

## On the Impact of Green Finance on High-quality Economic Development in China

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### Abstract

Because of its own particularity, green finance can direct funds in the market to environment-friendly green industries, so as to promote economic development. The development of green finance is not only in line with the development of the times, but also in line with the path of sustainable development that China has always adhered to. Whether for the restoration of the ecological environment or promoting the development of regional economy, green finance plays an important role. Firstly, this paper analyzes the mechanism of Green Finance on high-quality economic development. Then it analyzes the current situation and existing problems of China's green finance promoting high-quality economic development. Finally, it puts forward countermeasures and suggestions on how to promote the role of green finance in high-quality economic development.

### Keywords

**Green Finance; High Quality Economic Development; Action Mechanism.**

### 1. Introduction

Since the reform and opening up, China's economy has undergone earth shaking changes. However, this extensive economic growth mode based on the destruction of the ecological environment has brought great damage to the ecosystem. To improve environmental protection policies and effectively solve environmental protection problems, we should not only determine the implementation of the system, but also make rational use of financial, tax and other administrative measures to promote the implementation of environmental protection. We should take effective policies and measures to promote investment in environmental protection, make capital flow to environmental protection industries and reduce the resource allocation of environmental pollution industries. In addition, in China, the investment market of green finance has huge development space. This field benefits from the rise of environmental protection and supervision driven by the development of the industry, which makes the green development of the industry faster. In addition, in recent years, China's green credit market has witnessed a large number of centralized growth. In order to achieve sustainable and green development, we need to build a perfect green financial system and standardized green financial system, encourage companies to adjust industrial structure, improve the cost of pollution reduction, establish the awareness of ecological environment, and guide the flow of funds to the green financial industry.

In March 2022, the report "Green Finance Helps Carbon Reach Peak and Carbon Neutrality" published on the official website of the central bank pointed out that in the next stage, the central bank will further promote the construction of green finance and transitional financial

standard system, improve incentive and restriction mechanisms, develop diversified financing methods, and continue to deepen local pilot projects and international cooperation to support green and low-carbon economy and society. The report said that China is the core country supporting Green Finance on the international stage. The people's Bank of China will resolutely implement the spirit of the documents of the CPC Central Committee and the State Council, adhere to promoting the construction of the green financial system, improve the incentive and restraint mechanism, strengthen information disclosure, advocate and promote international cooperation in green finance, guard the "green waters and green mountains" and protect our earth home.

Green finance is of great significance to promote the development of China's green industry. The development of green industry is inseparable from the support of various new technologies, and the R&D of these technologies involves huge investment. At present, the biggest difficulty in developing green industry is still the shortage of funds. The rise of green finance has solved the current problems in the development of green industry, reduced the probability of enterprise bankruptcy due to capital shortage, and opened up new ways of financing and new ways of financing for the green industry. For example, in the financing of green industry, banks can attract a large amount of funds to the environmental protection industry by issuing green securities or green securities, so that enterprises can obtain sufficient development capital. The development of green economy can promote enterprises to break obstacles, realize the effective integration of internal resources, and promote the optimization and optimization of resources, so as to promote the sustainable and healthy development of enterprises.

At present, the development of green finance has become a major strategic goal of China's development, and green development is one of the five principles of China's new development concept, which emphasizes the harmonious coexistence between mankind and nature. As people gradually understand the symbiotic relationship between man and nature, they will spontaneously join the ranks of green finance. Environmental protection has become the development concept recognized by most countries in the world. Green finance will also conform to the trend of the times and become the link between environment and economic growth.

## 2. Literature Review

At present, there have been many achievements in the theory and practice of green finance at home and abroad. But they are all discussed from its nature, development trend, influencing factors and so on. Labatts et al. (2002) proposed that green finance is the organic combination of Finance and ecological environment, and closely combines it with environmental protection [1]. Patrick (1966) believes that in less developed developing countries, the way of active financial supply should be taken to maintain their economic development, and when the economy develops to a certain extent, it should be changed from supply-oriented finance to demand-oriented finance [2]. Labatt regards green finance as a financial instrument based on protecting the ecological environment, aiming at improving people's quality of life and avoiding environmental hazards to a certain extent [3]. Goldsmith (1969) selected relevant data from 35 countries and found that there was an obvious positive correlation between economy and finance [4].

In addition, many foreign economists have given suggestions for the government to intervene in the development of green industry. E. Banks. (2013) compared the policies issued by governments of various countries to intervene in the green economy, and believed that this has important reference significance for the California government to implement the policy of environmental protection procurement, which can not only promote the sustainable

development of environmental protection industry, but also form a positive spillover effect and promote consumers' purchase of environmental protection goods [5].

