Research on the promoting effect of government procurement on the development of small and medium sized enterprises

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Abstract: With the continuous improvement of the strategic position of SMEs in China and the important role of government procurement during the period of COVID-19 in supporting small and medium enterprises and coping with the epidemic, the role of government procurement in promoting the development of SMEs is once again taken seriously. This paper first expounds the status quo of the role of government procurement in the development of small and medium-sized enterprises from the perspective of data analysis and the comparison of domestic and foreign government procurement policies, then explains the mechanism of government procurement in the development of small and medium-sized enterprises through the relevant theories of Finance and macroeconomics, and on this basis, puts forward the problems existing in China's existing government procurement policies, and finally aims at the problems Combined with the practical experience of foreign countries, the paper puts forward the policy optimization suggestions.

1. Analysis of the role of government procurement in the development of small and medium sized enterprises

1.1 Government procurement -- an important tool for the government to support the development of small and medium sized enterprises

From the data point of view: according to the data of the National Bureau of statistics, at the end of 2018, there were 18.07 million legal entities of small and medium-sized enterprises in China, accounting for 99.8% of all legal entities of enterprises; small and medium-sized enterprises absorbed 233.04 million employees, accounting for 79.4% of all employees of enterprises. It can be seen that the stable and healthy development of small and medium-sized enterprises is of great significance to the overall economic and social development of our country; According to the data of China government procurement network, from 2015 to 2019, the scale of China's government procurement has expanded from 2107.05 billion yuan to 3306.7 billion yuan. Among them, the total purchase amount granted to SMEs also increased from 1607.22 billion yuan to 2451.91 billion yuan. In the past five years, the average proportion of the contract amount awarded to small, medium and micro enterprises in the scale of national government procurement is 76.36%.

In addition, Article 9 of the government procurement law implemented in January 2003 also clearly emphasizes that government procurement should promote the development of small and medium-sized enterprises. Especially during the epidemic period, government procurement helps SMEs to cope with the epidemic situation through various ways, such as "extending the government procurement contracts of existing eligible SMEs in current projects", "encouraging large enterprise suppliers to subcontract part of government procurement matters to SMEs", etc. To sum up, supporting the development of small and medium-sized enterprises is one of the most important goals of government procurement.
1.2 Comparison of the present situation of government procurement between China and foreign countries

BP neural network is back propagating, mainly composed of three parts: input layer, middle layer and output layer. The number of nodes in the input and output layers is relatively easy to determine, but the determination of the number of nodes in the hidden layer is a very important and complex problem. In recent years, with the rapid development of government purchasing, it has gradually become a new way for the government to provide public services[1]. China's government purchase gradually rose in 2007, nearly half a century later than the Western powers. In order to improve the government purchase mechanism, the degree of competition, legal support and other factors, it is necessary to take the practice of foreign governments in public service purchase as a reference benchmark, indispensable means. But in fact, there are still great differences between Chinese government purchase and foreign government purchase, which are shown in the following aspects:

Table.1. Comparison of the current situation of government purchase between China and foreign countries

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<td>Foreign Government Purchases</td>
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First, the operating mechanism is different. Compared with overseas government purchase, there is a big gap in performance evaluation and citizen participation in China's government purchase mechanism. Secondly, in terms of the relationship between buyers, the relationship between overseas
government as the employer and the contractor is more equal and independent, while the relationship between buyers in domestic government purchase may be unequal and non-independent. Third, in terms of competition intensity, overseas governments are more willing to enhance the competition intensity among different contractors by introducing market mechanism, so as to improve the quality of public services; while the competition degree in domestic government purchase is quite different, and some governments are dominant in the purchase. Fourth, in terms of legal system, the government procurement law issued by China does not belong to the public service law, while the western countries such as Britain and the United States have relatively mature public service law and finance and taxation law to provide legal protection for government procurement.

In short, the current government procurement in China is not completely consistent with that in foreign countries. However, China should make full use of foreign advanced experience and make improvements while exploring its own government procurement mode.

2. The mechanism and theoretical basis of government procurement on small and medium sized enterprises

2.1 The necessity of government procurement policy

(1) Government procurement system

Government procurement, also known as public procurement or unified procurement, refers to all levels of government and its affiliated entities in order to meet the needs of carrying out daily administrative activities and providing public goods and services, under the supervision of financial departments, according to the legal methods\(^1\). The act of purchasing goods and services from domestic and foreign markets. Government procurement generally adopts the way of public bidding, and its process usually includes several steps as shown in Figure 2. In addition, the figure also shows the main bodies in the process of government procurement and the goals they want to achieve.

