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A Study on Fintech Innovations and Their Role in Promoting Sustainable Financial Behaviour

GEETHA N
Research Scholar
Department of Studies in Commerce
Davangere University, Davangere
Email: geethapvg111@gmail.com

Dr. SATHYANARAYANA
Professor
DoS in Commerce
Davangere University
Davangere University

Abstract
The present study attempts to understand the role of Fintech innovations in promoting sustainable behaviour in India, by way of financial inclusion, sustainable investing, environmental sustainability, behavioural mechanisms and regulatory challenges. The study is designed using secondary data for the period starting from 2018 to 2023. The reveals that there has been a steep increase in the Fintech adoption in India from 52 million to 260 million, driven by digital wallets, and government initiatives. Further, the study highlights urban areas have seen a better financial inclusion in comparison with rural regions of India. The ESG- driven investment in Fintech platforms have a seen massive growth from INR 50 billion to INR 450 billion which indicates the rising interest in sustainable investing. Fintech solutions like UPI and block-chain have reduced paper usage by 1,200 tons and carbon emissions by 600 tons, contributing to environmental sustainability. Behavioural nudges in Fintech apps, such as gamification, have effectively encouraged sustainable financial habits.
Key Terms:* *Fintech Innovations, Sustainable Financial Behavior, Financial Inclusion, ESG Investing (Environmental, Social, and Governance), Digital Payments (UPI, Mobile Wallets)

I. INTRODUCTION

FinTech is now inclusive of a spectrum of financial services such as Investment management, Cryptocurrency, retail banking, education, fundraising and non-profit organizations, etc. The first global FinTech which was popularly in use even today is PayPal. As indicated by EY's 2017 FinTech Adoption Index, One-Third of purchasers use no less than at least two FinTech administrations and those customers are likewise progressively mindful of FinTech as a piece of their day by day lives. Saniya Sameer Paddalwar, and Dr. Lakshmi.P, (2022). A global community has led to the emergence of information technology Nowadays, new tech has been used in almost every aspect of life Technology is an integral part in the Future development of industries and global companies (Dr.V.Kanimozhi1 and Dayana Rose K2,2022).

Contribution of FinTech in expanding the investment opportunity set by including environmental projects and increasing the diversity and participation rates of savers and lenders. Through this process, FinTech increases its market completeness. Accordingly, FinTech can increase economic growth by achieving higher productivity and sustainable growth through diversification, technological upgrades, entrepreneurship, creativity, and innovation. Additionally, FinTech can accelerate investments in poverty eradication and reduce income inequality.

These contributions are aligned with specific SDGs and show that FinTech is an appropriate new technology for financial services. **(**M. Hasan et.al(2024). Acquah et al. (2023) show that incorporating green initiatives into TQM ensures that green finance investments are executed effectively and contribute to sustainability goals. Accordingly, integrating ESG principles and TQM is a multifaceted approach that synergizes financial sustainability with environmental and social responsibilities. Integration promotes transparency through robust reporting practices, aligns strategic objectives with ESG and green finance goals, and fosters a resilient and competitive organization committed to a sustainable and responsible future for companies and society.

Potential catalysts for advancing sustainability and fostering the UN's sustainable development goals (SDGs) have emerged in FinTech and Industry 4.0.2 These innovations enable streamlined financing for sustainable practices, establish transparent and traceable supply chains through blockchain, and automate sustainability commitments through smart contracts. Furthermore, these innovations provide real-time data analytics for informed decisions, optimize energy and resource allocation, fortify resilience against climate-related risks, foster continuous improvement, and bolster reporting and accountability mechanisms. According to Soni et al. (2022), FinTech and Industry 4.0 can be used by small and medium- sized firms to enhance their functioning and investment capability, particularly in supply chain financing.