In China, Sun (2010) found that several major factors affecting green finance in the process of economic development from the macro, meso and enterprise levels, and proposed that green finance can not only promote the transformation of industrial structure and the formation of energy structure, but also expand the ways of investment and financing, so as to promote the sustainable development of economy [6]. Zhao (2014) believes that green finance is mainly for emerging technology industries and innovative industries, which can guide the flow of funds and the scope of participation, and promote the development of regional economy [7]. Li (2016) studied China's "green finance" in a broad sense, and pointed out that if China wants to achieve sustainable development, it must firmly grasp the opportunities of the "the Belt and Road" and walk out of a development path and new development methods that are compatible with the "the Belt and Road" strategy [8]. Bu (2017) discussed how enterprises can improve the financing mode under the green financial system according to the impact of Green Finance on China's industrial structure [9]. Ma (2017) proposed a green finance development plan with Chinese characteristics under the existing green finance system and taking into account the current national conditions, and put forward relevant suggestions on the current green finance policy [10].

Through the collation of relevant literature at home and abroad, this paper finds that foreign scholars have studied green finance earlier and have formed a relatively perfect theoretical system. Due to the short development time and practice time of green finance, it is difficult to collect data. Therefore, the research on the development of green finance by domestic scholars is limited. Among the few confirmatory studies published at present, the number of papers taking green credit as the research object is the largest, but the research results are inconsistent, resulting in the slow progress of research in this field. At the same time, through the investigation of relevant literature, it can be concluded that the impact of technology R&D on economic development is a factor that can not be ignored. In the existing literature, there are few studies on introducing technology R&D factors into regional economic development. Therefore, based on the research results of green finance at home and abroad, this paper makes an empirical study on the role of green finance development and technology R&D by using quantitative and qualitative methods, so as to provide some new ideas for the development and development of green finance in China.

### **3. Action Mechanism of Green Finance on High-quality Economic Development**

#### **3.1. Promote Endogenous Economic Growth**

After the state has promulgated many supportive policies, green finance can pool the working capital in the market with its own particularity, and let more funds flow to green investment by reducing interest rates and entry standards, so as to provide strength for the revival of the national economy in the macro aspect. In addition, by continuously improving the industrial structure in the market, financial instruments can play a maximum role in the appropriate market environment and make the green economy burst out with strong vitality. Its development path is mainly two, namely, green development signal transmission and green industry capital agglomeration. Due to the support of government policies and the dual impact of the current environment, most of the funds can flow to the environmental protection industry. In the process of market financing, environment-friendly enterprises are often more favored by investors, which is more conducive to the capital inflow of the environmental protection industry. On the other hand, because the green industry is easier to be favored by investors, other industries have to adjust their industrial structure to maintain a competitive

position in the market. This positive adjustment method can drive the green development of various industries in the market to a great extent. According to the theory of economic growth, economic growth is inseparable from technological progress, while green finance can promote the technological progress of enterprises by improving the ability of risk control, effectively controlling transaction costs and a wide range of capital sources, so as to ensure the high-quality development of economy in green finance and other fields.

### **3.2. Promote the Transformation of Industrial Structure**

Green finance also plays an important role in the upgrading and transformation of industrial structure. Because of all its particularity, green finance is more likely to be favored by investors, which can make the market funds flow from high pollution and high energy consumption industries to environment-friendly and environment-friendly industries, such as thermal power generation to wind power generation, hydropower and so on. With the support of a steady stream of foreign capital, the environmental protection industry will get a rapid development, so as to accelerate the transformation of industrial structure in the overall market, improve resource utilization and reduce environmental pollution, so as to achieve the success of industrial transformation. For a long time, the biggest problem of China's traditional environmental protection enterprises is the shortage of funds. Green finance can provide financial support for the upgrading of equipment and technology in traditional industries. After capital injection, these enterprises will continue to take environmental protection development as the goal and independent innovation as the center to promote the transformation of industrial structure. With the concept of green development and sustainable development deeply rooted in the hearts of the people, the development prospects of some resource-based industries with high pollution and high energy consumption are worrying, while the environmental protection industry with green finance as the carrier will develop rapidly in this environment. While considering itself and conforming to the development of the times, other enterprises will actively seek industrial structure adjustment in exchange for technological innovation, so as to make enterprises remain competitive in the current market environment. In addition, many traditional enterprises, under the limitation of their own conditions, often develop new industries by reducing the industrial scale. This method of reducing the cost of traditional industries in exchange for transformation opportunities undoubtedly promotes the upgrading of industrial structure. At present, when the overall ecological environment is relatively bad, the development of heavy industrial enterprises with high energy consumption and high pollution has been difficult. The "two choices" of high-quality economic development and environmental protection urge the key industries to adjust the existing industrial structure in order to achieve high-quality economic development on the road of green finance.

