

Research on fiscal policy support for green finance development in the context of green recovery

Ruiwei Zhu

School of Public Finance and Taxation, Zhongnan University of Economics and Law, Wuhan, 430073, China

Abstract. This article is based on the present outbreak of the epidemic and its basic characteristics. In the process of research comparing the world's promotion of green economic development recovery policy, exploring the government's role in stimulating green finance development and helping our green recovery construction, through combing and summarizing the domestic and foreign relevant literature. The results found that the green finance industry fully conforms to the development goals of "green recovery" proposed in our country, and it has made great contributions in terms of driving the green investment and reducing environmental pollution, and is an important driving force in the implementation of the goal of green recovery. At the same time, due to the inherent nature of green financial products as public goods, the government needs to fulfill its own responsibilities and play a macro-control role in many aspects, and it is necessary to provide support for the development of green finance. Also, fiscal policy also plays an important role in guiding and promoting the development of green finance and creating an incentive mechanism for green finance. Therefore, based on the study of green finance and its supporting fiscal policies, this paper summarizes and analyzes the current policy deficiencies and deficiencies in the development of green finance, and proposes targeted fiscal policy supplements and improvements, so as to provide new ideas for policy improvement and comprehensive and sufficient development of green finance.

Keywords: Fiscal policy, Green finance, Green recovery

1. Introduction and Literature Review

At the beginning of 2020, the COVID-19 epidemic broke out in Wuhan and quickly spread around the world. The economy, employment and social development of all countries in the world suffered an unprecedented huge impact. The development of the world economy is faced with huge uncertainties and risks, and effective recovery measures are urgently needed to inject new vitality into the sustainable development of mankind. According to the existing incomplete statistics, more than 120 countries and regions in the world are striving for the great goal of "zero net greenhouse gas emissions by 2050" (TCFD,2020). The COVID-19 outbreak has increased awareness of the vulnerability of ecosystems and the importance of the natural environment to human life, health and security, according to the OECD. Governments have also recognized the mutual benefits of green recovery strategies and the core support of public policy, fiscal and financial support to revitalize economies and ensure an inclusive and sustainable recovery. Countries have launched a series of "green stimulus" packages to improve economic and social resilience while preventing the world from lurching from one crisis (COVID-19) to another (climate crisis).

On September 22, 2020, General Secretary Xi Jinping proposed at the 75th UN General Assembly that "in the face of post-epidemic recovery, China will increase its nationally determined contribution and adopt more effective policies and measures". Countries should embrace a new vision of innovative, coordinated, green, open and shared development, seize the historic opportunity of the new round of scientific and technological revolution and industrial transformation, promote the green recovery of the world economy after the pandemic, and pool strong synergy for sustainable development. Lyu and Siyuan (2021) proposed that green bonds, as an emerging financing method in financial markets, are booming worldwide. Between 2016 and 2019, the cumulative issuance of green bonds in China exceeded 1.1 trillion yuan, making the country the second largest green bond market in the world. Li (2021) pointed out that the People's Bank of China will "implement the major decision and deployment of carbon peak and carbon neutrality and improve the policy framework

and incentive mechanism of green finance", and put forward the "three functions" and "five pillars" of the green finance system, which clarified the policy ideas of green finance development. Wang and Pan (2021) pointed out that the financial industry plays an important role in green economy and green investment. Compared with finance, it can better screen projects and reduce ineffective investment. However, in the specific implementation process, it still needs to improve the regulatory system, policy support and guidance, to ensure that it fully play the role of promoting economic green recovery. At present our country green finance development momentum is good, development foundation tamped, after the help epidemic economic green recovery is playing positive utility. However, due to the characteristics of the financial industry, such as profit-seeking and risk-aversion, and the realization of the goal of "carbon neutrality", the development of green finance faces certain difficulties. It is still necessary for the government and various forces to jointly explore and maximize the recovery effect of green finance through cooperation and policy support.

