Research on the Development Strategy of Green Finance in China

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Abstract: With the rapid development of the global economy and population growth, environmental issues are becoming increasingly prominent. Green finance plays an important role in promoting environmental protection and sustainable development and facilitating the green transformation of the economy. Based on analyzing the development status quo of green finance in China, this paper points out the problems of insufficient green finance funds, limited product variety, and lack of talent, analyzes the root causes of these problems, and puts forward corresponding countermeasures and suggestions for these problems.

Keywords: Green Finance; Green Transformation; Sustainable Development

1. Introduction

In recent years, the development of green finance in China has been rapidly expanding in scale, diversifying issuers, and enriching the variety of green financial products[1]. However, while green finance has made some achievements[2], it also faces challenges such as insufficient funds, limited product varieties, and lack of talent[3]. Based on analyzing the development status quo of China's green finance, this paper discusses the problems and reasons for its development and puts forward corresponding development strategies to promote the healthy and sustainable development of China's green finance.

2. Current Status of Green Finance Development in China

2.1 Expanding Green Finance Scale

Firstly, China's green credit scale ranks first globally, becoming a primary financing channel. The balance of foreign currency green credit increased from 8.2 trillion yuan in 2018 to 22.0 trillion yuan in 2022, a growth of 2.7 times in four years. Secondly, Green bonds have experienced explosive growth. It increased from 607.5 billion yuan in 2021 to 873.5 billion yuan in 2022. Among them, innovative ESG bonds, including green bonds, green ABS, and low-carbon transition bonds, reached 550.9 billion yuan. And sustainable development goal-linked bonds, transition bonds, and low-carbon transition bonds have also witnessed rapid growth. As of the end of 2022, the total stock of green bonds in and outside China amounted to approximately 3 trillion yuan, emphasizing the increasingly prominent role of green bonds.

2.2 Growing Green Finance Issuances

According to Tonghuashun Find, the issuance of green bonds in China exploded and continued to grow. There are 1265 issuances of "investment in green" bonds, among which 683 are labeled green bonds, constituting a high proportion of 50.3% in the "investment in green" category. The top three categories of bonds in terms of issuances are short-term financing bonds (311 issuances), asset-backed bonds (286 issuances), and local government bonds (213 issuances). Among green bonds, asset-backed bonds are the highest, reaching 286, exceeding the total issuance of financial bonds and medium-term notes.

2.3 Improving Green Finance Policies

In recent years, China has successively released policies related to green finance, such as the "Green Industry Guidance

Catalog (2019 Edition)", "Green Industry Guidance Catalog (2019 Edition)", "Measures for Green Finance Evaluation by Banking Financial Institutions", "Guidelines for Disclosure of Environmental Information by Green Financial Institutions", and "China Green Bond Principles", which have provided legal safeguards for the development of green finance business.

3. Major Issues in the Development of Green Finance in China

3.1 Insufficient Supply of Green Finance

Agencies have estimated the scale of China's future green investment, which could reach 3-4 trillion yuan annually in the next five years. However, the government's fiscal resources will cover only 15 percent of this need, with the rest to be covered by financial means. Despite the 2022 data showing the issuance of 518 green bonds totaling 873.5 billion yuan, the current supply of green finance still lags behind the demand for green and low-carbon development. China's current green finance products are not mature enough, urging financial institutions to innovate green finance products and expand the supply of green finance in the market.

3.2 Limited Variety of Green Finance Products

Firstly, China's green financial products are mainly green loans and bonds. In contrast to developed countries, there is a significant gap in products like green funds, green insurance, and carbon financial products. Secondly, financial institutions often overlook the characteristics of their financing targets when designing products, primarily concentrating on large-scale energy-saving, emission-reduction, and clean energy projects or enterprises. They pay less attention to small and medium-sized environmental protection projects or businesses, which fail to meet the green financing needs of these smaller entities. Lastly, there remains a limited number of green financial products tailored for individuals, resulting in a narrow scope of product coverage and making it difficult for most residents to access green financial services.

