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THE OPTIMIZATION OF PUBLIC SERVICE SUPPLY FROM THE PERSPECTIVE OF MULTIPLE OBJECTS AND ANALYSIS ON THE MECHANISM AND EFFECTS OF PPP INNOVATION

Jia Kang, Ou Chunzhi *

Abstract

The efficiency that the optimization of public service supply aims to improve refers to comprehensive performance, which is different from the single efficiency or direct efficiency of managerialism. Often at the expense of publicity, efficiency is given priority and primacy. This behavior is acceptable in business, but not in public affairs. PPP innovation involves governance challenges related to how to keep the government's public value orientation and appropriate scale. For the "multi-subject" innovation that uses PPP as the institutional supply, it is necessary to clarify and deepen the theoretical understanding of why PPP is necessary and how to realize its standardized development in the face of challenges. Currently, financing function of PPP has attracted the attention of the academic circle and been particularly popular in the reform and development practice of local governments. However, how to understand, explain and use its "management function" correctly to ensure the public goal, optimize the public service and improve the efficiency of public service supply (comprehensive performance) is the key that we need to think deeply about. Based on the analysis of the positioning of efficiency and publicity and the mathematical theory that government exclusively cannot achieve the best public service, this paper conducts original theoretical analysis and demonstration that the introduction of PPP can reduce the costs of public service supply and improve the performance. It demonstrates that the introduction of social capital to participate in the public service supply can optimize the results of the trade-off and combination between the direct efficiency and comprehensive public targets. It investigates and analyzes further the effects and mechanisms of PPP innovation, and puts forward comments and suggestions.

Keywords: efficiency, comprehensive performance, government scale, public service supply, PPP

* Jia Kang, Research Fellow and Ph.D. Instructor in Chinese Academy of Fiscal Sciences, the President of China Academy of New Supply-side Economics, mainly engaged in the research on financial theories and policies ; Ou Chunzhi, distinguished professor in Business School of Guizhou Education University, Special Research Fellow of New Supply-side Economist 50 Forum, mainly engaged in the research on public governance and public policies. Corresponding author contact: chunzhiyongyuan@163.com, mobile: 18201209156.

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I. Introduction

Efficiency is the core issue of management. When it first appeared in Latin, it was a philosophical term meaning “effective factor”. Later it was widely used in economics and management, referring to the ratio of the results of economic and social activities and the costs consumed. In administrative management, it refers to the revenue of public goods and services provided by the government at unit cost, that is, the ratio of the quantifiable output to the input. In the field of public affairs, there is a corresponding concept of government governance efficiency, which refers to the comprehensive performance of the government in performing its functions. Its research has two weaknesses traditionally. One is to follow the research paradigm of management efficiency and ignore the publicity of the object (“positive externalities” involving the issues such as environmental protection, “social fairness and harmony” in the optimization of redistribution, the pursuit of long-term goals such as “backup” of economic development, and specific costs of democratization and legalization, etc.). Second is the research model limited to the pure theoretical model, neglecting the applicability of practice and the lack of integration of PPP and other institutional innovations in the public domain. The general efficiency research paradigm of management cannot be fully applied to the government as the publicity of government work and the diversity of objectives determine the comprehensive performance of public services, which is different from the single efficiency or direct efficiency in the sense of management. The particularity of a series of problems, such as the reasonable positing, the way of embodiment, the analysis of inefficiency, and the promotion mechanism, etc. are all issues that the research on public service supply should pay attention to and make special treatment. If we simply measure the efficiency of public governance (public service performance) based on the input-output ratio, and ignore the ultimate goal of diversification of public interests, we will lose sight of each other, or even turn things upside down. This is what we should try to avoid.

To study the concept of "efficiency", we cannot avoid the question of "for whose efficiency", the efficiency of private product supply or the efficiency of public product supply? Enterprise efficiency or government efficiency? For different fields, there are huge differences in the causes and manifestations of efficiency. The research on efficiency should reflect and adapt to these differences. The efficiency orientation of management ism often sacrifices publicity at the expense of direct efficiency, which is given priority and supremacy. This is still acceptable in corporate behavior. However, for related matters in the field of public service supply, its publicity takes precedence over the efficiency. The research on the efficiency of public service supply needs to fully reflect the particularity of the research object, adapt to the basic characteristics of public responsibility, public goals and public organizations, and fall on the correct grasp of comprehensive performance.

In the past, the inefficiency of traditional government-led traditional public service supply was mainly manifested in the following: the non-market nature of the output mechanism not only weakened competition from outside the government, but also weakened the endogenous motivation of the government to actively improve efficiency. The bureaucratic red tape and textualism, mixed with the behaviors of public servants, who being a rational economic man, pursued to maximize the budget, inevitably leads to the improper expansion of the government

(Anthony Towns, *Inside Bureaucracy*, 1967, Nice Cannan, *Bureaucracy and Representative Government*, 1971). Public service supply can not effectively respond to the people's demands and other issues, and needs to be optimized.

Generally, people can assume that the government can choose the number and type of services they provide according to the preferences and goals of public functions. However, in practice, the government often deviates from the demands of the people, resulting in alienation of publicity. Theoretically, the further discussion on this aspect has richer achievements. For example, Ou Chunzhi and Jia Kang (2017) pointed out that the self-expansion tendency of government agencies caused the government to be too large and the cost of public service supply exceeded the expected level. The packages of various services result in imbalance in the structure of public services, leading to co-existence in insufficient supply and surplus supply.[1] Barro, R. J. (1990) proposed the existence of the optimal scale of government, whose scale and economic growth showed an inverted U-shaped nonlinear relationship. [2] Bernauer (2013) thought that only when the government's expansion demand fell on the pure public service supply or externality correction, can the government's expansion clearly lead to welfare growth. [3] Berry & Lowery (1987) denied that the government had always argued that its own large scale was caused by responding to public demand, revealing that excessive government scale and oversupply were not necessarily caused due to responding to popular demands.[4] Goel & Nelson (1998) believed that the larger the government, the more likely it is to lead to corruption.[5] he above-mentioned researchers' perspective of government scale, the government scale and the changes in the public service costs (performance) after introducing the mechanism of PPP (public-private partnership, which is officially referred to as "government and social capital cooperation" in Chinese practice) have similarities, and serve as an important entry point to deepen the relevant cognition of this thesis. Kim, T. & Kim, H. (2016) examined the factors influencing the efficiency of social public expenditures in OECD countries, and pointed out that corruption and lack of responsiveness of public administrators are the main factors causing inefficiency.[6] Asatryan (2016) and others pointed out that the economic and fiscal crisis was a powerful catalyst for reform. Administrative reforms that improved the efficiency of the government can alleviate the conflict between the efficiency of public service supply and

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[1] Ou Chunzhi, Jia Kang, PPP is the Transcendence of Public Service Supply to the Bureaucracy Paradigm —— Reflections from the Perspective of Governance of Public Service Supply in China, *China Public Administration Review*, Vol. 2, 2017.

