




Investigating The Impact of FinTech on ESG Performance and Financial Performance With an Emphasis on Innovation in The Banking Industry

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Abstract

One of the new industries that has created a huge revolution in the field of banking and business in recent years is the FinTech industry; therefore, many believe that the future of the banking industry depends on paying attention to financial technology. In our country, with the expansion of new and knowledge-based companies in the financial field, the FinTech industry has grown significantly compared to previous years, but it is far from reaching the desired state; for this reason, the need for more research in the field of FinTech is palpable. On the other hand, one of the undeniable issues in today's world is paying attention to the environment. In today's competitive world, if organizations are not concerned about the environment around them and do not meet the demands of their stakeholders, they will be doomed to failure, and therefore, one of the most important measures and basic priorities of every organization should be achieving sustainable performance (ESG). This study aims to explain the impact of FinTech on ESG performance and financial performance with regard to the mediating role of innovation. The research method is based on the applied objective and on the basis of descriptive survey implementation, and the statistical population includes employees and managers of banks admitted to the Tehran Stock Exchange. To collect information from a questionnaire and to examine the research hypotheses, structural equation modeling was used in Smart PLS software, and the results indicate that the model has a good fit and that FinTech and innovation have an impact on ESG performance and financial performance. It was also observed that innovation has a mediating role in the impact of FinTech on ESG performance and financial performance.

Keywords: Fintech, Banking Industry, Sustainability Performance (ESG), Financial Performance, Innovation.

JEL Classification: Q32, G21, E01, O16, O32

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Introduction

The 19th century industrial revolution successfully lifted millions of people out of poverty; however, the subsequent environmental and resource degradation has been a side effect of this boom (Abbas and Dugan, 2022). Due to the increasing number of environmental crises, organizations are expected to gradually implement pro-environmental initiatives to achieve environmental sustainability (Peng et al., 2021). Companies consider sustainability performance as a new strategic choice to improve reputation and gain greater competitive advantage, because sustainability performance ultimately focuses on the company's value in the long term (Oh and Park, 2021). Fintech and environmental sustainability have recently become major topics among researchers, practitioners, as well as among bankers and asset managers (Zheng et al., 2021). Fintech can lead to new business models, applications, processes, or products in financial markets and institutions, and the provision of new financial services, and has a supporting and enabling role in banking and financial services (Liu et al., 2021).

Problem Statement/ Purpose & Question

One of the important challenges that companies and organizations have faced for years is the conflict between improving financial performance and preserving environmental issues. In the last few decades, the lack of sufficient attention to the environment in Iran has caused catastrophic crises, including permanent air pollution, damage to the earth's ecosystem and wildlife, greenhouse gas emissions, loss of natural resources, loss of living organisms, etc. It is clear that if this trend continues, the lives of future generations will also be in trouble; therefore, all companies and production and service organizations must, in addition to financial issues, also make achieving sustainable performance one of their main priorities. In recent years, the role of FinTech in the global economy, and especially the banking network, has been so significant that many believe the future of the banking industry depends on paying attention to financial technology. Although FinTech services in our country have grown significantly in recent years, this industry is still in its infancy in Iran due to numerous sanctions and lack of sufficient experience, and the need for cooperation between all financial and non-financial institutions and actors in terms of legislation, policymaking, and resource allocation is palpable. Some researchers have found a relationship between FinTech and sustainability performance in their research; however, no research has been conducted that simultaneously measures the impact of FinTech on sustainability performance and financial performance with an emphasis on innovation. Since among various industries, the main source of FinTech in the world and Iran is the banking network, in this research we decided to address this issue in the banking industry; so this study aims to explain the impact of FinTech on ESG performance and financial performance with regard to the mediating role of innovation & the main question is this: What is the impact of FinTech on sustainability performance (ESG) and financial performance with the mediating role of innovation in banks listed on the Tehran Stock Exchange?

Methodology

This research is applied in terms of purpose and descriptive survey in terms of method. The statistical population includes employees and managers of banks listed on the Tehran Stock Exchange with a minimum of a bachelor's degree and work experience of one year to over 20 years. Due to the large size of the statistical population, a sample of 384 people was



selected through systematic random sampling using the Cochran formula. A questionnaire was used to collect data, which includes 23 items and its indicators are scored using a 5-point Likert scale. In this questionnaire, Fintech includes 6 items, sustainability performance includes 9 items, financial performance includes 4 items, and innovation also includes 4 items. Experts and university professors were consulted to examine the validity, and the validity of the questionnaire was confirmed by applying corrective comments. Given that Cronbach's alpha value for all variables is more than 0.7, the reliability of the questionnaire is also confirmed.

