HO CHI MINH NATIONAL ACADEMY OF POLITICS

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FACTORS AFFECTING GREEN CREDIT DEVELOPMENT AT COMMERCIAL BANKS IN VIETNAM

SUMMARY OF DOCTORAL DISSERTATION

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INTRODUCTION

1. Rationale and Urgency of the Study

Today's world is witnessing intense geopolitical competition, armed conflicts, trade wars, and protectionism among developed nations, alongside climate change, extreme weather, and environmental degradation. These factors compel nations and businesses to shift their development mindsets from pure growth to sustainable development. The trend toward green development aimed at a green economy has dually become an inevitable imperative of our era.

Vietnam is assessed as one of the countries severely threatened by climate change impacts. The Communist Party and the State of Vietnam have consistently identified green economic development, green credit, and the transition from a brown to a green, circular, low-emission economic model as an irreversible necessity and a long-term strategic choice. Green credit serves as an essential tool for commercial banks to manage credit risks arising from environmental factors, such as legal risks, cash flows, collateral, etc. Developing green credit contributes to enhancing competitiveness, reputation, and access to international capital sources, aligning with global ESG trends.

To research and formulate solutions promoting green credit development, it is necessary to thoroughly investigate and clearly identify the factors affecting green credit development at commercial banks. From there, practical solutions can be proposed to foster green credit growth across commercial banks in Vietnam in the upcoming period, contributing to environmental protection and sustainable development.

Stemming from this reality, conducting a profound, comprehensive qualitative and quantitative assessment of green credit development at commercial banks in Vietnam, as well as evaluating the factors affecting and impacting green credit growth, has become an urgent demand. This will encourage commercial banks to innovate their growth models, serving the construction and advancement of a green and sustainable economy. Therefore, the author selected the topic "Factors affecting green credit development at commercial banks in Vietnam" for his doctoral dissertation research.

2. Research Purpose and Tasks

2.1. Research Purpose

2.1.1. General Purpose

The general purpose of the dissertation is to identify solutions contributing to green credit development at commercial banks in Vietnam in the coming period toward sustainable growth.

2.1.2. Specific Objectives:

(1) Identify the factors affecting green credit development at commercial banks in Vietnam;

(2) Measure the degree of impact of these factors on green credit development at commercial banks in Vietnam;

(3) Propose policy implications and solutions contributing to green credit development at commercial banks in Vietnam toward sustainable growth in the coming period.

2.2. Research Tasks

- To achieve the above objectives, the dissertation executes the following tasks:
- Review existing literature and clarify the theoretical foundation regarding factors affecting green credit development at commercial banks.
- Construct a research model, measurement scales, and identify factors influencing green credit development at commercial banks in Vietnam.
- Assess the current status of factors affecting green credit development at commercial banks in Vietnam.
- Propose orientations and actionable solutions to foster green credit development at commercial banks in Vietnam.

2.3. Research Questions

To fulfill the research objectives, this study addresses the following questions:

- What factors affect green credit development at commercial banks in Vietnam?

- What is the magnitude of impact of these factors on green credit development at commercial banks in Vietnam?

- What are the orientations and practical solutions to promote green credit development at commercial banks in Vietnam?

3. Object and Scope of Research

3.1. Object of Research

The object of research comprises the factors affecting green credit development at commercial banks.

3.2. Scope of Research

- Content Scope: Researching and analyzing factors influencing green credit development at commercial banks in Vietnam.

- Spatial Scope: The dissertation limits its spatial scope to 14 systemically important commercial banks as specified under Decision No. 538/QD-NHNN dated March 27, 2024, approving the list of systemically important credit institutions and foreign bank branches in 2024. The dissertation excludes policy banks (Vietnam Development Bank - VDB, Bank for Social Policies - VBSP), foreign bank branches operating in Vietnam, and other credit institutions such as Microfinance Institutions, People's Credit Funds, or Finance Companies.

- Temporal Scope: Assessing green credit development and the practical status of factors affecting green credit development at commercial banks in

Vietnam using secondary data over the 2018–2025 period.

- Stakeholders in Green Credit Development: While multiple entities participate in green credit development, this dissertation adopts Moore, J. F.'s (1993) business ecosystem theory, positioning the State Bank of Vietnam (SBV) as the central state management agency issuing regulatory mechanisms and policies to incentivize commercial banks to extend green loans and develop green credit.

4. Research Methodology

To evaluate green credit development and its influencing factors at commercial banks in Vietnam, the PhD candidate employs a combination of qualitative and quantitative research methods. Additionally, the dissertation utilizes descriptive statistics, analytical synthesis, and comparative methods.

5. New Contributions of the Dissertation

5.1. Theoretical Contributions

- The dissertation clarifies the narrow-sense concept of green credit, which is applied consistently throughout the study.
- The dissertation clarifies the core contents of green credit development at commercial banks.
- The dissertation constructs a conceptual framework, identifies influencing factors, and empirically verifies the direction and magnitude of their impacts on green credit development across 14 systemically important commercial banks approved under Decision No. 538/QD-NHNN dated March 27, 2024.

