basic values of “fairness” and “equality”, it does bring tangible benefits to the whole society, that is, the “positive externality” or public welfare that is inseparable from the utility claimed in most of the literature. Therefore, it is suitable for us to call this kind of new public goods “rights-ethics public goods”.

Based on the expanded definition of public goods, the scope of the public goods is shown in the figure (refer to Figure 1).

Fig. 1 Schematic Diagram of the Structure of the Expanded Public Goods



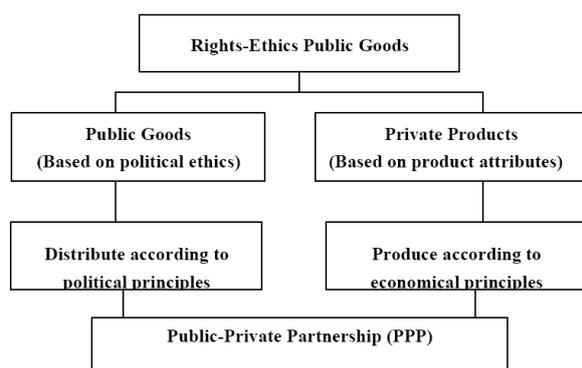
A. The basic characteristics of rights-ethics public goods are “public goods with characteristics of private products”.

¹² This is the public provision of private products researched by Dennis Epple, et al.. Conversely, it makes it logical that under the concept of “public-private partnership”, the market not only provides private products, but also provides public goods.

Compared with classic public goods, rights-ethics public goods have a dual nature, that is, “public goods with the characteristics of private products”. That is to say, based on political ethics, it should be equally consumed by all members of society, so it can only be distributed according to political principles. However, based on product attributes, it is both exclusive and competitive, and the total consumption X of a certain type of this product within a certain period is equal to the sum of I consumer consumption ($i = 1, 2, 3 \dots n$). It is expressed as a formula, $X = \sum_{x=1}^n X_i$. So the utility

of consuming them can be divided, the beneficiary subject can be identified and the degree of benefit can be measured, and all the conditions for charging are available. As a result, economic principles can be introduced in its production and the door to the Public-Private Partnership (PPP) is open (refer to Figure 2).

Figure 2: The Basic Characteristics of Rights-Ethics Public Goods



a). Distribute according to political principles, but pay special attention to those who lack rights

Most public goods should be enjoyed equally by all citizens. The concept of rights-ethics public goods is generated based on the value that “everyone should enjoy certain rights equally”, so in theory, the government should provide it to all citizens equally. However, it must be noted that whenever people complain about “unfairness”, “inequality”, and call for government policy adjustments, there is a self-evident fact that there are already some people and some groups in society, who first enjoy the rights that more people and everyone should enjoy. Therefore, the popularization of rights should be those that have no rights. In other words, only the lack of rights requires the fight for rights and the granting of rights, and only when the rights are not equal, there is a need for the popularization of the rights.

Noting this fact helps to accurately target the supply objects of rights-ethics public goods in a certain period of time, that is, low-income people who are unable to pay tuition, medical expenses, living expenses, etc. due to reasons beyond their control. As Michael Hill (2003), a British public policy expert, points out: in today’s developed countries, the supply of public goods and services in history is basically the first to be biased towards the poorest people who need help most, and then on this basis, the equalization of public goods and services is realized gradually.¹³

b). With the conditions of production by the private sector, the “economy” and “efficiency” principles and the “user-paid” and “public-private partnership” modes can be fully introduced into production.

The classic theory of public goods provides three modes of production of public goods: direct government production, private production, and third-party production.¹⁴ From the later developments, the myth of the government’s direct production of public goods has long been broken.¹⁵ Samuelson himself has repeatedly pointed out that “I have repeatedly told that a public product does not have to be provided by the public sector, it can also be provided by the private sector.”¹⁶ Further, Elinor Ostrom (2000) has shown that under a series of preconditions, collective organizations that are spontaneously formed by the public can also provide some kind of public goods, and the effect is not inferior to the government.¹⁷ In contemporary, the

¹³ (Britain) Michael Hill, *Understanding Social Policy*, The Commercial Press, August 2003.

