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INSTITUTIONAL FRAMEWORKS FOR DEVELOPING GREEN FINANCE IN THE BANKING SYSTEM

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Abstract: This article examines the institutional frameworks necessary for the development of green finance within the banking system. The study analyzes macro-, meso-, and micro-level institutional mechanisms that support sustainable banking practices, including central bank regulations, green taxonomies, ESG integration, and environmental risk management. Particular attention is devoted to the role of international standards and regulatory frameworks in promoting environmentally sustainable financial activities. The article also discusses the major challenges associated with institutionalizing green finance, such as data asymmetry, maturity mismatch, and the shortage of qualified specialists. The findings indicate that the establishment of a comprehensive institutional framework is essential for ensuring financial stability and accelerating the transition toward a low-carbon economy.

Keywords: Green finance, sustainable banking, ESG, green taxonomy, environmental risk management, climate finance, banking regulation, green economy, institutional framework, sustainable development.

The rapid development of the digital and global economy has significantly transformed the modern financial system. In recent years, environmental sustainability has become inseparable from economic and financial stability. Climate change, environmental degradation, and the depletion of natural resources have forced governments, financial regulators, and banking institutions to reconsider traditional financing models and adopt sustainable financial practices.

Green finance has emerged as a strategic mechanism for directing financial resources toward environmentally sustainable projects, renewable energy, energy efficiency, low-carbon technologies, and climate change mitigation initiatives. In the banking sector, green finance not only contributes to environmental protection but also strengthens long-term financial stability and risk resilience.

However, the effective implementation of green finance requires a strong institutional framework. Regulatory support, standardized classifications, environmental disclosure requirements, and internal governance reforms are necessary to transform traditional banking systems into sustainable banking systems. Therefore, the development of institutional mechanisms for green finance has become one of the most important priorities of modern financial policy.

The institutionalization of green finance in the banking system is generally based on three interconnected levels: macro-level regulation, meso-level standardization, and micro-level internal governance.

At the macro level, central banks and financial supervisory authorities play a decisive role in integrating climate-related risks into financial regulation and macroprudential supervision.

One important mechanism is the implementation of green reserve requirements. Under this approach, banks with a higher proportion of environmentally sustainable assets may benefit from lower reserve requirements, encouraging financial institutions to increase green lending activities.

In addition, international organizations such as the Network for Greening the Financial System (NGFS) provide climate stress-testing methodologies and policy recommendations for central banks

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and supervisors. These initiatives help financial institutions evaluate the impact of climate-related risks on financial stability and banking resilience.

Governments also support green finance through fiscal incentives, green bond frameworks, tax reductions, and sustainable investment policies designed to stimulate environmentally responsible economic activities.

One of the major institutional challenges in green finance is the issue of greenwashing, where financial products are falsely marketed as environmentally sustainable. To address this problem, many countries and international institutions have introduced green taxonomies.

A green taxonomy is a standardized classification system that defines which economic activities can be considered environmentally sustainable. These frameworks establish transparent criteria for identifying green investments and improving accountability within financial markets.

The European Union Green Taxonomy and China's Green Bond Endorsed Project Catalogue are among the most influential global models. Such frameworks enhance transparency, reduce information asymmetry, and strengthen investor confidence in green financial products.

Furthermore, standardized environmental reporting systems and sustainability disclosure requirements allow regulators and investors to monitor banks' environmental performance more effectively.

At the micro level, commercial banks are required to integrate environmental, social, and governance (ESG) principles into their internal management systems and strategic decision-making processes.

An important aspect of institutional reform involves establishing dedicated ESG or Sustainability Committees under the Board of Directors. These committees oversee sustainability strategies, environmental risk policies, and compliance with green finance regulations.

Banks are also increasingly adopting Environmental and Social Risk Analysis (ESRA) systems during loan appraisal processes. Under this framework, environmental and social risks are evaluated alongside traditional financial risks such as credit risk, market risk, and operational risk.