5.2. Practical Contributions

- The dissertation provides crucial, empirical insight into factors affecting green credit growth across 14 leading systemically important commercial banks in Vietnam, analyzed through the lens of Moore, J. F.'s business ecosystem theory.
- The empirical findings elucidate the direction and magnitude of impact of each factor on green credit development at Vietnamese commercial banks amid the ongoing refinement of SBV's green credit mechanisms and policies.
- The dissertation delivers empirical evidence and a set of practical, feasible solutions to advance green credit development as Vietnam accelerates institutional reforms, streamlines the organizational apparatus, and shifts its growth model.

6. Structure of the Dissertation

The dissertation is structured into 05 chapters, specifically as follows:

Chapter 1: Literature Review

Chapter 2: Theoretical Foundations of Factors Affecting Green Credit Development at Commercial Banks

Chapter 3: Research Process and Methodology

Chapter 4: Analysis of Factors Affecting Green Credit Development at Commercial Banks in Vietnam

Chapter 5: Orientations and Solutions for Green Credit Development at Commercial Banks in Vietnam.

Chapter 1
LITERATURE REVIEW

1.1. Literature Review on Green Credit

1.1.1. Studies on Green Finance

According to Scholtens and Dam, the term 'green finance' originated from the Equator Principles (EP) proposed by the International Finance Corporation (IFC) in 2003 alongside the concept of green credit, calling upon financial institutions to integrate environmental and social factors into investment and financing operations.

According to John Barner and Tingcun Han, green finance is defined as financial products and services that incorporate environmental considerations into lending decisions, post-disbursement monitoring, and risk management to incentivize environmentally responsible investments and promote low-carbon projects and technologies.

Nguyen Thi Minh Hue et al. summarize green finance as financial activities aiming to secure funding, realize business opportunities, or execute production plans for eco-friendly goods and services, including utilizing green credit capital and executing green investments.

1.1.2. Studies on Green Banking

According to Kaeufer, green banking involves greening a bank's service operations, encompassing both internal operations and banking activities.

Tran Thi Thanh Tu et al. state that a bank is considered 'green' when fulfilling two criteria: (1) In the short term, providing green services; (2) In the long term, maintaining a strategic business plan aligned with corporate social responsibility and environmental protection standards.

Ngo Anh Phuong notes that a bank qualifies as a green bank when offering services tied to environmental commitments or financing green and clean production.

Park and Kim define green banking broadly as: “Green banking is defined as financing activities by banking and non-banking financial institutions aimed at reducing greenhouse gas emissions and increasing societal resilience against negative climate change impacts, while balancing other sustainable development goals such as economic growth, job creation, and gender equality”.

1.1.3. Studies on Green Credit

Motoko Aizawa and Chaofei Yang view green credit similarly to sustainable finance, serving as a financial instrument to address climate change and mitigate environmental and social challenges and risks.

Lai Van Manh et al. define green credit as loans extended by credit institutions for consumption, investment, and business activities that yield environmental benefits, contributing to ecological and biodiversity protection.

Dang Thi Minh Nguyet et al. define green credit as credit granted by commercial banks to green production and business projects that do not pose environmental risks, aimed at tackling environmental and social challenges.

More comprehensively, Nguyen Dinh Hoan and Nguyen Hong Quang, reviewing green credit development at Vietnamese commercial banks, categorize global definitions into broad and narrow senses:

- Broad sense: Green credit is synonymous with green loans used to fully or partially finance/refinance green projects (per Loan Market Association - LMA). Green loans can be term loans or revolving facilities.

- Narrow sense: Green credit is a financial service within the green loan category, delivered primarily through the banking system. It refers to credit granted by banks for consumer needs, investment projects, or business operations that protect the environment, avoid environmental risks, and preserve ecosystems.

1.2. Overview of Green Credit Development

Motoko Aizawa and Chaofei Yang emphasize that developing green credit requires Chinese environmental protection agencies and the banking sector to build sufficient capacity to execute green credit policies.

According to GIZ, green credit growth requires state regulatory support in training, capital resources, interest rate concessions, and information access, alongside incentive mechanisms, guidelines, and monetary easing measures (e.g., lower reserve requirements, discount window access) to drive active banking participation.

Lai Van Manh et al. note that preferential loan terms and capital cost concessions are indispensable for green credit growth.

1.3. Literature Review on Factors Affecting Green Credit Development at Commercial Banks

Ngo Anh Phuong’s doctoral research identifies 04 positively impacting factors on green banking growth: (1) Government support policies; (2) Macroeconomic factors; (3) Green investment demand of business entities; and (4) Banks' financial capacity.

Nguyen Quoc Huy et al., analyzing factors influencing green credit growth at Vietnamese commercial banks using a quantitative structural equation modeling (SEM) approach with 1,050 bank personnel, identify 08 positive drivers (at a 5% significance level): (1) Support policies; (2) Financial capacity; (3) Marketing strategy; (4) Banking technology; (5) Human resource quality; (6) Risk management; (7) Legal framework; and (8) Environmental policy.

