### The Dilemma of Green Finance Development and the Path Analysis of Promoting Economic Growth

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Abstract: In order to address the financial demands of low-carbon development, the financial sector has developed green finance. It is a financing channel for the green economy. Green finance is helpful in maximizing resource allocation and fostering a transition to a low-carbon, environmentally friendly society. The rapid growth of green financing is advantageous for the promotion of high-quality economic development in light of the "dual-carbon" aim. Based on an examination of the current state of China's green finance growth, this study concludes that the laws and regulations governing green finance at the moment are not sound, the lack of effective incentive mechanisms for green finance, the lack of specialised talents, green product innovation is insufficient and other problems. Based on this, this paper proposes a path choice to help green finance improve economic development by improving the construction of laws and regulations, creating an efficient green financial incentive mechanism, and accelerating the diversification and upgrading of green products.

**Keywords:** green finance, high-quality development, "dual carbon" targets

#### 1. Introduction

At present, China's economy has over-emphasised high-speed development and created problems such as ecological damage and environmental pollution. President Xi Jinping suggested that China increase its nationally owned contribution, adopt more aggressive policies and measures, work to reach a peak in carbon dioxide emissions by 2030, and work to achieve carbon neutrality by 2060 at the 75th session of the United Nations General Assembly in September 2020. Financial market support is indispensable to achieving the goal of "double carbon". Green finance has emerged as a crucial tool for accelerating the industrial structure's change, the manner of economic development, and the high-quality growth of the economy. This paper takes the concept of green finance as the logical starting point, based on the current situation of China's green financial development. The article deeply analysis the current dilemma faced by the growth of green finance, aiming to look for effective paths to realize the objective of the economy's high-quality growth, and providing a source of information on green financing to aid in the economy's thoughtful growth.

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#### 2. Theoretical Overview

#### 2.1. The Concept of Green Finance

The goal of green finance is to significantly improve the environment, counteract climate change, and ensure that resources are used sparingly and effectively. Green finance largely refers to the financial services provided for project investment and financing, project operation, and risk management in the context of protecting the environment, efficiency in energy use, renewable energy production, green building, and transportation [1]. Green finance prioritizes environmental and social benefits over traditional finance.

#### 2.2. Status of Green Finance Development in China

#### 2.2.1. Continuous Improvement of the Green Financial System

In terms of building a system of standards and institutions, China's green finance has drawn on international research and examples in terms of theoretical systems and areas of practice, and has developed a series of its own green standards system (see Table 1).

Table 1: Summary of major development policies on green finance in China.

Implementation time	policy	thrust
2015.09	《General Programme for the Reform of the Ecological Civilisation System》	For the first time, it explicitly proposes to build a good basic institutional framework for a green financial system strategy.
2016.08	《Opinions on Creating a Green Financial System》	Promote the establishment of a green financial system in China. More social capital should be rallied and encouraged to invest in the green industry.
2017.06	《Plan for the Construction of a Financial Sector Standardization System (2016-2020) 》	The policy makes the green finance standardisation project a key project.
2018.03	《Green Banking Evaluation Programme for China's Banking Sector》	The policy regulates the green credit work of banking institutions and establishes a green bank evaluation programme.
2019.03	《Green Industry Guidance Catalogue (2019 Edition) 》	The policy outlines the direction that green industry development will take. Green industries include those that conserve energy and protect the environment, as well as those that produce goods and services more efficiently and using cleaner energy sources.
2020.07	《Circular on the Issuance of the Green Finance Performance Evaluation Programme for Banking Sector Depository Financial Institutions (Draft for Comment)》	The policy includes green bonds in the assessment of banks' green finance business.

Table 1: (continued).

2021.03	《Outline of the Fourteenth Five- Year Plan》	The plan calls for establishing a system of green development policies and advancing green finance aggressively.
2022.01	《Financial Technology Development Plan (2022- 2025) 》	The policy outlines the fundamental ideas of sustainability and low-carbon development and urges deep financial technology and green finance integration to enhance the innovative development of digital green financing.

Source: Compiled from information related to green finance policies introduced in China.

