

## Achievements and Shortcomings in Green Finance Serving Green Development

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### Abstract

According to increasingly environment problem, the concept of green development is deeply rooted in the hearts of the people gradually, and the development direction and navigation mark of the global society and economy has been turning to be green, healthy and sustainable. And there is a huge gap in the green development in the realistic foundation between the developed countries and China. We, therefore, can not copy foreign experience, and must conduct in-depth study of the green finance and the impact on the sustainable development. Otherwise, we need create a more effective evaluation system with innovation and development. The research on the evaluation of green finance serving green development has significant theoretical and practical value. The article by analyzing experience in severing from green finance for green development in the domestic and overseas, such performances in severing from green finance for green development were put forward.

**Keywords:** Green Finance; Green Development; Achievements and shortcoming; Social economy

### Abbreviations

Group of Twenty: G20.

### Introduction

In recent years, green financial services and green development have also achieved some results through continuous innovation. Whether it is integrating advanced technology in practice, or creating diversified forms in terms of models, management, resources, systems, etc., it has injected new vitality into green finance and made green finance achieve certain results in the service of green development. grades.

The G20 Green Finance Research Group conducted special research on the greening of banks, financial markets, and institutional investors. Research shows that although green finance currently accounts for a very low proportion of global financial activities, considering that the world needs to invest trillions of dollars each year to fill the huge demand for green development, the development prospects of green finance are still very broad. The key lies in identifying and overcoming problems in its development.

### *Main achievements of green finance in serving green development*

#### *Technological innovation*

Hicks (1975) believes that reducing transaction costs is the dominant factor in financial innovation. From a micro perspective, the root of financial innovation also lies in the profit-seeking behavior of financial institutions. In practice, combined with technological progress, transaction costs can be effectively reduced. The scientific and technological innovation of green financial services for green development is not a single one. It is a process of co-evolution and progress of “multi-spiral structures” such as application innovation, product innovation, market innovation, etc., which requires matching from many aspects. In recent years, under the trend of multi-dimensional development of applications and products, financial institutions have used technological progress to create innovative methods and innovative cultures with personal customer participation, and promoted high-quality customer experience into core competitiveness, thus making the green development of green financial services truly Be people-oriented.

From the perspective of scientific and technological progress, both technological finance and financial technology have served green development well. On the one hand, technology finance, as its name suggests, can be understood as the combination of the technology industry and the financial industry. It plays an important financial function in promoting technological innovation, transformation of achievements and development of high-tech industries, and is the source of power to promote industrial restructuring and upgrading. The development of green industry and the innovation of green technology cannot do without the support of venture capital. Especially in the initial stage of emerging industries, both financial support and high-speed technological innovation are needed. The intervention of technology finance has solved this problem very well. From another perspective, financial technology reduces the cost of financial activities itself and adds more convenience. Through the use of innovative payment systems, it also gives low-income groups the opportunity to use clean energy, allowing the poor to enjoy free energy like the rich. It has raised the awareness of green development among all strata of society. Patrick Njoroge, Governor of the Central Bank of Kenya, once pointed out that “sustainable development and deepening financial inclusion are the two most urgent goals facing the reform of the financial system around the world, and financial technology innovation is the greatest hope for achieving these two goals.”

#### *Model innovation*

Starting from the operating model, green finance and green development have also begun to take advantage of the convenience brought by the current “Internet +” to achieve more convenient and effective green business services. Internet finance, as a relatively new financial business model that uses Internet information technology to realize financial financing and complete investments, payments, etc., supplements and upgrades traditional financial services and provides new ideas for green development. Take the new energy industry as an example. If you want to achieve development, you need a sound financial system to provide financial support. However, using traditional financing models to serve emerging industries with longer investment return periods and higher risks can easily lead to term mismatches. question. Crowdfunding, financial leasing, supply chain finance and other methods are recognized by more and more industry insiders, and these financing methods are slowly being integrated with the Internet, forming new financing channels for the new energy industry. New energy companies can use the Internet to conduct big data assessments and analyze project risks and final benefits, and at the same time collect user usage data and launch specific projects for target groups to achieve new energy financing in the form of “Internet + crowdfunding”. Investors can also use the Internet platform to purchase items needed for operation from project parties that develop new energy, and then provide leasing services for project parties. Investors realize the goal of green investment through the Internet, and new energy companies can also develop after-sales and realize leaseback, a complete “Internet + financial leasing” chain came into being. In addition, some small, medium and micro enterprises in the upstream and downstream of the new energy supply chain can also use the “Internet + supply chain finance” method to transfer their undue accounts receivable to core enterprises in the form of bonds to achieve financing.

Starting from the product model, the trading platform of green financial products has also begun to gradually shift to smart terminals, which will actually improve the utility of customers and the efficiency of financial institutions themselves. The smart mobile terminal for 24-hour uninterrupted transactions can not only greatly expand the customer boundary, but also allow green financial

products to independently optimize resource allocation during the continuous transaction process, and share product information through the database connection between traders. Innovative results achieve multiple effects such as exchange of needed goods and risk prevention and control.