Dang Thi Minh Nguyet et al. identify two major groups of factors affecting green credit implementation: Internal factors (Business strategy; Bank policies and regulations; Credit officer quality; Banking technology; Financial capacity; Brand reputation; Corporate social responsibility) and External factors (Market characteristics; Economic growth; Legal environment; Inter-bank competition; Government economic programs/policies; Customer factors).

Recently, Nguyen Quoc Huy's doctoral dissertation demonstrates 08 positive drivers of green credit growth at Vietnamese commercial banks: (1) Support policies; (2) Financial capacity; (3) Marketing strategy; (4) Banking technology; (5) Human resource quality; (6) Risk management; (7) Legal framework; and (8) Environmental policy.

1.4. Overall Assessment of Literature Review and Research Gaps

1.4.1. General Assessment

In general, prior works have focused on:

- Clarifying theoretical foundations of green finance, green banking, and green credit.
- General studies on green credit expansion at commercial banks.
- Identifying factors influencing green credit growth.

However, empirical research on green credit remains fragmented across isolated topics, such as socio-economic benefits or risk management in green lending,...

1.4.2. Identified Research Gaps

- Many studies rely on descriptive models or qualitative financial analysis using secondary data, lacking robust quantitative evidence on the empirical relationships among influencing factors.
- Prior studies overwhelmingly rely on sustainable growth theory, neglecting the integration of business ecosystem theory in modeling factors affecting green credit growth.
- Most studies predated Circular No. 17/2022/TT-NHNN dated December 23, 2022, and Decision No. 21/2025/QD-TTg dated July 4, 2025.

Therefore, a distinct research gap exists regarding re-evaluating factors influencing green credit development under updated regulatory frameworks, particularly regarding how commercial banks adapt to environmental risk management requirements and green taxonomy standards.

Chapter 2
THEORETICAL FOUNDATIONS OF FACTORS AFFECTING GREEN CREDIT DEVELOPMENT AT COMMERCIAL BANKS

2.1. Theoretical Foundations

2.1.1. Business Ecosystem Theory

Developed by James Moore (1993) based on Arthur Tansley's (1935) ecological framework, business ecosystem theory explains how actors interact, cooperate, and compete to co-create, allocate, and capture value, illuminating the dynamic interdependence and co-evolution of economic organizations in a globalized market.

2.1.2. Sustainable Development Theory

Sustainable Development Theory provides a conceptual framework ensuring that socio-economic advancement occurs without degrading the natural environment, safeguarding resources for future generations across three core pillars: Economic, Social, and Environmental (WCED).

2.1.3. Green Economy

A green economy is an economic growth model that tightly integrates economic growth, environmental protection, and social progress, focusing on resource efficiency, carbon reduction, and ecosystem preservation (OECD, 2011; Tran Thi Thanh Tu, 2020). It emphasizes clean, eco-friendly growth, greenhouse gas mitigation, eco-industrial development, and technological innovation.

2.2. Fundamental Issues of Green Credit at Commercial Banks

2.2.1. Concept of Green Credit

- Broad sense: Green credit is a novel sustainable financial instrument funding activities targeting environmental protection and climate change mitigation.

- Narrow sense: Green credit refers to credit extended by commercial banks specifically for eco-friendly, green projects that foster sustainable development.

For this dissertation, the author adopts the narrow-sense concept: Green credit consists of credit facilities extended by the commercial banking system for consumption, investment, production, or business activities that carry no environmental risks, or explicitly target environmental protection, ecosystem preservation, and climate change mitigation.

2.2.2. Classification, Role, and Characteristics of Green Credit

- Classification of green credit:

Green credit can be classified according to various criteria. However, in this dissertation, green credit is classified into two main categories that characterize green credit: sector/industry and purpose of use.

- Role of green credit:

+ *Macroeconomic level*:

Firstly, green credit plays an essential and pivotal role and serves as a foundation for achieving a sustainable green economy.

Secondly, green credit helps limit investment in energy-intensive industries, restructure investment allocation, and achieve energy-saving and carbon-emission reduction objectives.

Thirdly, green credit also contributes to improving the quality of financial services provided to the real economy.

Fourthly, green credit serves as a primary financing channel for green projects.

Fifthly, green credit plays an important role in achieving carbon neutrality and promoting breakthrough technological innovation.

Finally, green credit helps regulate and guide capital flows, thereby making a significant contribution to environmental protection and climate change mitigation..

+ *Microeconomic level*:

Firstly, green credit generates profits for commercial banks.

Secondly, green credit enables commercial banks to diversify their range of green financial products.

Third,ly green credit serves as a driver and creates favorable conditions for the development of other banking services.

- Characteristics of green credit:

+ Green credit is provided to green production and business projects that do not pose significant risks to the environment.

+ The funds used to provide green credit are green funds.

+ The provision of green credit by commercial banks involves coordination with various competent authorities, such as the Ministry of Agriculture and Environment, the Ministry of Finance, and the State Bank of Vietnam, among others.