¹⁴ Refer to Lu Hengli, *Discussion on the Private Provision of Public Goods*, Journal of Tianjin Normal University (Social Science), No.3, 2002.

¹⁵ Samuelson has given the conditions for effective provision of public goods by the government, that is, the marginal willingness to pay for a public product by each member in society is equal to its marginal replacement rate, while the sum of the marginal replacement rates of all members in society is equal to the marginal conversion rate. This means that the government fully understands each member’s preference for the public product and the true disclosure of each member’s own preferences. This is actually impossible.

¹⁶ (USA) A Ellen Schmid, *Property, Power and Public Choice - Further Reflections on Law and Economics*, Shanghai: Shanghai People’s Publishing House, Shanghai SDX Joint Publishing Company, 1999.

¹⁷ These constraints are clearly defined boundaries, occupancy and supply rules in consistent with local conditions, collective choice, supervision, grading sanctions, conflict resolution mechanisms, minimum recognition of organizational rights and decentralized enterprises. Refer to Ostrom’s *Governing the Commons: The Evolution of Institutions for Collective Action*,

concept of private production of public goods has been widely accepted.

Under what conditions can public goods be provided by private individuals in sufficient quantities? Harold Demsetz (1970) argues that private companies can effectively provide public goods in cases where non-payers can be excluded; and through discriminatory price strategies – setting different prices for different consumers, maximize the returns to ensure that private individuals can provide enough public goods.¹⁸ Goldin Kenneth (1979) also believes that certain public goods cannot be fully provided to consumers through market means because the technology that excludes non-payers has not yet been produced or is not economically viable. Once exclusive is achieved, consumers are subject to “optional access” constraints, such as fees, while those who do not pay are excluded. In short, in the view of the classic theory of public goods, whether a product can be provided by private individuals depends on whether it is exclusive.

Accordingly, the answer to the best way of producing rights-ethics public goods is already coming. Previously, we have fully stated that products such as education, housing, and medical services are private products that are competitive, technical, and easily exclusive before they become public goods without public decision-making procedures. Who is consuming? How much has it been consumed? ... This kind of problem that plagues the pricing and charging of ordinary public goods is very clear here. Both the “exclusion of non-payers” required by Demsetz and the “optional entry” of Goldin can be met here. Further, according to the theory that has been repeatedly proved, when the public goods are provided by private individuals (with necessary government regulation), the market will gradually approach the equilibrium between production and consumption through the power of the “user payment” system and realize the optimal allocation of the resources.¹⁹

Shanghai SDX Joint Publishing Company, 2000, pp.144-160.

¹⁸ Demsetz, *The Private Production of Public Goods*, Journal of Law and Economics, No.3, 1970, University of Chicago Press.

¹⁹ Besley and Coate (1991), Epple, and Romano (1996) have all discussed the issue of “public provision of private products”. We believe that the main contribution of these two articles is to point out the “privateness” of education, medical care and housing. But they have not revised the classic definition itself, so there is so-called “public provision of private products”. Once the definition of public goods is revised, the issue of public provision of such products can be discussed as well as the issue of their private provision.

There is another unexpected by-product of private production of public goods: the core problem in the classic theory of “the pricing of public goods” is automatically addressed.²⁰ Of course, the premise is that there is relatively sufficient competition among producers. In most cases, the reason for the difficulty of pricing is mainly due to monopoly. In the field of public goods, the pricing difficulties caused by natural monopolies have always been a difficulty bothering the government in many countries. It can be said that as long as there is a monopoly - for whatever reason - the price discovery mechanism will be problematic, and product pricing will become a problem. So the fundamental way to solve the pricing problem is to eliminate the monopoly. In the case of rights-ethics public goods, they were originally “competitive products” that could be competitively consumed without the difficulty of exclusion, so technically they can not only be produced by the private sector but also be competitively produced.