### *Management innovation*

Many financial institutions have also begun to realize the innovation of green finance in promoting green development by introducing new measures for operational management of financial activities and green businesses, such as identifying and screening green projects, integrating environmental violation information of relevant enterprises or businesses, and environmental risk management. In addition, financial institutions have also integrated, classified, analyzed, and judged the operating data and financial data accumulated over the years through further system upgrades, such as green industry projects, to predict future industry development, and target the development trends and prosperity of the industry. Carry out planned supply and reasonable resource matching based on characteristics such as level.

When conducting green financial activities, some financial institutions also pay attention to building a reasonable regulatory platform to ensure that green finance effectively serves the management of green development. However, traditional regulatory methods are difficult to meet the new tasks. In order to more effectively supervise green financial activities, financial institutions have established an information sharing platform to obtain information on environmental behavior of financial activities to help financial regulatory agencies obtain information on the business activities of green financial participants. Interventions in the environment and understand whether the participants are environmentally friendly, so as to effectively grasp the information of all parties and realize the supervision of green finance. Financial institutions have also established specialized departments. Based on obtaining a large amount of effective information, they have also formed an accurate statistical monitoring system and set up multiple dimensions such as green operations, green risks, and green financial products to quantify the progress and effectiveness of green financial activities. Relying on the information collection and supervision of the platform, supervision rating and reward and punishment mechanisms have also been formed. Some financial institutions have begun to build a rating system, incorporating quantitative green financial information into the regulatory rating system for rating, and linking institutional access, green product application status, etc. to it, and providing rewards and punishments.

### *Resource innovation*

Starting from various aspects such as funds, talents, and information, financial institutions have also begun to innovate in resources. In terms of capital, managers keep abreast of the real-time dynamics of the capital supply market, constantly seek and tap capital supply channels, actively develop new businesses, and innovate sources of financial resources. In terms of talents and information, timely and accurate control of various information, while further optimizing the proportion of subdivided professional talents, creating industry-leading operating efficiency, and using the most economical and effective methods to complete the highest quality services.

From another perspective, green finance serving green development also requires green finance to help economic and social development get rid of the constraints of natural resources through innovation and integration, and open up a new path for economic structural adjustment and industrial structure upgrading. The significance of development is not limited to the accumulation of material wealth. It should also create higher-quality economic, social, humanistic, natural and other harmonious and friendly outputs under effective resource conditions, so that social groups can obtain higher benefits. Happiness. Under the conditions of limited natural resources, new forms of resources are slowly forming, such as technical resources, social resources, policy resources, and management resources. Relevant government departments have also begun to realize that the development of green finance requires multiple drives, and have begun to study the market pricing of green resources.

### *System innovation*

Institutional reform and development are also important factors affecting financial development. In recent years, relevant departments have begun to summarize the economic systems in the field of financial development in financial policy research, and combined them with relevant innovations in the financial field to propose pan-financial theories [Pan-finance refers to supporting entities that complement traditional finance. It includes not only traditional finance, but also closely related and closely connected industries such as asset management companies, investment consulting companies, and accounting firms.]. It is to combine financial activities and financial services with government environmental protection departments, environmental protection agencies, consulting firms and green technology environmental protection companies to formulate relevant new policies with clear tendencies, unified standards and strong execution. Under the current level of science and technology, through this multi-sector linkage transmission mechanism, establishing a new explicit system that can motivate the behavior of participants in green financial activities can more effectively promote the progress of productivity and meet the needs of green economic and social development. need.

### *Problems existing in green financial services for green development*

#### *Lack of unified standards*

Due to the different national conditions of different countries and the different focus of policy testing, it is difficult to form a unified standard for the development of green finance and the development of green financial activities. However, if financial institutions have launched their own green concepts one after another, it will be more difficult for transaction parties to form a consensus, which will greatly increase the cost of green investment, and even make it difficult for companies, banks, and investors to identify opportunities or targets for green investment. The lack of definition of green financial activities and products may also hinder the environmental risk management of financial institutions and the design of government policies. Although China, Brazil, Bangladesh and other countries have launched pilot measures for green financial activities at the national level, and the International Capital Market Association and the Green Finance Professional Committee of the China Society for Finance and Banking have also introduced relevant indicator principles, but there are still Many countries or regions have not adopted any relevant indicators to guide the development of green finance. In recent years, relevant departments in some regions have also proposed the concept of pan-green finance, which aims to achieve the goal of serving green development through the allocation of natural environmental capital such as land and resources. Not promoted.