+ Green credit projects generally have long payback periods. The investment sectors often involve the application of new science and technology to address environmental issues and reduce carbon emissions, and may entail relatively high market risks.

- Green credit products:

+ Green agriculture

+ Renewable energy/green energy sector

+ Green forestry

+ Other sectors, including green consumption, green real estate, environmental services, climate change mitigation and adaptation, sustainable water management, green tourism, energy efficiency and greenhouse gas emission reduction, waste treatment and water treatment plants, environmentally friendly production and business activities, and green credit cards.

2.2.3. Green Credit Development at Commercial Banks

2.2.3.1. Theoretical issues of green credit development at commercial banks

- Concept of Green Credit Development:

Green credit development refers to expanding the scale of green credit, increasing outstanding green credit, and developing additional green credit products to meet customers' needs.

- Objectives of Green Credit Development:

(1) Restructuring and improving the quality of green credit portfolios at commercial banks.

(2) Improving people's living standards and promoting environmentally friendly lifestyles (Wen et al.).

(3) Contributing to poverty reduction without compromising natural resources.

(4) Identifying, assessing, and investing in green projects that use natural resources more efficiently, reduce greenhouse gas emission intensity, and contribute to effective responses to climate change.

(5) Supporting developing countries in achieving economic and social benefits.

- Benefits of Green Credit Development at Commercial Banks:

+ From the national perspective

+ From the perspective of communities and consumers

+ From the perspective of businesses

2.2.3.2. Necessity and prerequisites for green credit development at commercial banks

- The necessity of Green Credit Development at Commercial Banks:

Green credit has emerged as an inevitable necessity and a future trend in bank lending.

- Conditions necessary for Green Credit Development:

+ Firstly, institutional and policy frameworks need to be further improved and strengthened.

+ Secondly, funding sources for green credit development need to be diversified and abundant.

+ Thirdly, favorable market conditions and appropriate customer demand are essential.

2.2.3.3. Content of Green Credit Development at Commercial Banks

Approached from the perspective of James F. Moore's Business Ecosystem Theory, the content of green credit development at commercial banks revolves around two main actors: (1) the State Bank of Vietnam (SBV), which plays the role of institutional and policy architect; and (2) commercial banks, which serve as operational actors that both compete and cooperate to develop green credit, thereby creating shared value toward sustainable growth.

- From the Perspective of the State Bank of Vietnam:

+ Developing and promulgating orientations, strategies, plans, and action programs to promote green credit and sustainable development.

+ Developing and promulgating policy mechanisms to encourage and promote green credit development at commercial banks.

+ Enhancing policy implementation and coordination capacity to ensure the synchronized implementation of solutions for green credit development at commercial banks.

+ Inspecting, auditing, and supervising the implementation and outcomes of green credit development at commercial banks.

+ Last but not least, such supervision contributes to enhancing the bank's reputation in the field of green credit.

- From the Perspective of Commercial Banks:

In order to develop green credit, commercial banks also need to:

+ Improve and refine green credit strategies and policies.

+ Expand the scale of green credit and diversify green credit products.

+ Enhance environmental and social risk management capacity.

+ Strengthen cooperation, mobilize, and expand green funding sources.

2.2.3.4. Criterias for Assessing Green Credit Development at Commercial Banks

- Assessment based on the number of green credit products.
- Assessment based on the growth of outstanding green credit.
- Assessment based on the proportion of green credit outstanding to total outstanding credit at a commercial bank, comparing the current year with the previous year.
- Assessment based on the quality of green credit.

2.3. Factors Affecting Green Credit Development at Commercial Banks

2.3.1. Green Credit Policies of Banks

2.3.1.1. Green Credit Policies of the State Bank of Vietnam

The green credit policies of the State Bank of Vietnam (SBV) constitute an important legal basis and foundation for commercial banks to formulate specific strategies, programs, and action plans that are aligned with their own scale, strategic orientations, and available resources, thereby optimizing operational efficiency, generating profits, and enhancing their competitiveness.

2.3.1.2. Green Credit Policies of Commercial Banks

Green credit policies of commercial banks can be understood as a system of principles, criteria, and governance procedures established by commercial banks to guide, assess, and control lending activities in accordance with environmental and social criteria, with the aim of achieving sustainable development. The green credit policy framework of a commercial bank consists of four main components:

(1) Credit objectives and scope

(2) Appraisal and approval procedures

(3) Interest rate and cost-of-funds policies

(4) Risk control and post-lending monitoring policies

2.3.2. Financial Capacity of Commercial Banks

The financial capacity of commercial banks refers to their ability to maintain and develop safe and efficient business operations on a sustainable basis through effective management of capital, assets, risks, and profitability.

2.3.3. Capacity of Commercial Bank Staff

Staff capacity is a comprehensive concept encompassing professional qualifications, technical and operational skills, ethical qualities, and adaptability, enabling employees to perform their duties effectively in a modern banking environment.

2.3.4. Digital Transformation of Commercial Banks

Digital transformation in the banking sector refers to the process of applying digital technologies across the entire range of banking operations to enhance operational efficiency, optimize customer experience, and develop digital business models.