In fact, it does not matter whether certain public goods are produced by the government or by private individuals. What is important is to clarify the misunderstanding that only government production can maintain the public welfare of public goods and provide it to the public at a cheap price or for free, that is, government production = low price or free, while private production often leads to high prices, thus losing the “public welfare” and “publicity” of public goods. Simply list the logical points here, and it is enough for us to distinguish the confusion. On one hand, low-cost or free-to-use public goods does not mean that it can be produced at low costs, and it does not mean that the costs of government production are lower than that of the private sector. On the other hand, private production of public goods does not mean that the private sector can directly sell public goods (services) to individuals in any case. In the case of private production of any public goods, there is inevitably an intermediary- the government between the production and consumption (refer to Figure 3). The government can adjust and regulate the production and consumption according to the needs and circumstances, for example, developing the entry conditions of the producers, providing product standards and quality, specifying the qualification, cost burden and time limit for the consumers, etc., which is the main aspect of the government’s role under the expanded definition of public goods. Therefore, the government can apply different principles: in the “consumption” side, when deciding who should consume or enjoy, the answer is “should or should not”, for which the basis for the decision is the political ethics and value held by the majority of people or the policymakers; in the “production” side, the question is “can or cannot”, that is, who can organize the production of public

²⁰ Refer to the footnote ③ on previous page.

goods at higher efficiency, for which the basis for the decision is pure economic problems like “efficiency”. Given that the economists have long been conclusive about this – in general, the productivity of the public sector is always lower than that of the private sector, thus public goods are handed over to private production, which is necessary and justified in terms of efficiency. As Zhou Qiren (2008) said, a product that is non-competitive in consumption does not mean that it is also non-competitive in production. It can be consumed at low prices or for free does not mean that the production of these products is at a low price or for free.

Fig. 3 Production and Consumption of Public Goods



The enduring discussion of private production of public goods proves from another perspective that the efficiency of public goods produced by the government in person is often less than that of private production, leading to waste of resources, poor quality of public goods, the expansion of the public sector and the increase in the actual burden on the people. Therefore, the discussion on the private provision of public goods actually reflects the unremitting efforts to try to bring efficiency principles back into the production of public goods. That is, under certain constraints, the private sector's participation in the production of public goods is not only not detrimental, on the contrary, it is beneficial to the latter's “public welfare” because it helps to mobilize all possible social resources to participate in the production of public goods, which in turn will expand supply, improve quality and lower prices, thereby enhancing social welfare in general.

In the classical theoretical context, certain public goods may not be involved in the production by the private sector because of their non-exclusive and non-competitive nature. The “private characteristics” of rights-ethics public goods are basically not obstructive. This is one of the most important distinctions between rights-ethics public goods and public goods under the classic definition.

Therefore, in theory, the best way to realize rights-ethics public goods is to organize production mainly by the private sector according to economic principles, and then provide to the public for consumption in accordance with political principles and policy guiding mechanisms mainly by the public sector. In this way, it is possible to implement the political ethics of “Everyone should enjoy the same rights.”, meanwhile making full use of market mechanisms to maximize the efficiency of public goods production. It is in this research direction that

the frontier concept of public-private partnership (PPP) has rapidly become a cutting-edge innovation method that leads the trend in the practice of new public management in recent years.

B. The provision of rights-ethics public goods mainly reflects the government function of income redistribution.

Emphasizing the advantages of private production of rights-ethics public goods does not mean denying and reducing the government's important role in its provision. As mentioned previously, there is an intermediary - the government between the production and consumption of public goods, In addition to the fact that the distribution of public goods must be carried out and guaranteed by the government according to political principles, the government must play an irreplaceable role in “intermediate links” such as how to raise funds, how to pay, and how to manage, and so on.