#### *External obstacles*

There are still some disputes in the academic circles about the definition of externality. Therefore, this article only describes the characteristics of externality. That is, externality theory is a kind of economic benefit theory that believes that various behaviors in the market are not unique and interrelated. theory. Externalities occur when the behavior of one participant in the market affects the economic effects of another. According to the analysis of the G20 Green Finance Research Group, one of the biggest challenges facing the development of green finance is how to effectively internalize environmental externalities. This externality is divided into two types: one is the positive externality of environmental improvement brought about by green environmental protection projects; the other is the negative externality of environmental damage caused by projects with excessive pollution. The first type may lead to insufficient green investment. For example, the construction cost of clean energy may be much higher than that of traditional energy. If there is a lack of effective incentives, the low return rate of the project may make it difficult for the green project to attract investment and be stranded. The second type may lead to excessive investment in polluting projects. For example, the production of a polluting enterprise in a certain area causes damage to the health of residents, but due to various reasons, they cannot claim compensation from the enterprise, and finally condone the excessive investment and production of the polluting enterprise. As for the negative externalities caused by behaviors that cause environmental pollution, the use of green financial means can effectively limit and correct them.

#### *Product pricing is difficult*

On the one hand, for most green financial products, a series of links such as environmental quality monitoring and environmental supervision need to be considered in the formulation process, and the cumulative costs incurred by these links will be much higher

than similar non-green financial products, resulting in their Prices will inevitably rise, exceeding those of general financial products. However, most green financial products are in an embarrassing situation because of their excessive pricing and unpredictable risks, which have led to a decline in their market competitiveness and cannot attract more customers. On the other hand, understood in a broad sense, the natural elements that maintain ecological security, ensure ecological regulatory functions, and provide a good and livable environment for humans can also be regarded as a kind of environmental capital. Such as: clean water, fresh air and pleasant climate, etc. However, most of these environmental capitals have the attributes of public goods, and whether or how to price them has become a difficult problem.

### ***Term Mismatch***

At present, in many countries or regions, many long-term infrastructure constructions still mainly rely on bank loans. However, in order to avoid excessive maturity mismatch, it is difficult for banks to provide long-term loans. However, many green projects, such as clean energy, clean rail transit, sewage treatment, solid waste treatment, etc., require a long-term construction process, and green investment projects in the same sector generally rely more on long-term financing than non-green investment projects. It requires the financial sector to continue to innovate, to alleviate or solve the problems caused by the mismatch of deadlines, so that green finance can play its due role in the process of green development.

### ***Information asymmetry***

With the popularization of green awareness and the promotion of green development models, many investors have developed a strong interest in green projects. Although governments and third-party organizations have issued some relevant regulations to promote environmental information disclosure and have achieved some results, due to many For various reasons, companies have not released environmental-related information, which has increased investors' search costs for green investment projects and affected the attractiveness of green projects to investors. Moreover, if companies do not have sustainable and reliable green asset "labeling", it will also constitute an obstacle to green investment. From the government's perspective, if a country's statistical disclosure of environmental information is relatively decentralized, for example, if the environmental protection department, financial regulatory authorities and investors cannot share information, it will also exacerbate the occurrence of information asymmetry. In addition, if investors cannot fully grasp the feasibility information of green technology, or are unsure about green investment policies, it will lead to investors having a strong sense of risk aversion in new energy, energy-saving technology and other fields, seriously hindering the process of green development.

## **Materials and Methods**

The relevant data of green finance and green development from 2007 to 2018 were used to evaluate the performance of green finance servicing green development in positive research later. Finally, the article discussed the mechanism optimization on the way that green finance serviced green development according to the empirical result. Moreover, the relevant suggestions and development paths according to the previous analysis and the empirical result were made. The main work of this paper includes the following aspects:

First of all, the mechanism of green finance serving green economy is given. Starting from the function of Finance and green finance in economic and social development, this paper elaborates the system and the function of green finance, and proves that the individual operator cannot consciously fulfill the obligation of environmental protection under the condition of none specified.

Secondly, in the article, an input-output indicator system for the ecological benefits of green finance, which can measure the level of green financial services in China, is established under the green development view. The DEA-Malmquist model is used to analyze the static and dynamic performance in eco-benefits of green financial.

Thirdly, a green development indicator system is established in this article. The entropy method is used to measure the domain green development and green finance input in China, by which the comprehensive scores are calculated.

## Discussion and Conclusion

This article mainly analyzes the current status of green finance serving green development at home and abroad. Although my country's green finance started later than developed countries, it can still gain certain late-mover advantages by using some reasonable technical indicators, business guidelines and forward-looking credit methods, and has achieved some results through innovative development, thereby playing a key role in the development of green finance. Green development plays a greater role.

## References

1. Cowan E. "Topical issues in environmental finance: plenary paper". EEPSEA special paper/IDRC. Regional Office for Southeast and East Asia, Economy and Environment Program for Southeast Asia (1998).
2. Hicks John Richard. "Value and capital: An inquiry into some fundamental principles of economic theory". OUP Catalogue (1975).
3. Patrick Hugh T. "Financial development and economic growth in underdeveloped countries". Economic development and Cultural change 14.2 (1966): 174-189.
4. Shusheng Q and Xiaoxiao J. "Analysis of China path to green development". Zhongzhou Academic Journal 37.5 (2016): 93-99.

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