[2]Barro, R. J,1990, "Government Spending in A Simple Endogenous Growth Model", *Journal of Political Economy, 98*(5), 103-126.

[3] Bernauer, T. and V. Koubi, 2013, Are Bigger Governments Better Providers of Public Goods? Evidence from Air Pollution. *Public Choice, 156*(3), 593-609.

[4] Berry, W. D. and D. Lowery, 1987, Explaining the Size of the Public Sector: Responsive and Excessive Government Interpretations. *The Journal of Politics, 49*(Volume 49, Number 2), 401-440.

[5] Goel, R. K. and A. Nelson, 1998, Corruption and Government Size: A Disaggregated Analysis. *Public Choice, 97*(1), 107-120.

[6] Kim, T. and H. Kim, 2016, Which Country Uses Public Social Expenditure Efficiently Among OECD Countries?. *Applied Economics Letters*, 1-4.

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publicity.[7] Gramlich (1994) believed that private capital's investment returns were more effective than those of public capital, their contributions to economic growth by encouraging private capital investment with industrial policies were larger than that of public investment, and the introduction of social capital was an irreversible trend.[8] Carbonara (2017) and others have improved the efficiency model under the PPP model. The basic idea is to achieve a win-win situation by balancing the revenue of the public and private sectors.[9] From the perspective of the existing literature research, there is complicated relationship between government scale, responsiveness, cleanliness, etc. and the efficiency of public service supply. The supply of traditional public goods and services needs to be optimized and the introduction of social capital (that is, the enterprises being as the main body of the market except for the government) is a trend of change, which has been clearly recognized by the researchers. However, it is worth noting that in the exploration of PPP, people's thinking tends to naturally slip into the use of input-output ratio to measure the efficiency of public service supply, ignoring that this "efficiency" often conflicts with "publicity". In the innovative development of the "upgraded version" of the economy and society, the question of how the government maintain its public value orientation and correspondingly government scale has become a new challenge for governance. The efficiency orientation of pure managementism may also become a constraint for optimizing the provision of public services as it cannot effectively combine the publicity. On the basis of clarifying the similarities and differences between "efficiency" and "comprehensive performance", it is necessary to further analyze and understand how to explain that PPP (that is, "government and social capital cooperation" in Chinese official terminology) is conducive to the implementation of public goals in comprehensive performance, in order to be helpful for optimizing the practice of public service supply.

II. Reasonable Positioning: Efficiency and Publicity of Public Service Supply

"Efficiency" is the core goal of management. However, the public nature of public service supply brings more diversified goals to it, and multiple goals mean choices and trade-offs among goals. There is a substitution or competition relationship between single efficiency or direct efficiency and other values and goals of public service supply. Thus, the reasonable positioning of efficiency in different situations will become one of the signs that highlight the complexity of the publicity of public service supply. The tangled factors in the publicity triggered by the recognizable public service supply efficiency cannot be underestimated.

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[7] Asatryan, Z., Heinemann, F., and H. Pitlik, 2016, Reforming the Public Administration: The Role of Crisis and the Power of Bureaucracy. *European Journal of Political Economy, 4*(6), 859-874.

[8] Gramlich, E. M,1994, Infrastructure Investment: A Review Essay. *Journal of Economic Literature, 32*(3), 1176-1196.

[9] Carbonara, N., Pellegrino, R., Carbonara, N. and R. Pellegrino, 2017, Public-Private Partnerships for Energy Efficiency Projects: A Win-Win Model to Choose the Energy Performance Contracting Structure. *Journal of Cleaner Production.*

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1. The public nature of public service supply inevitably leads to a trade-off between direct efficiency and fairness (ie "equalization of results") (Jia Kang, 2007) [10].

Economists generally believe that although the market mechanism needs fairness, it cannot rely solely on the market mechanism to ensure "fairness of the results", that is, its proper level of equality. This is because what the market mechanism does is to hand over the resources to the highest bidder, and then in the highly competitive competition, there will inevitably be differentiation between winners and losers, strong and weak, so an efficient market mechanism may cause great unevenness in the results of competition, and it may cause a huge gap in income distribution. This is one of the so-called market defects. The "invisible hand" can lead us to the outer limit of the edge of the possibility of production, but it does not necessarily distribute these products in an acceptable way (Samuelson and Lian Nordhaus, 1991).[11] It can also be understood in this way that the advantage of the market mechanism lies in direct efficiency. Value goals beyond this efficiency must be compensated by other mechanisms, and the government is one of the mechanisms to compensate for market deficiencies. Government is different from the private sector. Efficiency is not the only goal pursued by the government. The government has many other goals (Ingram, 1998).[12] The pursuit of fairness and appropriate assistance to the weak are the bounden duty of the government. The direct efficiency and efficiency priority in traditional management are not entirely suitable for the government, so there is no doubt that it is not suitable for the government-led public service supply.

2. As a natural attribute, the publicity of public service provision also brings trade-offs between direct efficiency and democracy.

If the public service supply simply pursues direct efficiency, it will conflict with the government's other social value goals to a certain extent, that is, the potential conflict between direct efficiency and public opinion and democracy. Democracy often leads to seemingly low efficiency, but it cannot sacrifice the necessary democratic agenda as the realization of democracy is one of the core values of modern government. In the past, we often attributed government inefficiency to bloated institutions, bureaucratic style of civil servants, and procedural red tape. In fact, these are just our intuitive impressions of public servants. The duties that public servants perform in daily life often contradict each other. In addition, they have to accept the due diligence, supervision and inquiries from the public about the government. The public requires both low-cost and high-quality provision of public services, and public officials must ensure internal information security and disclose other information to the media as much as possible. The most difficult contradiction to resolve is that the public expects public officials to maintain both the flexibility of governance and the seriousness of administration according to law. These may also be expressed as so-called red tapes, and these red tapes are often the

[10] Jia Kang, Discussion on Classification Adjustment in the Distribution of Resident Income in Government's Maintaining Fair and Equalization, Sub National Fiscal Research, Vol. 7, 2007.

[11] Paul A. Samuelson, William D. Nordhaus, 1991: Economics, Beijing: Chinese Development Press.

[12] Patricia Ingram, 1998: Public Management System Reform Model, Chinese Translation Edition, National School of Administration Press.