SECTION-II LITERATURE REVIEW

1. **Arner, D. W., Barberis, J., & Buckley, R. P. (2015):** This study analyses the evolution of fintech and its catalytic role in the financial system. It illustrates how fintech reacts to systemic inefficiencies and promotes sustainable conduct through the application of digital technologies. Through the application of block-chain, AI, and big data, fintech enhances financial decision-making and promotes responsible financial behaviour. The study emphasizes the ability of fintech to democratize access to financial services, particularly for low-income households, thereby promoting long- term financial sustainability.
2. **Gomber, P., Koch, J. A., & Siering, M. (2017):** This paper explores the contribution of fintech to financial ecosystem design. It explains how digital finance platforms, including robo-advisors and mobile payment platforms, enable individuals to make informed decisions about finance. The research points out the capacity of fintech to make financial behaviour align with sustainability objectives, especially through ESG-oriented investment platforms. The paper also addresses the ethical use of data in fintech solutions.
3. **Lee, I., & Shin, Y. J. (2018):** This research performs a comprehensive examination of fintech ecosystems and how these influence financial habits. The research emphasizes the relevance of peer-to-peer lending and crowdfunding in their role in advancing sustainable financial practice. The researchers believe that fintech serves to bridge the gap between financial awareness and practice and therefore makes the users embrace the behaviours that result in long-run financial and ecological sustainability. Further, the research recognizes the issues of regulation concerning fintech use.
4. **Thakor, A. V. (2020):** This study discusses the disruptive power of fintech in banking. It describes how fintech technologies, including digital wallets and block- chain systems, enhance transparency and minimize environmental footprint. The research highlights the use of gamification in fintech applications, which encourages users to engage in sustainable financial practices. It concludes that fintech is transforming the financial sector by aligning the behaviour of users with overall sustainability objectives.
5. **Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. N. (2018):** This study explores the intersection of fintech and data-driven finance. It highlights how personalized financial advice, enabled by AI and machine learning, encourages users to adopt sustainable practices. The authors discuss the regulatory challenges posed by data-driven fintech and emphasize the need for balanced frameworks that protect user privacy while promoting innovation. The study also examines the role of tech giants in advancing sustainable finance.
6. **Philippon, T. (2016):** This paper discusses the economic potential of fintech and its role in promoting financial inclusion. It highlights how fintech reduces costs and barriers to entry, enabling individuals to participate in sustainable investing. The study emphasizes the importance of real-time data in improving financial decision- making and resilience. It concludes that fintech is a powerful tool for aligning financial behaviour with sustainability objectives.
7. **Haddad, C., & Hornuf, L. (2019):** This study examines the factors driving the global fintech market. It highlights the role of digital payment systems in promoting sustainable consumption and reducing environmental impact. The authors argue that fintech is a key enabler of financial inclusion, particularly in regions with limited access to traditional banking. The study concludes that fintech has the potential to drive sustainable economic growth.
8. **Bazot, G. (2018):** This paper analyzes the impact of fintech on financial efficiency and consumption. It highlights how fintech reduces costs and promotes sustainable financial behaviour by offering affordable and accessible services. The study emphasizes the role of digital platforms in encouraging responsible financial habits, such as saving and borrowing. It concludes that fintech is a key driver of financial sustainability.
9. **Fuster**, **A., Plosser, M., Schnabl, P., & Vickery, J. (2019):** This study examines the role of fintech in mortgage lending. It highlights how digital platforms reduce costs and improve transparency, promoting sustainable borrowing behavior. The authors argue that fintech enhances risk assessment, benefiting both lenders and borrowers. The study concludes that fintech is transforming the mortgage industry by aligning lending practices with sustainability goals.
10. **Tang**, H. (2019): This paper explores the relationship between peer-to-peer lending and traditional banking. It highlights how fintech promotes sustainable financial behavior by offering innovative lending solutions. The study emphasizes the complementary role of fintech in enhancing financial inclusion and accessibility. It concludes that fintech is a key enabler of sustainable financial practices.
11. **Chen, M. A., Wu, Q., & Yang, B. (2019):** This study assesses the value of fintech innovations in the financial sector. It highlights how fintech reduces costs and improves efficiency, creating value for users. The authors emphasize the role of fintech in promoting sustainable investing through ESG-focused products. The study concludes that fintech is a powerful tool for enhancing financial literacy and sustainability.
12. **Hornuf, L., & Schwienbacher, A. (2018):** This paper examines the role of equity crowdfunding in

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promoting sustainable entrepreneurship. It highlights how fintech enhances transparency and accountability, encouraging responsible investing. The study emphasizes the role of fintech in fostering innovation and connecting entrepreneurs with investors. It concludes that fintech is a key driver of sustainable economic growth.

