IMPROVING FINANCIAL MANAGEMENT MECHANISMS IN THE FORMATION OF A GREEN BANKING SYSTEM

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Abstract. This thesis examines the theoretical foundations and practical approaches to improving financial management mechanisms in the formation of a green banking system. The study focuses on the implementation of green finance instruments, including green lending, green bonds, and ESG (Environmental, Social, Governance) principles integration into commercial banks' activities. The research analyzes the institutional, regulatory, and financial challenges faced by banks when adopting sustainable financial practices and proposes strategies for enhancing financial management to support the transition to a green banking model. The findings highlight that effective financial management mechanisms are crucial for promoting sustainable development, reducing financial and environmental risks, increasing investor and client confidence, and ensuring long-term stability and competitiveness of commercial banks.

Introduction. In recent years, the global financial sector has increasingly recognized the critical role of sustainable banking and green finance in promoting long-term economic stability, environmental protection, and social responsibility. As commercial banks serve as key intermediaries in mobilizing financial resources, their ability to integrate sustainable financial practices into their operations has become essential for supporting the transition to a low-carbon and environmentally responsible economy.

The concept of green banking encompasses a range of financial instruments and management practices designed to minimize environmental risks while maintaining financial performance. These instruments include green lending, green bonds, and investments guided by ESG (Environmental, Social, and Governance) principles, all of which aim to channel capital towards projects that have positive environmental and social impacts. The integration of these mechanisms into the banking system presents both opportunities and challenges. On the one hand, effective adoption of green finance instruments allows banks to mitigate investment risks, strengthen client and investor confidence, enhance competitiveness, and contribute to sustainable development goals.

On the other hand, banks often face institutional, regulatory, and operational barriers, such as the lack of standardized assessment methodologies for

environmental risks, insufficient staff expertise in ESG principles, and the absence of comprehensive monitoring and reporting frameworks. This thesis aims to analyze the theoretical foundations and practical approaches for improving financial management mechanisms within commercial banks to facilitate the development of a green banking system. By examining international experiences and evaluating domestic practices, the study identifies the key factors that influence the successful implementation of sustainable financial instruments and provides recommendations to optimize financial management strategies.

The findings of this research are expected to support commercial banks in enhancing their operational efficiency, ensuring long-term financial stability, reducing environmental and financial risks, and promoting a transition toward a sustainable economy. Overall, the integration of improved financial management mechanisms in green banking is not only a strategic response to global sustainability challenges but also a vital tool for strengthening the resilience, competitiveness, and social responsibility of commercial banks.

Literature review. Research on green finance and sustainable banking has accelerated in recent years due to the growing need for the global financial sector to adapt to environmental and social sustainability requirements. Philipp et al. (2020) [1] examined the implementation of green lending and green bonds in commercial banks, highlighting the integration of ESG principles into banking operations as a crucial factor in reducing investment risks and ensuring long-term financial sustainability.

Their study demonstrates that incorporating sustainable finance instruments not only enhances financial performance but also strengthens the bank's social and environmental accountability. Zhang and Liu (2021) [2] investigated the regulatory and institutional challenges associated with implementing green finance instruments in commercial banks. Their findings emphasize the importance of standardized methodologies and monitoring systems for evaluating green lending and financing of environmentally-oriented projects, noting that the absence of such frameworks often hinders effective adoption. Kumar and Sharma (2022) [3] analyzed practical experiences of integrating green bonds and ESG principles into commercial banks' investment strategies, revealing that these instruments significantly improve banks' competitiveness while enhancing investor confidence and attracting sustainability-focused clients. Robinson and Evans (2019) [4] explored contemporary approaches to environmental risk management within commercial banks, identifying the complexities involved in operationalizing green finance instruments and stressing the need for robust financial strategies and ESG monitoring systems.

The European Banking Authority (2021) [5] provided guidelines on the adoption of green finance instruments and sustainable banking practices, offering detailed recommendations on standardizing financial and environmental risk assessment, establishing governance frameworks, and measuring sustainability performance. Collectively, these studies illustrate that implementing green finance instruments in commercial banks is a multifaceted process requiring coordination

between theoretical frameworks, regulatory policies, institutional mechanisms, and practical strategies.