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necessary cost to achieve publicity. However, it must be admitted that there is indeed a tendency of doing different from the expected during implementation. Barry Bozeman (2007) defined red tape as "these are some rules. People must follow these rules and assume the responsibilities and obligations stipulated by the rules, but the fait accompli of these rules does not achieve the original purpose when the rules were formulated." The reason why there are more red tapes in government than private organizations is that in a certain sense, the government is under more supervision pressure from external forces, such as power implementation procedures and audits, and so on. All these supervisions are derived from the laws, power checks and balances mechanism related to government activities and the core values of society.[13]

3. The public nature of the public service supply may be severely damaged by direct efficiency, which makes its legitimacy be eroded to a certain extent.

The basic value of managementism lies in economy, efficiency and effectiveness. It focuses on performance evaluation and efficiency. It uses market or quasi-market methods to rebuild government operations. It strengthens the competitiveness of government work with goal-orientation, customer-orientation, time-limited contracts, cost savings, material rewards and other methods with more freedom than ever. Managementism emphasizes instrumental rationality and may ignore the richer value connotation of its public attributes, causing deviation from public value. Public service supply is essentially based on a democratic framework, which is a balance of conflicting goals of multiple values. It must pursue social justice and civil rights, and emphasize the consideration of multiple values such as public interests, state responsibility, public participation, and so on. The management-oriented perspective of the supremacy of public service supply is easy to ignore the fundamental value and purpose of public service supply to a certain extent and completely confuse with the provision of private products in a market way, which will lead to the gradual change of public service supply under instrument rational far from the public value. There are possible conflicts between autonomy and accountability, personal vision and public participation, privacy and openness, risk sharing and public goods custody between the management-oriented public service provision and the political value-oriented state responsibility (Bellone and Goerl, 1992).[14] The legitimacy of the provision of public services must be based on their ability to bear the public responsibilities and realize the multiple value goals of public interests.

From the above analysis, it can be seen that it is difficult to avoid the potential conflict between the management efficiency priority of the public service supply (that is, taking direct efficiency as the primary pursuit) and its public attributes. It must be acknowledged that although direct efficiency is not the first value goal of the government, it is indeed one of the indispensable goals and also the shortcoming of the government, which makes the government be most vulnerable to criticism, accusation and external pressure on many occasions. From the perspective of managementism, the direct efficiency of the government is indeed lower than that of other

[13] Charles T. Goodsell, 2007: The Case for Bureaucracy: A Public Administration Polemic, Chinese Translation Edition, Fudan University Press.
[14] Bellone, C. J., & Goerl, G. F. (1992). Reconciling Public Entrepreneurship and Democracy. *Public Administration Review, 52*(2), 130-134.

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organizations. In other words, the direct efficiency of social capital is usually higher than that of the government. However, this efficiency is not mainly due to the difference in organizational form, but from the simple goal of social capital and the "market training" in competition. If the emphasis is only on letting public officials use "commercial methods" to improve administrative efficiency, it means that people have misunderstood the concept of "administrative efficiency" to a great extent. In most cases, the reason we need the government to do things is to avoid allocating public resources in a way that maximizes profits. If the government wants to pursue higher administrative efficiency, they can use profit-making methods to operate themselves, and they can easily give themselves a monopoly position to make profit-making easier (Tallock, 2010).[15] In short, government inefficiency is largely determined by the public nature of its responsibilities (Bozeman, 1992).[16] Due to the competition and substitution relationship between direct efficiency and publicity, for the provision of public services, the perspective of multiple perspectives is essential and necessary. The rational positioning of its efficiency is extremely complicated. If multiple relevant factors such as public interests, public responsibility and responsiveness are added to the evaluation dimension of the efficiency of public service supply, then obviously, the resulting concept of comprehensive performance can better measure the public service supply than the concept of direct efficiency in single input-output ratio of the managementism.

After exploring the reasonable positioning of the efficiency of public service supply, it is necessary for us to clarify the problem that it is difficult for us to optimize the traditional way in which public services are provided by the government, in order to more clearly understand the only way to improve the efficiency of public service supply, that is, comprehensive performance.

III. Analysis on the Optimization of the Traditional Supply of Public Services: The Government Cannot Exclusively Realize Optimization.

The question of the optimal supply of public services provided by the government as the main body has been full of controversy in the academic circle: 1 Is there an optimal? 2 If there is an optimal, how to optimize? To try to answer the above questions, we assume that there are only two services in the economy, public services and private services. For convenience, X represents the quantity of public services and 1 unit of currency represents the cost of public services per unit, so X represents both the quantity of public services and the price of public services. y_i represents the number of private services that the individual I has, and p represents public services. For the sake of convenience, we assume that each person's utility is determined by the sum of public services and private services that he obtains, and u_i is used to represent the sum of individual utility as follows.

$$u_i = v_i + y_i$$

[15] Gordon Tullock, 2010: Economic Hierarchies, Organization and the Structure of Production, Chinese Translation Edition, The Commercial Press.

[16] Bozeman, B., Reed, P. N. and P. Scott, 1992, Red Tape and Task Delays in Public and Private Organizations. *Administration & Society, 24*(24), 290-322.

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Here, v_i is a continuous function, $\frac{\Delta v_i}{\Delta x}$ is the marginal utility of i at point p of the public service, and the available public service is p, which means that under the premise of consuming the given private services, every additional unit of public service will bring increased utility. Suppose that all the original assets of individual i are allocated to public and private services, and there is no borrowing, which is expressed asw_i. In the simplified model we set, the corresponding allocation must meet the following feasibility conditions:

$$X+\sum_i y_i=\sum_i w_i$$

Since all the assets of individual i are allocated to public services and private services, how can individual assets be allocated as the optimal number of public services? Samuelson's derivation of optimal conditions tells us:

$$v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x)>1$$

That is, $v_i(x)$. the sum derived from x is strictly greater than 1, which means that the margin of the supply level of x for the individual sum is greater than 1 (Samuelson, 2015). If for all individuals, the number of private services all exceeds the marginal utility of public services at point x, that is $y_i > v_i'(x)$. Then the sum of the marginal utility of public service supply exceeding 1 unit is too small, and we cannot take public service supply at this time as the optimal point. If each individual's private service is reduced, then for each individual i, the consumption of private service is as follows:

$$\overline{y}_i=y_i-v_i'(x)$$

As a result, the reduced consumption of private services is as follows:

$$v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x)=1+\Delta \quad (\Delta>0),$$

This formula indicates that the left side of the inequality is greater than 1 unit.