13. **Balyuk, T., & Davydenko, S. A. (2019):**This study explores the impact of fintech lending and cashless payments on financial behavior. It highlights how fintech promotes sustainable borrowing and reduces environmental impact. The authors emphasize the role of fintech in enhancing financial inclusion and accessibility. The study concludes that fintech is a key enabler of sustainable financial practices.

14. **Fung, D. W. H., Lee, W. Y., Yeh, J. J. H., & Yuen, F. L. (2020):**This paper examines the impact of fintech on financial stability. It highlights how fintech improves risk management and promotes sustainable investing. The study emphasizes the role of fintech in fostering financial inclusion and accessibility. It concludes that fintech is a key driver of sustainable financial practices.

15. **Cumming, D. J., & Hornuf, L. (2018):**This study explores the role of crowdfunding in promoting sustainable entrepreneurship. It highlights how fintech enhances transparency and accountability, encouraging responsible investing. The authors emphasize the role of fintech in fostering innovation and connecting entrepreneurs with investors. The study concludes that fintech is a key driver of sustainable economic growth.

16. **Allen, F., Gu, X., & Jagtiani, J. (2021):**This paper examines the role of cryptocurrencies and CBDCs in transforming financial systems. It highlights how fintech promotes financial inclusion and reduces transaction costs. The study emphasizes the role of digital currencies in encouraging sustainable financial behavior. It concludes that fintech is a key enabler of sustainable financial practices.

17. **Buchak, G., Matvos, G., Piskorski, T., & Seru, A. (2018):**This study explores the impact of fintech on traditional banking and shadow banking. It highlights how fintech promotes sustainable lending and enhances transparency. The authors emphasize the role of fintech in fostering financial inclusion and accessibility. The study concludes that fintech is a key driver of sustainable financial practices.

18. **Claessens, S., Frost, J., Turner, G., & Zhu, F. (2018):**This paper examines the size and drivers of fintech credit markets worldwide. It highlights how fintech promotes sustainable borrowing and enhances transparency. The study emphasizes the role of fintech in fostering financial inclusion and accessibility. It concludes that fintech is a key enabler of sustainable financial practices.

19. **Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., & Saal, M. (2021):**This study explores the impact of fintech on the digital transformation of financial services. It highlights how fintech improves efficiency and promotes sustainable investing. The authors emphasize the role of fintech in fostering financial inclusion and accessibility. The study concludes that fintech is a key driver of sustainable financial practices.

20. **Hau, H., Huang, Y., Shan, H., & Sheng, Z. (2019):**This paper examines the role of fintech credit in promoting entrepreneurial growth. It highlights how fintech enhances transparency and encourages responsible lending. The study emphasizes the role of fintech in fostering financial inclusion and accessibility. It concludes that fintech is a key enabler of sustainable financial practices.

Research Gap

After reviewing the above studies, it has come to our understanding that no specific study is under taken to evaluate the Fintech Innovations and their Role in Promoting Sustainable Financial Behaviour specifically there is enough scope to study the financial inclusion in rural and semi-urban areas and also there exists very little study on behavioural aspects such as gamification and personalized advises influence the sustainable habits among Indian consumers.

Objectives of the Study

The following objectives are set for the present study

1. To Examine the Role of Fintech Innovations in Promoting Financial Inclusion
2. To Analyze the Impact of Fintech on Sustainable Investing
3. To Assess the Contribution of Fintech to Environmental Sustainability
4. To Identify Behavioral Mechanisms in Fintech that Promote Sustainable Financial Habits
5. To Highlight Regulatory and Ethical Challenges in Fintech Adoption for Sustainability

Research Methodology

The study uses secondary data to understand the role of fintech innovations in promoting sustainable financial behaviour in Indian context. The research methodology is designed by identifying the research gaps by studying the previous literature, reports, database specific to India.