2.3.5. Commercial Banks' Access to Green Funding Sources

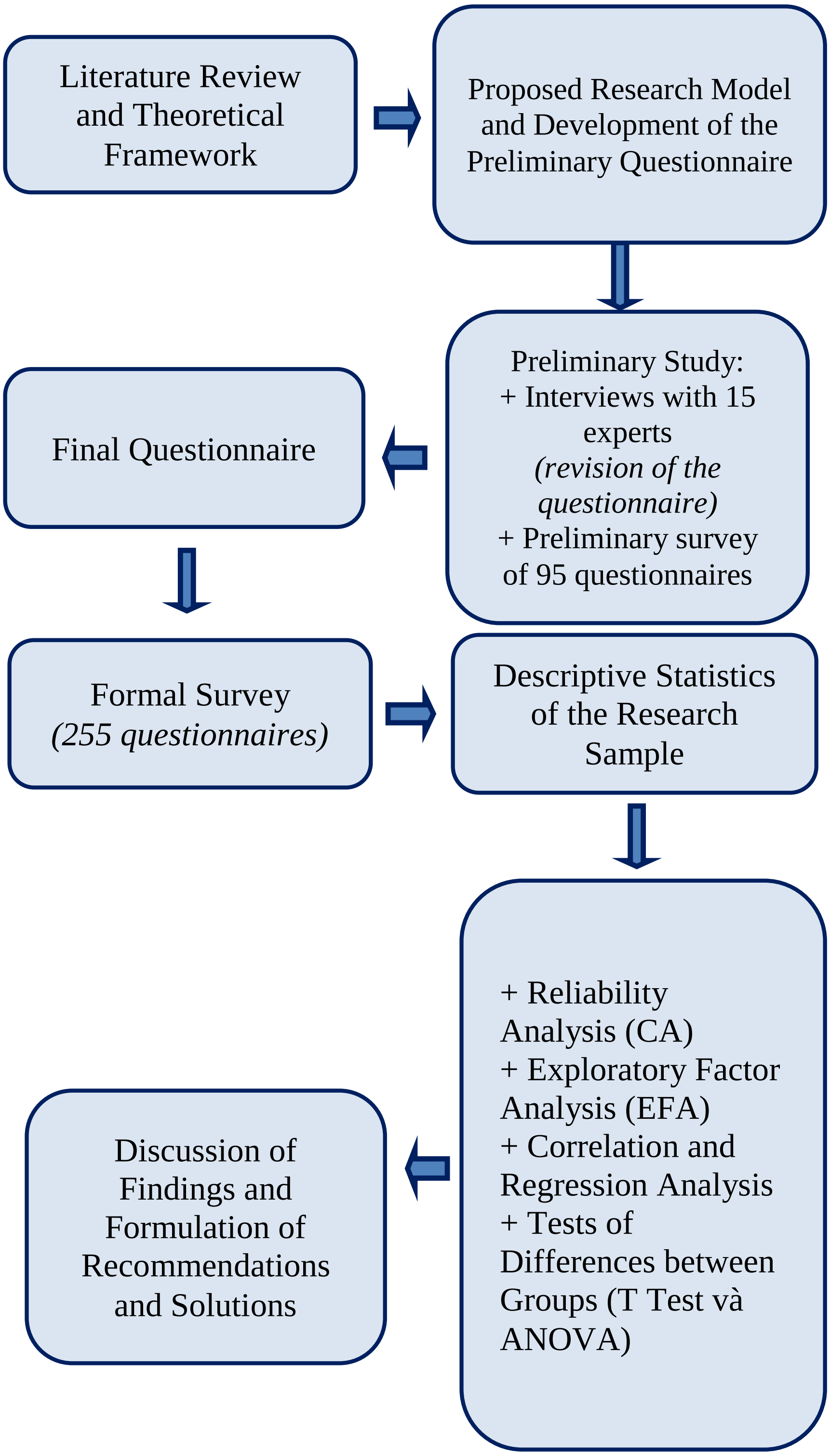
Commercial banks' access to green funding sources refers to their ability to mobilize funds from, or obtain financing from, domestic or international organizations and individuals/legal entities to establish green funding sources and subsequently reallocate these funds to customers and projects requiring financing for green investment, production, and business activities.