Under the classic theory of public goods, the government collects taxes to finance public goods. Although Lindahl equilibrium has long proved that the price of certain public goods is equal to the sum of the tax amounts that are willing to pay by the individuals who enjoy these public goods, the most ideal situation is those who have the highest rating of this public goods (often the most in need) bear the largest share of the tax, and so on, until the full cost is shared. However, for various reasons, the “peer-to-peer benefit principle” in the above logic is rarely reflected in the tax practice. In most cases, there is no relationship or direct correspondence between the tax category and tax rate and the type and quantity of personal consumption public goods. This is of course due to the difficulty of the public's preference for public goods, the impossibility of charging for individuals due to non-competitive and non-exclusive consumption of classic public goods, and the limitations of the “capability principle” from another perspective.²¹

Rights—ethics public goods have relatively strong attributes of “private products” that make it possible to charge individual fees and, if needed, to manifest and strengthen the link between individual pay levels and consumption levels. In addition to the “user pays” system, the typical case refers to the improvements in the social insurance system that is widely implemented in various countries. On one hand, as long as the conditions are met, every member of society must join the social insurance

²¹ Low-income people have low taxpaying capacity, but their demand for public services is not correspondingly reduced. Thus, it is necessary to obtain the transfer payments from taxpayers with high incomes.

system and pay social insurance premiums (taxes) according to the standards set by the government. On the other hand, as long as the conditions are met, each member of society can enjoy the public services in the system that are linked (not necessarily equal) to their own contribution levels. The role of the government in this is mainly to organize and maintain such a system. Specifically, first, develop relevant laws and urge each member of society to join the system with national power. Second, specify relevant rates and require the employers and employees to pay in mandatory. Third, when the system is insufficient in the fund, inject the capital, use available budgetary resources and redistribute. Fourth, the social insurance funds are entrusted or managed directly through the formulation of relevant systems. Fifth, the relevant products are purchased and paid for by the government as a public representative.

As for the products and the extent to which the government chooses to highlight the link between the level of personal payment and the level of consumption, it depends on the specific situation of different countries at specific stages.

As for the payment, the common feature of rights-ethics public goods is that the government as a representative of the public can advance and pay a considerable part of the costs. In the case of private production, the government usually bids the producers from the market by formulating the quality standards and types of the required public goods (services), performing performance appraisal, etc., and pays the fees after the consumption of the members in society. Even for those public goods directly produced by the government, although there is no clear payment line as above, they are paid through the financial budget and government grants.

It can be seen that for the rights-ethics public goods, which is originally private products in an intuitive form, once they are politically selected as public goods, the government plays an important role in income redistribution and social management, and maintains "user pays" system and other policy adjustment tools such as subsidies and differential pricing. It fills a huge gap between producers' "must pay before production" and some consumers' "can't pay but must consume", making rights-ethics products consumed by the society members in a wide scope as much as possible and increasing the total social welfare.

C. The Boundary Determination of Rights-Ethics Public Goods and Related Decision-Making System

In contemporary, the main contents of rights-ethics public goods are education, medical care, housing,

employment, personal services, and relief for low-income people.

In classic theories, the boundary drift and dynamic adjustment of public goods are already observable universal facts. The most general explanation for this is that the advancement of exclusive technology and the decline in cost have led to certain products drifting from "public domain" to "private domain".²² In addition, factors such as the development of the market economic system and the different stages of economic and social development have also caused the drift of its boundaries. In the case of rights-ethics public goods, the criteria for determining boundaries are not only purely technical conditions and cold economic factors but also social policies with complex political interactions, the decisive influences of which are some kind of "political ethics" or "value" held by most people.

Furthermore, the most important thing for the government is not to provide what kind of rights-ethics public goods, but to establish a public choice mechanism for dynamic adjustment and regular redrawing at the institutional level.²³ Historically, "civil rights" are both caused by the constant struggle of those who lack rights, and by the compromises and concessions of the people with vested interests based on actual needs. So the fundamental question is what kind of mechanism is used to realize the interaction of the two sides. From the perspective of the long history of human history, there are only two ways to classify the thickest lines. One is the adaptive adjustment of the vested interest groups when those without rights are unable to tolerate and rise in revolt, the form of which is often large external conflicts with huge social costs (uprising, riot, dynasty replacement, etc.), which is called "non-normative public choices". The second is to establish a decision-making process with low social costs and based on democracy and the rule of law in which ordinary people can participate, which is called a "standard public choice" mechanism. The history has answered which is better or worse and will continue to make an answer.