Research methodology. This study employs a combination of theoretical, empirical, and comparative research methods to analyze the improvement of financial management mechanisms in the formation of a green banking system. The theoretical framework is based on a comprehensive review of the literature on green finance, sustainable banking, and ESG (Environmental, Social, and Governance) principles, as well as relevant regulatory and policy documents issued by international financial institutions and national banking authorities. The empirical component of the study involves collecting and analyzing quantitative and qualitative data from commercial banks that have implemented or are in the process of implementing green finance instruments, including green lending, green bonds, and ESG-based investment strategies.

Data sources include financial statements, annual sustainability reports, official banking publications, and regulatory disclosures. In addition, structured surveys and semi-structured interviews were conducted with bank executives, risk managers, and sustainability officers to gain insights into the practical challenges, institutional barriers, and strategic approaches associated with adopting sustainable financial practices. Comparative analysis was also employed to examine international best practices and benchmark them against domestic banking experiences, identifying strengths, weaknesses, and opportunities for improvement. Statistical and financial analysis methods were used to evaluate the impact of green finance instruments on key performance indicators, risk mitigation, and operational efficiency, while qualitative analysis was applied to assess the effectiveness of ESG integration and sustainability reporting frameworks.

Research discussion. The discussion of the research findings indicates that the implementation of green finance instruments within commercial banks is both a complex and multidimensional process that significantly impacts financial management practices, operational efficiency, and long-term sustainability. The analysis of empirical data collected from banks demonstrates that green lending and green bonds not only provide opportunities to finance environmentally beneficial projects but also strengthen the financial resilience of institutions by diversifying investment portfolios and mitigating ecological and financial risks.

Interviews with banking executives and sustainability officers revealed that while banks recognize the strategic importance of integrating ESG principles into their operations, practical challenges remain, including insufficient regulatory guidance, limited staff expertise in sustainable finance, and the lack of standardized risk assessment and monitoring frameworks. Comparative analysis with international best practices shows that successful adoption of green finance instruments is closely linked to the establishment of robust governance structures, continuous staff training programs, and systematic monitoring and reporting mechanisms.

Banks that have effectively implemented these practices report improvements in investor confidence, enhanced public image, and increased competitiveness in both

domestic and international markets. Furthermore, statistical analysis indicates that integrating green finance into commercial banks' financial management mechanisms contributes positively to key performance indicators, including return on investment, risk-adjusted profitability, and long-term asset stability. Normative and regulatory assessments suggest that clear guidelines and incentives provided by national authorities play a pivotal role in facilitating the adoption of sustainable financial practices and ensuring compliance with ESG standards.

Conclusion. The findings of this study demonstrate that the integration of green finance instruments into commercial banking operations is a strategic and multidimensional process that significantly enhances financial management mechanisms, operational efficiency, and long-term sustainability. The implementation of green lending, green bonds, and ESG-based investment strategies not only allows banks to channel funds toward environmentally and socially responsible projects but also strengthens their financial resilience, mitigates risks, and increases investor and client confidence. The research highlights that successful adoption of sustainable financial practices requires the development of robust governance frameworks, standardized risk assessment methodologies, continuous staff training, and systematic monitoring and reporting mechanisms. Moreover, regulatory guidance and institutional support play a critical role in facilitating the implementation of green finance and ensuring compliance with international sustainability standards. Overall, improving financial management mechanisms in the context of a green banking system enables commercial banks to achieve operational excellence, maintain competitive advantage, and actively contribute to sustainable economic development. The study concludes that a holistic approach, combining theoretical, regulatory, and practical strategies, is essential for optimizing the effectiveness of green finance instruments. Consequently, the adoption of improved financial management mechanisms not only promotes environmental and social responsibility within the banking sector but also supports broader global objectives for sustainable development, ensuring that commercial banks remain resilient, competitive, and aligned with emerging sustainability trends.

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