Now we reduce the sum by 1 unit and transfer from private services to the provision of public services. The current number of public services is as follows. x increases the public service for each i, and the marginal utility increases, which is expressed as$v_i'(x)$. Therefore, when the consumption quantity is $(\overline{x},\overline{y}_1,\ldots,\overline{y_n})$, the increased utility of each i at $(x\, y_1,\ldots,y_n)$ is almost the same, but we still have reduced private services that can be kept and allocated between individuals. Strictly speaking, this situation is better than the utility at $(x, y_1,\ldots,y_n)$. In case:

$$v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x)>1$$

Then at this time, it cannot be regarded as Pareto optimal because we can improve the utility by reducing private services and increasing the redistribution of public services without harming others. In case:

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$$v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x)<1$$

Then at this time, the number of public services is not Pareto optimal. If we increase the consumption of private services, at least we can improve the utility of some people without harming others. Thus, we can draw the conclusion that the necessary conditions for Pareto optimal allocation are as follows:

$$v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x)=1$$

In Samuelson's allocation of optimal conditions, the personal marginal utility of the sum of public goods is set to 1 unit. Samuelson's optimal conditions are consistent with the largest total net utility of public goods. The total net utility of public goods is obtained by the total utility minus the costs of public goods.

$$v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x)-x=\sum_i v_i(x)-x$$

To find the maximum value of the expression, set the first derivation about x to 0, and then solve for x to get $\sum_i v_i'(x)=1$, which is consistent with the optimal conditions of Pareto public products. It can be seen that the Samuelson conditions are sufficient and necessary for the optimal supply quantities of public goods. If the optimal quantity of public goods can be obtained in theory, what about the provision of public services in practice? In practice, the supply quantity of public services is far from optimal. Assuming that individual i purchases public services in a rational manner, individual i attempts to maximize as follows:

$$u_i=v_i(x)+y_i$$

Satisfy budget constraint $x+y_i=w_i$, replace y_i, maximize $u_i=v_i(x)-x+w_i$. Now w_i is continuous, the extremum of the function is $v_i(x)-x$. $v_i(x)$ is regarded as concave upward, that is, the margin of return from additional public services per unit decreases. When the tangent slope distance of $v_i(x)$ is equal to the slope of y=x, the vertical distance between $v_i(x)$ and y=x is its maximum value:

$$v_i'(x)=1$$

$\hat{x}_i$ is the amount of public service supply when the utility of the individual i is maximized. Suppose the rational person i wants to buy this amount of public service, then x can be consumed by others. In addition, in a typical large organization, the status of individual members is very similar to the status of an enterprise in a perfectly competitive market, or the status of a domestic taxpayer: It is difficult for individual efforts to have a significant impact on their organization. Regardless of whether he has contributed to the organization or not, anyone can enjoy the benefits from others (Olson, 1995).[17] Therefore, suppose that there is a person j, who makes $v_j'(x)<1$.

[17] [USA] Mancur Olson, 1995: The Logic of Collective Action, Chinese Translation Edition: Shanghai Renmin Publishing House / Truth & Wisdom Press / SDX Joint Publishing Company, p.p. 13-14.

If an individual wants to purchase an additional 1 unit of public service, his overall utility will be reduced, then in this way, the individual will not have the motivation to purchase an additional 1 unit of public service. From the perspective of personal utility, he would rather be a free rider for i. For individual k, if $v_k'(\hat{x}) > 1$, this group of people will give up 1 unit of private services and purchase public services to benefit from it. These people will continue to purchase additional public services and will not stop until the number x is reached. At this time, for at least one individual i, $v_k'(x)=1$. For all members j, $v_j'(x) \leq 1$.

In practice, $v_1'(x)+v_2'(x)+v_3'(x)+\ldots+v_n'(x) > 1$. It can also be understood that if the total marginal utility exceeds 1, it means that the amount of public services purchased is not optimal. In a small group (referring to a small number of members), public service supply can only be lower than the optimal number. The farther it is from the optimal number, the smaller the member share of the total group (referring to the larger number of members). When the other conditions are the same, the more individuals there are in the group, the smaller the group member's share of the total. Thus, the larger the number of individuals in the group, the farther it is from the optimal number. Obviously, the efficiency of large groups is generally lower than that of small groups (Olson, 1995).[18] In practice, the number of optimal public services for members of large groups is greater than that of the members of small groups. Thus, once the members of the large group reach the optimal number, the utility of the small group members will be reduced by purchasing an additional amount of public services. It can be seen that if there is no external adjustment mechanism, then the quantity of public service supply cannot be optimized (Nurmi, 2010).[19]

However, even if there is an external adjustment mechanism, the provision of public services may not necessarily be optimal. Assuming that the coordinator allocates the quantity and cost of public services, when people send the coordinator the utility function of the individual's public service, they think that they will pay for the public service according to their declared utility, then it can be imagined that they may understate the personal utility. Of course, there can be another situation. Assuming that public services are paid through general taxation, the lower the people's income, the greater the craving and dependence on public services. However, unfortunately, low income leads to low taxes, and it is difficult to provide more and better public services with low taxes. Therefore, the payment of public services through general taxation will lead to oversupply, which is in sharp contrast to the lack of public services provided by Lindal's voluntary payment mechanism (Hillman, 2006).[20] Thus, it results in the second-best option of the public service supply. The Clarke tax just solves the problem of information asymmetry that

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[18] [USA] Mancur Olson, The Logic of Collective Action, Translated by Chen Yu, Shanghai: Shanghai Renmin Publishing House / Truth & Wisdom Press / SDX Joint Publishing Company, p.p. 25.

[19] [Finland] Hannu Nurmi, 2010: Model of Political Economy, Chinese Translation Edition, Shanghai Renmin Publishing House / Truth & Wisdom Press, p.p. 179-182.

[20] [Israel] Arye L. Hillman, 2006: Public Finance and Public Policy: The Responsibilities and Limitation of the Government, Chinese Translation Edition, China Social Sciences Press, p.p. 100-101.

people conceal the utility of public services. Clarke tax urges people to speak truthfully about their true utility (Tideman and Tullock, 1976).[21]

Now according to the utilities of three people A, B, C to evaluate the use of public services a and b, as shown in Table 1. The government has no way of knowing the actual gains and losses that the public services have brought to A, B, and C. In order for everyone to truly declare their personal utility so that the government can make reasonable public service decisions, the procedure rules are set as follows:

1. If a person's utility declaration changes the government's decision on whether to provide public services, then the person is subject to tax.
2. The personal tax payment amount is equal to the total loss of other people caused by the change in the decision of public service supply.
3. Tax revenue will not be used to pay for this public service, nor will it be distributed in any way among the people involved in this public service.

	A	B	C
Public Service a	90	60	40
Public Service b	60	60	50
Clarke tax	Tax = 10	Tax = 20	Tax = 0

Table 1: The Example of Clarke Tax for Two Public Services

If A does not participate in the utility assessment, then public service b will be selected (if A does not participate, the total utility of public service a will be 100 and the total utility of public service b will be 110). If A declares truthfully, then public service a will be selected (at this time, the total utility of public service a will be 190, and the total utility of public service b will be 170). Since A's participation changed the government's final decision on the provision of public services, then according to the rules, A should pay the Clarke tax equivalent to the total losses to B and C due to the change in decision, the amount of which is 30 (public investment turning from public service a to public service b, B gains 0 units of utility, and C loses 10 units of utility). Similarly, the participation of B and C can also change the utility of others. The principle of Clarke's tax system makes everyone's honest declaration become the optimal strategy, and honest declaration makes the public service supply reach an efficient Nash equilibrium.