3.3 Shortage of Specialized Technical Talents

Many local financial institutions lack specialized technical personnel. The loan statistics mainly rely on manual records. The ability of workers to identify, evaluate, and manage green industries and projects varies widely, and the risks and rewards of green projects can not be accurately estimated, not to provide valuable advice to institutional decision-makers. In the management after loan, most of workers cannot track the green credit indicators in real-time, which will seriously affect the performance evaluation of green projects.

4. Reasons for Issues in the Development of Green Finance

4.1 Asymmetric Risks and Returns in Green Finance

Green finance projects often carry higher risks, such as renewable energy projects being susceptible to factors like policy changes, technological risks, and market fluctuations. It heightened uncertainty and risk aversion among investors, coupled with the long-term nature of green finance projects requiring years for returns, contributing to cautious investor attitudes. Additionally, the lack of uniform standards and transparency in the green finance market makes it challenging for investors to assess and compare different projects, further increasing information asymmetry and transaction costs. The mismatch between the returns and risks in green finance is a primary factor leading to insufficient funding in the market under the goals of "carbon neutrality" and "peak carbon emissions".

4.2 High Development Costs of New Green Finance Products

As the main drivers of green finance product innovation, financial institutions take the responsibility of actively engaging in continuous research and development. However, substantial investment in technological research and development, data collection and analysis, regulatory compliance, and market promotion lead to high development costs. Specifically, the development costs arise from the reliance on advanced technology and innovative solutions, the need for extensive environmental and climate data to support design and evaluation, rigorous regulatory and compliance reviews, and additional investments in market promotion and advertising. These high development costs become a barrier to creating new green finance products, hindering their introduction to the market.

4.3 Lack of Specialized Education and Training Opportunities

The development of green finance involves knowledge from multiple fields, including environmental science, finance, economics, etc. These fields require high levels of knowledge and technical expertise, which needs to be applied comprehensively. Green finance professionals need to possess interdisciplinary knowledge and skills. However, the current education system does not have the appropriate professional courses and training programs, leading to a shortage of green finance professionals. Additionally, due to green finance being a relatively emerging field, there is a lack of industry experience and successful cases, which makes it difficult for financial institutions to recruit and train green finance professionals, thereby limiting their career development.

5. Strategies and Recommendations for Green Finance Development

5.1 Expand the Supply of Green Finance Funds

The most effective measure to increase the supply of green finance is to ensure the control of risks and expand the profitability of green finance. Green finance should consider both social responsibility and profitability. Governments could consider providing financial institutions with lower financing costs and longer financing periods for large-scale and long-term green finance projects. Additionally, incentivizing financial enterprises to expand their green finance product business will increase the supply of green finance funds in the market. Financial institutions should focus on the long-term sustainable development of green finance, establish clear development goals and pathways, and gradually build a sustainable operational model for green finance. Differentiated green finance businesses, based on regional industrial characteristics and conditions, should be developed to enhance the integration of financial resources and avoid homogenous competition.

5.2 Innovating Green Finance Products

Firstly, Establish a green finance tax incentive mechanism. The government can optimize the allocation of green funds by designing an effective incentive mechanism to ensure financial support for green infrastructure projects and reduce the financing costs of financial institutions when developing new products through financial subsidies, interest rates, and credit guarantees. Secondly, enrich the system of green financial products. Develop new products such as green credit cards, green consumer loans, and ecological protection loans to provide green financial services for environmental protection. In addition, it is also necessary to expand the scale of green insurance, green funds, and carbon financial products, increase financial support for these products, and promote green financial innovation.

5.3 Cultivating Green Finance Talent

Firstly, colleges and universities should attach importance to cultivating talents in related fields. The university curriculum should strengthen financial theory research, combine it with other disciplines, and train financial and environmental protection professionals. Encouraging students in related majors to actively participate in the innovation and practice of green finance products in enterprises can broaden their horizons and achieve the goal of combining practice with theory, thereby cultivating a team of versatile and practical talents. Secondly, it is necessary to enhance the training of green finance practitioners. Financial institutions and enterprises should be good at discovering and training outstanding talent in the financial industry. And it needs to establish an incentive mechanism to encourage employees to participate in the new green financial product innovation

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