Green Finance and Enterprise Development: A Literature Review

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Abstract. This article aims to explore the path and mechanism of promoting sustainable development of enterprises through green finance, and analyze the important role of green finance as an emerging financial model in enterprise upgrading and economic growth mode transformation in the context of global environmental protection. Meanwhile, strengthening international cooperation in green finance, sharing green technologies and experiences, is of great importance for enhancing the competitiveness of Chinese enterprises in the global green economy. Finally, this article summarizes the mutually reinforcing relationship between enterprise development and green finance, and points out the challenges currently faced, such as inconsistent green finance standards, information asymmetry, and low market recognition. In response to these issues, suggestions have been put forward to strengthen policy guidance, improve market mechanisms, increase market transparency, and enhance public environmental awareness, providing theoretical reference and practical guidance for green finance to better serve the sustainable development of future enterprises.

Keywords: Green finance, enterprise development, sustainable development, economic and financial cooperation.

1. Introduction

With the rapid development of the global economy, environmental problems are increasingly growing, and challenges such as resource depletion and climate change have serious impacts on the sustainable development of human society. In this context, green finance, as a new type of finance that promotes environmentally friendly economic activities, is gradually becoming an important role in promoting global economic transformation and sustainable development. [1]. Green finance not only focuses on economic performance, but also emphasizes environmental protection and social responsibility. By guiding social capital towards low-carbon, environmental protection, and sustainable development, a reliable path has been provided for the coordinated development of the economy, society, and environment.

As the main body of economic activities, the development model of enterprises is related to the sustainability of the global economy and the health of the environment. Faced with environmental pressure and changes in market demand, more and more companies are realizing the importance of green transformation and incorporating sustainable development into their corporate strategies, exploring the path of green innovation. However, green transformation often comes with high costs and risks, requiring strong financial support to ensure its smooth implementation. The emergence of green finance perfectly meets this demand, providing diversified financing channels and risk management tools for enterprises' green transformation [2].

Therefore, revealing how green finance promotes sustainable development of enterprises not only has important theoretical value, but also has profound practical significance for guiding enterprise practice and promoting global economic green transformation. This article will start with the basic concepts and core principles of green finance, and deeply analyze the support of green finance tools for green transformation, the impact of green finance policy system, incentive mechanism, and international cooperation mechanism on enterprise development, providing useful references and inspirations for promoting sustainable development of enterprises and promoting global economic green transformation.

2. Literature Review

2.1. The Concept of Green Finance

Green finance refers to financial services provided to support economic activities such as environmental improvement and addressing climate change. Emphasis should be placed on fully considering environmental protection and social responsibility in investment and financing decisions, guiding social capital towards green, environmentally friendly, and low-carbon technologies through financial means, and promoting sustainable development of the economy, society, and environment. Green finance is not only a financial tool, but also a development concept and strategic choice [3]. It requires financial institutions to not only pay attention to economic benefits, but also to the impact on the environment and society when providing financial services, in order to ensure that financial activities promote economic development without harming the natural environment and long-term social interests. Green finance includes many financial products and services, including green loans, green bonds, green funds, green insurance, carbon finance, etc. These financial products and services support the development of the green economy in different ways, such as providing low-cost financing support, reducing investment risks in green projects, and increasing the liquidity of green assets [4]. Green finance has become increasingly important on a global scale. Governments, financial institutions, businesses, and international organizations around the world are actively promoting the development of green finance by formulating policies, innovating products, and strengthening cooperation to jointly promote the prosperity and sustainable development of the green finance market.

2.2. The Global Development Context of Green Finance

2.2.1. Early embryonic stage (1970s to 1990 s)

In 1972, the Club of Rome released "The Limits to Growth", which first proposed the concept of sustainable development and sparked deep reflection on the contradiction between the environment and resources in industrialized societies. In 1974, the German federal government established GLSBank (German Ecological Bank), which mainly focuses on social issues and ecological fields, becoming an early practice exploration of green finance. In 1992, in order to promote the sustainable development of financial institutions, the "Statement on Environmental Sustainability by the Banking Industry" was issued, further promoting the development of green finance (sustainable finance) [5].

