

### *FinTech and Investment Behaviour*

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**Abstract:** Financial Technology (FinTech) has significantly transformed the investment behaviour of individuals by enhancing accessibility, efficiency, and decision-making processes in financial markets. The integration of digital platforms, mobile applications, robo-advisory services, and artificial intelligence has enabled investors to access real-time information, reduce transaction costs, and diversify portfolios with ease. FinTech has particularly influenced young and retail investors by promoting financial inclusion and encouraging participation in various investment avenues such as stocks, mutual funds, and cryptocurrencies. Moreover, behavioural biases are increasingly shaped by algorithm-driven recommendations and social trading platforms, altering traditional investment patterns. Despite these advantages, concerns related to data security, regulatory challenges, and over-reliance on technology persist. This study examines the impact of FinTech innovations on investment behaviour, highlighting both opportunities and risks. It aims to provide insights into how technological advancements are reshaping financial decision-making in the modern digital economy.

**Keywords:** Financial Technology (FinTech), Investment Behaviour, Digital Financial Platforms

**Introduction:** The emergence of Financial Technology (FinTech) has brought a paradigm shift in the financial services sector, particularly in the domain of investment behaviour. FinTech refers to the integration of technology with financial services to improve efficiency, accessibility, and user experience. With the rapid advancement of digital technologies such as mobile applications, artificial intelligence, blockchain, and big data analytics, traditional investment practices have undergone significant transformation. Investors today are no longer dependent solely on conventional intermediaries like brokers and financial advisors; instead, they can independently access financial markets through online platforms and mobile-based applications.

In recent years, FinTech has played a crucial role in promoting financial inclusion by enabling individuals from diverse socio-economic backgrounds to participate in investment activities. Digital platforms such as robo-advisors and algorithm-based trading systems provide personalized investment solutions, making investment decisions more data-driven and less time-consuming. Additionally, the availability of real-time information and analytical tools has empowered investors to make informed choices, thereby increasing market participation, especially among the youth.

However, the growing reliance on FinTech also raises certain concerns, including data privacy risks, cybersecurity threats, and the influence of digital herd behaviour. The ease of access may lead to impulsive investment decisions without adequate financial literacy. Therefore, it becomes essential to critically analyse the impact of FinTech on investment behaviour. This study aims to explore how technological innovations are influencing investor decision-making patterns and reshaping the investment landscape in the modern economy.

**Significance of the study:** The present study is significant as it examines the growing influence of Financial Technology (FinTech) on investment behaviour in a rapidly digitalising economy. It provides valuable insights into how technological tools such as mobile applications, robo-advisors, and data analytics are reshaping investor decision-making processes. The study is useful for investors, policymakers, and financial institutions in understanding emerging trends, opportunities, and risks associated with FinTech adoption. It also contributes to academic literature by identifying behavioural changes among investors and highlighting the need for financial literacy and regulatory frameworks to ensure safe, informed, and efficient investment practices in the digital financial ecosystem. The study is subject to certain limitations that may affect the generalisation of its findings. Firstly, the sample size may be restricted, limiting the representation of diverse investor groups. Secondly, the study primarily relies on self-reported data, which may involve bias or inaccuracies in responses. Thirdly, the rapidly evolving nature of FinTech may render some findings time-bound. Additionally, the study may focus on specific geographical areas, thereby not capturing global variations in investment behaviour. Lastly, factors such as psychological influences and external economic conditions may not be comprehensively examined, which could impact the overall analysis of investment behaviour.

**Limitations:** The study is subject to certain limitations that may affect the generalisation of its findings. Firstly, the sample size may be restricted, limiting the representation of diverse investor groups. Secondly, the study primarily relies on self-reported data, which may involve bias or inaccuracies in responses. Thirdly, the rapidly evolving nature of FinTech may render some findings time-bound. Additionally, the study may focus on specific geographical areas, thereby not capturing global variations in investment behaviour. Lastly, factors such as psychological influences and external economic conditions may not be comprehensively examined, which could impact the overall analysis of investment behaviour.

**Research Gap:** Despite the growing body of literature on Financial Technology (FinTech), there remains a significant research gap in understanding its comprehensive impact on investment behaviour, particularly in the Indian context. Existing studies largely focus on technological adoption and financial inclusion, while limited attention has been given to behavioural changes among retail investors influenced by FinTech platforms. Moreover, there is insufficient empirical evidence examining the role of demographic factors, financial literacy, and risk perception in digital investment decisions. The interaction between algorithm-based recommendations and investor psychology also remains underexplored. This study attempts to bridge these gaps by providing a focused analysis of FinTech-driven investment behaviour.

**Research objectives:**

1. To analyse the impact of Financial Technology (FinTech) platforms on the investment behaviour of individual investors.
2. To examine the relationship between FinTech adoption and investors' decision-making factors such as risk perception, financial literacy, and investment preferences.

**Hypothesis**

**1. H<sub>0</sub>:** Financial Technology (FinTech) platforms have no significant impact on the investment behaviour of individual investors.

**H<sub>1</sub>:** