Proceedings of Business and Economic Studies, 2025, Volume 8, Issue 3
http://ojs.bbwpublisher.com/index.php/PBES
Online ISSN: 2209-265X
Print ISSN: 2209-2641

The Development of Green Finance and the Financing Constraints of Small and Medium-sized Enterprises

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Abstract: As an important tool to achieve sustainable economic and environmental development, green finance can effectively alleviate the financing constraints of small and medium-sized enterprises (SMEs), especially in promoting green transformation plays a key role. SMEs play an important role in economic growth, innovation, and job creation, but due to a lack of collateral, imperfect credit history, and opaque financial information, they face great obstacles in the financing process, especially in the early capital investment required for green transformation. Green finance, through innovative financial instruments such as green credit and green bonds, provides new financing channels for SMEs, helping them reduce financing costs, optimize financing structure, and promote their green transformation and sustainable development. This paper analyzes the current situation and root causes of SMEs' financing dilemma from the perspective of green finance, and probes into the influence of green finance policies on financing behavior.

Keywords: Green finance; Small and medium-sized enterprises; Financing constraints

Online publication: July 15, 2025

1. Introduction

Small and medium-sized enterprises (SMEs) face significant financing challenges, which hamper their growth and sustainability, especially in the context of green finance. Lack of adequate collateral and credit history is a widespread problem that exists in both developed and developing countries. As the global economic landscape changes and the risk of recession persists, financing pressures for SMEs are intensifying. To mitigate these challenges, governments around the world have established a variety of financing guarantee schemes. The development of green finance can optimize the economic structure of enterprises, thereby alleviating the financing problems of enterprises [1–2].

2. Current financing situation of SMEs

The financing of small and medium-sized enterprises (SMEs) has always been a key problem in economic development. Small and medium-sized enterprises (SMEs) occupy an important position in China's economy, providing a large number of job opportunities and innovation impetus. However, due to their small size, imperfect credit history, and insufficient collateral, SMEs face greater financing difficulties. The following are several major aspects of the financing situation of SMEs in China.

2.1. Limited financing channels

SMEs are highly dependent on bank loans. Traditionally, SMEs mainly rely on bank loans, but because SMEs generally lack sufficient asset collateral and credit history, banks are stricter in their loan approval and have a high financing threshold. In addition to the complementary role of non-bank financial institutions, some SMEs try to obtain funds through private financing, guarantee companies, financial leasing, equity financing, and other channels, but these methods are also subject to greater restrictions and high costs. It is difficult to rely on bonds and equity financing. SMEs lack sufficient market scale and credit ratings, making it difficult for them to raise funds by issuing bonds or going public. Even if they are able to issue corporate bonds, they usually face high costs and difficulty in accessing the market.

2.2. Financing costs are high

First of all, the credit risk of SMEs is high, and the credit of SMEs is not transparent enough. Many enterprises do not have enough financial statements, or it is difficult to provide accurate credit evaluation, which makes the lending institutions or investors face greater risks. Secondly, the lack of collateral, many small and medium-sized enterprises, due to limited assets, cannot provide banks or other financial institutions required collateral, resulting in higher financing costs or even being refused financing. Finally, there is a single financing channel. At present, bank loans are still the most important financing method for SMEs, but the interest rate of bank loans for small and micro enterprises is usually high, especially in the case of no guarantee or mortgage.

2.3. Information asymmetry

Small and medium-sized enterprises have poor information transparency, imperfect financial statements, tax records, credit history, and other aspects, which makes it difficult for financial institutions to effectively assess corporate risks and affect financing decisions. At the same time, the guarantee and collateral of SMEs are insufficient, and SMEs often lack effective collateral and collateral, especially for scientific and technological innovation and service enterprises. The evaluation standards of intangible assets, such as intellectual property and technology, are not clear, resulting in great difficulty in financing. Financing channels have strong limitations. Although technology finance and Internet finance provide more financing channels for SMEs, these channels still have problems, such as a low degree of marketization and imperfect supervision.

