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Original Paper

Study on the Development of Green Transformation and Development of Commercial Banks in the "Double Carbon" Background

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Abstract

China has pledged to achieve carbon neutrality within 30 years, which is half the time frame of major European countries. The task is urgent, and the challenges are unprecedented. The goals of carbon peak and carbon neutrality will promote a comprehensive upgrade of the national economic industry structure, compelling Chinese enterprises to seek a path of high-quality development. This poses new challenges to the operational and managerial capabilities of commercial banks. This paper reviews the current domestic and international research status, analyzes the opportunities and challenges faced by commercial banks under the context of the "dual carbon" goals, and further explores the transformation strategies for commercial banks under this context.

Keywords

"Dual Carbon", commercial banks, transformation and development

1. Introduction

On September 22, 2020, Chinese President announced at the 75th United Nations General Assembly that China strives to peak its carbon dioxide emissions before 2030 and aims to achieve carbon neutrality by 2060. The goals of carbon peaking and carbon neutrality (hereinafter referred to as "Dual Carbon" goals) are significant economic strategic decisions announced to the world by the Central Committee of the Communist Party of China. They represent a crucial step for China to enter a new development stage, implement a new development concept, build a modern economic system, and establish a new development paradigm. These goals are instrumental in driving forward the high-quality development of

China's economy and society. Over the next 30 years, all sectors of China will work together under the guidance of the Central Committee to achieve the objectives of the Dual Carbon strategy.

Among the various socioeconomic forces striving to achieve the Dual Carbon goals, commercial banks will play an exceptionally significant role. Commercial banks need to orient their transformation and development towards the ultimate goal of high-quality socioeconomic growth. Anchored in the phased objectives of the "Dual Carbon" economy, based on the current status and realistic potential of commercial bank development, efforts should be directed towards establishing a long-term and stable carbon financial management system and mechanisms that support carbon economy development. Under the goals of self-imposed carbon emission reduction, China needs to gradually reduce the proportion of high-pollution, high-energy consumption, and high-emission industries in the economy. This involves promoting economic, industrial, and energy structural transformation and upgrading, strengthening green technological innovation, vigorously developing clean energy, and advancing high-quality economic growth. Furthermore, commercial banks are required to contribute significantly to energy-saving and emission reduction through tasks such as supporting industrial upgrades for reduced emissions, backing green and low-carbon projects, and participating in carbon emission trading. According to forecasts by the China International Capital Corporation Research Institute, achieving the ultimate goal of carbon neutrality in China will require an average annual investment of up to 3.5 trillion yuan in green initiatives over the next 40 years.

As a central component of the financial system, commercial banks must proactively respond to new challenges and provide high-quality, efficient, and low-carbon financial supply and services to facilitate the realization of the Dual Carbon goals. Under the backdrop of the Dual Carbon objectives, the transformation and development of commercial banks are directed towards the development of a low-carbon economy. This involves capitalizing on the practical possibilities within the financial industry, aligning with the vision of a low-carbon economy, and proposing a transformation strategy for commercial banks. This strategy aims to establish a system and mechanism conducive to achieving triple-win outcomes for the economy, environmental protection, and finance. It seeks to create a sustainable mechanism for low-carbon economic development and a conducive institutional framework for commercial bank development. This approach not only conforms to the historical logic of economic development but also aligns with the objective laws of economic growth. It reduces the cost of transitioning towards a low-carbon, high-quality economy and facilitates commercial banks in better promoting high-quality economic development while supporting the growth of a low-carbon economy.

2. Literature Review

Christopher A. Pissarides proposed that commercial banks should seize the opportunities under the carbon neutrality goals and vigorously promote green finance. Green finance is an extension of traditional finance, with characteristics of mobilizing idle funds in society and channeling them into sectors and regions in need of capital. However, its introduction changes the past development model of traditional finance that solely pursued economic growth while neglecting environmental protection. Green finance emphasizes the protection of the environment and ecological resources in financial business development, incorporating them into the evaluation criteria system. Its purpose is to achieve reduced environmental pollution, ecological protection, and sustainable socioeconomic development.

Albert Alesina suggested that commercial banks should actively engage in and lead the formulation of international rules for developing green finance. They should update these rules in a timely manner based on social needs, establish standardized operational procedures, and meticulously adhere to relevant regulations. Environmental, social, and governance (ESG) standards should be emphasized. This involves not only requiring loan clients to comply with ESG standards but also stipulating that financial products provided to clients must meet ESG standards. Commercial banks should actively participate in market transactions and prioritize new product development to achieve business expansion and banking profitability goals, while simultaneously achieving energy-saving and emission reduction objectives and integrating economic and social responsibility objectives.

