Research on the Green Finance Development Model of Commercial Banks Based on FinTech

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Abstract: Since the 1990s, despite the rapid development of China’s economy, environmental pollution and ecological imbalances have become more and more serious. Fintech financial development technology is a financial-related concept in recent years, which has a huge effect on the research of commercial banks to realize the national green finance operation mechanism and effect evaluation. This article mainly studies how Industrial Bank can better improve the green credit risk management system in the context of FinTech, and also learns from Industrial Bank’s risk management of green credit, provides suggestions for the development of green credit risk management in the banking industry, and promotes modern green, and the development of credit risk management system construction.

Keywords: Sustainable Green Finance; Chinese Commercial Banks; Financial Technology

1. China’s green finance development

As early as 1981, China’s “Decision of the State Council on Strengthening Environmental Protection Work during the Period of National Economic Adjustment” stipulated several policies for using economic levers to protect the environment. In 1992, the “Top Ten Countermeasures for China’s Environment and Development” clearly pointed out that with the deepening of the economic system reform, the market mechanism has become more and more powerful in the regulation of China’s economic life, and the corporate management mechanism is gradually changing. Therefore, governments at all levels should use more economic means to achieve the purpose of protecting the environment.” Subsequently, the use of economic policies to protect the environment and promote corporate green innovation has gradually become a trend. The China Banking Regulatory Commission is one of the main promoters of the development of green credit business by banking financial institutions. It has successively issued the “Green Credit Guidelines”, “Guiding Opinions on Energy Conservation and Emission Reduction Credit Work”, and “Notice on Investment and Financing Policies and Measures to Support the Development of Circular Economy” and other documents[1].

2. The current status and deficiencies of green finance in Chinese commercial banks

From the relevant development experience of China’s leading banks, green financial instruments include green credit loans, insurance services, securities funds and other products. However, a relatively complete policy system has only been formed in the field of green credit in China.

In 2007, China began to implement a green credit system to curb the blind expansion of industries with high energy consumption and high pollution. Although some phased and local achievements have been made, due to some short-
comings of the green credit policy itself, there is still a long way to go compared with the expected goals.

Firstly, due to the lack of incentives, it is difficult to effectively attract commercial banks to support environmental protection projects. In order to avoid risks, if the bank lends to polluting companies, if the company is investigated and punished by the environmental protection department, it means that the company may be severely punished economically, or even stop production or shut down, then bank loans will face the risk of loss. In order to avoid its own risks, the bank will actively cooperate with the environmental protection department and refuse to provide funds to polluting companies.

Secondly, commercial banks lack effective management processes, environmental information between various departments is not clear, and lack of information transmission mechanisms, which affects the implementation effect and supervision and management of green credit to a certain extent.

Finally, China’s existing economic policies and related access standards for environmental technology industries can no longer adapt to the development of the times and cannot meet the increasingly important environmental protection needs. In order to avoid credit risks and ensure the achievement of operating profit targets, some banks tend to relax their standards and act flexibly, making it difficult to fully implement green credit policies.

3. Examples of green finance of commercial banks based on FinTech

3.1 Zhongxing Bank

In 2009, China’s first professional green finance marketing agency came from industrial bank, whose main purpose is to monitor and manage the environmental risks of enterprises. Its responsibility is to convene banks to conduct detailed pre-financing inspections on the environmental issues of corporate loan projects, investigate and summarize the performance of enterprises in environmental protection, check the environmental risk control of enterprises, and provide green credit financing services for companies in these projects. Tell them how to better manage their risks. At the same time, in order to better develop green credit, industrial bank cooperated with software developers to develop and launch an electronic network platform for environmental and risk management, while optimizing its own green credit risk management system. Subsequently, in 2012, in order to better develop the green credit business, the Industrial Bank established the Sustainable Development Finance Department of Industrial Bank and established its own financial team to uniformly manage the marketing management, technical parameter support management and risk control of product design. This series of measures has accelerated the development of sustainable financial services.

Industrial Bank has established a set of environmental and social risk management procedures based on the valuable experience of domestic advanced green credit business and in accordance with national laws and regulations. The Industrial Bank conducts overall planning for the three stages of pre-loan, in-loan, and post-loan, continuously strengthens pre-loan investigations, and requires companies to meet the relevant requirements of the environmental protection department in the early stages of production, including pollution discharge and social performance investigations. This stage is an intermediate stage and needs to be taken seriously by bank personnel. For post-loan tracking management, bank credit personnel are required to timely check and summarize the business status and environmental friendliness of the enterprise, and find problems. In addition, banks should always monitor the risks of loan companies in the two high-level industries to detect and deal with risks before they occur, avoid losses to the environment, enterprises and banks, and ensure the implementation of green credit policies. As a model for commercial banks to develop green credit business, Industrial Bank took the lead in collecting and establishing a bank of environmental and social risk experts related to the banking industry, and improved the green credit risk management process from many aspects.

