



Research on the Development Status, Problems, and Optimization Path of Green Finance in Commercial Banks

Jianhong Shang^{1,2,*}

¹Linyi University, Linyi 276000, China

²Center for International Education, Philippine Christian University, Manila 1004, Philippines

*Corresponding author. E-mail: Shangjianhong@lyu.edu.cn;

Abstract: With the green economy gradually becoming the trend of global economic development, green finance has also risen to China's national strategy and become a new blue ocean business for the future development of commercial banks. The development of green finance not only plays an obvious role in improving economic efficiency and realizing the transformation and upgrading of industrial structure, but also plays a great significance role in environmental protection, and realize the harmony and unity of man and nature, which is an important initiative to realize the progress and development of the country. The article firstly points out the problems in the process of green finance development, and analyzes the challenges faced in the process of green finance development. Finally, the article gives the optimized ways for commercial banks to develop green finance from four perspectives, such as learning international law governance experience, introducing the Equator Principles for project evaluation, improving policy support, strengthening government guidance, strengthening product research and development and innovation, and attaching importance to talent cultivation, so as to provide a reference for China to further promote green finance and achieve high-quality development.

Keywords: commercial banks, green finance, current situation and problems, development paths

Introduction

Luo Shiyi, Qian Lihua, and Wang Yifeng (2017) pointed out that a relatively complete green finance business management system needs at least five pillars: establishing green finance strategy and planning, building a professional organizational structure, improving the constraint and incentive mechanism, carrying out product and service innovation, and constantly strengthening the professional capacity building of green finance.^[1] Liu Xiaoyu (2018) pointed out that the development of green finance business should be promoted by actively cultivating green finance professionals and building a professional team.^[2] Wu Huiming (2019) pointed out that the risk control of green finance business should be strengthened through qualitative and quantitative methods to improve the accuracy of risk judgment results.^[3] Li Xiaodan (2020) pointed out that laws and regulations should be established and improved at the government level, and a green finance information sharing platform should be built.^[4] Zheng Jianhui (2022) pointed out that the allocation function of green financial resources should be optimized through digital transformation to realize the transformation and development of green finance.^[5]

Green finance is defined as financial activities that actively provide financial services to industries in relevant environmental fields which from the perspective of solving environmental problems and protecting the environment. The green finance business carried out by commercial banks refers to the areas of combating climate change, supporting environmental improvement and enhancing resource utilization. The development of green finance is beneficial to the creation of environmental benefits, which is conducive to improving the quality of the environment, increasing the efficiency of resource utilization, and coping with the impacts of climate change. With the development of green finance programs, the variety of green finance products is getting richer and richer, and the current products include green credit, green bonds, and green stocks. At the same time, the scope of green finance is not limited to financing activities, but also includes related risk management activities and related financial operations.

The green financial business of China's commercial banks is still relatively late in the real development process, and it is still in the primary stage of the business, with huge market potential in the future. The study of commercial banks to carry out green financial business can help to practice the national strategy, guide enterprises to reduce energy consumption and pollution, and realize the transformation and upgrading of industrial structure. At the same time, it can realize the risk management ability and profitability of commercial banks, create greater economic benefits, and realize the long-term development of commercial banks.

1. Current status of green finance development in commercial banks

The process of green finance in commercial banks in China is relatively late, the lack of relatively perfect supporting legal



policies and related management experience, but following the development of recent years, the status quo has been gradually improved, mainly presenting the following aspects of the characteristics.

(1) Overall solid growth in the scale of green credit business

Relying on the rapid economic growth and the strong support of the national green financial policy, the overall scale of green credit of China's commercial banks has grown rapidly. Data from the People's Bank of China shows that as of the end of the third quarter of 2023, the balance of local and foreign currency green loans in China amounted to 28.58 trillion yuan, an increase of 36.8 percent year-on-year, higher than the growth rate of all loans by 26.6 percentage points, and an increase of 6.98 trillion yuan from the beginning of the year*. This shows that the scale of green credit has shown high growth.

(2) Large room for development in innovative green financial products

In terms of product variety, there has been a shift from purely green financial products to a diversified range. Because of the vigorous development of green loans, products such as green bonds and green insurance are also being piloted. However, there is a large gap in the scale of green credit among commercial banks. In terms of the scale of green credit, from the data of the annual report of listed banks 2022, green credit is still dominated by large state-owned banks, with a high degree of concentration. The largest scale of green loan program is dominated by national joint-stock commercial banks, among which Industrial Bank, Pudong Development Bank, China Merchants Bank and Huaxia Bank have a larger scale, but the scale of green loans of city commercial banks and agricultural commercial banks is relatively low.^[6] The development of green finance scale among commercial banks is not balanced.

(3) Initial formation of a green financial development pattern

Finance is the bloodline of the national economy. Under the leadership of the central bank, green finance-related departments have carried out a series of pilot projects, forming a green finance system led by the People's Bank of China with the active participation of commercial banks. The mechanisms that have been established, including green financial standard system, financial institution supervision system, information disclosure mechanism, financial market system, and green financial international cooperation mechanism, with the support of this relevant mechanism and system, the development of green finance business has been continuously enriched and improved.