The research contribution of this paper may be reflected in the following aspects. First of all, the above literature on the support of fiscal policies for the development of green finance is still relatively few. This paper makes an in-depth analysis of the support and practical problems of fiscal policies for the development of green finance, which is a useful supplement to relevant research. Secondly, based on the background of green recovery, this paper discusses the current situation and trend of fiscal policy support for the development of green finance, which provides a beneficial perspective for the existing research and is conducive to scientific thinking about the development of green finance in China. Finally, this paper puts forward some policy implications. This study refines existing policies from multiple dimensions, such as capital source, capital use, tax and fee reduction, PPP development model, and policy guidance. At the same time, through the analysis of the successful development cases of demonstration areas, the development experience is extracted, and the model for the balanced development of green finance among regions is provided for reference.

2. Internal mechanism of government finance guiding the development of green finance

2.1 The inherent mixed public goods attribute of green finance

Green financial products are both public and market, essentially it is a financial product formed by complying with the goal of our macro-economic development plan. Therefore, the government should escort the development of the green finance industry either from the perspective of fulfilling its own responsibilities or promoting the transformation and development of the macro-economy. At the same time, due to the green nature of green financial products themselves, they face strong externalities, market failures, information asymmetry and other problems in the development process, so it is difficult to achieve efficient and high-quality development by unilaterally exerting the regulation role of the "invisible hand" of the market, and the government needs to play a role in macro-control.

2.2 Promote internalization of the externalities of green projects

Generally speaking, compared with traditional industries, green projects have narrow financing channels and insufficient financing. However, in the traditional mode, enterprises produce water, air, soil, noise and other pollution in the process of production, and most of these negative externalities are borne by the society and the public. The difficulty of internalizing the external cost of pollution aggravates the difficulty of financing the development of green industry. In theory, if the government can in the appropriate policies in the process of financial institutions to provide entity project financing will be money oriented in environmentally friendly projects, or increase the pollution of the project and the cost of financing difficulty, you can achieve the purpose of promoting the internalization of external costs, thus promote the financial industry's green transformation and a series of green production invest in the construction of the project. In addition, a certain amount of

financial support can also play a leverage role, which is conducive to stabilizing investment expectations and reducing investment risks of financial institutions. If the social benefits generated by green projects cannot be internalized, it will also limit the inclination of the financial industry, affect investment willingness and confidence, weaken green investment and financing, and hinder the green transformation of the financial industry. Therefore, the government should play the role of a good guide, provide convenience for green projects to obtain financial support or directly provide subsidized fiscal and tax policies, encourage green transformation and development, and reduce worries in the process of development.

2.3 Provide public goods such as law and infrastructure to alleviate funding problems

Green finance is the reform and transformation of the financial industry in the context of current economic development, and the construction of supporting infrastructure and relevant legal system will lag behind its own development to a certain extent. At the same time, these public goods with auxiliary functions cannot be formed spontaneously by the market, and the government needs to guide and support the construction. Only by establishing relevant laws and regulations with high quality and high efficiency can the government reduce the time and economic cost of the development of green finance, control its transformation risk, and finally provide help for the cause of our green recovery. In the process of the development of green finance industry, there are still some problems, such as the standard of defining "green attribute", information asymmetry and capital shortage in the market. In the process of facing the above problems, government departments need to build a complete and scientific standard system, guide the flow of funds and the degree of information disclosure through strong fiscal policies, realize the common linkage among regions and within the market, and fundamentally boost the development of the green finance industry.

2.4 Clarify the boundary between the market and the government, and improve the quality and efficiency of public finance

For a long time, the Chinese government has occupied a large proportion in the allocation of resources, which has weakened the function of market allocation and led to the crowding out of some private sectors, resulting in huge financial pressure. Financial support for the development of green finance is conducive to drawing a clear boundary between finance, finance and the market, and avoiding the government's excessive proportion in the allocation of resources. To support the sound and development of green financial products through fiscal discount and other policies can tilt financial resources toward high-quality green industries, give full play to the regulation and control function of the market, and achieve the national macro goals of energy conservation, emission reduction and sustainable development with more market-oriented investment and financing means. Since 2020, our country's finance is facing the increasing deficit and the financial pressure is increasing constantly. In this case, the government should actively promote the development of green financial products. Through green bonds, green credit and green insurance, the allocation of financial resources can be optimized, and the joint force of fiscal policy and monetary policy can be strengthened to gradually transfer investment risks to the market while avoiding systemic financial risks. In the long run, fiscal support for green finance can gradually transform the development of green projects from government-led to government-assisted, effectively reduce the subsidy pressure and mitigate the deficit risk. In addition, with the continuous improvement of green finance, certain performance evaluation system and capital management mode can be introduced into financial management, so that the use and evaluation of financial funds fully reflect the marketability, policy and social needs.