![Government procurement flow chart](image)

(2) Market failure theory

In real economic life, it is difficult to meet the assumption of perfect competition market, so there will be market failure phenomenon, that is, completely depending on the market\(^2\). The best state of social welfare can not be achieved by the function of market mechanism. In the public goods market, there are several main reasons for market failure \(^3\):

- **Externalities.** Generally speaking, the nature of public goods includes two essential characteristics: exclusiveness and non-competitiveness, which makes suppliers unable to obtain all the revenue generated by providing public goods, but spills part of the total revenue to others, that is, the positive externality of public goods. Therefore, micro subjects in the market are not willing to actively provide public goods to meet the needs of the public.
Rent seeking and market monopoly. In the process of government purchase, individual large enterprises use the government's administrative power to intervene in bidding activities in order to pursue the monopoly of government concession, which makes the government purchase price higher than the marginal cost. On the one hand, it causes the waste of financial funds and damages the interests of taxpayers and the public; on the other hand, it seriously hinders market competition and squeezes the living space of small and medium-sized enterprises.

Information Asymmetry. In the supply market of public goods, some members grasp the information that other members can't have, which leads to the information asymmetry among the micro subjects, resulting in unfair transaction relations and contractual arrangements, and the uneven allocation of market resources.

(3) The theory of government intervention
Market failure needs to be solved by government intervention. By means of legislation and administration, organization of public production, provision of public goods, fiscal policy and monetary policy, the government can optimize resource allocation, adjust income distribution, stabilize and develop economy[2].

Government procurement belongs to the purchasing expenditure of financial expenditure. We can increase the proportion of the purchase amount to the purchasing expenditure of small and medium-sized enterprises to achieve the specific purpose of supporting small and medium-sized enterprises and encouraging them to optimize production and innovation, so as to reflect the role of the government in using government procurement to repair market failure.

2.2 The mechanism of government procurement

(1) The direct ratio between government purchase and GNP
According to the calculation formula of GNP, GDP = y = C + I + G + (x-m), where G is government consumption expenditure, including government purchase and government transfer payment. Therefore, government purchase expenditure is roughly proportional to GNP.

(2) Multiplier effect of government procurement
The multiplier of government purchase expenditure kg = ∆ Y / ∆ g = 1 / (1 - β) reflects the multiple relationship between the change of national income and the change of government purchase expenditure. Combined with the model shown in Figure 3, we can infer that the increase of government purchase expenditure can cause the doubling of national income.

![Figure 2. Multiplier model of government purchase expenditure](image)

To sum up, government procurement expenditure has a positive role in promoting national income and the development of small and medium-sized enterprises, and this role has a multiplier effect, which reflects the function of government procurement to activate the market economy and macro-control.
3. Problems in the policy of government procurement supporting small and medium sized enterprises

3.1 There is the possibility of violating the principle and original intention of government procurement

In the previous analysis of the mechanism of government procurement, we know that the original intention of government procurement is to regulate the market failure of public goods supply, and the basic principles of government procurement are openness, transparency, fair competition and good faith [3]. However, the targeted support of government procurement for small and medium-sized enterprises may violate the principle of fair competition:

(1) In modern taxation principles, governments of all countries will adhere to the principle of tax equity and provide preferential tax policies to small and medium-sized enterprises with weak tax paying ability;

(2) The government's price control of public goods may result in the loss of small and medium-sized enterprises with less price and cost advantages, and the government will provide financial subsidies such as price subsidies and enterprise loss subsidies to these small and medium-sized enterprises.

Therefore, small and medium-sized enterprises themselves have enjoyed the multiple benefits provided by the government, and in the previous analysis of the current situation of government procurement, it can be seen that the share of government procurement of small and medium-sized enterprises has been very large, so how to balance the relationship between supporting small and medium-sized enterprises and protecting fair competition in government procurement needs more targeted institutional arrangements.

3.2 The standard of small and medium enterprises is vague

In the process of government procurement practice, some suppliers with considerable scale have taken advantage of the current situation that the policy for the identification of SMEs is vague, relying on the certification documents of SMEs issued by the local industry and information technology department or the economic and Technological Development Bureau Preferential treatment for small and medium-sized enterprises[4].

At present, China mainly defines small and micro enterprises from the perspective of business scale, but the relevant legal provisions do not further clarify the "total assets", "operating income" and other indicators representing the business scale of enterprises, resulting in an embarrassing situation for the regulatory authorities, and the policy dividend can not be fully released.

3.3 The relevant system design is inconsistent with the policy objectives

From the current situation of government procurement in China, although the policy authorities have a clear tendency to support small and medium-sized enterprises through government procurement, the relevant system design can not match it. Take the following two systems for example:

(1) Access mechanism of government procurement

Article 22 of the law of the people's Republic of China on government procurement makes the following provisions on the qualification of suppliers participating in government procurement activities, including the ability to bear civil liability independently, good commercial reputation and sound financial accounting system, and the necessary equipment and professional and technical ability to perform the contract. In addition, the setting of specific conditions in the registered capital qualification is too high, such as requiring suppliers to have higher (Level 2 and above) qualification in the industry[5], which often limits the participation of small and medium-sized enterprises. Obviously, compared with large enterprise groups, small and medium-sized companies have a huge disadvantage in terms of access qualifications.