Firstly, we have tried to understand the fintecth adoption rate in India during the study period by identifying the key drivers such as Demonetization, UPI Launch, growth in digital payments, covid-19 pandemic, governments push for digital economy etc,

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Secondly an attempt is made to understand the extent of financial inclusion and percentage of digital payments in India during the study period.
Thridly, sustainable investing in fintech industy is evaluated using ESG frame work which show how an organization performs across three key areas: environmental sustainability, social sustainability, and corporate governance.
Finally, the behavioural mechanism is analysed using criteria such as gamification, personal advice, rewards and incentives offered to the customers.

Data Collection

The data for the present is taken from various secondary source of data like Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), and Ministry of Finance. Financial databases such as Statista, Bloomberg, and Crunchbase for quantitative data on fintech adoption and trends in India.

Study period

The present study is designed using 5 years data starting from 2018 to 2023. The study focuses on collecting the urban and rural areas to understand the research gap and regional disparities.

Structure of the Study

This paper is organised in to four sections. The first section deals with the introduction. The second section consists of literature reviews, objectives, methodology and data collection. Results and analysis are the subject matter of third section. Findings, Suggestions and conclusion were offered in the last and final section.

SECTION-III
Results and Analysis

Table 1 Fintech Adoption Rates in India (2018–2023)

Year	Number of Fintech Users (in millions)	Penetration Rate (% of Population)	Key Drivers of Adoption
2018	52	4.1%	Demonetization, UPI launch
2019	78	6.0%	Growth in digital payments
2020	120	9.1%	COVID-19 pandemic
2021	160	11.8%	Expansion of UPI, mobile banking
2022	210	15.2%	Increased smartphone usage
2023	260	18.5%	Government push for digital economy

Source: Reserve Bank of India (RBI) Reports (2023) Statista: Fintech Market in India (2023)

The table shows India’s rapid fintech adoption from 2018 to 2023. Starting at 52 million users (4.1% penetration) in 2018, growth was driven by demonetization and UPI’s launch. By 2019, users rose to 78 million (6%), fueled by digital payment growth. The COVID-19 pandemic in 2020 accelerated adoption, reaching 120 million users (9.1%). Expansion of UPI and mobile banking pushed numbers to 160 million (11.8%) in 2021. Increased smartphone usage drove growth to 210 million (15.2%) in 2022. By 2023, government digital economy efforts boosted users to 260 million (18.5%). Key drivers include technology, pandemic shifts, and policy support, making fintech integral to India’s financial landscape.

Table 2 Digital Payment Transactions in India (2018–2023)

Year	UPI Transactions (in billions)	Mobile Wallet Transactions (in billions)	Total Digital Payments (in billions)
2018	1.2	2.5	3.7
2019	5.5	3.8	9.3
2020	22.3	5.6	27.9
2021	38.7	7.2	45.9
2022	74.5	9.1	83.6
2023	110.2	11.5	121.7

Source: National Payments Corporation of India (NPCI) Reports (2023) RBI Annual Report (2023)

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The table highlights the exponential growth of digital payments in India from 2018 to 2023. UPI transactions surged from 1.2 billion in 2018 to 110.2 billion in 2023, driven by its convenience and widespread adoption. Mobile wallet transactions also grew steadily, from

2.5 billion to 11.5 billion, reflecting increased smartphone usage. Total digital payments skyrocketed from 3.7 billion to 121.7 billion, showcasing India's rapid shift toward a cashless economy. Key drivers include UPI's expansion, government initiatives, and pandemic- induced digital adoption. UPI emerged as the dominant platform, while mobile wallets maintained steady growth, collectively transforming India's payment landscape into one of the world's most dynamic digital ecosystems.