Chapter 3

RESEARCH PROCESS AND METHODOLOGY

3.1. Research Process

Figure 3.1. Research Process of the Dissertation



Source: Proposed by the PhD Candidate

3.2. Research Model and Hypotheses

Figure 3.2 below presents the research model of the dissertation

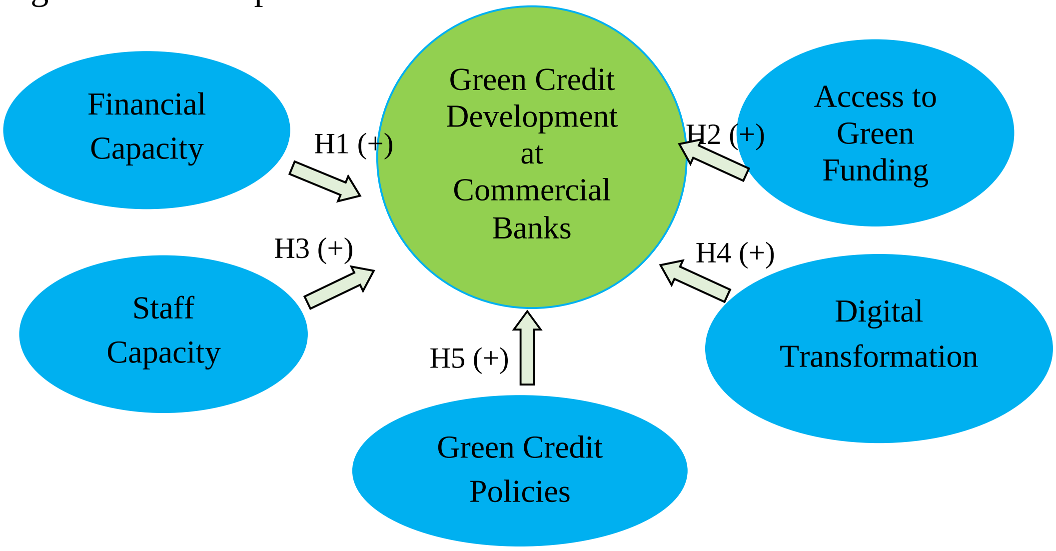


Figure 3.2. Research Model

3.3. Qualitative Research Methodology

3.3.1. Objectives and Content of the Qualitative Research

3.3.2. Results of the Qualitative Research

The experts participating in the interviews provided recommendations focusing primarily on the addition and refinement of the measurement scales for the factors affecting green credit development at commercial banks in Vietnam.

3.4. Variables and Measurement Scales

3.4.1. Financial Capacity of Commercial Banks

3.4.2. Staff Capacity of Commercial Banks

3.4.3. Level of Digital Transformation of Commercial Banks

3.4.4. Access to Green Funding by Commercial Banks

3.4.5. Green Credit Policies of Banks

3.4.6. Green Credit Development

3.5. Quantitative Research Methodology

3.5.1. Questionnaire-Based Survey Method

3.5.2. Data Analysis Methods

3.5.2.1. Descriptive Statistical Analysis

3.5.2.2. Reliability Testing of the Measurement Scales

3.5.2.3. Exploratory Factor Analysis

3.5.2.4. Correlation Analysis

3.5.2.5. Multiple Regression Analysis

3.5.2.6. T-Test and ANOVA

3.5.3. Results of the Preliminary Quantitative Research

3.5.3.1. Assessment of the Measurement Scale for the Financial Capacity of Commercial Banks

3.5.3.2. Assessment of the Measurement Scale for Staff Capacity

3.5.3.3. Assessment of the Measurement Scale for the Level of Digital Transformation of Commercial Banks

3.5.3.4. Assessment of the Measurement Scale for Commercial Banks' Access to Green Funding

3.5.3.5. Assessment of the Measurement Scale for Green Credit Policies of Banks

3.5.3.6. Assessment of the Measurement Scale for Green Credit Development at Commercial Banks

CHAPTER 4
ANALYSIS OF FACTORS AFFECTING GREEN CREDIT DEVELOPMENT AT COMMERCIAL BANKS IN VIETNAM

4.1. Overview of the Commercial Banking System in Vietnam

4.1.1. Network of Commercial Banks in Vietnam

4.1.2. Asset size of Commercial Banks in Vietnam

According to the State Bank of Vietnam (SBV), as of December 31, 2024, the total assets of the credit institution system at the end of 2024 reached more than VND 23.82 quadrillion, representing an increase of 13.94% compared with the end of 2023.

Accordingly, the total assets and outstanding credit of state-owned commercial banks reached VND 9.62 quadrillion and VND 6.88 quadrillion, respectively, accounting for 58.7% and 58.0%, respectively, of the G14 group. The total assets and outstanding credit of joint-stock commercial banks reached VND 6.78 quadrillion and VND 4.99 quadrillion, respectively, accounting for 41.3% and 42.0%, respectively, of the G14 group.

4.1.3. Business Performance of Commercial Banks in Vietnam

4.1.3.1. Capital Mobilization Activities

According to the SBV's *2023 Financial Stability Summary Report*, funds mobilized from economic organizations and residents reached approximately VND 14.6 quadrillion, an increase of 13.2%, higher than the growth rate recorded in recent years. Savings deposits of individual customers reached VND 6.5 quadrillion at year-end, representing an increase of 11.4% compared with the same period of the previous year.

4.1.3.2. Credit size and Growth

In 2024, the scale of credit to the economy exceeded VND 15.6 quadrillion, increasing by 15.08% compared with the end of 2023.