(2) In the process of qualification examination of government procurement suppliers, almost all procurement subjects require suppliers participating in project competition to provide corresponding security. One of the important contents of bidding procurement documents is the security clause,
which is usually divided into contract security and performance security. Generally speaking, the deposit is 2% ~ 20% of the total budget of the project and so on\(^6\). The loss of liquidity of such a sum of money is undoubtedly worse for small and medium-sized enterprises which have difficulties in financing and operation.

3.4 E-procurement platform is not friendly to small and medium-sized enterprises

With the continuous improvement of the social requirements for the integrity and transparency of government procurement, the construction and improvement of e-procurement platform has become the most urgent demand in the field of government procurement. Especially during the epidemic period, many governments open up special zones for epidemic prevention materials on the online procurement platform, which creates channels for the information docking of epidemic prevention materials and greatly improves the procurement efficiency; In addition, the system automatically sets the information such as reservation proportion and price deduction in the purchasing process, which effectively avoids corruption caused by human operation and greatly reduces the operation cost.

But from the actual situation, small and medium-sized enterprises have almost lost the initiative, the right to bid and the right to speak in the E-marketplace, and the vast majority of suppliers who enter into transactions through the e-procurement platform are large enterprises. The reason is that I think the electronic virtual transaction will reduce the bidder's trust in suppliers. In addition, during the epidemic period, the government has a heavy responsibility for emergency procurement. The bidder tends to choose large companies with stable product quality, fast delivery speed and strong strength rather than small and medium-sized enterprises with strong uncertainty.

4. Suggestions and Discussion on policy optimization

In view of the problems in the support policies of government procurement for small and medium-sized enterprises discussed above, and referring to the practical experience of foreign countries, this paper puts forward the following policy optimization suggestions:

4.1 Set up special management organization for small and medium-sized enterprises in government procurement department

Many countries have similar institutions, such as the small business administration of the United States, the micro small and medium enterprises department of India, the French Federation of small and medium enterprises (cgpme) and so on\(^7\). With the continuous improvement of the strategic position of small and medium enterprises, it is necessary for China to set up relevant institutions in the government procurement department to be responsible for building the supplier information database of small and medium enterprises, and to make a detailed analysis of their production fields and product grades In order to provide accurate sources of goods for government procurement activities, and regularly hold information release and training meetings for the bidding business leaders of various small and medium-sized enterprises, so as to ensure that the ability of small and medium-sized enterprises to obtain information is at the same level as large enterprises.

4.2 Further improve the policy and regulation system of small and medium- sized enterprises participating in government procurement

The federal procurement regulations of the United States has a special section on how government procurement can promote the development of small and medium-sized enterprises, while the government procurement law of China only puts forward directional opinions on this, lacking more detailed and accurate provisions. For example, we should specify the bidding proportion of small and medium-sized enterprises in government procurement; reserve part of the purchase amount for small and medium-sized enterprises\(^8\); reduce the entry threshold of small and medium-sized enterprises; refine the scope of government procurement, split the bulk goods procurement to give more opportunities for small and medium-sized enterprises to participate in; encourage small and medium-sized enterprises to bid jointly, but severely crack down on price alliance behavior; strengthen the supervision of small and medium-sized enterprises; For
procurement projects with a certain amount or less, the margin shall be exempted.

4.3 Government to coordinate loan financing for SMEs

France has set up special financial institutions to provide credit support for the financing of small and medium-sized enterprises[9]. China can learn from its experience. On the one hand, it provides credit support for small and medium-sized enterprises through policy banks, and the successful enterprises can apply for loans from policy banks with the letter of acceptance and other effective documents as collateral; On the other hand, it is necessary to relax the supervision of the financial technology companies represented by ant financial services to provide small loans for small and medium-sized enterprises, especially in the field of e-commerce. Through the analysis of their business big data, it is necessary to establish the e-reputation files of small and medium-sized enterprises, and access the data to the government e-procurement platform, so as to help the middle-sized enterprises with good reputation and strong performance ability to actively participate in government procurement Small enterprises alleviate the problem of short-term financing.

4.4 Strengthen the supervision of the whole process of government procurement

In the aspect of supplier qualification inspection, it is emphasized to relax rather than relax. Establish a dynamic assessment mechanism, regularly update the list of purchasers through the assessment of suppliers' product quality and price, service attitude, integrity records and other indicators, so as to prevent large enterprises from "sleeping at ease" through rent-seeking[10]; make the bidding results public, accept social supervision, and pay attention to the queries and complaints of local small and medium-sized enterprises on the bidding results, so as to maintain the voice of small and medium-sized enterprises.

References