

Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors*. *International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & REVIEWS

journal homepage: www.ijmrr.online/index.php/home

ROLE OF FINTECH IN ACCELERATING GREEN INVESTMENT ADOPTION AMONG RETAIL INVESTORS

Talib Taqvi^{1*}, Dr. Vaidehi Kamath²

^{1*}Research Scholar, Lala Lajpatrai College Research Centre, India.

²Research Guide, Lala Lajpatrai College Research Centre, India.

Corresponding Author: prof.talib.taqvi@gmail.com

How to Cite the Article: Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors*. *International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.



<https://doi.org/10.56815/ijmrr.v4i4.2025.199-206>

Keywords

Green Investment,
FinTech,
One Sample t-test.

Abstract

FinTech is essential in creating opportunities to access sustainable financial products and making green investments transparent, more affordable and convenient to retail investors. Its digital innovations assist in breaking the traditional boundaries, thus speeding up the transition to investing in an environmentally responsible manner. The proposed study is driven by the increased need to learn more about how FinTech can mobilize individual investors towards green finance in the context of the increased environmental awareness. It seeks to investigate the manner in which digital applications can be used effectively to impact sustainable investment behaviour and climate objectives at large. The purpose of conducting this research is to evaluate the Role of FinTech in Accelerating Green Investment Adoption Among Retail Investors. The technique used in the current study is one sample t-test using R Studios. The findings of the study indicate that providing easy access to green investment products, FinTech applications increase awareness of sustainable investment options, FinTech offers simplified digital onboarding that encourages participation, FinTech tools enhance transparency about environmental impact, FinTech platforms reduce transaction costs associated with green investments, FinTech guide retail investors toward green assets, FinTech improves investor confidence by offering real-time performance tracking of green portfolios, FinTech enables micro-investing, making green investments affordable, Robo-advisors promote green investment options,



[The work is licensed under a Creative Commons Attribution
Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors*. *International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

	FinTech improves financial literacy, and FinTech increases trust by offering verified and credible information are significant role of fintech in accelerating Green Investments among retail investors.
--	--

1. INTRODUCTION

The fast growth of financial technology (FinTech) has transformed the manner and manner in which retail consumers access, assess and invest capital, opening up new avenues in which personal savings can be directed into environmentally friendly initiatives. FinTech reduces the traditional frictions, i.e., information frictions, high transaction costs, and restricted access to diversified products, which may matter especially in growing the number of retail participation in green investments (World Bank, 2022). FinTech platforms facilitate access to green financial products among everyday investors to be discovered and purchased by facilitating the digitization of onboarding, fractional- and micro-investing, and algorithmic advisory services, which were previously exclusive to institutional or high-net-worth investors (Gonzalez-Arcos et al., 2023; Faradynawati et al., 2022). Evidence shows that micro-investing users exhibit significant willingness to trade little financial payoff to sustainability objectives, implying that low-price, low-entry FinTech products can bring in small capital in green direction (Gonzalez-Arcos et al., 2023). In addition to access and affordability, the FinTech tools can make a significant difference in transparency and information landscape on environmental, social, and governance (ESG) characteristics. The current developments in data aggregation, automated ESG rating, and real-time portfolio analytics allow retail investors to understand the environmental impact of their holdings and compare green labels more conveniently than before (Hasan, 2024). The disclosure provides solutions to one of the fundamental obstacles to behavior: not knowing the true sustainability effect of marketed products, and has the potential to increase investor confidence when platforms incorporate validated third-party ESG information or traceability of green instruments through blockchain (Guang-Wen and Siddik, 2023). Simultaneously, the sustainability preferences may be integrated into portfolio construction by robo-advisors and customized recommendation engines, which will push retail clients towards low-carbon or theme green investments without necessarily requiring extensive prior knowledge (Faradynawati et al., 2022).

The learning and interaction features of FinTech also seem to be consequential. Awareness can be augmented with interactive learning modules, in-app sustainability summaries, and gamified nudges to encourage the interest of the investors in the green option, especially young or inexperienced investors who use mobile platforms to make financial decisions (Hasan, 2024). On the market level, digital distribution channels enable the green financial products to scale in a more efficient way by reducing the cost of acquiring customers and reaching out to investor segments with pro-sustainability preferences (World Bank, 2022). Nevertheless, as much as the potential of technology is evident, practical challenges are also present in the recent literature: the inconsistency of sustainability labelling, different quality of ESG data, and the necessity of



Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors. International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

regulatory clarity to prevent greenwashing and to protect consumers (Better Finance, 2022; Hasan, 2024).

In light of these trends, it is policy-relevant and timely to study FinTech as a way to hasten the introduction of green investment among retail investors. By summarizing the evidence on access, transparency, product design, and investor behaviour, a study can determine the process by which FinTech can be used to establish sustainable allocation and what features of the design best transform interest into long-lived investment streams. The paper thus examines how FinTech can hasten the process of retail adoption of green investments and how the practical routes, including micro-investing, robo-advice, and transparency, connect the digital innovation to increased retail engagement in green finance.

2. REVIEW OF LITERATURE

Magableh, K., Badwan, N., et al. (2025)

Conducted a research study for a complete analysis of the present literature body regarding the role of financial technology "FinTech" innovation to drive sustainable development, wherein it pinpoints significant pattern, prospects, as well as obstacles, and also identifies thematic clusters. It helps in demonstrating the FinTech innovations posses greater potentiality for advancing sustainable development with the help of enhancing efficiency of the resources, lower carbon footprints, and foster accessible financial services.

Safitri, C. & Fasa, MI. (2024)

Discussed in their research study about the strategic role of Fintech to drive green investments globally and sustainable transactions, challenges encountered, as well as the opportunities in achieving Sustainable Development Goals (SDGs) in near future. The findings derived from the research indicates that the Fintech technologies helps in reducing carbon footprint through replacement of resource-intensive conventional processes of finance alongwith digital technologies.

Hidayat-ur-Rehman, I. & Hossain, MN. (2024)

Mentioned in their research seeking for unveiling the role of intermediary essayed by green finance and competitiveness, alongside moderate the effect of Digital Transformation, in this intricate relation among sustainable performance and adoption of Fintech. The findings derived from the research indicates that green finance and competitiveness emerges as pivotal mediator, which bridges the gap among adoption of Fintech and sustainable performance.

Doghan, MA. & Chong, K. (2023)

Analysed in their research study that the main aim of this study was scrutinizing role of intermediaries of green investment, green innovation, and green finance in relation among adoption of Fintech and sustainability of the environment. The results derived from the study shows positive correlation among adoption of Fintech and sustainability of the environment as well as it is mediated significantly by green investment, green innovation, and green finance.

Aboalsamh, H., Khrais, L., et al. (2023)



Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors. International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

Emphasized, the primary objective of the current work included a deep analysis of consumer attitudes in the Middle East market concerning the impact of green fintech on sustainability along with the discussion of green fintech policies and initiatives to determine their impact on consumer behaviour. The results suggest that green fintech is a strategy that enables sustainability because corporations are encouraged to invest in renewable energy since this practice is a strategic way to ensure more funding is obtained at lower interest rates.

In their study, Celestin, M. & Asamoah, P. (2020)

Discussed the way in which the digital financial innovations are influencing the development of the green investment portfolios in the Rwanda country in the year 2015-2019. The results derived from the research indicates Fintech have increased the accessibility, efficiency, as well as transparency in the green financial sector of Rwanda.

3. OBJECTIVES OF THE STUDY

1. To examine role of FinTech in accelerate green investment adoption among retail investors.
2. To give suggestive measures to accelerate green investment adoption among retail investors

Hypothesis:

H₀: FinTech has no significant role in accelerating green investment adoption.

H₁: FinTech plays a significant role in accelerating green investment adoption.