Clarke tax requires everyone to declare their utility function on the quantity of various public services provided. The government distinguishes various quantities x and then solves for x: $\sum_i u_i'(x)=1$, which is Samuelson's optimal condition for the provision of public services and also the sum of everyone's net utility when maximizing public services. $\bar{x}$ is used to represent x when

[21] Tideman, T. N., & Tullock, G. 1976, A New and Superior Method for Making Social Choices. *Journal of Political Economy, 84(6),*1145-59.

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the optimal conditions are met. If people declare real information, then the total net utility of public services will be maximized at this point. Clarke tax T_i for individual I is as follows.

$$T_i=\bar{x}-\sum_{j\neq i} m_j$$

At this time, m_j is used to represent the declared utility value of individual J, and the Clarke tax of i is a function of the information declared by others. As known from the above analysis, T_i does not depend on the personal information of i. Take the utility of public services a and b for A, B, and C for example, u_A=150, u_B=120, u_C=90, T_1=10, T_2=20, and T_3=0. Suppose that the utility of A is 150, but he only declares 130, and the other are also dishonest. The Clarke tax of A is still 10, but the value $\bar{x}$ of public service provision has changed, and is no longer the optimal true value of A. And A pays the same tax as the optimal public service, but at this time, the amount of public service supply is no longer optimal for A.

Although Clarke tax can guide people to honestly declare the utility that individuals get from public services, so far, no government has used Clarke tax to determine public expenditure. This is because that Clarke tax has little practical operability. Even Clarke tax It is feasible, but it is still difficult to solve the problem of fairness (Hillman, 2006).[22]

It can be seen from the above analysis that it is difficult for the government to achieve optimal supply when it exclusively provides public services. In addition, as externalities are accompanied by the provision and use of public services, the interaction of individuals and groups often leads to suboptimal results. As far as the government's responsibilities are concerned, it is necessary to coordinate political and economic actions through the participation of laws and public policies based on public goals such as public interests, public responsibility and responsiveness. Unfortunately, while correcting market failures, the government may also suffer from failures. In addition, government behavior itself is often one of the main sources of externalities (both positive and negative). In the process of public service supply, the conflict of roles and deviation of publicity between the government and public officials often lead to the inefficiency or even non-efficiency of public service supply, which in turn leads to the loss of social welfare and mismatch between public service investment and social benefits, resulting in negative externalities. In the utilization process of public services, due to the widespread “free rider” and other problems, personal costs (benefits) and social costs (benefits) do not match. Thus, public resources are used in low efficiency or without any efficiency, reducing the welfare of others and also producing negative externalities. Therefore, the public service supply will inevitably explore an optimized path, and the government should strive to eliminate or internalize the negative externalities and avoid other negative externalities derived there from. The optimization of

[22] [Israel] Arye L. Hillman, 2006: Public Finance and Public Policy: The Responsibilities and Limitation of the Government, Chinese Translation Edition, China Social Sciences Press, p.p. 103-104.

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public service supply is undoubtedly the mission that the government cannot complete by providing traditional public services exclusively (Ou Chunzhi and Jia Kang).[23]

At this point, we can draw a basic judgment that the government exclusively cannot optimize the provision of public services and needs to find a new way. In actual life, the introduction of social capital to participate in the provision of public services through PPP mechanism has become an option for the “innovative development” of the system, and thus has become an important innovative option for efficiency improvement in the practice of public service provision in various economies.

In the following, we will combine the public interests, public responsibility, responsiveness, and other public value considerations after the government introduces social capital to participate in the provision of public services to deeply analyze the efficiency changes in public service supply.

IV. Non-Government Exclusively: Analysis on Efficiency Changes in the Optimization of Public Service Supply

Since the government exclusive model cannot be optimized, theoretical and practical exploration logically points to the non-government exclusive model. Typically, companies that are social capital parties are introduced to implement PPP mechanism innovation. How to deepen the understanding of the output results in the public engineering - public service supply chain after the introduction of PPP can better neutralize and coordinate the potential contradictions and “tangled” factors between direct efficiency and multi-objective public comprehensive performance, which may involve many variables. Assuming that other variables are established, this section will study the corresponding changes of “government scale” that is focused on by the existing research results after introducing PPP and the accompanying changes in the costs of public services and in the related comprehensive performance.

Looking beyond the “direct efficiency”, we can start from the necessity of the negative externalities and government intervention to examine comprehensive performance. The negative externalities of the economy is illustrated as invalidity or even damage in the significance of society to a large extent, which is led to by the utilization of resources by the private sector. Government intervention is a mechanism to deal with this problem, and it is often the most convenient method. The government can adopt its own unique taxes, subsidies or preferential policies to form a coordination mechanism so that the negative externalities of market players can be reasonably internalized or eliminated. This is also determined by the public nature of government functions. Assuming that the other variables remain unchanged, the government’s ability to internalize and dissolve all negative externalities in society depends on the mechanisms and capabilities of the intervention coordination supported by the government’s own scale (financial resources and institutions).

[23] Ou Chunzhi, Jia Kang: Framework Analysis on the Provision of Public Services and It Optimization Selection Whether PPP can Optimize the Supply of Public Services and Goods, Academic Forum, Vol. 4, 2018.

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Musgrave believes that the government has three tasks derived from its functions: improving the efficiency of resource allocation, stabilizing the stable development of the economy, and redistributing income. To measure the scale of government required to complete these tasks, there is no uniform standard in academics so far. Generally, these two indicators can be measured indirectly with public revenue or the proportion of public expenditure in the total economy. As the research theme of this paper is the provision of public services, this paper intends to measure the scale of government from the perspective of public expenditure. Musgrave divides public expenditure into three major categories: public service supply, transfer payments and public investment. There is a lot of talk about “reducing the size of the government” among people in our country. The “government size” here usually refers to the proportion of government administrative expenditure in GDP. Obviously, government administrative expenditure is only a part of public expenditure, which is not enough to reflect the full impact of the government on the social economy. If the scale of government is measured based on this rather than public expenditure, and then criticized, it will undoubtedly cause misjudgment to a certain extent. The “government scale” referred to in this article refers to the number of departments corresponding to all government expenditures combined with government administrative expenditures and functional expenditures. This is another indirect indicator that measures and reflects the scale of government. If the member of government departments are positively correlated with government expenditure scale and government scale, this assumption can be supported by empirical common sense.

When discussing the scale of government, we usually try to find the optimal scale of government. To explore its optimal scale, we must take the given target as the scale, which is the comprehensive performance of public service supply in this paper. It is the scale of government that can fully realize the goals of public value.