4.1.3.3. Capital Adequacy Ratio

In 2023, the Capital Adequacy Ratio (CAR) of credit institutions applying Circular No. 41/2016/TT-NHNN increased slightly from 11.68% to 11.75%, as commercial banks accelerated the payment of stock dividends to increase charter capital and improve their CAR.

4.1.3.4. Operating Income

The cumulative pre-tax profit of 27 listed banks in 2024 reached VND 299.377 trillion, an increase of 18% compared with the previous year, driven by total income growing faster than expenses.

4.2. Current Status of Green Credit Development at Commercial Banks in Vietnam

4.2.1. Results of Green Credit Development at Commercial Banks in Vietnam

As of December 31, 2024, outstanding green credit exceeded VND 679 trillion, representing an increase of 9.37% compared with the end of 2023 and accounting for more than 4.3% of total outstanding credit in the economy. Green credit was concentrated primarily in renewable and clean energy, accounting for more than 41%, and green agriculture, accounting for more than 29%.

For commercial banks in the G14 group, as of December 31, 2024, total outstanding green credit reached VND 387.7 trillion, accounting for 57% of total outstanding green credit across the credit institution system. Of this amount, state-owned commercial banks had outstanding green credit of VND 200.47 trillion, accounting for 51.7% of the G14 group's outstanding green credit, while joint-stock commercial banks had outstanding green credit of VND 187.23 trillion, accounting for 48.3% of the G14 group's outstanding green credit.

4.2.2. Current Status of Green Credit Implementation by Sector

As of September 30, 2024, outstanding green credit in three sectors—green agriculture; renewable and clean energy; and sustainable water management in urban and rural areas—accounted for more than 84.7% of total outstanding green credit of the commercial banking system. Renewable and clean energy accounted for the largest share at 43.4%, followed by green agriculture at 30.5% and sustainable water management at 10.8%.

4.3. Current Status of Factors Affecting Green Credit Development at Commercial Banks in Vietnam

4.3.1. Current Status of the Financial Capacity of Commercial Banks

In 2023, total assets of the banking system reached VND 20.07 quadrillion, increasing by 9.8% compared with the end of 2022, while total charter capital reached VND 1 quadrillion, an increase of 14.3% over the same period. By the end of 2024, total assets of the banking system had reached VND 23.82 quadrillion, representing an increase of 13.94% compared with 2023. The liquidity reserve ratio of credit institutions showed an improving trend, increasing from 16.6% at the end of 2020 to 18.6% at the end of 2023. After-tax profits of credit institutions increased by 282.07% year-on-year as of November 2024, while average total assets increased by 13.46% and equity decreased by 6.22%.

4.3.2. Current Status of the Capacity of Commercial Bank Staff

At present, commercial bank staff generally still lack sufficient experience, skills, and knowledge in managing environmental and social risks. In some cases, assessments cover waste-treatment technologies and resettlement plans, where applicable; however, such assessments still largely depend on the individual experience of the appraiser (Ngo Anh Phuong, 2020).

4.3.3. Current Status of Digital Transformation in the Banking Sector

In 2023, more than 95% of commercial banks in Vietnam had implemented or were implementing digital transformation strategies. Many commercial banks had launched fully digital banking services, including Timo, Cake, TNEX, and Ubank..

4.3.4. Current Status of Commercial Banks' Access to Green Funding Sources

The commercial banking system in Vietnam has made significant progress in accessing and deploying green funding sources. However, this process still faces challenges related to policy mechanisms, enterprises' capacity to absorb capital, and awareness of green finance.

4.3.5. Current Status of Green Credit Policies of Banks

Currently, the banking system in Vietnam has developed, issued, and implemented various policies to promote green credit development, focusing on providing financial support for environmentally friendly projects in pursuit of sustainable development objectives.

4.4. Results of the Analysis of Factors Affecting Green Credit Development at Commercial Banks in Vietnam

4.4.1. Analysis Results

4.4.1.1. Descriptive Statistics of the Research Sample

4.4.1.2. Results of Reliability Testing of the Measurement Scales

4.4.1.3. Results of Exploratory Factor Analysis

4.4.1.4. Results of the Mean Value Test

4.4.1.5. Results of Correlation and Regression Analysis

The regression model reflecting the effects of the factors on green credit development is as follows:

Green Credit Development = -695 + 0.272* Financial Capacity + 0.168*Staff Capacity + 0.086*Digital Transformation + 0.139*Access to Green Funding Sources + 0.495*Green Credit Policies

4.4.1.6. Results of Statistical Hypothesis Testing

4.5. Overall Assessment of the Current Status of Factors Affecting Green Credit Development at Commercial Banks in Vietnam

4.5.1. Achievements

The dissertation assesses the reliability of the measurement scales using Cronbach's Alpha and Exploratory Factor Analysis (EFA), identifying six factors, including five independent factors and one dependent factor (green credit development). Thus, the five independent factors are: (1) Financial Capacity of Commercial Banks; (2) Staff Capacity of Commercial Banks; (3) Digital Transformation of Commercial Banks; (4) Commercial Banks' Access to Green Funding Sources; and (5) Green Credit Policies of Banks.