4. RESEARCH METHODOLOGY

The study used descriptive research design and both primary and secondary data was used to collect data. Non probability purposive sampling method was employed. The study has strictly followed established ethical guidelines for data collection and analysis as suggested by Pirani (2024). The respondents for this study selected are 75 retail investors. The sample size used is accordance with Faul et al. which suggests that 45 participants as a minimum to use in carrying out a one-tailed, one-sample t-test is required. The statistical test adopted was parametric one-sample t-test with the help of R Studio.

Data Analysis and Interpretation:

Table No: 1 one sample t test

Items	t – statistics	P – value	Results
Provide easy access to green investment products.	24.98	0.000	Significant
FinTech applications increases awareness of sustainable investments options	25.00	0.001	Significant
FinTech offers simplified digital onboarding that encourages participation	24.32	0.000	Significant
FinTech tools enhance transparency about environmental impact	25.21	0.002	Significant



Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors. International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

FinTech platforms reduce transaction costs associated with green investments.	23.87	0.003	Significant
FinTech guide retail investors toward green assets.	23.11	0.002	Significant
FinTech improves investor confidence by offering real-time performance tracking of green portfolios.	26.09	0.001	Significant
FinTech enables micro-investing, making green investments affordable	23.12	0.000	Significant
Robo-advisors promote green investment options	24.66	0.000	Significant
FinTech improves financial literacy	26.32	0.000	Significant
FinTech increases trust by offering verified and credible information	25.22	0.000	Significant
FinTech facilitates quick and secure digital transactions for green financial products.	23.51	0.000	Significant

Source: Compiled from Primary Data

The results of the one-sample t-test indicate that all the factors related to FinTech in influencing green investment adoption have significant t-values exceeding the value of zero and p-values lower than the 0.05 value, meaning that their scores are significantly higher than the test value of 3. This validates the fact that FinTech is a tremendously important and beneficial factor in terms of green investment adoption by retail investors. The findings indicate that the major FinTech attributes, Provide easy access to green investment products, FinTech applications increases awareness of sustainable investments options, FinTech offers simplified digital onboarding that encourages participation, FinTech tools enhance transparency about environmental impact, FinTech platforms reduce transaction costs associated with green investments, FinTech guide retail investors toward green assets, FinTech improves investor confidence by offering real-time performance tracking of green portfolios, FinTech enables micro-investing, making green investments affordable, Robo-advisors promote green investment options, FinTech improves financial literacy, and FinTech increases trust by offering verified and credible information are significant role of fintech in accelerating Green Investments among retail investors. The results conclude that FinTech innovations can prove themselves as a potent engine in motivating and maintaining the adoption of green investment.

5. CONCLUSION

The analysis indicates, one of the potent facilitators of green investment adoption among the retail investment is FinTech. These channels will become more transparent and accessible to investors with the help of the availability of sustainable investment opportunities offered by FinTech platforms to motivate more people to turn to green finance. Some of the characteristics that can be employed in enhancing the intention and the ability of the people to invest in eco-friendly financial products include the simplified digital processes, the heightened awareness-building, the heightened transparency of the environmental impact, and the heightened investor confidence. In addition to that, the positive effect of FinTech on supplying the information, which is reliable,



Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors*. *International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

removing the barriers to entry, and simplifying the process of transactions, making them convenient and safe can only become stronger. Overall, the FinTech is a disruptive technology, which enables the retail investors to become an active participant of sustainable investment opportunities.

6. SUGGESTIONS:

FinTech platforms can create more interactive and education tools that enable investors to get to know more about the long-term value of green investments. Another step they can take is to team up with environmental bodies so as to provide comprehensive responses to the sustainability impact of various products. It is also possible to provide the improved engagement by developing the personalized recommendation system with the focus on the green investment. Increased scrutiny of the claims of sustainability would be a move in the right direction towards building more confidence in the eyes of the skeptical investors. As well as lower quality and entry-level or low-price micro-investment green portfolio would assist in getting low-income or entry-level investors into sustainable investment at low cost. The FinTech providers can proceed to the even more environmentally responsible investing among retail users with these strategic enhancements.

7. AUTHOR(S) CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

8. CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

9. PLAGIARISM POLICY

All authors declare that any kind of violation of plagiarism, copyright and ethical matters will take care by all authors. Journal and editors are not liable for aforesaid matters.