V. THE "SPECTRUM" OF SOCIAL PRODUCTS AFTER ADDING RIGHTS-ETHICS PUBLIC GOODS

²² The classic example is that there was a large piece of public land in the western United States, but after the emergence of the shovel, the cost of isolating outsiders and livestock into a particular land area was extremely low, and the land gradually became private. Another example is the electronic toll technology, which makes urban roads where toll stations are not available also be toll roads.

²³ Refer to the expression in Qin Hui's *On Liberty: The Key to Integrating Personal Value Into Social Values*.

A. The Composition of Public Goods when Expanding the Definition of Public Goods

The expanded definition of public goods and its related interpretations allow us to sketch out a “spectrum” of the basic distribution of social products from public goods to private products. (Refer to Figure 4.)

Between the pure public goods on the far left and the pure private products on the far right, there are a large number of quasi-public goods and rights-ethics public goods with drifting boundaries. The characteristics of social products in this field are not strictly consistent with the characteristics of “non-exclusive” and “non-competitive”. It is inconsistent in micro-level and consistent in macro-level to a certain extent, which is different from the products that are “completely consistent with two characteristics” on the left side and the products that are “completely inconsistent with two characteristics” on the right side. No matter it is pure public goods or quasi-public goods and rights-ethics public goods, they have an inseparable “positive externality” effect, which is different from the “no obvious positive externalities” of private products, but the degree can be significantly different. In this perspective of understanding - taking education as an example, Jia Kang (1998) has analyzed: “Education and health care, for some individuals and micro-units, can be classified as non-public products. But as maintaining a certain level of education and health care in the whole society is a necessary condition for macroeconomic stability and overall development, they are classified as public goods. In modern society, it is the necessary conditions for overall social development that the basic education of social members reaches and maintains a certain level. Therefore, the basic education, such as China’s nine-year compulsory education, has more characteristics of pure public goods, while higher education is more biased towards the characteristics of non-public goods because its correlation with diverse development investment decisions and competitiveness has increased significantly in the social choice of individual members and life design” (Jia Kang, 2002). Today, it can be said that the rights-ethics public goods explicitly mentioned in this article stabilize the low-income group and the so-called “vulnerable group” in the social redistribution led by the government, thus stabilizing the whole society and promoting the maximization of public interests. However, its boundaries need to be re-determined through public selection procedures at regular intervals, and different definitions may occur in different historical development stages due to technical conditions, market conditions, institutional mechanisms, etc., for example, the length of compulsory education extending from the statutory 6 years to 9 years and then to 12 years. Even at the

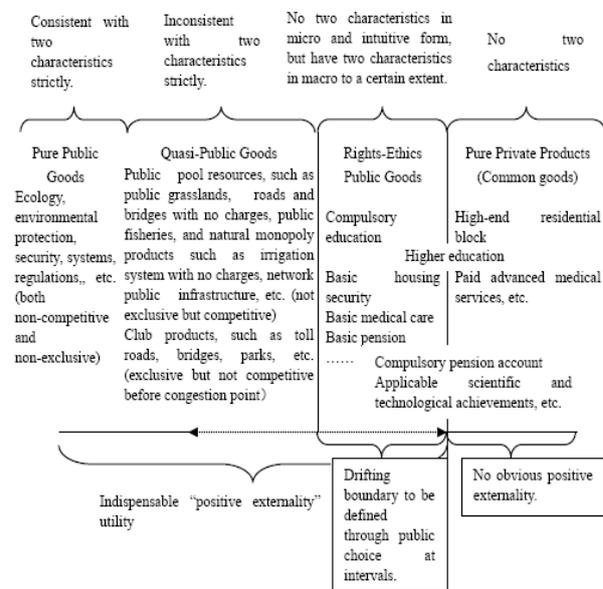
boundary of rights-ethics public goods and pure private products, there may be “wall riding” social products between them, such as higher education, compulsory personal pension accounts, and some applicable scientific and technological achievements.

In summary, we can form a basic understanding of the three parts of public goods under the expanded definition of public goods.

1. Identify undoubtedly the non-exclusive and non-competitive pure public goods for consumption.
2. Some quasi-public products that partially meet the above-mentioned characteristics.
3. Rights - ethics public goods inconsistent with two characteristics in a micro and intuitive form, but consistent with two characteristics in macro and comprehensive form to a certain extent.

