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The Effect of PPP Model on Local Government Debt

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ABSTRACT
The Private-Public-Partnership (PPPs) is a novel method of financing for the provision of infrastucture and public services. It is also expected to alleviate local government debt burden, which has become a pravelent issue around the world. However, the PPP model can cause divergent effects on local debt under the different methods and practices. Therefore, there are divergent directions showed in the current theoretical views regarding how PPPs may influence debt. To help government gain more insights and avoid detour in the future implement of PPP model, this paper, through a method of literature review, will focus on relevant ideas with respect to PPP model's effect on local government debt, and illustrate some suggestions on how to use PPP model correctly to reduce risk of debt. The paper finds that the discussion of PPPs' effects on local debt is already relatively mature and thorough nowadays, as long as there is no drastic variation in the economic environment. The practice of PPP model in different countries varies.

Keywords: *PPPs, Local Government Debt, Efficiency, Implicit Risk*

1. INTRODUCTION

These years, local governments debt has been becoming a prevailing issue in the world, especially among developing countries, which are facing the challenges of developing infrastructure to meet the needs of industrialization and urbanization. It's true that proper amount of government debt plays an important role in stimulating investment and boost local economy. However, excessive debt ratio will significantly weaken the long-term promotion effect, and even lead to stronger crowding out effect on private investment, which imposes negative impacts on economic growth [1]. Thus, in pursuit of alleviating the pressure on government budget constrain and reduce risk of debt, the PPP model, a new financing channel introducing capital from the private sectors, has been adopted in a more common way around the world than before. However, some researches and practice so far showed that it was true that PPP model can relieve the pressure on public budget in short term, whether it can authentically dissolve the local debt and restrain the rapid growth of debt still remained controversial, since the potential gains on cost of projects that may incurred in the financing process may adversely increase the risk of debt. Aside from the potential problems in the mechanism, exterior factors like false implementation can contribute to the rise of risk as well. Though, we can't make fully conclusion on whether PPP model is problematic or not, all the debates and researches should ultimately serve on the practical purpose of achieving efficiency, that is to say, how to fully take advantage of the PPP model to maximize social surplus and effectively control the risk of local government debt. This can be particularly urgent and crucial for recent years. Under the negative impact of corona virus, governments need to borrow more fund than usual to invest in order to recover the economy from the recession, which unavoidably enlarges the debt and may increase the relevant risk.

So far, many scholars have deeply analyzed the strengths and weakness of the PPP model, which provided powerful insights into the realization of the efficacy of PPPs to the fullest with regards to reducing local government debt risks and increasing social surplus. However, not that much research makes a comprehensive review on them.

Thus, the paper through a method of literature review, will focus on relevant ideas with respect to PPP model's effect on local government debt, and illustrate some suggestions on how to use PPP model correctly to reduce risk of debt. It hopes that the paper can help provide a comprehensive review and feasible suggestions on PPPs, which are expected to lay a solid foundation for the future reaserch in the field and make contributions on the cause of improving public management and social welfares.

2. IMPACT OF PPP MODEL ON GOVERNMENT DEBT

Initiated by the government, the PPP model is a kind of institutional innovation in the field of infrastructure and public services, in purpose of relieving the lack of government funding.[2] It has been growing rapidly in both developed countries and developing countries during the recent decades.

2.1 Supports on PPP model dissolving the high debt stock of local government

There's still some disputes between scholars in the issue of whether the PPP model can authentically dissolve the high debt stock of local government. Many scholars hold the view that PPP model can restrain the local debt. On the one hand, the PPP model introduces private capital into infrastructure and public services, relieving the fiscal pressure on local government [3]. In the meantime, this changes the proportion of government capital in infrastructure and public services, and avoids immediate outlays of fund [4], alleviating the time constraint and liquid risk of government's debt.

On the other hand, the PPP model can improve the efficiency of debt resources. According to Miao(2016)[5], the risk of local government's debt appears when there's low efficiency of capital resource allocation, which is elicited by the unusual expand of debt scale under non-social rational motives of local government. Under the mechanism of benefit redistribution and risk sharing with private sectors that PPP model provides, government's non-social rational behaviors can be inhibited. Further, the erosion of public interest by private sectors is less likely to happen as well due to the supervision to each other between both sides. The low efficiency of debt resource allocation also happens when government borrow funds to provide quasi-public goods, which are usually end up being overused due to the feature of private benefit serving. Thus, inefficiency occurs when government takes complete responsibility of quasi-public goods. When introducing the PPP model in such provision, the operational right and responsibility are devolved to private sectors, which would naturally charge for its services in compensation for the cost. According to Marimott and Pouyet(2008), the proper introduction of market mechanism is beneficial for not only the reduction of operating costs but also the enhancement of service efficiency [6]. Therefore,aside from the risk of incremental debt, the PPP model is beneficial for reducing the risk of stock debt by introducing market mechanism in the process of operation and maintenance of the existing public goods, such as TOT(Transfer-Operate-Transfer) mode.