2.2.2. Rapid development phase (2000-present)

In 2015, the United Nations Sustainable Development Summit adopted the 2030 Agenda for Sustainable Development, in which 17 sustainable development goals came into effect, emphasizing the role of financial support for sustainable development. In 2016, at the G20 Summit held in Hangzhou, the G20 released the "G20 Green Finance Comprehensive Report", which clarified the definition, purpose, scope, and challenges of green finance and supported the global economy's transition towards green and low-carbon development. The international definition of green finance is gradually becoming clearer, but a unified standard has not yet been formed [6]. The concepts of green finance, environmental finance, sustainable finance, climate finance, ESG, etc. include elements such as pollution control, environmental protection, resource conservation, and climate change, which are often mixed together [7]. As developed Western countries have passed the stage of pollution control, their definition of green finance is increasingly focused on issues such as biodiversity conservation, climate change, and sustainable development. Many developing countries define green finance in terms of topics such as pollution control, environmental protection, resource conservation, and more. China actively participates in international green finance cooperation, jointly establishes an international sustainable finance platform with the European Union and other countries, and promotes multilateral dialogue among policy makers on sustainable finance regulatory measures.

2.2.3. At the current stage

Countries and international organizations are working to promote the standardization and mutual recognition of green finance standards, in order to enhance the transparency and comparability of the green finance market. With increasing attention to the environmental benefits of green finance, environmental information disclosure will play a greater role in helping investors and stakeholders understand the environmental impact of financial activities. Green finance will become an important tool, guiding social capital towards low-carbon technologies and green industries, and promoting the green and low-carbon transformation of the economy and society.

3. The Impact of Green Finance on Enterprise Economic Performance

3.1. Reduce Corporate Costs

3.1.1. Lower financing cost

Green finance directly reduces the financing cost of enterprises by providing preferential interest rate, tax relief and other policy measures. For example, green bonds and green credit typically have lower interest rates, which allows companies to save on interest expenses when raising funds, thus reducing overall operating costs. In addition, green finance also encourages financial institutions to provide long-term and stable financial support for green projects, which helps enterprises to reduce the additional costs caused by short-term funding pressure [8].

3.1.2. Operating cost savings:

Enterprises can reduce energy consumption and operating costs by participating in green projects, such as using energy-saving equipment. For example, companies that use renewable energy sources such as solar or wind can reduce their reliance on traditional energy sources, thereby lowering energy costs. At the same time, using energy-saving equipment can effectively reduce the energy consumption of enterprises and further save operating costs.

3.2. Expand Financing Channels

3.2.1. Diversified financing channels

Green finance provides diversified financing channels for enterprises, including green bonds, green credit, green funds, etc. These financial instruments not only enrich the financing methods of enterprises, but also provide enterprises with more flexible and convenient financing services. For example, the issuance of green bonds can attract more investors' attention, thus broadening the source of funding for enterprises.

3.2.2. International cooperation and financial support

With the rise of green finance around the world, more and more international organizations and financial institutions begin to pay attention to and support green projects. Enterprises can obtain more financial support and policy preferences by cooperating with international organizations or participating in international green finance projects. This helps enterprises to further expand financing channels and reduce financing costs.

3.3. Improve Total Factor Productivity

3.3.1. Technological innovation and industrial upgrading:

Green finance encourages enterprises to use green technologies for innovation and industrial upgrading. By introducing advanced green technologies and equipment, enterprises can improve production efficiency and reduce energy consumption. This technological innovation can help companies improve their total factor productivity and enhance their market competitiveness.

3.3.2. Optimized allocation of resources:

Green finance guides social capital to support green industries and environmental projects by optimizing the allocation of financial resources. This helps enterprises achieve rational allocation and efficient utilization of resources, thereby improving total factor productivity. For example, financial institutions can adjust their loan quotas and interest rates according to their environmental performance and progress in green transformation, so as to encourage enterprises to increase green investment and transformation and upgrading efforts.

3.4. Convenient Upstream and Downstream Industrial Chain

3.4.1. Support of supply chain finance

Green finance also provides convenient financial services for the upstream and downstream industrial chains of enterprises through supply chain finance and other ways. This helps enterprises to strengthen their partnerships with suppliers and customers, and reduce supply chain risks and costs. For example, financial institutions can provide financing support, credit guarantee and other services for the upstream and downstream enterprises of the green supply chain, to help enterprises realize the stable operation and coordinated development of the supply chain.