### **3.3. Improve the Ecological Environment**

Green finance can promote enterprises to carry out technological innovation and increase investment in environmental protection, so as to improve the ecological environment, make the green industry more vulnerable to the bias of investors and guide funds to enter the green industry. Some experts suggested that green finance also plays an important role in the treatment of pollutants from heavy industry, and plays a dual role in protecting the ecological and economic development of the region. In other words, giving full play to the role of green finance can greatly improve the economic situation and ecological environment of a region and even the whole country. Fundamentally speaking, green finance is a core mode of environmental protection and focusing on the environmental protection industry. This system clearly shows the technology and equipment needs of the environmental protection industry at the capital price, so as to attract capital inflows in the market. For example, green finance has a high level of risk aversion, by which enterprises can distinguish investors and push relevant green industries or services, realize risk transfer through different combinations of products,

so as to help enterprises obtain more investment and provide powerful conditions for industrial transformation and upgrading. With the support of various green financial policies jointly launched by the central and local governments, compared with heavy industries with high pollution and high energy consumption, it is much easier for green economy industries to obtain investment. The government uses green finance as the medium to gradually withdraw the market funds from the "two high and one surplus" industries and enter the green industries beneficial to the society. Nowadays, the strong market share of green finance has promoted the change of China's energy consumption structure. Clean energy has become the main direction of the development of automobile industry in the future.

#### **4. Current Situation and Problems of Green Finance on High-quality Economic Development**

##### **4.1. In Green Market System**

After the Chinese government explicitly requested the establishment of a green financial system, the green industry has entered the track of rapid development. At the same time, the types of green finance and the number of investment are also gradually increasing. Since China put forward the green financial system, the green financial industry has ushered in the spring, and the diversified green financial products and investment amount have also increased year by year. However, behind these developments, there are some problems in green financial products and tools. For example, the uneven development of green financial tools, excessive reliance on green credit for financing, and different countries have different standards for green bonds, resulting in the difficulty of international financing; The development speed of green insurance is slow and there are few products; Green securities are only used in some pilot listed companies; Due to the lack of relevant policies and measures when financial institutions implement environmental protection projects, their investment and supply in the market do not match, and their income is low, which has hit the investment enthusiasm of environmental protection organizations.

##### **4.2. In Green Institutional System**

In October 2021, the State Council issued the 2030 carbon peak action plan to strengthen international cooperation in green finance and promote the development of China's green finance, so as to improve China's green finance system. At the same time, local governments have also issued documents in response to vigorously develop green finance and help achieve the dual carbon goal.

At present, the Chinese government is gradually improving the policy and legal system related to green finance. However, due to the late start of China's green finance, its green industry is not sound enough. From a macro perspective, a relatively perfect legal system has been established in China, but the specific laws and systems for the development of green finance are not perfect. This leads to the problems of overlapping institutional functions and vague power in the financial operation of the government, which affects the favorable environment and policy support of the government for the development of enterprises, and restricts the circulation of funds to green industries. In addition, the development of green finance is uneven in space. For example, the development of green finance in the eastern region is better than that in the western and central regions, and the development of green finance in Sichuan and Shandong is better than that in the surrounding provinces. This imbalance between regions restricts the overall development of China's green finance.

##### **4.3. In Green Reputation and Green Talent Reserve**

Although green reputation has facilitated the company's investment and financing, our green image is still weak in terms of green reputation and green brand. First of all, the Chinese

government has not stipulated the company's environmental information disclosure system, nor has it formulated unified standards. The financial institutions implemented are also mixed, and the public's evaluation of them is not unified. Secondly, some banks will accept bribes from companies and issue qualification certificates to unqualified financial institutions, while the government also lacks the ability to screen green financial projects, which leads to many "harmful companies" wearing the skin of "green enterprises". This has directly damaged the environmental image of green finance. China's green finance started late and lacks professional talents. Although there is no shortage of professionals in the financial industry, there are few professional green finance professionals. In addition, the talent allocation between regions and industries is also very unbalanced, and the quality of personnel in various professional fields is uneven, which has seriously affected the long-term development of green finance. At the same time, the development of China's green finance also needs the help of financial intermediaries. At present, China's green financial intermediaries are relatively lack, which has also become the bottleneck of the development of green finance.