However, noting that market mechanism only takes effect when several prerequisites are met: clear property right, effective incentives and strong regulations.[7] If these conditions are not satisfied, clearly, the PPP model is not having the greatest possible effect. For example, in China, in which the institution of property right is not advanced enough, most of the market-oriented provisions are under the monopoly by state-owned enterprises, resulting in inefficiency and bad quality of the provision. If the relevant enterprises are not behaving well, the government is the one that has to take the ultimate burden. Thus, before adopting the PPP model, a reformation of property right system should go first, making sure that the market possesses enough capability to undertake public projects[8].

2.2 Opposites on PPP model dissolving the high debt stock of local government

Some scholars hold the opposite views. Irregular projects can cause risks of debt [9]. Hodge and Greve underlined that the conflict between objectives in the public and private sectors may lead to unnecessary increment in project costs[10]. Speculative renegotiation initiated by private sectors can force the government to invest additionally[11], leading the rise in transaction cost. In Chile, due to the uncompetitive market environment, almost all the transportation BOT projects experienced the additional renegotiation, and the government had to compromise to cover the investment overrun[12]. Besides, government may bear the risk of implicit debt. [13] PPP model actually does not reduce government debt since it can only transfer future government revenues to pay for current private capital borrowings. This causes inaccurate amount of liabilities on government's balance sheet, leading to a concealed debt risk[14]. Thus, a potential situation may happen where the savings in the early fiscal spending is offset by the future cash flow losses. There are several aspects in the PPP model that may lead to implicit debt risk. Firstly, Hemming and Anderson(2006) pointed that the government has the inclination for over-guarantee for projects in order to attract private capital investment[15]. Wibowo(2004) [16]further analyzed that this can come from government's incentives for instant return, which push it to make the fiscal condition look better in the short run, ignoring the consequence of debt risk in the long run. One of the PPP projects in Columbia in 1990s in which local government gave assurance against risks to attract investments can be used as an example[17]. An economic recession afterwards triggered many government guarantee conditions, causing huge amount of responsibility for government to pay off, which accounted for 4% of the GDP. Moreover, officials tend to resort to PPP model to hide public debt in the purpose of gaining more public support. They don’t need to worry about the potential fiscal risk in the future due to the time lag of payment responsibility, which allures officials to resign in order to transfer the risks to the new officials when there is trouble coming. Last but not least, if local government officials shift more weight to the pursuit of personal benefit instead of public interest, and the enterprises are always assumed to maximize their interests, then a public-private collusion may take place, which may aggravate debt risk[5]. To sum up, most of the deprecatory ideas basically build on the assumptions that the conflicts in public and private benefit and government failure are unavoidable, which eventually increase government's debt burden instead of reducing it.

To conclude, PPP can be a double-edged sword. Giving full play to the role of PPP can improve the efficiency of resource allocation, reduce production costs, and ease the pressure on local debt whereas excessive or improper use of PPP will exaggerate debt risks. Therefore, the priority is to identify the key factors to success, making full use of its strengths to optimize social surplus.

3. USING PPP MODEL TO MITIGATE GOVERNMENT DEBT RISKS

Based on the previous analysis of PPP model's strengths and weaknesses, we will conclude some key factors in the process of PPP project that may be helpful to successfully reduce local government's debt and increase social welfare.

3.1 Choosing the right project

As mentioned before, the provision of quasi-public goods is an relatively ideal place for the PPP model to take effect. However, conditions may vary among different projects when it comes down to specification. Thus, case-by-case analysis should be taken when using PPP model. However, we can still refer to some common crucial features of the suitable projects for the PPP model to resolve debt problem: large investment scale and long operating period, clear boundaries, strong regionality, and less difficulty of charging[18]. In addition to the demand on project itself, certain exogenous conditions like competitive bidding and careful screening by experts are needed as well. Yao and Zhu (2019)[19] suggested that the scope of investigation should not only include comprehensive examination of implementing risks of projects, but also refer to local government debt risks to circumvent excessive leverage levels. Prioritize the projects that have higher profitability., or enhance the profitability of PPP projects to offset the cost. Although most of the PPP projects earn low profit, there are still some measures that can be used to save costs and enhance efficiency[20].