Lü Xuedu (2021) pointed out that green finance is a key focus during the 14th Five-Year Plan period in China. It requires further improvement of the green finance standards system, enhanced information reporting and disclosure, comprehensive integration of climate change factors into policy frameworks, and inclusion of climate risk factors in investment risk management. “Carbon finance” serves as a breakthrough point for climate finance, promoting the in-depth development of green finance.

Luke Fei (2021) proposed that by strengthening energy consumption and emission management at the enterprise level, establishing green asset accounts reflecting government, corporate, and individual carbon emissions and carbon assets could provide a better data foundation for the carbon market, set standards for climate investment and financing, and provide tools for carbon neutrality. Carbon peaking and carbon neutrality represent the process of choosing a low-carbon, green, and high-quality development path.

Chen Chong (2021) stated that developing carbon neutrality business is the essential response for commercial banks to seize opportunities and address challenges. It is a necessary requirement for implementing carbon peaking and carbon neutrality goals and a definite choice for fostering new growth drivers. The author emphasized that commercial banks should embark on green transformation from three aspects: strategic vision, operational system (organizational structure, policy system, process management, risk management, capacity building, information disclosure), and product system (retail carbon-neutral products, corporate carbon-neutral financial products, asset management carbon-neutral products). The implementation steps of a carbon-neutral strategy by commercial banks should not only align with their own business development stage but also integrate with the country’s new development pattern.

Scholars both domestically and internationally have asserted that the green transformation of commercial banks is imperative. Currently, among the 224 countries and regions globally, 127 have committed to peaking carbon dioxide emissions and achieving carbon neutrality. Among them, 28 countries and regions have set goals to achieve carbon neutrality around the middle of this century. The pursuit of carbon neutrality will generate a massive demand for green investment, offering prepared commercial banks rapid opportunities for the growth of green financial services.

3. Opportunities and Challenges Faced by Commercial Banks Under the "Dual Carbon" Context

3.1 Development Opportunities

Commercial banks should seize the "golden opportunities" within the framework of carbon neutrality. According to estimates by the Institute of Climate Change and Sustainable Development at Tsinghua University, under the carbon neutrality target, annual additional investment will exceed 2.5% of GDP, and the market space for carbon-neutral finance will amount to trillions of yuan. The Green Finance International Research Institute of the Central University of Finance and Economics released the "China Green Finance Development Research Report (2020)," which indicated that there was a gap of 62 billion yuan in new green funds in 2019, and the demand for green investment and financing continued to grow by trillions of yuan annually. Faced with a trillion-yuan green investment funding gap, commercial banks need to actively participate, manage climate and environmental risks effectively, increase the proportion of green finance businesses, and establish an image of responsible commercial banking. According to the latest data from the People's Bank of China, by the end of 2022, the balance of domestic and foreign currency green loans across the nation reached 22.03 trillion yuan, a year-on-year increase of 38.5%, with a growth rate 5.5 percentage points higher than the previous year. A total of 6.13 trillion yuan in green loans were newly added, placing China at the forefront globally in terms of stock scale. Among them, direct and indirect emission reduction loans accounted for 8.62 trillion yuan and 6.08 trillion yuan, respectively, totaling 66.7% of green loans. The proportion of green loans related to "high energy consumption, high emissions, and excess capacity" increased compared to the previous year. The rapid growth of domestic green credit in 2022 effectively met the financing needs of green and low-carbon economic development and significantly enhanced the financial institutions' ability to serve green economic development.

3.1.1 Increasing Demand for Green Finance

With the growing environmental awareness in society, there is an increased demand for green and environmentally friendly projects from both enterprises and individuals. This presents an opportunity for banks to expand their green finance businesses. Banks can introduce products such as environmentally friendly loans and green bond issuances to meet the sustainability needs of their customers. For instance, banks can offer dedicated environmentally friendly loans to support sustainable development projects such as clean energy initiatives and energy efficiency enhancement projects. These loans can provide businesses with the necessary funds to undergo green transformations. Additionally, banks can assist companies in issuing green bonds, attracting investor funds for environmental projects. This not only provides companies with financing options but also offers investors opportunities to invest in the green economy. Establishing specialized green investment portfolio products that focus on environmental initiatives enables customers to invest in assets with lower carbon emissions and environmental benefits, thereby achieving diversity and sustainability in their investment portfolios.