3. Analysis of financial support for the development of green finance

3.1 Deviation of local government implementation and poor linkage

Although the system of green financial policy has been gradually established and a series of relevant policy documents have been issued, there exist deviations in the policy implementation of Chinese local governments, which are especially obvious in the relatively backward province. For example, many green financial policies related to energy transformation communicated by the central government have not been implemented. In many provinces with heavy industry as the pillar industry, such as Northeast China, highly polluting industries still account for a large proportion. Secondly, in terms of fund transmission, local governments and departments have poor implementation of the phenomenon. The funds issued by the central government to support green enterprises rarely reach the local level after going through layers of exploitation. In addition, the discoordination and imbalance of resources and economy among regions have put more pressure on the development of green finance industry and delayed the process of green recovery. At the same time, there are some "rent-seeking" behaviors in the process of promoting the development of green finance in various places, which greatly restrict the effect of the policy, make the financial subsidy funds exist huge waste, and do not really realize the support for enterprises and green industry projects, and increase the cost of policy implementation. In fact, green finance, as a project closely linked to the goal of carbon neutrality, has developed on a large scale. At present, only some areas in China have rapidly and efficiently promoted the green transformation of the financial industry. The development of green finance is regional and fragmented, and a unified organic whole is not formed. In addition, after the central policies were issued to local governments, precise docking and assistance were not achieved. Some regions failed to fully integrate their own development level and regional characteristics to improve the policies, but copied the development model and relevant policies, resulting in the lack of diversification and precision of green finance. In addition, the pilot zones that give priority to the development of green finance also fail to transmit their development experience to other regions in time, which leads to information deviation and lack of guidance between the governments at the higher and lower levels and the same level, which is not conducive to building a green finance system on a national scale.

3.2 The core goal of each subject is not consistent

The development of green financial industry in China is mainly based on the government, taking various kinds of financial institutions as intermediate institutions, and finally finishing the process of green transformation of enterprises and consumption. Among them, the government aims to take finance as the means of macro-control and promote various financial institutions to develop green credit, green funds, green securities, green insurance and other businesses by issuing policies and laws, so as to finally realize the green transformation and high-quality development of the economy. Financial institutions, on the other hand, aim at making profits. Even though green finance attaches importance to social benefits while focusing on economic benefits, it still focuses on making more profits through green products. Enterprises and consumers adjust their industrial structure and investment choices in order to comply with national policy arrangements. As a whole, the three are interrelated but the core goals of each subject are different. Due to the delayed profit recovery of green finance, financial institutions will not be willing to provide relevant products for the purpose of profit, which will lead to the inability of enterprises to smoothly carry out the investment and production of green projects. Therefore, coordinating the objectives among the above green financial entities and making them relatively stable can promote the pace of China's green recovery in the post-pandemic era more efficiently and complete the green transformation and innovative development of the financial industry as a whole more quickly.

3.3 The instability of financial support

In general, China has been carrying out a positive fiscal policy since the early 21st century, trying to achieve the effect of driving consumption, ensuring people's livelihood and promoting the internal circulation of the economy by expanding fiscal expenditure. However, according to the survey, since 2019, the national fiscal revenue has decreased to some extent, especially in less developed western regions, the imbalance between local fiscal revenue and expenditure has worsened, and the deficit ratio is on the rise, even breaking the warning line of 3%. Therefore, some local governments cannot provide strong, sustainable and stable financial guarantee for the development of green finance. In addition, in recent years, our various governments put effort into developing infrastructure construction, but in the western less developed areas because of the fund operation and the government's own deficit risk and other problems that lead to many projects can not recover the funds in time after completion, finally form local governments but hidden debts. This affects the credibility of the local government and the confidence of the development of enterprises to a certain extent, exacerbates the instability of the economic environment, and fails to provide a safe and high-quality development atmosphere for the pilot and promotion of green finance projects. In terms of policy support, while tax cutting can glow the vitality of economic development in medium and long-term perspective, for the development of green finance also has a good incentive effect, but for some local governments to carry out the tax cutting supportive fiscal policies need to strongly compression such as general public spending or by issuing bonds or loans and other means. Due to its limited fiscal revenue capacity and the time period required for the output and profit of green finance projects, it is equivalent to exacerbating financial risks and government financial pressure for underdeveloped regions, and does not realize the two-way promotion between green finance and government finance in essence.