## **5. Countermeasures for Green Finance to Promote High-quality Economic Development**

### **5.1. Coordinated Development of Green Finance and Regional Economy**

When developing green finance, we should try our best to eliminate the difficulties encountered by traditional enterprises in industrial transformation, and transfer funds in the market from industries with high pollution and high energy consumption to green industries with low pollution and new technology through government policy support, so as to encourage the transformation and upgrading of similar industries and promote the coordinated development of economy and economy. In addition, to cultivate the public's awareness of environmental protection, high-quality economic development and environmental protection complement each other. The transformation of ordinary industries into green industries can promote the transformation of regional economy from high-speed development stage to high-quality development stage. At present, the development of green finance is not coordinated in space, and there are great differences in the development progress of major regions, especially the backward regions, which have great development space in economic development and ecological protection. Each province should establish a development platform and build a channel for green financial cooperation, so as to make regional economic synergy and progress to ecological synergy. In the process of industrial transformation and upgrading, it can not only attract the inflow of funds in the investment market, but also issue relevant policies to provide financial support, alleviate the pressure in the process of enterprise transformation, ensure the success of transformation, and provide stable assistance for the high-quality development of green finance and economy.

### **5.2. Deepen Financial Reform and Opening up and Improve the Level of Financial Services**

In order to continue to promote the development of the green financial system, we need to continue to liberalize the regional green financial access standards, build a complete enterprise management system, strengthen the supervision of financial institutions, and make the whole industry comprehensive system gradually mature. Further strengthen the industrial transformation of traditional enterprises, open a variety of financing channels, and strengthen the competitive advantage of such enterprises in the market, so that green finance can be smoothly integrated into the market, so as to promote more enterprises to carry out industrial transformation, which also reduces the risk of green financial investment to a certain extent. Appropriately reduce the entry standards for foreign shareholders to enter the field of green

finance and promote the international development of green financial institutions. According to the enterprise's own development direction, we pay attention to high-tech innovation and related equipment research and development, and build a green financial system in line with our own development direction. With the support of high and new technologies in the field of green finance, it can strengthen the adaptability of financial leveling to the market and the ability of risk aversion. It is more competitive and more in line with the development of the times, and provide appropriate financial products for investors with different needs for green finance at all levels of society.

In addition, we should further adjust the economic structure to achieve the optimal allocation of economic factors, and help solve the obstacles encountered in economic development through the support of some external funds. We should vigorously develop Inclusive Finance and provide appropriate and effective services for institutions that need green financial services. On this basis, we should expand the types of green financial products according to the public's preferences, strengthen their universality and provide guarantee for the green financing channel of enterprises. In the process of implementation, government departments need to play a more important role. On the one hand, they need to accelerate the transformation and upgrading of traditional enterprises and the sustainable development of green enterprises. On the other hand, tap funds are directed into the field of green finance. Regulators also need to deal with the problems of high pollution and high energy consumption industries.

### **5.3. Improve the Regulatory System and Prevent Financial Risks**

While government departments establish bilateral channels for green finance, they also need to strengthen the risk supervision in the field of green finance. The proportion of green finance is not far from that mentioned above. Therefore, according to the development status of green finance in various places, take big data as the core and cloud computing as the carrier, establish and improve the risk monitoring system of green finance, so as to provide guarantee for the development of green finance. We should strengthen the supervision of the banking system, improve the supervision system of green financial channel, connect with the national financial risk monitoring system, timely analyze the development of regional economy, especially strengthen the management of network risk and do a good job in risk prevention and control. On this basis, we also need to call on investors to invest rationally, strengthen the publicity of financial risks and improve the awareness of risk prevention. Taking green credit as an example, as the main body of green credit, the amount of green credit issued by banks is increasing year by year. At present, the green credit under supervision has formed a perfect reward and punishment mechanism and scoring system, which also leads to the situation that banks issue green credit in violation of regulations in the process of issuing. While controlling these phenomena, the regulatory authorities should also return green financial products such as green credit to their original role - taking environmental protection as the core concept to promote high-quality economic development. Such a regulatory body will not only play a positive role in the whole green financial industry, but also be more conducive to the acceptance of green products by more people, and the economy will achieve high-quality development.

### **5.4. Develop Green Financial Industry and Promote High-quality Economic Development**

Green finance will inevitably waste resources in the process of development. Correctly deal with the problems encountered by green finance in this process, so as to better provide efficient services for green industry. According to the basic situation of China's industrial structure adjustment, in order to achieve the ultimate goal of high-quality economic development, green finance needs to adapt to the transformation of industrial structure and reduce the waste of resources during this period. In addition, in the process of implementing green financing, banks and other financial institutions should give priority to serving environmental protection

projects of green industries, reduce the entry guarantee of green industries, and improve the entry threshold of polluting industries, so as to provide guarantee for the green development of regional economy. Vigorously promote the technological innovation of green industries, give play to the role of the market, and solve the problem of capital shortage in the R & D process of green enterprises. We should ensure the development of green finance industry, reduce the risks in the field of green finance, encourage the entry of market capital and high-tech innovation, and finally promote high-quality economic development in the field of green finance.

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