3.1.2 Innovation and Application of Financial Technology

The goals of carbon peaking and carbon neutrality necessitate innovative financial instruments and services. This provides commercial banks an opportunity to continuously refine their business models and support the development of a low-carbon economy. Firstly, a carbon emissions tracking system can be established. Utilizing technologies such as blockchains, banks can develop systems to track corporate carbon emissions, offering customers real-time environmental data to better manage their environmental impact. Secondly, green digital payment methods can be introduced to incentivize customers to make environmentally friendly consumer choices. For instance, customers could earn points or discounts for using sustainable products during purchases. Thirdly, creating a sustainable investment platform is essential. Developing an online investment platform that allows customers to easily select and invest in green projects while providing information and assessments about these initiatives empowers customers to make informed investment decisions.

3.1.3 New Market Positioning and Business Opportunities

Active engagement in the carbon-neutral economy and the establishment of a sustainable brand image can enhance the competitive advantage of commercial banks in the market. For instance, offering sustainable financial consulting to provide clients with advice on green finance and sustainable investment helps them understand how to achieve better investment returns in the field of sustainable development. Participating in green communities by collaborating with environmental organizations and engaging in community environmental projects demonstrates the bank's sense of social responsibility and commitment to sustainable development, attracting environmentally conscious customers. Employing creative marketing strategies that highlight the bank's leadership in the field of green finance can attract more consumers and investors focused on sustainable development. Moreover, by researching and evaluating climate-related risks, banks can offer risk management and insurance services to support clients when facing climate change and natural disasters. Additionally, banks can develop innovative financial products to meet financing demands in the fields of environmental protection and sustainable development.

In summary, under the backdrop of carbon peaking and carbon neutrality, commercial banks can actively capitalize on the increasing demand for green finance, innovate with financial technology applications, and explore new market positions to gain a competitive edge in the field of sustainable finance. However, while pursuing these opportunities, banks must also navigate the risks and challenges in an evolving environment, ensuring prudent operations and financial health.

3.2 Challenges

China has committed to achieving the "Dual Carbon" goals within 40 years, half the time frame of major European countries. This urgency presents unprecedented challenges. The goals of carbon peaking and carbon neutrality will lead to comprehensive upgrades in the national economic industry structure, compelling Chinese companies to seek a path of high-quality development. Specifically, commercial banks will face challenges related to increased credit risks, heightened regulatory pressures, uncertain investment returns, and the risks of market transformation.

3.2.1 Increased Credit Risks

When providing loans to green and low-carbon projects, banks need to assess project feasibility and environmental impacts more rigorously to avoid the risks of non-performing loans. Moreover, emerging clean technologies may face challenges related to their technological maturity, potentially resulting in investment failures.

3.2.2 Increased Regulatory Pressures

Governments may enhance regulatory requirements for financial institutions' involvement in carbon neutrality. Banks need to ensure the compliance of their operations, adhering to relevant environmental standards and regulations. This might require additional investments and adjustments.

3.2.3 Uncertain Investment Returns

Certain clean energy and environmental projects may not yield the same investment returns as traditional projects in the short term. This uncertainty could impact banks' willingness to participate in these projects.

3.2.4 Market Transformation Risks

The transformation to a low-carbon economy could lead to the contraction of traditional industries, thereby affecting related loans and business. Banks need to exercise caution when financing these industries to avoid risks.

In conclusion, in the context of carbon peaking and carbon neutrality, commercial banks can proactively transform themselves by offering more green financial products and services, fostering sustainable investment, and thereby gaining a competitive advantage. However, banks must navigate risks and challenges in a dynamic environment to ensure sustainable operations and financial health.

4. Transformation and Development Strategies for Commercial Banks Under the "Dual Carbon" Context

Currently, some commercial banks have yet to fully grasp the enormous business opportunities presented by the "Dual Carbon" goals. Therefore, there is a need to enhance the understanding of the rigidity and trends of the "Dual Carbon" objectives. The principle that economics drives finance is an unchanging rule, and the development of finance should align with major trends. Currently, the "Dual Carbon" goals are irreversible trends. As such, commercial banks must adapt accordingly, seize development opportunities, implement proactive strategies, avoid risks associated with lagging behind, and maximize resource utilization during the realization of the "Dual Carbon" goals. Following the standards set by the Equator Principles, banks should regulate their operational management behavior, vigorously engage in agency issuance of green bonds, and actively innovate green financial products to offer preferential financial services to the green industry.