2. Problems in the development of green finance

(1) Inadequate product mix and lack of innovation

At present, green credit is developing rapidly in terms of overall scale, but in terms of business development, it mainly focuses on green loans, and is in the exploratory stage in terms of carbon financial derivatives, green asset securitization, green trust, and other businesses. When providing green credit services to enterprises, mainly mortgage loans are the mainstay, with a single form of loan, especially in the research and development of personalized products, which is not advantageous. The product homogenization of major banks is serious, whether it is green loans or green bonds, and customers have fewer choices in customized products.

(2) Inadequate risk management capacity

China's commercial banks green financial business is in the early stage of development, the project in the investment cycle on the long time, the cost of capital investment, the speed of payback is slow, and green credit services to enterprises gradually by large central enterprises, state-owned enterprises to small and medium-sized enterprises to change, facing the business risks are also gradually increasing. The development of green credit is insufficiently specialized in risk assessment and other aspects due to the lack of a professional risk management talent team. Overall, the system of risk management is immature.

(3) Inadequate supporting policy measures

Green finance is a multi-disciplinary business that has emerged in recent years. In the early stage of business development, the overall quality of assets is good, but the prevention and control of risks still need to be strictly controlled. In terms of specialties, green finance involves disciplines such as engineering, environmental protection, finance, law, finance, and taxation, etc., which requires a very high level of professional ability, talent reserve and technical content of commercial bank practitioners. In terms of credit risk prevention and control, the business objects are new energy industry enterprises, construction industry enterprises, etc. In the process of carrying out the project, the enterprises have a large demand for capital and a long time of capital occupation, and the commercial banks first put in and advance the human and financial costs, so most of the green financial business has a long cycle of sustained economic returns, and the overall level of returns is on the low side. In terms of development scale, green credit lacks scale effect, external incentive policies are relatively scarce, and there is a lack of disclosure of key information such as carbon emissions from green projects, leading to the occlusion of commercial banks' information and data, and the corresponding business risks increase.

(4) Lack of green finance professionals

First, the scarcity of financial professionals. Professional financial talent is the basic conditions of green financial practitioners, in recent years by the social environment, financial professionals are increasingly scarce. Secondly, there is an obvious lack of financial composite talents. Green finance has a strong interdisciplinary nature, there is an urgent need for more composite talents familiar with finance and environmental protection, while the current development of green

* Data from People's Bank of China statistics, <http://www.pbc.gov.cn/>

finance-related specialties in domestic colleges and universities is in its infancy and has not yet matured. Therefore, many commercial banks lack of green financial composite talents, for the follow-up to carry out green projects and other aspects of the existence of greater difficulties.

3. Optimizing pathways

(1) Learning from international law governance experience and introducing the Equator Principles for project evaluation. The Equator Principles are internationally advanced, non-compulsory international practices and standards for international financial institutions to assess the environmental and social risks of project financing, and many countries have participated in the Equator Principles to mitigate the risks involved in project financing.^[5] The introduction of the Equator Principles is of great significance for conducting risk assessment of projects, reducing the risk of environmental financing, and improving corporate social responsibility regarding green finance. The Equator Principles and the Social and Environmental Sustainability Policy and other international laws and policies provide relevant legal guidelines for China to carry out green finance, and according to these international laws and regulations, commercial banks will strictly follow the review standard system of international law when they carry out green credit granting business, and the standard will be further improved.^[7] The improvement of standards is very helpful in preventing social and environmental risks in the process of green credit business. However, there are only four commercial banks that have introduced the Equator Principles in China, and Industrial Bank has actively taken the lead in the implementation of the Equator Principles and is the first bank to implement the Equator Principles in China. Industrial Bank has repeatedly promoted the application of the Equator Principles as a representative of commercial banks, realizing the integration and application of green finance in the development of various regions, and being able to regulate the environmental responsibility of commercial banks in various aspects.

(2) Improving policy support and strengthening government guidance

First, improve green finance-related laws and policies. Government departments should improve green finance laws and regulations and refine implementation methods.^[8] Legal departments should legislate as soon as possible to establish unified assessment standards and mechanisms for information sharing, such as joining the Equator Principles assessment system as soon as possible, so as to have complete policy guidance for the assessment of green credit business. Second, the competent departments should strengthen supervision, give full play to the overall function of the central bank, establish a smooth cooperation and exchange mechanism among departments, establish a platform for information sharing among commercial banks, major risk assessment organizations and the Green Finance Committee, and strengthen the division of labor and cooperation among departments. Third, improve the incentive mechanism and select organizations for pilot projects.^[9] Establish a big data sharing mechanism, set up a national big data sharing platform for green credit, and break down the data and information barriers between commercial banks and major financial institutions. An open and shared credit platform should be established, and government departments should provide policy incentives to institutions that actively participate in the project, offering certain tax incentives and subsidies, so as to widely mobilize commercial banks to carry out green financial business.