As a result, banks become more capable of identifying environmentally harmful projects and redirecting capital toward sustainable investments. This contributes to both financial stability and environmental protection.

International financial institutions and commercial banks increasingly align their operations with globally recognized sustainability principles and frameworks.

The Principles for Responsible Banking (PRB), introduced by the United Nations Environment Programme Finance Initiative (UNEP FI), encourage banks to align their business strategies with the United Nations Sustainable Development Goals (SDGs) and the Paris Climate Agreement.

Similarly, the Equator Principles provide financial institutions with a risk management framework for identifying and managing environmental and social risks associated with large-scale investment projects.

Another important initiative is the Task Force on Climate-related Financial Disclosures (TCFD), which offers recommendations on climate-related risk disclosure in four key areas: governance, strategy, risk management, and performance metrics.

These international frameworks contribute to the standardization of sustainable banking practices and improve the transparency of climate-related financial reporting.

Despite substantial progress, several structural challenges continue to hinder the development of green finance in the banking system.

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First, many banks lack sufficient historical and reliable environmental data regarding borrowers' carbon emissions, climate vulnerability, and ecological impact. This data asymmetry complicates accurate environmental risk assessment.

Second, green infrastructure projects such as renewable energy plants often require long-term financing, while commercial bank liabilities are generally short- or medium-term deposits. This creates a maturity mismatch problem within banking operations.

Third, there is a shortage of professionals with expertise in both traditional financial risk management and environmental sustainability analysis. The absence of qualified specialists limits the effective implementation of ESG-based banking practices.

Additionally, differences in national regulations and sustainability standards create inconsistencies in global green finance practices.

The development of institutional frameworks for green finance is no longer merely a matter of corporate social responsibility; it has become a strategic prerequisite for ensuring long-term financial stability and sustainable economic growth in the twenty-first century.

The coordination of government policies, green macroprudential regulations, standardized taxonomies, ESG integration, and transparent environmental disclosure mechanisms can significantly strengthen the banking sector's contribution to the transition toward a low-carbon economy.

In the future, banking systems should focus on improving environmental data infrastructure, enhancing international cooperation, developing national green finance strategies, and training highly qualified specialists in sustainable finance and environmental risk management. Strengthening institutional foundations will enable banks to play a leading role in supporting global sustainable development objectives.

References:

1. An, J., Mikhaylov, A., & Richter, U. H. (2021). Trade-off between green energy generation and financial performance in the banking sector. *Energies, 14*(14), 4122. https://doi.org/10.3390/en14144122
2. Berrou, R., Desson, E., Ninio, S., & Plihon, D. (2019). Corporate governance and green finance: The role of boards of directors. *Journal of Sustainable Finance & Investment, 9*(3), 201–218.
3. European Commission. (2020). *Technical guidance on the application of "do no significant harm" under the Recovery and Resilience Facility Regulation*. European Union.
4. Network for Greening the Financial System [NGFS]. (2021). *Scenarios for climate risk analysis: Guide for central banks and supervisors*. NGFS Publishing.
5. Pradhan, A. K., & Sahoo, M. (2022). Institutional quality and green finance: Evidence from emerging economies. *Environmental Science and Pollution Research, 29*(28), 42531–42544. https://doi.org/10.1007/s11356-022-18894-3
6. Scholtens, B. (2017). Why banking institutions should consider environmental risks. *Sustainability, 9*(8), 1345.
7. United Nations Environment Programme Finance Initiative [UNEP FI]. (2020). *Guidance document on the implementation of the Principles for Responsible Banking*. UNEP.
8. World Bank. (2022). *Developing a national green taxonomy: A workbook for financial regulators*. World Bank Group.
9. Zhang, D., Zhang, Z., & Managi, S. (2019). Green finance and its development features: A systematic review. *Journal of Cleaner Production, 233*, 766–778. https://doi.org/10.1016/j.jclepro.2019.06.023