1. Analysis on the Relationship Between the Cost of Public Services Paid by the Public and Government Scale

According to common sense, people generally think that the government that is highly streamlined to achieve the smallest departmental division will act more efficiently. However, in practice, the government can’t do without division of departments. Except for normal operation, it must effectively solve the problem of negative externalities, then how many departments should the government be composed of?

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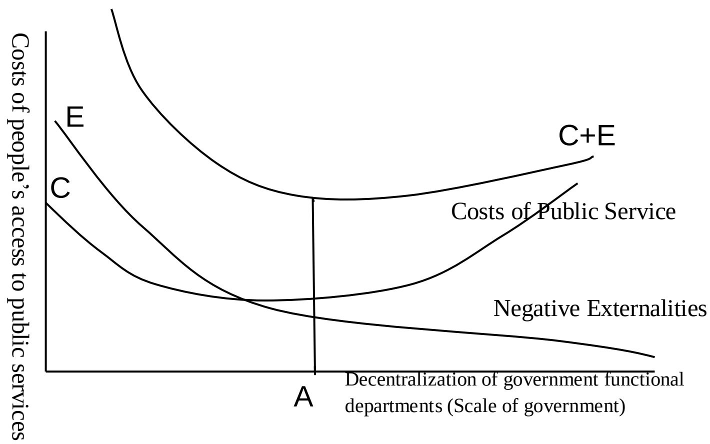

Figure 1 The Relationship between the cost of people's access to public services and the scale of government

We set up a rectangular coordinate system as shown in Figure 1. The horizontal axis represents

the degree of decentralization of the number of government functional departments. The more the degree of decentralization, the larger the scale of the government. If the process is continuous, then the scale of government increases from left to right with the improvement of the degree of decentralization. The vertical axis represents the cost of public access to public services. Curve C reflects the change in the direct cost of people's access to public services that is caused by the changes in the scale of government. As shown in Figure 1, the left of the curve indicates that the government functions are concentrated (the number of government departments decreases, that is, the size gradually decreases). At the origin, it is assumed that the government has only one department, and the people have no choice, but to accept a set of public service supply. In addition, due to the single department and limited supply capacity, all kinds of complicated affairs are handled through one channel. Besides, the procedures are cumbersome. Thus, the matters are bound to be congested, procrastinated, or hastily dealt with, or delayed for a long time. The cost of the people's access to public services is extremely high. With the decentralization of government functions (the government's scale is gradually increasing at this time), the cost of people's access to public services has declined. After reaching the lowest cost point, with the decentralization of government functions, a public service is coordinated and supplied by many departments at the same time. The costs faced by the people have begun to increase again, higher and higher, and even higher than the unified government. (Refer to curve C in Figure 1.) Any modern government is composed of multiple functional departments, and there can be neither too many nor too few departments. For example, the large department reform required by China requires streamlining and merging the departments, however, which can no longer be merged into one department. This is the reason. The healthy development of society and economy is inseparable from government intervention. The legitimacy and rationality of government intervention are aimed at reducing negative externalities (Tullock, 2011) (that is, maintaining publicity and reducing the loss of public interests due to negative

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externalities).[24] The cost of this negative externality to the people is represented by the E curve. As the government functions are subdivided (scale expansion), the E value decreases, which is because that the government's ability to internalize the negative externalities of the enterprise is related with the scale of the government Assuming that other variables are constant, the larger the government scale, the greater its internalization ability. But curve E is different from curve C. Curve C has the lowest point, while curve E does not. Curve E infinitely approaches the horizontal axis (Pennock, 2010).[25] The negative correlation between the scale of the government department and the costs of the people's access to public services resulted by negative externalities can also be supported by empirical common sense.

The total cost of the people's access to public services can be represented by C + E in Figure 1. The minimum point A of curve C + E is the optimal scale of the government, and it will always be on the right side of the minimum point of curve C.

Summary 1: As shown in Figure 1, if you want to get the lowest cost of public services, you must master the scale of the government. The division of the departments can neither be too fragmented nor too concentrated (that is, the government scale is between the minimum and maximum. There is a theoretical optimal solution).

2. Changes in the cost of public service supply after the introduction of social capital: reflecting the improvement of comprehensive performance

After introducing foreign aid — social capital, which participated in the provision of public services through the PPP mechanism, the "multiple subjects" of government, enterprises, and professional institutions engaged in public works and provided new mechanisms for public services. The inherent driving force and multi-dimensional constraints established a compatible performance improvement mechanism that encouraged risk sharing (in fact, the government, enterprises and professional institutions shared their respective responsibilities according to their own comparative advantages), cooperated with strong powers and shared the benefits together. The performance has been improved as "1+1+1>3". The performance improvement has been achieved under a new type of cooperation mechanism, in which all parties restricted, weighed and coordinated the direct efficiency and other public goals exceeding direct efficiency. Direct efficiency does not appear to be the primary or single goal, but is reflected in the fact that enterprises can obtain non-profitable but acceptable profits, and is integrated into multidimensional public goals (Jia Kang, 2018).[26] Due to the financial support and performance improvement effect of PPP, the cost of the public's access to public services changes as shown in

Figure 1. Curve C moves down into a curve C' , and at this time its sum with curve E is

[24] Gordon Tullock, 2011, Public Choice (The Selected Works of Gordon Tullock), Chinese Translation Edition, The Commercial Press.

[25] Pennock, and J. Roland, 2010, Federal and Unitary Government—Disharmony and Frustration. *Systems Research & Behavioral Science*, *4*(2), 147-157.

[26] Jia Kang, Why PPP is the Inevitable Choice? Ecological Civilization of China, Vol. 3, 2018.

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represented by curve C' + E, that is, the cost of the public's access to public services moves from A to A', and the reduction value from A to A' is obtained.

Summary 2: The analysis on the changes in the public's costs after the introduction of social capital shows that the total cost of the people's access to public services can be reduced when the government's scale is controlled (but the number of departments and related expenditures will be appropriately increased). At this time, A'' represents the optimal scale of the government, which can be represented by the extreme point A'' of curve C'' + E in Figure 2. A'' is always at the right of the minimum point of the curve C'' and the left of the extreme point of curve C'' + E. A'' is the point that the cost of the public's access to public services is the lowest. It will bring an increase in the comprehensive efficiency of public services.

It should be noted that if the intervention of social capital causes the total cost line of the public access to public services shift downward, the extreme point A, which reflects the minimum total cost, should remain unchanged. However, in practice, this assumption is untenable. With the changes induced by the intervention of social capital, there will inevitably be a rising change in the "government scale (management departments and related expenditures)", thus the curve will not shift as a whole.