3.2 Other banks

First of all, ICBC took the lead in clarifying the concept of China’s “green credit” construction. In 2010, it further clarified the connotation, work objectives and principles of green credit, and achieved full coverage of the entire credit
process by green credit management. ICBC has also formulated and improved the “green credit” policy and system, combined with national environmental protection policies and industry characteristics, and put forward targeted industry green credit standards and environmental risk management requirements as one of the core contents of the bank’s industry credit policy. Guide and promote the “green adjustment” of the bank’s credit. Since 2008, ICBC has continuously improved the classification standards of green credit for corporate loans on the basis of learning the Equator Principles and the performance standards and guidelines of the International Finance Corporation. It has comprehensively classified and managed the environmental risks of all corporate customers, and established and formed coverage the bank’s green credit risk monitoring system promotes the legal compliance and steady operation of the bank’s credit business. At present, ICBC’s corporate loans are divided into four levels and twelve categories according to the green credit standards. The four levels are friendly, qualified, observation and rectification, and the twelve categories include friendly category I (ecology protection category) and friendly category II (clean energy category), friendly category three (energy saving and emission reduction category), friendly category four (resource comprehensive utilization category), qualified category one, qualified category two, qualified category three, observation category one, observation category two, rectification category one, rectification category two and three types of rectification. Relying on the green credit classification system, ICBC classifies every corporate loan as “green”, so that the entire bank’s credit is invested in environmental protection and environmentally qualified enterprises. Third, ICBC has strengthened the organization and management of risk prevention and control in the field of green credit. In response to the various processes and links of the credit business, ICBC has put forward specific management requirements for strengthening the monitoring, identification, control and resolution of environmental and social risks, formulated strict green credit audit standards and procedures, and strictly implemented the “environmental protection one-vote veto system.” Guide enterprises to increase awareness of energy conservation, emission reduction and environmental compliance. At the same time, ICBC has also improved the environmental risk monitoring and prevention and control mechanism responsible by the head office and branches, formulated a post-loan environmental risk prevention and control system for environmentally sensitive industries, paid close attention to national environmental protection industry policy developments and related environmental risk information, and strengthened tracking and monitoring. And risk early warning to realize the whole process management and control of environmental risks. At present, ICBC is vigorously promoting the innovation of green financial products such as carbon factoring and energy efficiency loans based on the characteristics of green emerging credit markets such as energy conservation, environmental protection and circular economy. At the same time, encourage innovative energy saving and emission reduction models, vigorously promote low-carbon and environmentally friendly green financial services, and create environmentally friendly “green banks”. More importantly, ICBC is also actively cultivating green emerging credit markets such as energy conservation, emission reduction, and circular economy in combination with national industry and environmental protection policies.

4. Thinking about the case

4.1 Strengthen the role of government performance appraisal and incentives

It is necessary to implement the government performance evaluation mechanism for the local leader “green GDP” to strengthen the government’s green development momentum; to continue to increase environmental protection inspections, increase accountability and punishment, and increase the cost of violations; second, it is necessary to improve laws, regulations, and rules, and clarify financial institutional responsibility. For example, in July 2018, the Central Bank formulated the “Green Credit Performance Evaluation Plan for Banking Depository Financial Institutions (Trial)”, which included five quantitative indicators for green credit performance evaluation (including the proportion of green loan balance, the proportion of green loan balance, the evaluation results of the increase in the proportion of green loans, the year-on-year growth rate of green loan balances, and the green loan non-performing rate) were included in the macro-prudential (MPA) assessment of depository financial institutions in the banking industry. Third, we must give play to the guiding role of fiscal finance in green investment. It is necessary to establish a “green re-lending”
tool, add “green” elements to the targeted RRR cut, include green credit assets in the scope of qualified collateral for bank refinancing, promote financial institutions to open up “green channels” for green projects, and earnestly implement incentive incentives mechanism to guide financial resources to tilt towards green industries.

4.2 Banks should establish three lines of defense and fully participate in the construction of green credit risk management and control from multiple angles

The first line of defense: add a parallel position in the front office business department, namely green credit risk management. For public credit business, after the account manager completes the pre-loan assessment, the account manager will apply for credit according to the following process: the account manager completes the survey and the credit risk manager checks, the credit risk management team leader reviews, and then the branch business leader will submit to the approval department. The second line of defense: the green credit management department has improved the green credit risk management system while identifying and evaluating risks. The third line of defense: the audit department is responsible for ensuring the implementation of the risk management policy, the summary of the policy implementation and the feedback to the relevant departments. Establish a corporate governance system for risk decision-making and reduce the phenomenon of individuals replacing collective decision-making. Continuously improve the bank’s evaluation of customers, strengthen the quality of green credit management for credit managers, conduct regular training and testing, conduct comprehensive and detailed inspections and evaluations of customers’ financial level, operating conditions and environmental pollution, and establish reward and punishment mechanisms. Monitor and improve the level of customer evaluation.

With regard to the economic policies and related access standards of China’s existing environmental technology industries, China needs to incorporate advanced international experience, such as green credit business guidelines in developed countries, and needs to formulate and issue green credit business standards that are in line with China’s actual conditions. The center of green credit business standards is loan customers. China’s green business access standards can start with target customers, and the standards must be formulated by the government. The content includes detailed classification of bank financing areas and target customers. From the perspective of target customers, managing different companies according to standards and achieving standardization is conducive to information acquisition. By learning from western countries, we can learn from their risk management and control systems, business approval mechanisms, business decisions, etc., and formulate reasonable rules based on our own actual conditions. Relevant units should take into account the actual conditions of China’s large and medium-sized enterprises and private enterprises, appropriately raise China’s credit standards, strengthen the management and control of green credit, strengthen the control of financing business, enhance the self-prevention awareness of credit project providers, and ensure the financial market steady development.

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