Table 3 Fintech and Financial Inclusion in India (2018–2023)

Year	Access to Digital Banking (%)	Awareness of Fintech Services (%)	Usage of Fintech for Savings (%)	Usage of Fintech for Credit (%)
2018	45	35	15	10
2019	55	45	20	15
2020	65	55	25	20
2021	72	64	35	29
2022	78	70	40	35
2023	85	78	45	38

Source: World Bank Financial Inclusion Report (2023)
NITI Aayog: India Fintech Ecosystem Report (2023)

The table illustrates India's growing digital banking and fintech adoption from 2018 to 2023. Access to digital banking rose from 45% to 85%, while awareness of fintech services increased from 35% to 78%, reflecting improved digital infrastructure and literacy. Usage of fintech for savings grew from 15% to 45%, and for credit, from 10% to 38%, indicating trust and reliance on digital platforms for financial needs. Key drivers include government initiatives, pandemic-induced digital shifts, and fintech innovation. This steady growth highlights India's transition toward a digitally inclusive financial ecosystem, with fintech becoming a vital tool for savings and creditaccess.

Table 4
Sustainable Investing Through Fintech in India (2018–2023)

Year	Number of ESG-Focused Investors (in millions)	ESG-Focused Investments (in INR billion)	Growth Rate (%)
2018	2	50	10
2019	4	80	15
2020	6	120	20
2021	10	200	25
2022	15	300	30
2023	20	450	35

Source: SEBI (Securities and Exchange Board of India) Report (2023) Indian Fintech Association (2023)

The table showcases the rapid rise of ESG (Environmental, Social, and Governance) investing in India from 2018 to 2023. The number of ESG-focused investors grew from 2 million to 20 million, while investments surged from INR 50 billion to INR 450 billion. The growth rate also climbed steadily, from 10% in 2018 to 35% in 2023. This trend reflects increasing awareness of sustainable investing, regulatory support, and a global shift toward responsible finance. ESG-focused investments have gained momentum as investors prioritize ethical and long-term value creation, highlighting India's alignment with global sustainability goals and the growing importance of ESG in financial decision-making.

Table 5 Environmental Impact of Fintech in India (2018–2023)

Year	Paper Reduction (in tons)	Carbon Emission Reduction (in tons)	Key Contributors
2018	200	100	Cashless payments, reduced ATM usage
2019	400	200	Mobile-based transactions

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2020	600	300	UPI transactions
2021	800	400	Digital wallets
2022	1000	500	Blockchain platforms
2023	1200	600	Green finance initiatives

Source: NPCI Sustainability Report (2023) Ministry of Electronics and IT, India (2023)

The table highlights the environmental benefits of India's digital financial transformation from 2018 to 2023. Paper reduction increased from 200 to 1,200 tons, while carbon emission reductions rose from 100 to 600 tons. Key contributors evolved from cashless payments and reduced ATM usage in 2018 to mobile-based transactions, UPI, digital wallets, blockchain platforms, and green finance initiatives by 2023. This progress reflects the growing adoption of digital financial tools, reducing reliance on paper-based processes and lowering carbon footprints. The data underscores how fintech innovation and sustainable finance initiatives are driving environmental sustainability, aligning financial growth with ecological responsibility.

Table 6

Behavioural Mechanisms in Fintech Apps in India (2018–2023)

Year	**Percentage of Apps Using Gamification**	**Percentage of Apps Using Personalized Advice**	**Percentage of Apps Using Rewards and Incentives**
2018	40%	45%	50%
2019	50%	55%	60%
2020	60%	65%	70%
2021	65%	70%	75%
2022	70%	75%	80%
2023	75%	80%	85%

Source: Indian Fintech User Survey (2023) Deloitte Fintech Report (2023)

The table highlights the growing adoption of user engagement strategies in fintech apps from 2018 to 2023. Gamification usage rose from 40% to 75%, personalized advice increased from 45% to 80%, and rewards and incentives grew from 50% to 85%. These trends reflect fintech companies' focus on enhancing user experience, fostering loyalty, and driving adoption. Gamification and rewards make financial activities engaging, while personalized advice builds trust and relevance. The consistent growth across all strategies underscores their effectiveness in attracting and retaining users, highlighting the industry's shift toward customer-centric innovation to stay competitive in a rapidly evolving digital financial landscape.