The research results show that Green Credit Policies have the highest standardized coefficient (0.495) with a significance level of 0.000, indicating that this is the most important factor affecting green credit development. This is followed by Financial Capacity, with a positive standardized coefficient of 0.272 and a significance level of 0.000; Staff Capacity, with a positive standardized coefficient of 0.168 and a significance level of 0.001. Similarly, the standardized coefficients of Access to Green Funding Sources and Digital Transformation are both positive, at 0.139 and 0.086, respectively, with significance levels of 0.012 and 0.008, respectively (both < 0.05). This indicates that both Access to Green Funding Sources and Digital Transformation have positive effects on green credit development at commercial banks in Vietnam.

The results of this study further demonstrate that the research meets requirements of scientific rigor, objectivity, and practical relevance.

4.5.2. Limitations and Shortcomings

4.5.3. Causes of the Limitations and Shortcomings

CHAPTER 5
DIRECTIONS AND SOLUTIONS FOR GREEN CREDIT DEVELOPMENT AT COMMERCIAL BANKS IN VIETNAM

5.1. Context and Development Orientation of Green Banking and Green Credit in Vietnam

5.1.1. International Context

5.1.2. Domestic Context

5.2. Perspectives and Orientations for the Development of Green Economy, Green Growth, and Green Credit at Commercial Banks in Vietnam

5.2.1. Perspectives on the Development of Green Economy, Green Growth, and Green Credit at Commercial Banks in Vietnam

5.2.1.1. Policies and Guidelines of the Communist Party of Vietnam on Green Economy, Circular Economy, and Sustainable Development

5.2.1.2. Government Actions to Develop the Green Economy, Circular Economy, and Sustainable Development

5.2.2. Orientation for Green Credit Development at Commercial Banks in Vietnam

5.2.2.1. From the Perspective of the State Bank of Vietnam

5.2.2.2. From the Perspective of Commercial Banks

5.3. Recommendations and Solutions for Green Credit Development at Commercial Banks in Vietnam

5.3.1. Recommendations for the State Bank of Vietnam

Firstly, develop and improve policy mechanisms to promote green credit development at commercial banks.

Secondly, encourage and support commercial banks in accelerating digital transformation to promote green credit development.

Thirdly, strengthen training to improve the capacity and professional qualifications of bank staff.

Fourthly, proactively and actively promote the development of green banking in Vietnam.

Fifthly, proactively and actively coordinate with the Ministry of Finance, the Ministry of Agriculture and Environment, and other relevant ministries, sectors, and local authorities to promote green credit development.

5.3.2. Recommendations for Commercial Banks

Based on the quantitative results, combined with the theoretical foundation presented in Chapter 2 and the difficulties, obstacles, and existing issues concerning the factors affecting green credit development, commercial banks need to proactively develop and improve their green credit development policies, while strengthening: **Financial Capacity, Staff Capacity, Access to Green Funding Sources, and Digital Transformation**.

CONCLUSION

The dissertation has achieved the following specific results:

Theoretically, the dissertation provides a comprehensive review of the theoretical foundations of green credit, green banking, and the factors affecting green credit development at commercial banks. It also adopts the narrow definition of green credit, examines the current status of green credit development at commercial banks, and proposes orientations and solutions for green credit development in the coming period.

Practically, the dissertation analyzes data on outstanding green credit during the 2018–2025 period, identifying the direction and magnitude of the effects of each factor on green credit development at commercial banks in Vietnam. Based on these findings, the dissertation provides policy implications to encourage and promote green credit development at commercial banks in Vietnam.

The limitations of the dissertation are identified in four main aspects:

Firstly, limitations in the scope and scale of the survey.

Secondly, the survey sample size is not sufficiently large and is unevenly distributed across geographical regions.

Thirdly, the quantitative analysis method relies primarily on linear regression.

Fourthly, the measurement variables included in the model remain limited and do not fully incorporate systemic factors such as institutions, macroeconomic conditions, and environmental factors.

In future research, the study could expand the research scope and period while combining quantitative methods with advanced qualitative approaches to provide a more comprehensive assessment of the effects of individual factors. This would contribute to further refining the research model and developing recommendations that are better aligned with the practical context of green credit development at commercial banks in Vietnam.

LIST OF SCIENTIFIC WORKS RELATED TO THE DISSERTATION TOPIC PUBLISHED BY THE PhD CANDIDATE

1. Doan Khanh Tai (2025), "Current Status and Solutions for Green Credit Development at Commercial Banks in Vietnam", *Finance Review – Ministry of Finance,* No. 852, July 2025, Vol. 1, pp. 93–96.

2. Doan Khanh Tai (2025), "A Model of Factors Affecting Green Credit Development at Commercial Banks in Vietnam", *ournal of Economics and Forecasting – Ministry of Finance,* No. 12/2025, pp. 38–41.

3. Doan Khanh Tai (2025), "Legal Framework for Green Credit Development at Commercial Banks in Vietnam", *Journal of Economics and Forecasting – Ministry of Finance*, No. 13/2025, pp. 26–30.