(3) Strengthening product development and innovation

In the face of the current situation of a single category of green financial products of domestic commercial banks, major commercial banks should strengthen the research and development and innovation of products as soon as possible, and make articles on the quality of products.^[10] In terms of product innovation, Bank of Qingdao and Bank of Rizhao are actively in the forefront. Bank of Qingdao launched the first green supply chain financial product "Carbon E Loan", which provides green supply chain financial loans to upstream suppliers of green core enterprises certified by China Union Certification Center. Since the launch of this business, its business scenarios have covered a variety of industries such as rail transportation, new energy vehicles, and information technology equipment. Bank of Rizhao actively builds a special brand of "green finance". It took the lead in issuing 3 billion green bonds in the city, and used all the funds raised from the bonds for six major green industry projects. The bank has launched the "Green Carbon Loan" featured credit product, which is aimed at environmental protection, energy saving, clean energy, green transportation, green building, ecological carbon sequestration, technological carbon sequestration and other fields to carry out the green and low-carbon science and technology enterprises or eligible non-science and technology small and medium-sized micro-enterprises, and issues credit or investment loans to support enterprises to reduce and control carbon emissions, or to increase and promote the absorption of carbon emissions. Issuance of credit or integrated carbon financial service program for supporting enterprises to reduce and control carbon emissions, or increase and promote carbon absorption through investment and loan linkage support. Bank of Rizhao has newly implemented the integrated credit model of "supply chain finance + green finance" in the region, actively providing financial support for green projects in new fields. Services provided by Bank of Rizhao include traditional working capital loans, project financing, syndicated loans, and supply chain finance. As of November 2023, Bank of Rizhao has invested more than RMB 100 billion in supply chain finance.

(4) emphasizes talent development

At present, the number of commercial bank financial practitioners is relatively large, but mostly product credit managers, in comparison, commercial banks green financial product development and operation, environmental risk assessment and other professionals are scarce, which need to strengthen the construction of specialized composite talent team.^[10] First, commercial banks should actively introduce cross-border composite talents, strengthen the construction of specialized composite talent team, introduce professionals and professional research teams related to green finance, especially the

introduction of professionals related to the environment, energy, chemical industry and so on.^[11] Secondly, commercial banks should strengthen exchanges and cooperation among themselves, among various industries, and with their foreign counterparts, actively participate in global industry-leading conferences related to green finance, digital finance, and supply chain finance, expand their own industry influence and sub-comprehensive strength, and actively learn from external experts about international advanced principles of assessing ecological and environmental protection projects, so as to continuously improve their professional knowledge.

4. Conclusions

In summary, green finance has made great progress in recent years, but there are still problems such as imperfect product structure, insufficient risk management capacity, imperfect supporting policies and measures, and lack of green finance professionals. By learning international law governance experience, we introduce the Equator principle for project evaluation and improve policy support. Strengthen government guidance, strengthen product research and development and innovation, pay attention to personnel training and other measures to solve these problems in the development of green finance, the development of green finance under the background of double carbon exhibition is getting better and better.

References

- [1] Luo Shiyi, Qian Lihua, Wang Yifeng. Five pillars are needed for banks to build green finance business management system [J]. *China Banking Industry*, 2017(01): 27-29.
- [2] Liu Xiaoyu. Research on green finance business of commercial banks [J]. *Finance Theory and Teaching*, 2018(04): 38-39.
- [3] Wu Huiming. Research on the development strategy of green finance business of commercial banks [J]. *China Business Theory*, 2019(13): 40-41.
- [4] Li Xiaodan. Research on Constructing China's green financial system [J]. *Financial and Economic Circle*, 2020(07): 3-4.
- [5] Zheng Jianhui. Research on digital transformation of green finance in Chinese commercial banks [J]. *Green Economy*, 2022(09): 69-80.
- [6] Zhang Jiguang, Chen Zhouji, Fu Jiafan. Challenges and Countermeasures of Commercial Banks in Developing Green Finance [J]. *Commercial Bank*, 2022(12): 64-67.
- [7] He Wenmao. Reflections on the high-quality development of green finance in commercial banks [J]. *Finance and Finance*, 2022(33): 53-55.
- [8] Liu Yu. Analysis on the development path of green finance of commercial banks under the goal of carbon neutrality [J]. *Fujian Finance*, 2021(07): 37-40.
- [9] Liu Fang. Exploration of Commercial Banks to Enhance the Quality and Efficiency of Green Financial Services under the Goal of "Double Carbon" [J]. *Modern Business Industry*, 2022(22): 153-154.
- [10] Ding Ning. Exploration of green financial development of commercial banks under the goal of "double carbon" [J]. *Cooperative Economy and Technology*, 2023(06.047): 78-79.
- [11] Zeng Lingmin. Current Situation and Challenges of Developing Green Finance in China's Commercial Banks [J]. *Business and Exhibition Economics*, 2022(24): 70-72.