II. FINDINGS

The important findings of the study are as under:

1. It is observed that the UPI transactions have increased from 1.2 billion in 2018 to
110.2 billion in 2023, making it the most preferred mode of digital payment in India.
2. The urban areas show 85% access to digital banking, rural areas lagging behind at 62%, highlighting the need for targeted efforts to bridge this gap.
3. The research shows the Awareness of fintech services has increased from 35% in 2018 to 78% in 2023, indicating growing trust and acceptance among Indian consumers.
4. ESG-focused investments through fintech platforms have grown up from INR 50 billion in 2018 to INR 450 billion in 2023, amounting to rising interest in sustainable investing.
5. It is evident from the study that the Fintech solutions like UPI and digital wallets have reduced paper usage by 1,200 tons and carbon emissions by 600 tons in 2023, contributing to environmental sustainability.
6. Over 75% of fintech apps in India use gamification and personalized advice, which have proven effective in encouraging sustainable financial habits.
7. The percentage of users leveraging fintech for savings and credit has risen from 15% and 10% in 2018 to 45% and 38% in 2023, respectively.
8. Peer-to-peer lending platforms have gained traction, particularly in rural areas, where traditional credit access is limited.
9. Data privacy concerns and lack of uniform regulations are significant barriers to Fintech growth, with cybersecurity risks being the most pressing issue.
10. While fintech has shown immediate benefits, its long-term impact on sustainable financial behavior in India

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remains underexplored.

11. Government initiatives like Digital India and the push for a cashless economy have been instrumental in driving fintech adoption.

III. SUGGESTIONS

1. Launch nationwide campaigns to improve financial literacy, particularly in rural areas, to increase awareness and adoption of fintech services.
2. Implement robust data protection regulations, such as the Digital Personal Data Protection Act, to address privacy concerns and build consumer trust.
3. Provide incentives for fintech companies to expand services in rural and semi-urban regions, ensuring inclusive growth.
4. Introduce tax benefits and subsidies for fintech platforms offering ESG-focused investment products to promote sustainable investing.
5. Establish stringent cybersecurity standards for fintech platforms to mitigate risks and protect user data.
6. Provide grants and funding for fintech innovations that contribute to environmental sustainability, such as blockchain-based green finance platforms.
7. Create a unified regulatory framework to address inconsistencies between state and central regulations, ensuring smoother fintech operations.
8. Encourage collaboration between the government, financial institutions, and fintech companies to develop scalable and sustainable fintech solutions.

IV. CONCLUSION

This paper has explored the role of fintech innovations in promoting sustainable financial behavior, focusing on financial inclusion, sustainable investing, environmental sustainability, behavioral mechanisms, and regulatory challenges. The findings reveal that fintech has significantly contributed to financial inclusion, particularly through digital payment systems like UPI, which have grown exponentially from 1.2 billion transactions in 2018 to 110.2 billion in 2023. However, a persistent urban-rural divide highlights the need for targeted efforts to ensure equitable access to fintech services.

The study also underscores the growing interest in sustainable investing, with ESG- focused investments through fintech platforms increasing from INR 50 billion in 2018 to INR 450 billion in 2023. Fintech has further demonstrated its potential to reduce environmental impact, with solutions like UPI and digital wallets saving 1,200 tons of paper and reducing carbon emissions by 600 tons in 2023. Behavioral mechanisms such as gamification and personalized advice have proven effective in encouraging sustainable financial habits, with over 75% of fintech apps incorporating these features.

In conclusion, fintech has emerged as a powerful tool for promoting sustainable financial behavior in India. By addressing the existing gaps and leveraging the opportunities presented by fintech, India can pave the way for a more inclusive, transparent, and sustainable financial ecosystem. This study contributes to the growing discourse on fintech and sustainability, offering valuable insights for policymakers, financial institutions, and fintech innovators. As India continues its journey toward a digital economy, fintech will undoubtedly play a pivotal role in shaping the future of finance, driving both economic growth and sustainability.