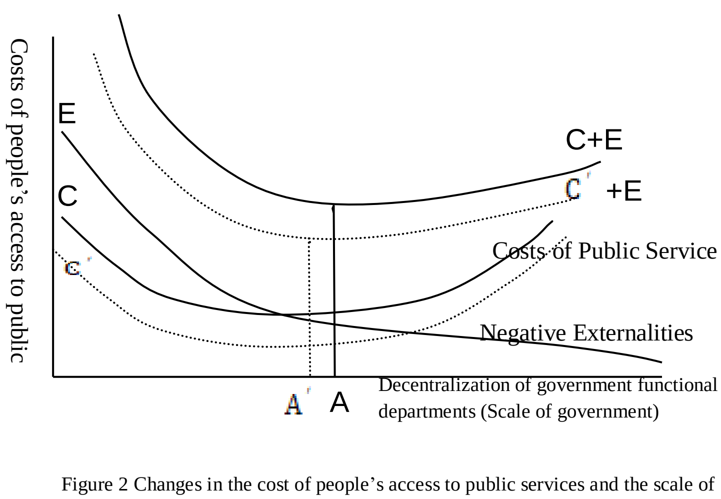

Figure 2 Changes in the cost of people's access to public services and the scale of government after introducing PPP

The above figure analyzes the "government scale" with the number of government departments as a representative indicator, and then analyzes and demonstrates the optimization of public service supply after the introduction of social capital under the relevant constraint conditions. Its essential content is that multiple public goals are the progress taking optimization into consideration, and can be realized by means of PPP-style partner cooperation with multiple subjects. Thus, the results of comprehensive public goals is more satisfactory. For example, it not only improves the direct benefits of public project construction and public service operations, but also restricts the "side effects" such as increased environmental costs, increased income gaps, and excessively simplified or even ignored democratic procedures that may result from the extreme demand for direct benefits. The lower cost level corresponds not only to the index of "efficiency", but also to the index of "comprehensive performance". Assuming that other conditions remain unchanged, although the scale of government will increase to a certain extent (increasing PPP special management institutions, personnel and expenditure), it will be exchanged for an improvement in comprehensive performance (The curve expresses that the cost of people's access to public services is reduced. In practice, the contents reduces negative externalities, increases responsiveness, and increases the degree of public participation in public affairs, and so on, which are precisely in line with the PPP's rule of law, sunshine and specialization.). The characteristics of the cost function of government expenditure, and the corresponding multiple public goals, such as public responsibility, public interests and responsiveness, etc. all have an upgraded correspondence.

V. Investigation on the Effect and Mechanism: PPP is the optimization and innovation of governance mechanism for improving efficiency of public service supply.

From the analysis of the above three and four sections, we can see that the introduction of social capital by the government to participate in the provision of public services is expected to improve the comprehensive performance. After the government is properly expanded, the public can obtain public services at a lower cost, the multi-objective pursuit and responsiveness of public interests are effectively reflected, and the government can better assume public responsibilities. Therefore, PPP is not only a last resort under the current constraints of China's financial resources, but also a deliberate effort to optimize the long-term mechanism of public service supply. The government's introduction of social capital to participate in the provision of public services has become the current development trend. This has been in full swing in China in recent years after several other economies valued and developed. Social capital is more sensitive to risk returns than the government, which will assist the government to some extent in improving the direct efficiency in the sense of management that could not be done separately by the government. Public governance theory emphasizes the construction of a governance mechanism that maintains the basic social order through multi-party participation and collaborative solutions in public service management, which contains the concepts of limited government, responsible government, rule of law government, popular participation, democracy, and social justice, and so on. The emerging governance mechanism is a sufficient condition for maintaining public attributes of public service supply and realizing public value, and is the only way for social governance to achieve good governance. PPP is the representative thing of this governance mechanism for optimizing the innovation.

Whether it is PPP or the broader government-social capital cooperation in Chinese practice, different types or different organizational forms are suitable for different situations. It is particularly critical to determine and select an appropriate cooperation type, participation method, timing and target. All along, partnerships have been used as one of the most obvious

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means of enhancing the government's ability to govern. As Osborne explained in *Rebuilding the Government*, rebuilding is creating the government's inherent motivation for reform and entrepreneurial thinking, that is, building a "self-renewal system". In addition, PPP is endowed with value connotations that promote the realization of the demands of various stakeholders and the public to the greatest extent possible and resolve potential conflicts between the supply and demand of public services. It can be said that PPP has brought a revolution in efficiency. As a mechanism innovation, PPP optimizes the supply of public services in the integration of resources, which is not only helpful to eliminate the drawbacks of the original government exclusive model, but also beneficial to avoid falling into the bias of pure management of the enterprises that only focusing on the direct benefits. In the partnership, complementary advantages are formed, or the potential advantages of all parties are mobilized and played logically

First, promote innovation. Partnerships composed of stakeholders with different perspectives undoubtedly have more diverse and optimized advantages and complementary results in terms of innovation. These stakeholders can produce higher, larger and more dynamic integration capabilities through sharing professional skills, ideas, practices, revenues and risks. The partners really sit together and discuss cooperation on an equal footing, such as the objectives and scope of the cooperation. After a full discussion, they jointly formulate solutions and even the necessary systems. Contractual partnerships are more tolerant of individual partners' attempts, adjustments and adaptations to cooperation within a normative framework, and if necessary, can allow more timely withdrawal from failure or dilemma. Therefore, the efficiently operated PPP can innovatively develop a set of win-win systems and methods that can reach consensus among partners by taking into account the experience of each partner and diversified goals, thus challenging the existing systems and methods (Zadek, 2001) while upgrading the mechanism for pursuing comprehensive performance.[27]

Second, share the resources. The PPP of cooperation between the government and social capital can improve the efficiency of cooperation through rational division of labor and resource sharing while giving play to their respective comparative advantages. The government and social capital share the professional skills, knowledge and expertise, which is conducive to improve the quantity, quality, efficiency and rationality of public service supply. In cooperation with governments that have expertise in specific service areas or experience in serving specific vulnerable groups, public services can expand the scope of services, expand the types of services, and improve the quality of services. Within the partnership, the government will become more democratic. By eliminating duplicated work and improving information exchange, PPP can improve the responsiveness of policy implementation and the comprehensive performance in the sense of sharing with diverse subjects in society.