3.2 Clarifing the ownership of project and properly allocating risks between government and private sector

In order to attract investment and accelerate the implementation of projects, the government tends to compromise with the market, add guarantees and take more risks[20]. As a result, the risk allocation can be more favorable to the stronger side due to the unequal distribution of power. Government guarantee is the direct cause of various financial risks under PPPs. Despite of the relevant management systems towards guarantees, such as inclusion in accounting, it cannot eradicate the extra-budgetary issues arising from guarantees due to the inherent limitations[21]. The essence of PPPs contracts is the property contract between public and private sectors. So, everything should be set off from the perspective of making clear the boundary of ownership. Zhou also stressed that ownership structure should move in proportion to the structure of risk-bearing and risk management, which means the side that bears the main risk is supposed to take the ownership. The crux is to identify the best allocation of risks depending on specific conditions in different projects. Miao(2015) provided another way to divide the responsibility and risk. Consider the proclivity for eroding public benefit of each side and allocate responsibility in the opposite way around. If government is more likely to erode the benefit of the project, then the responsibility of management should be given to private sector, and vice versa. This assures the efficiency of debt resources.

However, noting that the inherent attribute of government indicates that it still has constructive obligations of supervising public projects and protecting public interests[22]. For instance, if a significant PPP project fails, under the condition of too big to die, the government has to come to rescue, which may lead to bigger debt risk. This responsibility is implicit before the failure occurs, so the magnitude of risk cannot be accurately predicted only until the government's rescue plan crystallizes. To deal with this situation, government can prepare in advance in budgeting and accounting for potential future defaults on PPP projects. Ma(2018)[23] suggested setting up a special PPP risk account to reflect the relevant risks. A PPP government contingent debt fund can be set up as another preparation to deal with future potential default, which plays a function like self-insurance. He also pointed out that the fund can be charged from the companies involved in exchange of guarantees provided by the government, in which case the moral hazard from private sectors is less likely to happen.

3.3 Increasing disclosure of information

Government should commit to publicize detailed information of different aspects about PPP project. According to the requirement from International Monetary Fund, government should incorporate the future cost size, potential implicit debt risks,etc. in its fiscal report[17]. This can effectively prevent government from committing dishonesty behavior in PPP projects[24] and restrain irrational expansion of local debt.

Transparency between government and companies matters, too. Companies have the incentives to commit opportunistic bidding behavior during project procurement[25]. For example, conceal the real costs and overstate the profitability of project to win over their opponents. Due to the information asymmetry, the government cannot distinguish the truthfulness of the information provided by companies, thus may underestimate the risk of project. Once the project fails, the extra bail-out will add unexpected pressure on government budget. The potential risk caused by lack of transparency can be serious, so necessary information disclosure must be required. Companies are mandated to take legal liability if their intentional reservation caused loss to a prescriptive level in practice.

3.4 Strengthening supervision of PPP projects

Regulate the operation of PPP projects and prevent local governments from financing in the name of PPP projects. Introduce professional third-party institution to evaluate and monitor PPP projects. This also works for avoiding collusion between public and private sectors. on From time dimension, the third party regulatory agencies should transit to dynamic supervision of the whole life cycle of PPP projects[26] .Under the traditional static supervision, the agencies only refer to the segmented fiscal information from past periods of time, instead of contingent condition from the long run perspectives, which can generate time lag and omissions in the supervision. From the perspective of entities involved, Liu(2021) summarized several countries' ways of supervision and conclude that each country should adopt a characteristic third-party supervision methods according to its actual situation.

4. CONCLUSION

The PPP model is a critical topic to explore in the economic environment where high local debt is becoming more prevalent over the world, especially under the strike of the pandemic. From the series of materials presented in this paper, we conclude that the discussion of PPPs' effects on local debt is already relatively mature and thorough nowadays, as long as there is no drastic variation in the economic environment. The practice of PPP model in different countries varies. The guidelines proposed above need to be adjusted with details to fit the specific environment of a country. One of the weaknesses of this research is that it only describes the framework in general, thus comprehensive illustration is needed. Another problem is the lack of empirical research. Based on the fusion of different views, more cases with classic features or problems can be added into the research to make the argument more convincing and complete. In the future, more researches can dive deeper into how to utilize the PPP model to reduce governments' debt in the case-by-case level, combining the real practices to analyze the lessons and space for improvement under different economical institutions, instead of the generality.

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