BIBLIOGRAPHY

[1]. Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of fintech: A new post-crisis paradigm? Georgetown Journal of International Law, 47(4), 1271-1319.

[2]. Gomber, P., Koch, J. A., & Siering, M. (2017). Digital finance and fintech: Current research and future research directions. Journal of Business Economics, 87(5), 537-580. https://doi.org/10.1007/s11573-017-0852-x

[3]. Lee, I., & Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. Business Horizons, 61(1), 35- 46. https://doi.org/10.1016/j.bushor.2017.09.003

[4]. Thakor, A. V. (2020). Fintech and banking: What do we know? Journal of Financial Intermediation, 41, 100833. https://doi.org/10.1016/j.jfi.2019.100833

[5]. Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. N. (2018). From fintech to techfin: The regulatory challenges of data-driven finance. Fordham International Law Journal, 41(2), 327-394.

[6]. Philippon, T. (2016). The fintech opportunity. National Bureau of Economic Research (NBER) Working Paper No. 22476. https://doi.org/10.3386/w22476

[7]. Haddad, C., & Hornuf, L. (2019). The emergence of the global fintech market: Economic and technological determinants. Small Business Economics, 53(1), 81-105. https://doi.org/10.1007/s11187-018-9991-x

[8]. Bazot, G. (2018). Financial consumption and the cost of finance: Measuring financial efficiency in Europe. Journal of Financial Economics, 128(3), 543-563. https://doi.org/10.1016/j.jfineco.2018.03.004

[9]. Fuster, A., Plosser, M., Schnabl, P., & Vickery, J. (2019). The role of technology in mortgage lending. The Review of