4. Fiscal policy recommendations to support the development of green finance

4.1 Strengthen transfer payments and implement coordinated support among governments

In terms of direct financial input, the direct financial support provided by the central government to the green finance industry is an important driving force for the development of the green finance industry. At present, China has set up "energy saving and emission reduction subsidy funds" and several special funds for energy saving and environmental protection to guarantee the capital demand of green finance industry. On the other hand, financial departments actively expand the budget for green finance, so that more financial funds will flow to green projects, and the green vitality of the financial industry will be revitalized. At the same time, the inflow of a large amount of financial funds can form a demonstration guiding role, guiding a certain amount of social capital to green projects, effectively alleviating the shortage of funds in the green finance industry, and promoting the implementation of several projects. At the same time, in view of the limited spending capacity of local governments in some underdeveloped areas, inter-governmental transfer payments have become one of the effective means to support the in-depth development of green finance. The transfer payment mode of direct access of central financial funds to grassroots level implemented since 2020 has greatly improved the time value and use efficiency of funds, shortened the maneuver time of fund allocation and improved the availability rate of funds. The establishment of detailed green special funds is conducive to clarify the purpose of funds and achieve precise docking. In a special fund for the control of air pollution, for example, it can not only accelerate the process of energy conservation and emissions reduction, providing solid financial security for the development of green industry, but also can reflect financial support and development are determined, to a certain extent, can reduce the risk coefficient of new industries, improve their ability to cope with risks, and can give the confidence of the investors must at the same time, in order to broaden channels for financing activities in green industries.

4.2 Expand funding channels and form stable financial support

At present, the relevant content of green finance has been brought into the general public budget, the budget of government-managed funds and the budget of state-owned capital operation. However, financial industry itself for high capital demand, single main body of capital support can hardly afford its capital expenditure, so at present, our green finance still has some capital gap. Therefore, Chinese government focus on integration of the central government and the society to invest in green finance industry, in the central support give play to the role of the central guidance demonstration, on the basis of promoting social capital into the green industry, and USES the central control to market-oriented operation of green industry fund, make the government special fund on the market and improve the people's investment confidence. At the same time, various sources of funds are also conducive to improving the anti-risk ability of green special funds, so as to avoid the absence of green funds due to changes in central or local government financial expenditure or the degree of deficit. In addition, guiding social capital into the green industry is conducive to all parties in society to realize the necessity and opportunity of the development of the green finance industry, enhance the recognition and enthusiasm of the society for the green finance industry, create a good development atmosphere for it, and accelerate the development and improvement of the green finance industry. On the other hand, strong capital guarantee is conducive to stimulate the development vitality of the green industry, improve the implementation and improvement of various green projects, and help guide talents and equipment to flow into the green industry and improve its innovation ability. The participation of social capital can also make the implementation of green finance industry more smooth. By actively practicing the national development strategy and promoting green transformation, the industry can form a demonstration effect and drive the transformation, upgrading and green development of all walks of life.

4.3 Cut taxes and fees to boost effective supply

In the post-epidemic recovery and reconstruction stage, many private enterprises are faced with financing and tax problems to resume work and production. At the same time, the green finance industry is also facing the same dilemma. The enthusiasm of its main body is gradually weakening and delaying the operation efficiency of its input and output. The products and investment projects based on green finance are highly consistent with the overall goal of sustainable development at present. In addition, green finance projects can stimulate the demand of labor, consumption and investment, and our finance can help the reconstruction work in the later period of the epidemic by reducing taxes and fees and financial discount. By reducing and exempting the tax and interest burden related to green finance, the operation cost is reduced and the economic efficiency is improved. This move not only drives the implementation of a series of green projects and industries, but also drives the development of green bonds and green loans. On the basis of the fiscal policy of tax reduction and fee reduction, green finance can promote effective supply under light economic pressure, and improve its own development while giving back to the finance to achieve good economic and social benefits.

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