Findings

To answer the research hypotheses, structural equation modeling with SmartPLS software was used. Using T-Value outputs, the acceptance or rejection of the research hypotheses is examined. Considering the T-Value which is 5.943, 28.957 and 8.432 and is greater than 1.96, therefore the first, second and third hypotheses of the study are accepted; so FinTech has an effect on sustainability performance, innovation and financial performance. Also, considering that the T-Value is 2.504 and 4.772 and is greater than 1.96, the fourth and fifth hypotheses of the study are also confirmed; so innovation has an effect on sustainability performance and financial performance. To test the sixth and seventh hypotheses which have a mediating variable, the Sobel test is used. The way to examine the hypotheses with a mediating variable is that if the effect of the independent variable on the mediator and the effect of the mediator on the dependent variable is simultaneously significant, the role of the mediator is confirmed and the indirect effect will be confirmed. According to the research models in standard and significant mode and the Sobel test statistic, it is possible to conclude about the rejection or acceptance of the hypothesis. According to the value of the Sobel test statistic which is equal to 2.481 and 4.725 and is greater than 1.96, the sixth and seventh hypotheses are accepted; so innovation has a mediating role in the effect of FinTech on sustainability performance and financial performance.

Conclusion

When we look at the development of FinTech in the world, we will witness the rapid and remarkable growth of this industry in recent years; where many startups have focused their activities on this industry and have sought to expand their activities in the field of financial technology; especially with the emergence of new technologies including artificial intelligence, machine learning and blockchain, which have transformed the overall business process and have also provided the basis for fundamental advances. After the financial crises of recent years, there is always a fear that the banking network in different countries will collapse or suffer serious damage due to existing risks, and even the requirements of the Basel Committee alone are not effective. For this reason, the development of FinTech and RegTech is increasingly recommended to ensure financial and banking services and the correct implementation of legislative policies. In addition, today, in addition to addressing technology and the financial industry, we should not ignore the environment that is entrusted to us; for this reason, serious attention has been paid to the environment in the goals of sustainable development, and companies and organizations should also have environmental concerns in addition to improving performance and gaining returns. Banks are no exception to this rule and, as the main players in the country's monetary and financial system, they must have the necessary planning to improve sustainability performance. After examining the direct hypotheses of the research, it was determined that



FinTech has an impact on sustainability performance, innovation, and financial performance with a path coefficient of 0.520, 0.764, and 0.531, respectively. It was also observed that innovation has an impact on sustainability performance and financial performance with a path coefficient of 0.239 and 0.292. The results obtained in this study are consistent with the results of Al-Maqtari (2024), Siddik et al. (2023), and Dwivedi et al. (2021). In addition, in the present study, the Sobel test was used to examine indirect hypotheses and it was determined that innovation plays a mediating role in the effect of FinTech on sustainability performance and financial performance. According to the results obtained, it can be stated that if FinTech is used efficiently and banks prioritize environmental protection in their vision and base the use of financial technologies in line with sustainable development goals, sustainability performance will improve and in this way, financial performance, which is the primary goal of all for-profit organizations, will also be improved. Based on the results, the following suggestions can be made: First, it is suggested that bank managers use FinTech to expand green financing and help reduce environmental damage by applying innovation and providing appropriate services to customers in the FinTech context. It is also suggested that banks, by providing appropriate training, encourage customers to use FinTech services as much as possible instead of visiting branches. In this regard, separate specialized teams should be created alongside bank risk committees to increase customer security and privacy and strengthen legislative policies. Also, among the basic requirements of various industries in recent years is compliance with environmental issues; Therefore, bank managers are advised to pay more attention to sustainability reporting and environmental protection in their quarterly and annual reports. Since modern banking is based on emerging technologies, bank managers are advised to provide the necessary infrastructure to utilize these technologies as much as possible, such as artificial intelligence and blockchain, in financial risk management, customer service, etc. Finally, because FinTech is rapidly becoming one of the areas with the highest financial turnover in the world, it is recommended that banks make every effort to implement FinTech in all aspects.

References

1. Abbas, J., & Dogan, E. (2022). The impacts of organizational green culture and corporate social responsibility on employees' responsible behaviour towards the society. *Environmental Science and Pollution Research*. doi:10.1007/s11356-022-20072-w.
2. Liu, Y., Saleem, S., & Shabbir. (2021). The Relationship between Corporate Social Responsibility and Financial Performance: A Moderate Role of Fintech Technology. *Environ Sci Pollut Res*, 28: 20174–20187.
3. Oh, H., & Park, S. (2021). Corporate sustainable management, dividend policy and Chaebol. *Sustainability*, 13(13), 7495.
4. Peng J, Chen X, Zou Y, Nie Q. (2021). Environmentally specific transformational leadership and team pro-environmental behaviors: The roles of pro-environmental goal clarity, pro-environmental harmonious passion, and power distance. *Human Relations*. 2021;74(11):1864-88
5. Zheng, G. W., Siddik, A. B., Masukujaman, M., & Fatema, N. (2021). Factors affecting the sustainability performance of financial institutions in Bangladesh: the role of green finance. *Sustainability*, 13(18), 10165. <https://doi.org/10.3390/su131810165>