3. The impact of the development of green finance on SME financing

In recent years, China's economy has achieved remarkable results, becoming the second-largest economy in the world. However, long-term reliance on the extensive economic development model has also led to serious problems of environmental pollution and waste of resources. With the environmental situation becoming increasingly severe, the traditional model of sacrificing the environment for economic growth is no longer sustainable. How to balance the contradiction between economic development and environmental protection has become a realistic problem to be solved urgently. As a financial tool to promote the coordinated development of the economy and environment, green finance is being widely used. The report to the 19th CPC National Congress made it clear that a market-oriented green technology innovation system should be built, and green finance should be developed [3]. In March 2021, the National People's Congress further stressed in the 14th Five-Year Plan that people should adhere to the development concept of "clear waters and lush mountains are gold and silver mountains", accelerate the development of green finance, and support green technology innovation. Obviously, the development of green finance has become an important measure to promote green technology innovation and sustainable development [4].

In the process of promoting green economic development, green finance has played a key role. Existing research focuses on the impact of green credit policies and green bond policies. By adjusting the allocation of bank loans, green credit policies promote the green transformation of enterprises, while forming financing constraints on high-polluting enterprises; Green credit policies help to optimize the economic structure and achieve a win-win situation for both the economy and the environment; The issuance of green bonds can improve the market liquidity of enterprises, enhance their environmental performance and get positive feedback from the market [5].

The impact of green finance on the financing of SMEs is increasingly emerging, especially in the context of promoting environmentally friendly industries and sustainable development. Green finance not only provides SMEs with new financing opportunities but also enhances their market competitiveness and social responsibility. Specifically, green finance impacts SME financing in the following ways [6].

3.1. Providing new financing channels

With the rapid development of green finance, more and more banks and financial institutions have launched financing instruments such as green loans and green bonds to specifically support projects such as environmental protection and clean energy.

In recent years, the number of green investment funds has gradually increased, focusing on areas such as environmental protection, energy transition, and climate change. SMEs will be able to attract investment from green funds if they meet green criteria. These funds not only provide financial support but may also bring technical guidance and market expansion opportunities.

Supply chain finance and carbon trading markets: Green finance also provides more flexible ways for SMEs to raise finance. For example, through supply chain finance, some SMEs can access financial support through green partnerships.

3.2. Reducing financing costs

As SMEs generally face higher financing costs, green certification can help companies demonstrate their commitment to environmental protection and sustainable development, resulting in lower financing costs. Financial institutions believe that green projects have higher long-term returns and stability, so they tend to offer more competitive lending rates or other favorable terms [7].

The Chinese government provides subsidies, loan guarantees, and preferential tax policies for green projects, effectively reducing financing costs for small and medium-sized enterprises. The government's financial support and guarantee policies for green enterprises have helped banks reduce the risks of lending to SMEs, thus enabling banks to provide loans at lower interest rates [8].

3.3. Enhancing market competitiveness

As consumers become more concerned about environmental protection and sustainability, green finance provides an opportunity for SMEs to highlight their environmental image. Through green certification or access to green finance support, companies can not only enhance their brand image but also attract socially responsible consumers and investors and enhance their market competitiveness.

More and more investors are incorporating environmental, social, and governance (ESG) factors into their investment decisions. By adopting green financial products, SMEs are able to attract green investors with long-term investments, further broadening their access to finance [9–11].

3.4. Promoting technological innovation and sustainable development

Green finance provides strong financial support for small and medium-sized enterprises in the fields of environmental protection, renewable energy, energy conservation, and emission reduction. Many SMEs face high technology research and development costs in the initial stage, and the support of green finance helps them better carry out technological innovation, upgrading, and product research and development.

SMEs in traditional industries can get financial support through green finance to help them in their green transformation. Financial support not only promotes industrial upgrading but also improves resource utilization efficiency, reduces environmental impact, and gradually achieves green development.