Further, it should be explicitly emphasized that the boundaries between the various classifications within public goods and their private products can drift with the relevant factors and conditions of development stage, technology, market, system, etc., and the specific scope of rights-ethics public goods needs to be redefined at regular intervals through public selection procedures.

Figure 4: Schematic Diagram of the “Spectrum” of Public Goods - Private Products



B. A Specific Case: China’s Recent Medical and Health System Reform

On April 6, 2009, China’s decision-making level issued the “Opinions on Deepening the Reform of the Medical and Health System” (hereinafter referred to

as the “*Opinions*”). Compared with the past, the most striking change of this new medical reform program, which has been published for three years and has been controversial, is that the government has clearly stated that “the basic medical and health system is provided as a public product to the whole people”, which has aroused the enthusiastic attention of the whole society.

This “Opinion” and its above-mentioned terms about the public product attributes of the basic health care system provide a good example of this article’s basic understanding of rights-ethics public goods. Institutional arrangements in the economic society are also a kind of public goods, and the basic medical security conditions provided by the basic medical and health system covering the whole nation, which can be obtained by the lowest income class, support the harmonious and stable situation shared by all social members. It is a public product that benefits all people and everyone. In China, the basic medical health system, as a public product that has not been defined and newly defined, represents the dynamic evolution of rights-ethics public goods in real life. This is born in the land of China in the bottom-to-up interaction of the games of “longitudinal democracy”²⁴, which is called by John Naisbitt. The reality of China’s economic and social transition shows that the expanded definition of public goods (including rights-ethics public goods) is worthy of serious academic discussion, and should be possible and necessary to constitute the theoretical basis for the innovation of relevant concepts and public management practices. Real-life in China and the world economy and society is inspiring and stimulating the researchers to pay more attention to such unavoidable research deepening and expanding work.

VI. CONCLUSION

In this paper, we enumerate and sort out two definitions of public goods, namely Samuelson’s definition, and Buchanan’s definition, and point out that the two characteristics of public goods contained in the definition of Samuelson are “non-competitive and non-exclusive in consumption”, which is a paradox with the contemporary policy reality of China and the western countries that “the government sometimes provides private products” (Harvey Rosen) and also difficult to explain. On this basis, we draw out and sort out Buchanan’s definition of public goods, and illustrate our high regard for the “collective choice” contained in this definition. Further, we believe that the two definitions of Samuelson and Buchanan are not independent and antagonistic, but can be opened up into a relationship

of inclusion and the included, the so-called “expanded definition of public goods”, thus the definition of Samuelson (emphasis on the “two characteristics” of public goods) and the definition of Buchanan (emphasis on “collective choice”) are unified within a more comprehensive and self-consistent interpretation framework. Therefore, the main contribution of this paper is not to redefine the public goods, but to achieve “bridging” and “opening up” between the existing two representative definitions of public goods that seem incompatible with each other. The “expanded definition of public goods” integrates the original split cognitive framework to develop and enhance the overall inclusiveness and explanatory power of the theory of public goods.

The concept to open up and bridge two definitions of public goods are rights-ethics public goods. Is it necessary to give a name to the “quasi-public goods” such as basic education, health care, affordable housing, etc. that everyone is accustomed to? We think that this is absolutely necessary. Our research shows that under the strict classic definition of public goods, the above products are not quasi-public goods at all. On the contrary, they are private products that are competitive in consumption and exclusive in the beneficiary. When the society develops to a certain stage, education, medical care, housing, etc. are regarded as the basic rights of citizens and have become part of the basic values of the whole society and the political ethics that the ruling party must follow. Only at this time, can these private products be turned into public goods through “a thrilling leap” after going through necessary public selection procedures. The name of the rights-ethics public goods accurately points out that “it is a private product provided by the government”, which is different from the essential characteristics of ordinary public goods.

Moreover, the introduction of rights-ethics public goods also helps to clarify the current government and market responsibilities in China’s education, health care, housing, and other issues and provides constructive ideas. Due to the special nature of rights-ethics public goods, namely “private products provided by the government”, different principles need to be applied in the production and distribution of these products, that is, production according to economic principles and distribution according to political principles.