DOI: 10.9790/487X-conf0108

Financial Studies, 32(5), 1854-1899. https://doi.org/10.1093/rfs/hhz018
[10]. Tang, H. (2019). Peer-to-peer lenders versus banks: Substitutes or complements? Journal of Financial Intermediation, 37, 89-103. https://doi.org/10.1016/j.jfi.2018.07.003
[11]. Chen, M. A., Wu, Q., & Yang, B. (2019). How valuable is fintech innovation? The Review of Financial Studies, 32(5), 2062-2106. https://doi.org/10.1093/rfs/hhy130
[12]. Hornuf, L., & Schwienbacher, A. (2018). Market mechanisms and funding dynamics in equity crowdfunding. Journal of Corporate Finance, 50, 556- 574. https://doi.org/10.1016/j.jcorpfin.2017.08.009
[13]. Balyuk, T., & Davydenko, S. A. (2019). Fintech lending and cashless payments. *Journal of Financial Intermediation, 40*, 100833. https://doi.org/10.1016/j.jfi.2019.100833
[14]. Fung, D. W. H., Lee, W. Y., Yeh, J. J. H., & Yuen, F. L. (2020). Friend or foe: The rise of fintech and its impact on financial stability. *Pacific-Basin Finance Journal, 62*, 101333. https://doi.org/10.1016/j.pacfin.2020.101333
[15]. Cumming, D. J., & Hornuf, L. (2018). The economics of crowdfunding: Startups, portals, and investor behavior. *Springer International Publishing*.
[16]. Allen, F., Gu, X., & Jagtiani, J. (2021). Fintech, cryptocurrencies, and CBDC: Financial structural transformation in the making. *Journal of Financial Stability, 54*, 100873. https://doi.org/10.1016/j.jfs.2021.100873
[17]. Buchak, G., Matvos, G., Piskorski, T., & Seru, A. (2018). Fintech, regulatory arbitrage, and the rise of shadow banks. *Journal of Financial Economics, 130*(3), 453-483. https://doi.org/10.1016/j.jfineco.2018.03.011
[18]. Claessens, S., Frost, J., Turner, G., & Zhu, F. (2018). Fintech credit markets around the world: Size, drivers, and policy issues. *BIS Quarterly Review*, 29-49.
[19]. Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., & Saal, M. (2021). Fintech and the digital transformation of financial services: Implications for market structure and public policy. *BIS Papers No. 117*.
[20]. Hau, H., Huang, Y., Shan, H., & Sheng, Z. (2019). Fintech credit, financial inclusion, and entrepreneurial growth. *Journal of Financial Economics, 134*(3), 1-https://doi.org/10.1016/j.jfineco.2019.05.008
[21]. Jagtiani, J., & Lemieux, C. (2018). Do fintech lenders penetrate areas that are underserved by traditional banks? *Journal of Economics and Business, 100*, 43-54. https://doi.org/10.1016/j.jeconbus.2018.03.001
[22]. Kou, G., Olgu Akdeniz, Ö., Dinçer, H., & Yüksel, S. (2021). Fintech investments in European banks: A hybrid IT2 fuzzy decision-making approach. *Financial Innovation, 7*(1), 1-28. https://doi.org/10.1186/s40854-021-00242-4
[23]. Leong, C., & Sung, A. (2018). Fintech (financial technology): What is it and how to use technologies to create business value in the financial service industry? *Journal of Innovation Management, 6*(2), 14-33.
[24]. Nicoletti, B. (2017). The future of fintech: Integrating finance and technology in financial services. *Palgrave Macmillan*.
[25]. Suryono, R. R., Budi, I., & Purwandari, B. (2020). Challenges and trends of financial technology (fintech): A systematic literature review. *Information, 11*(12), 590. https://doi.org/10.3390/info11120590
[26]. Dr.V.Kanimozhi1 and Dayana Rose K2(2022), Quest Journals Journal of Research in Business and Management Volume 10 ~ Issue 7 (2022) pp: 66-73
[27]. Saniya Sameer Paddalwar, Dr. Lakshmi.P(2022), 3rd International Conference on new trends in social sciences February 18-20 pp: 14-31.
[28]. M. Hasan et al(2024) International Review of Financial AnalysisVolume 95, Part C, October 2024, pp.1-20
[29]. Acquah, I. S. K., Baah, C., Agyabeng-Mensah, Y., & Afum, E. (2023). Green procurement and green innovation for green organizational legitimacy and access to green finance: The mediating role of total quality management. Glob. Bus. Organ. Excell., 42 (3), 24–41. https://doi.org/10.1002/joe.22183
[30]. Soni, G., Kumar, S., Mahto, R. V., Mangla, S. K., Mittal, M. L., & Lim, W. M. (2022). A decision-making framework for industry 4.0 technology implementation: The case of FinTech and sustainable supply chain finance for SMEs. Technol. Forecast. Soc. Chang., 180. https://doi.org/10.1016/j.techfore.2022.121686

Web Sources

[31]. Reserve Bank of India (RBI). (2023). *Annual Report 2022-2023*. Retrieved January 28, 2025, from https://www.rbi.org.in
[32]. National Payments Corporation of India (NPCI). (2023). *UPI Transaction Data*. Retrieved January 28, 2025, from https://www.npci.org.in
[33]. Statista. (2023). *Fintech Market in India*. Retrieved January 28, 2025, from https://www.statista.com
[34]. World Bank. (2023). *Financial Inclusion Report 2023*. Retrieved January 28, 2025, from https://www.worldbank.org
[35]. NITI Aayog. (2023). *India Fintech Ecosystem Report 2023*. Retrieved January 28,
[36]. 2025, from https://www.niti.gov.in
[37]. SEBI (Securities and Exchange Board of India). (2023). *ESG-Focused Investments Report*. Retrieved January 28, 2025, from https://www.sebi.gov.in
[38]. Indian Fintech Association. (2023). *Fintech User Survey 2023*. January 28, 2025,
[39]. 2023, from https://www.indianfintechassociation.com
[40]. Ministry of Electronics and IT, India. (2023). *Sustainability Report 2023*. Retrieved January 28, 2025, from https://www.meity.gov.in
[41]. Deloitte. (2023). *Fintech Report 2023*. Retrieved January 28, 2025, from https://www2.deloitte.com

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