3.5. Enhancing social responsibility and risk management

Green finance focuses not only on economic returns but also on social and environmental sustainability. SMEs that participate in green finance activities not only receive financial support but also enhance their sense of social responsibility, which can help drive companies to achieve long-term sustainable development.

Green finance policies and green rating systems can help SMEs identify and manage environmental and social risks. Through green risk control system assessment projects, financial institutions can help enterprises identify potential risks in advance, thereby strengthening risk prevention and management.

Overall, green finance provides new financing channels for SMEs, reduces financing costs, promotes technological innovation and green transformation, and enhances enterprises' market competitiveness and social responsibility. Despite this, green finance still faces challenges such as standardization issues and inadequate information disclosure. With the further improvement of policies and the continuous development of the green finance market, green finance will provide support for more SMEs in the future and help them achieve better development in the process of green transformation.

4. Suggestions

First, in the initial stage of green finance development, it is necessary to strengthen policy support to promote substantive innovation. At present, China's green finance is still in its infancy, although some progress has been made, but in promoting enterprise innovation, green finance is more of a strategic innovation than a substantive innovation. Many companies still view green finance as a tool to obtain financial support, rather than as a core driver for long-term sustainable development. Therefore, the government needs to further increase its support for green finance, improve the efficiency of the use of funds, and build a long-term and effective mechanism for green finance development by improving the policy framework. Only in this way can enterprises be guided to shift from superficial green strategies to deeper green technology and management innovation, thus ensuring that green finance can achieve sustainable and healthy development in the future [10].

Second, optimize the allocation of green finance resources and strengthen support for corporate innovation. In order to effectively promote green innovation by enterprises, the government should strengthen the protection of intellectual property rights and improve relevant laws and regulations. In particular, credit restrictions for private enterprises in green projects should be lowered to provide a more relaxed external environment for green innovation. At the same time, during the implementation of green finance policies, resource allocation should be dynamically adjusted according to market changes, and the intensity of environmental penalties and incentives should be flexibly adjusted to ensure their precise delivery at different stages of development. In addition, the government should strengthen its financial support for heavily polluting enterprises, especially those that intend to transform and upgrade, by providing them with more financing opportunities and policy support, so as to avoid excessive punishment leading to the loss of motivation and opportunities for enterprises to transform.

Third, the government should accurately identify innovative green enterprises and enhance the effectiveness of policy support. While encouraging enterprises to make green innovations, the government needs to improve its ability to screen and identify green innovative enterprises. For those enterprises with genuine green innovation potential, the government should increase policy preference and support to ensure that green financial resources flow to the projects and enterprises with the greatest potential. Through precise identification and support, green finance can better promote the sustainable development of enterprises and provide the necessary funds and policy guarantees for true green innovation. Such differentiated policy support can not only enhance the innovation capability of enterprises but also ensure the optimal allocation of green finance resources [11].

Fourth, government interventions can ease financing constraints for SMEs. Government intervention can effectively ease the constraints faced by SMEs in the financing process, especially in the process of green transformation. By setting up special financing guarantees and providing financial subsidies, the government can help SMEs improve their credit level and reduce financing risks [12]. For example, some countries have set up special green loan programs specifically to support SMEs' investment in green projects. This not only provides financing support for SMEs but also facilitates their smooth development in green transformation by reducing financing costs and risks. Therefore, the government's role in green finance is crucial, especially in facilitating SMEs' access to green financial support [13].

As green transformation gradually becomes an inevitable choice for the development of SMEs, the financing needs of enterprises are undergoing profound changes [14]. Therefore, in the future, it is necessary to further increase the market penetration rate of green financial products, promote the innovation and market expansion of green financial instruments, and ensure that more SMEs can benefit from green transformation and sustainable development.

Disclosure statement

The authors declare no conflict of interest.

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