10. SOURCES OF FUNDING

The authors received no financial aid to support for the research.

REFERENCES

- [1] Aboalsamh, H., Khrais, L., et al. (2023). Pioneering perception of green fintech in promoting sustainable digital services application within smart cities. *Sustainability* 15 (14), 11440.
- [2] Celestin, M. & Asamoah, P. (2020). CHAPTER X FINTECH FOR SUSTAINABILITY: THE ROLE OF DIGITAL FINANCE IN PROMOTING GREEN



Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors. International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

INVESTMENT PORTFOLIOS. *Multidisciplinary Approaches Towards Research in Arts Humanities and Social Sciences*, pp. 94-115.

[3] Doghan, MA. & Chong, K. (2023). Fintech adoption and environmental sustainability: Mediating role of green finance, investment and innovation. *International Journal of Operations and Quantitative Management* 29 (2), 296-315.

[4] Faradynawati, I. A., & Söderberg, I. (2021). Sustainable Investment Preferences among Robo-Advisor Clients. *Sustainability*, 14(19), 12636. <https://doi.org/10.3390/su141912636>

[5] Gonzalez-Arcos, C., Meath, C., Leszczyc, P. P., Haruvy, E., & An, J. (2023). Fostering sustainable investments through micro-investing platforms. *Scientific Reports*, 13(1), 21194.

[6] Guang-Wen, Z., & Siddik, A. B. (2023). The effect of Fintech adoption on green finance and environmental performance of banking institutions during the COVID-19 pandemic: the role of green innovation. *Environmental Science and Pollution Research*, 30(10), 25959-25971.

[7] Hasan, M., Hoque, A., Abedin, M. Z., & Gasbarro, D. (2024). FinTech and sustainable development: A systematic thematic analysis using human- and machine-generated processing. *International Review of Financial Analysis*, 95, 103473. <https://doi.org/10.1016/j.irfa.2024.103473>

[8] Hidayat-ur-Rehman, I. & Hossain, MN. (2024). The impacts of Fintech adoption, green finance and competitiveness on banks' sustainable performance: digital transformation as moderator. *Asia-Pacific Journal of Business Administration*.

[9] <https://betterfinance.eu/wp-content/uploads/BETTER-FINANCE-Robo-advice-2022-Report.pdf>

[10] <https://documents1.worldbank.org/curated/en/099450005162250110/pdf/P17300600228b70070914b0b5edf26e2f9f.pdf>

[11] Magableh, K., Badwan, N., et al. (2025). Role of financial technology (FinTech) innovations in driving sustainable development: a comprehensive literature review and future research avenues. *Journal of Science and Technology Policy Management*.



Taqvi Talib, Kamath Vaidehi (2025). *Role of Fintech in Accelerating Green Investment Adoption among Retail Investors*. *International Journal of Multidisciplinary Research & Reviews*, 4(4), 199-206.

- [12] Parikh, V. (2022). How to revitalize management education in India. *Journal of Management & Entrepreneurship*, Vol – 16, Issue – 1, Pg. 151-155
- [13] Pirani, S. (2024). Navigating Research Ethics: Strategies for preventing and Addressing Research Misconduct, *International Journal of Multidisciplinary Research & Reviews*, Vol 03, No. 02, PP.96-104.
- [14] Safitri, C. & Fasa, MI. (2024). The Role of Fintech and Green Investment in Driving Sustainable Transactions. *Islamic Economics and Finance Journal* 3 (2), 117-126.
- [15] Thakkar, K (2023) Challenges in front of Tourism Sector in South Konkan region (Ratnagiri and Sindhudurg) during the post covid period. *Journal of Education (Rabindra Bharti University)*, Vol XXIII No 1, 84-89.
- [16] Thakkar, K. & Pandangale P (2021) A Comparative Analysis of Performance of Power Supply Companies In The Duopoly Market of Mumbai Region. *Journal of Contemporary Issues in Business and Government*, 27(4), 357-362.