As far as “production according to economic principles” is concerned, from the perspective of strict academic argumentation, we have clarified the feasibility of fully private production of these products. The beneficiaries of education, health care, and low-rent housing can be confirmed and its degree

²⁴ John Naisbitt and Doris Naisbitt, *China’s Megatrends*, Beijing: All-China Federation of Industry and Commerce, 2009.

of benefit (exclusiveness) can be measured, therefore it is fully chargeable and can be handed over to the private sector for production. As a result, not only can we gain the superiority of “introducing competition and improving efficiency”, which is widely recognized by all walks of life, but also solve the core problem in the public economics of “difficulties in the pricing of public goods”. The practical significance lies in: fundamentally denying the views and practices of some government departments that insist that only public schools and public hospitals can maintain public welfare (substantially protect the interests of the department).

As far as “distribution according to political principles” is concerned, we argue that private products such as education, medical care, and housing should be special public goods that enter the list of government provisions after “regulated public choices”. Therefore, the responsibility of the government mainly lies in ensuring that their nationals have access to (ie, accessibility) these products. There is no necessary connection between the above and whether the nationals have the corresponding ability to pay. Therefore, the main role of the government is to establish a sustainable fundraising and payment system and to urge every citizen to join and provide support for low-income people so as to compensate for the huge gap between “must pay before product” and “cannot pay, but must consume”, thus promoting social equity and maintaining the legitimacy of the regime. With economic and social development, this is a dynamic and standardized public choice mechanism that should be conducted once in a while (such as the legal compulsory education aforementioned are 9 years, but in some of the more developed regions it has been extended to 12 years through the legislative process of the National People's Congress). In real life, it is a major practical issue concerning the democratization and legalization system of public affairs and public resources allocation in China.

“Production according to economic principles and distribution according to political principles” is actually a major division and specific expression in the scope and focuses of the government and market functions in the production and distribution of the above products, as well as materialization of the leading “public-private partnerships” (PPP) in the field of public goods. The implied policy implications are as follows. On one hand, relax the government regulation in the production of these products, reduce the conditions that restrict the entry of the private sector, introduce competition, improve efficiency and save social resources. On the other hand, clarify and increase the government's responsibility in “delivering” the above public goods, realizing the redistribution of income, and promoting social equity. Our research shows that the

rationalization of the government's function of “neither offside nor absent” should be a dynamic and endless process of historical evolution that requires the participation of democratization and rule of law to dynamically define the specific boundaries of rights-ethics public goods. The significance of this progress must be global and fundamental for the modernization in China.