Third, the effects of synergy. The government and social capital use cooperation and consensus as the basis for decision-making. In accordance with the formal contractual relationship based on trust, the partners actively respond to collective actions, resolve conflicts by compromise,

[27] Zadek, S,2001, Partnership Alchemy: Engagement, Innovation and Governance. *Perspectives on Corporate Citizenship*, 199-214(16).

concession and negotiation, and share revenues, risks, responsibilities and rights (Derick and Jennifer, 2011).[28] In this way, the potential risk of cooperation failure can be guided to a win-win path, avoiding undesirable cooperation between partners and the resulting losses. PPP can thereby improve the overall supply level of the resources needed to solve problems while taking into account multiple objectives. The synergy between partners is to maximize the impact of resources by integrating the complementary resources of different organizations and finding a more suitable method than traditional methods. The overall effect of an effective partnership is far greater than the simple summation of individual partners' own effects (ie, "1 + 1 + 1> 3" for the governments, enterprises and professional institutions). The synergy produced through cooperation provides the partners with a "transformative" learning process, and the government and social capital improve themselves through mutual learning and reference. Effective partnerships are also expected to promote information sharing, improve communication methods, promote mutual understanding and adaptation, avoid inefficiency and duplication of work, and identify opportunities for effective resource sharing (Miller, 1999).[29] The partnership can also enable the government and social capital to properly and necessarily integrate the policies under the common strategy to ensure that the policies are complementary and efficiently implemented. In general, the PPP that the government, enterprises, and professional institutions participate in together can form a comprehensive performance improvement mechanism of "1 + 1 + 1> 3", which is actually formed by innovation, sharing, collaboration, and complementarities (Jia Kang, 2018)[30].

Fourth, enhance legality. Social capital is introduced into the field of public service supply. Its advantage is that it is both flexible and responsive, and can quickly meet the demands of the users of public services. This is also an important way for PPP to help the government realize its legitimacy through continuous accumulation of effectiveness (Ou Chunzhi, 2017).[31] The crisis of political legitimacy is one of the main characteristics of modern society. Among the various challenges faced by PPP, the issue of legitimacy cannot be ignored. Guaranteeing and improving legitimacy is also the key to determining the efficiency of PPP operation. Only with the consent of the public can PPP operate smoothly. In addition, the diversity of society determines that none value option can simply dominate. The public can engage in free and equal dialogue on how to reach consensus on public decision-making, and participate in the provision of public services through cooperative governance. Instead of "mob politics", it is an effective way to resolve the crisis of political legitimacy. It is the rational return of the official-civilian conflict resolution mechanism, that is, to provide a space for rational dialogue between the government and the people. The cooperative governance with the partners is beneficial for digging the appeals of the public and solving the problems that should be solved in the past, which have not been solved. Under the established rules and procedures, people can participate in public affairs through

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[28] Derick, W. B. and B. Jennifer, 2011, Public-Private Partnerships: Perspectives on Purposes, Publicness, and Good Governance [J].Public Administration, 2011, 31(12): 2-14.

[29] Miller, C, 1999, Partners in Regeneration: Constructing A Local Regime for Urban Management?. *Policy & Politics, volume 27*(27), 343-358.

[30] Jia Kang, Why PPP is the Inevitable Choice? Ecological Civilization of China, Vol. 3, 2018.

[31] Ou Chunzhi, Good Governance of the Cooperation between Government and Social Capital: the Validity and Legality of the Construction of PPP, China Public Administration, Vol. 1, 2017.

cooperative governance based on their own understanding of the interests, and choose the decision that is most suitable for taking into account multiple goals. Of course, currently, some PPP projects in China have not yet been mature enough to form the intended cooperative governance model. With the improvement of PPP, it is urgent to play the potential advantages in real life.

VI. Conclusions

An important significance of PPP system supply innovation is that it is an innovative governance tool that meets the challenges of cooperation across organizational borders with private institutions, transforms the government's exclusive model, and optimizes the supply mechanism of public services. Exploring a successful and efficient cooperation path and sustainable way under the premise of taking advantage of and facing controversy is the main purpose of optimizing public service supply, improving the efficiency of public service supply, and making the government better assume public responsibilities. The development of PPP has a long way to go, and there are still some principles in the process of operation that cannot be ignored.

(1) As an innovative model of public service supply, PPP should be regarded more as a process of modern state governance mechanism construction, rather than merely as a financing process. It can not only help the government improve efficiency, but also solve the problems of effectively responding to the public's demands, making up for the insufficient supply of public services under the government's established scale, and taking into account the efficiency and publicity in the public domain. The implementation of PPP objectively requires the government to establish necessary special management institutions and coordination and information service organizations, which is manifested as an expansion factor of the government scale. In addition to the incremental "comprehensive performance" hedging of the related costs, during the implementation of the supporting reforms in China, obviously, it is necessary to coordinate with the streamlining reforms of "large department system" and "flat" government to grasp the relevant issues of this perspective. In recent years, China has set up special PPP management agencies in government agencies, which increased related administrative expenses, training fees and other expenditures. It reflects that the empirical confirmation of the assumption of government scale changes in Section 4 of this article is a change conforming to common sense and logic. In practical work, the key is to make PPP develop in a rule-of-law, sunshine and professional way, thus reducing the cost of public services and improving the performance of the implementation results.

(2) Although PPP must learn efficiency from the market, it cannot attend to trifles (commercial profits) and neglect essentials (public position). It should pay special attention to the particularity of the situation. It is necessary to recognize the fundamental position of the government in the process of national governance to maximize the public interests and to avoid overemphasis on efficiency in the sense of market and management, which may lead to "empty public service supply". PPP should pay attention to its publicity with institutional and mechanical strength and the internal logic of "win-win", follow the public spirit and public value, and promote public interests. But at the same time, we must fully affirm the status of "equal civil cooperation" of the parties to the PPP contract and the position of "business negotiation" when enterprises

participate, and legally guarantee that the enterprises can obtain "non-profitable but acceptable" returns as social capital so as to realize the sustainability of PPP.

(3) The research on PPP should take the approach of disciplinary integration to avoid blind spots brought by a single disciplinary. It has sufficient necessity and practical significance to combine the disciplinary of politics, economics, administration, law and philosophy.

In the current governance practice, whether the local government adopts the PPP model is mostly judged from the economic desirability, such as cost comparison of specific standards, risk-benefit sharing, financing tools, and so on. Therefore, it often underestimates governance issues such as the public attributes of PPP and weakens the consideration of comprehensive performance. The analysis in this article shows that compared to traditional public service provision, the PPP model is more conducive to the government's goal of achieving good governance with "inclusive development". Therefore, the direct efficiency under the guidance of management should not be the only dimension or the first important dimension to measure PPP. When deciding whether to adopt the PPP model to provide public services, the government should fully consider the comprehensive performance of its governance, that is, public interests, public responsibilities and the degree of realization of responsiveness. While maintaining moderate government scale, the government should make use of social capital to optimize the public service supply more effectively. Following this innovative development path, we have good reasons to believe that PPP innovation marks a new chapter in the construction and operation of public projects by the government in opening up modern governance and promoting good governance of public services. Due to space limitations, data and case studies on the empirical effects (and their strength) of PPP need to be studied in another paper.

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