3.4.2. The construction of green supply chain

Green finance also encourages enterprises to build green supply chains and promote the green and low-carbon transformation of the entire industry chain. By introducing environmental protection concepts and practices such as green procurement, production, and logistics, enterprises can promote upstream and downstream enterprises to jointly achieve green transformation and sustainable development [9]. This can help enhance the brand image and market competitiveness of the enterprise, as well as improve economic and environmental benefits.

In summary, green finance has improved the economic performance of enterprises by reducing costs, expanding financing channels, increasing total factor productivity, and promoting the development of upstream and downstream industrial chains. These impacts will not only help enterprises to achieve the goals of sustainable development and green transformation, but also make important contributions to the green development and ecological civilization construction of the whole economy and society.

4. The Impact of Green Finance on Corporate Social and Environmental Performance

4.1. Promote the Social Performance of Enterprises

4.1.1. Enhance brand image and public recognition

Green finance encourages enterprises to adopt environmental protection measures and sustainable development strategies, which helps enterprises to establish a positive social image and enhance brand value and public recognition. When companies are seen as models of environmental protection and sustainability, their products and services tend to be more favored by consumers, thus increasing market share and sales.

4.1.2. Enhance stakeholder relations

Green finance requires enterprises to consider the interests of stakeholders in the operation process, including employees, customers, suppliers, investors, etc. By implementing green strategies, companies are able to improve their relationships with these stakeholders and enhance their trust and cooperation [10]. For example, companies can provide green products and services to meet customers' environmental needs, while working with suppliers to promote green supply chains and jointly achieve environmental goals.

4.1.3. Fulfilling social responsibilities

Enterprises that actively participate in green finance projects tend to pay more attention to fulfilling their social responsibilities. This includes participating in community environmental protection activities, supporting environmental public welfare projects, and promoting environmental education. These behaviors can not only help to enhance the social reputation of the enterprise, but also enhance the social responsibility and mission of the enterprise, and win more social support and praise for the enterprise.

4.2. Promote the Environmental Performance of Enterprises

4.2.1. Promoting energy conservation, emission reduction and efficient utilization of resources

Green finance encourages enterprises to adopt clean energy and energy-saving technologies and equipment to reduce energy consumption and emissions. This will help enterprises achieve energy conservation and emission reduction targets and reduce the negative impact on the environment. At the same time, green finance also promotes enterprises to make efficient use of resources, improve the efficiency of resource utilization, and reduce production costs.

4.2.2. Promoting green technology innovation and industrial upgrading

Green finance provides financial support for enterprises and encourages them to carry out green technology innovation and research and development. Through technological innovation, enterprises can develop more environmentally friendly and efficient products and technologies to improve their market competitiveness. Green finance also promotes enterprises to carry out industrial upgrading, develop in the direction of green, low-carbon and circular, and achieve sustainable development.

4.2.3. Improve the environmental management system and risk prevention and control:

Green finance requires enterprises to accept strict environmental assessment and management in the process of financing, which encourages enterprises to establish a sound environmental management system. Enterprises need to formulate environmental protection policies, establish environmental protection systems, strengthen environmental risk prevention and control and emergency response capabilities, to ensure that production and business activities meet environmental protection requirements [11]. These measures can help enterprises to reduce environmental risks and improve environmental performance.

4.2.4. Construction of green supply chain and ecological cooperation:

Green finance encourages enterprises to build a green supply chain system and promote the green and low-carbon transformation of the whole industrial chain. Enterprises can select green suppliers, promote green procurement, and implement green logistics to drive upstream and downstream enterprises to jointly achieve green development goals. This ecological cooperation will help to improve the environmental performance of the entire industrial chain, and enhance the market competitiveness of enterprises.

4.3. Challenges and Measures

4.3.1. Challenges

Enterprises may conceal real information or provide false information, making it difficult for banks to obtain really environmental and social impact data and increasing the risk of green finance. The lack of disclosure and monitoring of pollution emissions by listed companies makes it difficult for financial institutions to accurately evaluate their green performance. In addition, green finance has not yet become a core business for many financial institutions and lacks sufficient incentive mechanisms to promote its vigorous development. In the short term, the value-added effect of green industries is not significant, leading to a lack of motivation for financial institutions to invest in green finance. At present, green finance mainly relies on green loans from banks, and the role of other non-bank financial institutions is insufficient, which limits the diversified development of green finance.