REFERENCES

- [1] Guo Qingwang, Lu Xin, Zhao Zhiyun, etc., *The Dictionary of Public Economics*, Beijing: Economic Science Press, (1999).
- [2] Jia Kang, *The Attributes of the Educational Products and Its Corresponding Theory, Research on the Financial Educational Investment and Its Management*, Beijing: China Financial and Economic Publishing House, (2002).
- [3] Jia Kang, *Substance and Regulation of Public Finance*, Beijing: Economic Science Press, (1998).
- [4] Feng Qiaobin, *Private Property, and Public Finance*, Beijing: China Financial and Economic Publishing House, (2005).
- [5] Lu Hengli, *Discussion on the Private Provision of Public Goods*, *Journal of Tianjin Normal University (Social Science)*, 3 (2002).
- [6] Liu Shibai, *Market Economy and Public Products*, *Economist*, 4 (2007).
- [7] Li Lin, Liu Guo'en, *The Participation of Profitable Hospital in Market Competition Alleviating the Difficulty of Getting Medical Treatment*, *Review on Chinese Medical Reform*, No. 4, (2009).
- [8] Long Xinmin, Yin Lijun, *A Review on the Concept of Public Goods*, *Journal of Xiangtan University (Philosophy and Social Sciences)*, 3 (2007).
- [9] Ma Jun, *The Value of the Concept of Public Good*, *Finance & Trade Economics*, 11 (2005).
- [10] Qin Hui, *On Liberty: The Key to Integrating Personal Value Into Social Values, China and World Affairs*, 4 (2006).
- [11] Tang Jun, *The Basic Concept and Theoretical Framework of Social Policies, China Value*, http://www.chinavalue.net/Article/Archive/2007/4/8/61689_14.html, April 12, (2009).
- [12] Tang Xianglai, *The Fourth Way to Public Product Supply — A Research of the PPP Mode*, *Economic Survey*, 1 (2006).
- [13] Wu Wei, *The Latest Development of Public Goods Theory in the West*, *Finance & Trade Economics*, No.4, (2004).
- [14] Zhou Yicheng and Yan Juan, *What is Public Goods, a Literature Review*, *Academia Bimestris*, 1 (2008).
- [15] Zhu Mingxi, *Query on the Definition of Public Goods of Western Mainstream Schools*, *Public Finance Research*, 12 (2005).
- [16] *The Central Committee of the Communist Party of China and the State Council, Opinions on Deepening the Reform of the Medical and Health System*, promulgated on April 6, (2009).
- [17] SEN Amartya. *Poverty and Famines* [M]. Beijing: The Commercial Press, (2004).
- [18] (USA) James M. Buchanan, translated by Tang Shouning, *Public Finance In Democracy Process*, Shanghai: Shanghai Joint Publishing Company, (1992).
- [19] (USA) Douglass C. North, *Structure and Change in Economic History*, Shanghai: Shanghai Joint Publishing Company, (1991).
- [20] (USA) Harvey S. Rosen, *Public Finance (The Fourth Edition)*, Beijing: China Renmin University Press, (2000).
- [21] Michael Hill, *Understanding Social Policy*, Beijing: The Commercial Press, (2003).
- [22] (Australia) Huge Stretton and Lionel Orchard, *Public Goods, Public Enterprise, Public Choice*, Beijing: Economic Science Press, (2000).
- [23] Inge Kaul, etc., *Providing Global Public Goods: Managing Globalization*, Beijing: People's Publishing House, (2006).

- [24] Buchanan, James M., *The demand and Supply of Public Goods*, Chicago: Rand McNally & Company, (1968).
- [26] Dennis Epple & Richard E. Romano, *Public Provision of Private Goods*, *The Journal of Political Economy*, 104(1) (1996).
- [27] Goldin, Kenneth D., *Equal Access VS Selective Access: A Critique of Public Goods Theory*, *Public Choice*, 29 (spring), (1979).
- [28] Harold Demsetz, *The Private Provision of Public Goods*, *Journal of Law & Economics*, 13 (1970) University of Chicago Press.
- [29] Musgrave, R.A., *The Theory of Public Finance*, New York, McGraw-Hill, (1959).
- [30] Musgrave, R.A., *Provision for Social Goods*, *Public Economics*, London: Macmillan, (1969).
- [31] Pickhardt M., *Fifty Years After Samuelson's The Pure Theory of Public Expenditure: What' Are We left with?* Paper presented at the 58th congress of International Institute of Public Finance, Helsinki, August , (2002) 26-29. <http://www.pickhardt.com>.
- [32] Samuelson, P.A., *The Pure Theory of Public Expenditure*, *The Review of Economics and Statistics*, 36(4) (1954).
- [33] Samuelson, P. A., *Diagrammatic Exposition of a Theory of Public Expenditure*. *Review of Economics and Statistics*, (1955) 350–356.
- [34] Samuelson, P. A., *Aspects of Public Expenditure Theories*. *Review of Economics and Statistics*, (1958) 332–338.
- [35] Samuelson, P. A., *Pure Theory of Public Expenditure and Taxation*. In J. Margolis and H. Guitton (Eds.), *Public Economics* , (1969) 98–123. London: Macmillan Press Ltd.
- [36] Schmidt, D., *The Limits of Government. An Essay on the Public Goods Argument*. Boulder: Westview., (1991).
- [37] W. VerEecke, *Public Goods: An Ideal Concept*, *Journal of Social-Economics*, 28 (1999)
- [25] R. H. Coase, *The Lighthouse in Economics*, *Journal of Law and Economics*, 17(2) (1974) 357-376.