#### 2.2.2. Financial Products Are Abundant

China's green credit has always been growing at a high rate and is a crucial component of green finance. For financial institutions, industries, and businesses, green credit is the most significant source of financing for encouraging green transformation and excellent sustainable development [2]. The total amount of China's local and foreign currency green loans as of the end of 2022 was RMB 22.03 trillion, an increase of RMB 6.01 trillion for the wholly owned subsidiaries, and an increase yearly of 38.5 percent, a percentage point higher than that in the final month of the year before and higher than the growth rate of loans by 28.1 percentage points.

The scale of green bond issuance has maintained steady growth. By the end of 2022, there will be 2,162 green bonds totaling RMB 2.9 trillion in the green bond market in China. The categories that make up a comparatively big portion of the green bond market in terms of bond types include financial bonds, green bond financing instruments, corporate bonds, and business bonds. In terms of the quantity of green bond offerings, asset-backed securities, local government bonds, business bonds, and medium-term notes are more common in China [3].

Green Insurance has achieved rapid growth and enhancement. In recent years, China's insurance industry, supported by national policies, has carried out a series of innovative explorations to provide services for green development. Currently, China's green insurance is in a period of rising development, with more and more insurance companies participating in the development and design of green insurance and new products emerging. Between 2018 and 2020, China's green insurance provided 45.3 trillion yuan of coverage and paid out 53.377 billion yuan in claims, according to the Insurance Association of China. In particular, green insurance coverage reached \$18.3 trillion in 2020, a 24.9 per cent increase from the previous year.

#### 3. Challenges to the Growth of Green Financing

#### 3.1. Green Finance-Related Laws and Regulations Are Not Yet Sound

China's green finance industry has grown quickly in recent years. However, due to the late start, laws and regulations are not yet sound.

First, the green financial system was established relatively late and is still in the stage of gradual improvement. The top-level plan for the growth of China's green finance system first obtained official support with the launch of the Overall Programme for the Reformation of the Ecological Civilization System in September 2015. China's green finance has evolved since the program's proposal, with government agencies gradually putting in place a multi-level, multi-dimensional green financial policy system [4]. However, the existing system of green financial policies and standards is still inadequate, and specific measures and implementation mechanisms are not in place.

Secondly, there is a lack of mandatory and binding policy support. Supervisory departments with regulatory responsibilities and powers and relevant government departments lack enforcement power, and punishments for violations are weak. Most enterprises invest in green financial products with high risk, and the implementation of green financial business is hindered, government departments should actively improve laws and regulations to reduce the risk of enterprise investment.

Thirdly, some enterprises do not attach enough importance to green finance and do not participate in the purchase of green insurance. Green financial products usually have a long payback period and low economic returns, which leads most enterprises to believe that investing in green financial products is more risker and to switch to general business.

#### 3.2. Lack of Effective Incentives for Green Finance

One of the characteristics of low-carbon investment is that it has a long investment cycle and returns are not obvious. In order to engage more social capital, effective incentive mechanisms must be established. Due to the different functions and broad scope of sectors, the criteria for green finance incentives in sectors with the same objectives are not uniform. From the viewpoint of policy formulation of green financial incentive mechanism, the formulation of guarantee discount policy is not perfect. From the perspective of green financial information disclosure mechanism, China's information sharing mechanism is not yet perfect [5]. The Enterprise Credit Information Basic Database has not yet included information on environmental compliance or disciplinary information for enterprises, making it difficult for financial institutions to access the relevant information.

#### 3.3. Lack of Specialised Personnel and Insufficient Innovation in Green Products

At the moment, Chinese commercial banks' green financial products are still in a relatively single state, lacking in product design for the individual customer's individual financing needs, as well as the demand for energy saving and emission reduction [6]. Green innovation is characterised by a long investment cycle and a high risk of failure. As a result, managers constrained by short-term performance objectives are usually reluctant to engage in green innovation, which will incur more expenses and ultimately reduce short-term accounting performance. As a new industry, the development of green finance itself lacks a sufficient number of professionals, coupled with its more stringent selection conditions for talents. Due to a lack of suitable training for such abilities in China's colleges and vocational institutions, green finance is experiencing a talent deficit [7].

#### 4. Innovative Green Finance to Help Economic Development

## **4.1.** Improving Rules and Regulations to Lay the Groundwork for the Growth of Green Finance

First, the construction of a green financial system should be strengthened and guided. Government departments should do a good job of rational planning within the region and actively guide exchanges and collaboration between regions and provinces. Measures have been taken at the national level to build an integrated financial market, actively promoting the spread of advanced measures and experience to lagging provinces and regions, minimising the problem of factor wastage and effectively enhancing the efficiency of green finance [7].