4.1 Expanding Green Finance Business to Meet Low-Carbon Financial Demands

Innovate financing models to promote green financing. Actively engage in carbon asset-pledged financing, energy-saving and emission reduction benefit rights pledged financing, and international carbon factoring financing, among other services. Actively participate in the construction of the national carbon emission trading market, explore products or services such as carbon credit transactions and carbon trading financial advisory, issue wealth management products tied to carbon emission rights, and engage in asset securitization of green credit. Continuously develop new green financial products that cater to the development of the green industry. For instance, develop loans backed by carbon emission rights, forestry rights, low-carbon credit cards, etc.

4.2 Implement Differentiated Credit Policies to Drive Green Technological Innovation

Implement stricter and differentiated credit policies, increase the proportion of green credit, and strictly limit loans related to "high energy consumption, high emissions, and excess capacity." Adjust the focus of new loans to gradually shift toward energy-saving and emission reduction, and carbon sequestration areas. The loan scope should mainly include new energy, intelligent transportation, electrification of transportation, new energy vehicles, green consumption, green construction, green agriculture, and green forestry. Prioritize support for industries such as photovoltaics, wind power, and hydropower. Support research, development, promotion, and application of carbon capture and storage technologies. Participate in national reserve forest projects. Facilitate the transformation and upgrading of traditional industries and strictly control loans for new projects in industries with high energy consumption, high emissions, and excess capacity. For fossil energy and high-carbon industries such as coal and coal-fired power, implement strict loan quota management and reduce credit scale.

4.3 Strengthen Environmental Due Diligence and Establish Comprehensive Risk Management System

Prior to providing loans and financial support, banks need to enhance environmental due diligence for projects, assessing their feasibility and environmental impacts. Establish dedicated environmental due diligence teams and develop standardized environmental assessment processes to ensure project sustainability and minimize environmental risks. In the context of carbon neutrality, financial regulatory authorities' requirements for green finance are becoming increasingly stringent, and commercial banks are also enhancing their focus on climate risks. Banks should proactively assess the exposure of assets in high-risk areas related to climate and environment, and conduct climate and environmental stress tests and scenario risk analyses. Scientifically quantify asset risks caused by climate change and actively employ effective risk hedging measures to manage climate and environmental risks. Utilize credit risk monitoring systems to enhance risk monitoring capabilities. Banks should integrate climate and environmental risk management into their overall business strategies and decision-making frameworks, gradually establish and improve policies, systems, and management processes related to climate and environmental risk management, build a comprehensive climate and environmental risk management system, and continuously enhance the bank's climate and environmental risk management capabilities.

Fund Project

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References

Chen, J. R. (2023). Comparative Study of ESG Evaluation between China and Foreign Countries under the “Dual Carbon” Background—Taking Chinese Commercial Banks as an Example. *Hainan Finance*, *2023*(6), 26-32.

Chen, Z. F. (2023). Analysis of the Development Path of Green Finance for Commercial Banks under the “Dual Carbon” Goal. *Business and Exhibition Economy*, *2023*(6), 110-112.

Lei, P., & Ji, H. (2022). Research on Methane Control Strategy for Commercial Banks under the “Dual Carbon” Goal. *Rural Finance Research*, *2022*(11), 28-35.

Li, Z. G., Zhang, Z. P., & Huang, Y. (2023). Practice and Prospect of Carbon Emission Rights Financing Business for Commercial Banks under the “Dual Carbon” Background. *Modern Finance Guide*, *2023*(1), 52-55.

Tu, S. F. (2023). The Impact of Green Credit on the Profitability of Commercial Banks under the “Dual Carbon” Goal—Based on Panel Data of 10 Listed Banks. *Journal of Changsha University*, *37*(3), 67-72.

Wei, X. S. (2023). Research on the Strategy of Commercial Banks Supporting Industrial Green Transformation under the “Dual Carbon” Strategy. *Agricultural and Rural Bank Journal*, *2023*(3), 20-24.

Xi, Q. (2023). Practice and Reflection on the Development of Green Finance by Commercial Banks under the “Dual Carbon” Background. *Agricultural and Rural Bank Journal*, *2023*(2), 38-42.