The innovation of green financial products and services lags behind and cannot meet the diversified financing needs of enterprises. Law firms and consulting firms, among other intermediary service agencies, lag behind in the field of green finance.

4.3.2. Measures

Establish and improve the enterprise environmental and social information disclosure system, and improve the transparency. Environmental protection departments should unify the quantitative standards and strengthen the supervision and evaluation of enterprises. The government should introduce more substantive incentive policies, such as fiscal subsidies, tax and fee cuts, and loan guarantees, to encourage financial institutions to increase investment in green finance. Banking regulators can give preferential policies to banks with a high level of green credit performance to reduce financing costs. Encourage intermediary service agencies such as law firms and consulting firms to develop green finance-related businesses and train professionals. Strengthen the popularization and publicity of green finance knowledge, and improve the public's awareness and participation in green finance [12].

To sum up, green finance has effectively promoted the social performance and environmental performance of enterprises by promoting mechanisms such as brand image, enhancing stakeholder relations, fulfilling social responsibilities, improving environmental management system and building green supply chain. These impacts will not only help enterprises achieve the sustainable development goals, but also make important contributions to the green development and ecological civilization construction of the whole economy and society. Although green finance in promoting the enterprise social performance and environmental performance face many challenges, but by strengthening information disclosure and regulation, improve the incentive mechanism, broaden the financing channels, promote green financial product innovation, strengthen international cooperation and exchanges and enhance public participation, can effectively respond to these challenges and improve the healthy development of green finance.

5. Conclusion

This study delves into the specific mechanisms and roles of green finance in promoting corporate economic performance, environmental performance, and social responsibility. Through literature review, reveal the multidimensional impact of green finance on enterprise development, and provide a basis for enterprises and governments to formulate relevant policies.

This study defined the concept of green finance and outlined the relevant theoretical foundations of green finance, including sustainable development theory, environmental economics theory, etc., laying a solid theoretical foundation for subsequent research. This article analyzes how green finance can promote production expansion, technological innovation, and market competitiveness of enterprises by providing low-cost funds and reducing financing risks, thereby improving their economic benefits. And the role of green finance policies in promoting corporate social responsibility performance was studied, including the performance of enterprises in environmental protection, public welfare, social responsibility investment, and the impact of these behaviors on corporate image and brand value.

This study with "green finance and enterprise development", further discusses the green finance of the enterprise development, the study shows that the green finance by providing low cost, long-term stable financial support, green finance effectively reduce the enterprise financing cost and risk, promote the enterprise production expansion and technological innovation, improve the enterprise market competitiveness and profitability. By encouraging enterprises to adopt measures such as energy conservation, emission reduction, and green technology innovation, the environmental burden and pollution emissions of enterprises have been reduced, and their environmental performance and sustainable development capabilities have been improved. And it also promotes the formation and development of green supply chains, driving the green and low-carbon transformation of the entire industrial chain. In addition, the implementation of green finance policies and the promotion of green

finance products have also increased the importance that enterprises attach to environmental protection and social responsibility, promoting their positive performance in environmental protection, public welfare, and social responsibility investment. These behaviors can enhance a company's social image and brand value, as well as help the company win broader benefits. Although green finance has made significant achievements in promoting enterprise development, the current policy system and market mechanism of green finance are still insufficient. In the future, we need to further improve the green finance policy system and strengthen the coordination and connection between policies.

To promote the rapid development and effective implementation of green finance, the government needs to strengthen coordination and cooperation among various departments. And the government also needs to strengthen supervision and guidance of the green finance market to ensure its healthy and orderly development. This policy will enhance the implementation effectiveness and social impact of green finance. By strengthening international cooperation and exchanges, countries can share experiences, jointly develop green financial products, and promote the prosperity and development of the global market. This will help promote the green transformation and sustainable development of the global economy. In the future, it will integrate more closely with the real economy. Financial institutions will actively respond to the needs of the real economy, provide strong financial support for the transformation and upgrading of traditional industries and the development of emerging industries, promote energy-saving and environmental protection technologies, improve resource utilization efficiency, while emerging industries will receive more sufficient financial support, accelerate technological innovation and market expansion.

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