Secondly, green financial laws and regulations should be continuously improved and perfected. With regard to the current popular green financial business, government departments should determine energy-saving and emission reduction targets and financial support tools for carbon emission reduction through legislation, so as to regulate the green financial market in the form of

laws. Once issues or some incorrect perspectives are identified, government agencies and regulators can address them in compliance with applicable rules and regulations.

Thirdly, the depth and breadth of green finance publicity should be enhanced. Through specialized lectures on green finance, green finance legislation, and green finance products have been publicized. Emphasis has been placed on the distinctions between green finance and regular finance as well as the specific environmental benefits of green money. Timely docking of green credit demand of enterprises, so that enterprises can fully understand green finance and use green finance, therefore encouraging the growth of green financing. Especially for high-pollution, high-energy-consumption and surplus industries, green finance can help them reduce environmental pollution, reduce financing problems, achieve energy structure transformation and vigorously promote high-quality economic development [8].

# **4.2.** Creating an Efficient Green Financial Incentive Mechanism to Consolidate Green Financial Development

The State can unify the establishment of incentive mechanisms for green finance and formulate and introduce incentive policies including credit subsidies, listing incentives, guarantee incentives and risk sharing, therefore encouraging market actors' vitality and enticing more social capital to engage in the growth of green finance [5]. Clarify the standards for green financial incentives, and where different competent authorities are involved in the same area, the members of the Committee shall jointly consult to formulate unified standards. Where standards have already been issued separately and are inconsistent, formulate unified standards as soon as possible and release them to the public. At the same time, local governments should, based on local resource endowment, industrial structure, financial strength and other factors, specify the industries, enterprises and projects that need to be encouraged for development, and formulate a corresponding incentive system on this basis, so that the development of green initiatives that are most in line with the strengthening of the regional industrial structure and most in need of appropriate incentives can be supported by limited resources [9].

## **4.3.** Accelerating the Diversification and Upgrading of Green Products to Help the Growth of Green Finance

As customers' demand for green financial products becomes more and more diversified, banks should strengthen co-operation with other financial institutions, such as insurance, funds and trusts, to build a multi-level product system and continue to enrich their business categories [10]. The first is to learn from the industrialized nations' superior experience, along with Chinese national conditions and consumer demand, increase the investment in R&D funds, innovate the profit model of green credit products and services, and launch customised credit products required for the sustainable development of various industries, in order to attract various types of potential customers, enhance the competitiveness of the bank and the brand influence, and thus to achieve the effect of improving the profitability of the bank. Secondly, it is broadening the field of green credit investment. In addition to traditional green industries, it has increased credit support for green manufacturing, green buildings, green consumption, new energy, new materials and other areas, and actively promotes the overall green transformation of the economy and society. For example, it will participate in the carbon emissions trading market, explore carbon futures and other emerging carbon financial services; explore "green + inclusive" product innovation, so as to achieve joint promotion of the two, and assist in finding solutions to the issues with expensive and challenging financing in the green transformation of small and microbusinesses [11]. Closely integrating financial institutions and market demand, improving the construction of disciplines in research institutes, universities and colleges specialising

in environmental economics and other related disciplines, forming a professional training system combining academic education, continuing education and internships and practices, and fostering the cultivation of green financial management personnel and professional and technical talents in all aspects. China should continue to explore new concepts, modes and methods of green financial development, so as to give the comprehensive green transformation of economic and social growth fresh kinetic energy.

#### 5. Conclusions

In conclusion, the state and the government should always implement the concept of green development and use the green finance industry to support the stable expansion of China's social economy in light of the environmental pollution issues caused by the country's rapid economic development. With the support of China's "dual-carbon" strategy, the general state of green finance development is favorable. It has helped to support high-quality economic growth, which is a good thing. There are still numerous issues in the process of progressively advancing the growth of green finance, thus reform and innovation are required. It is also vital to strengthen the design of rules and regulations and consolidate the foundation of the growth of green finance in order to fully exploit the beneficial role that green finance plays in economic development. We can hasten the upgrading and diversification of green products and more effectively promote the high-quality development of the economy by creating an effective green financial incentive mechanism.

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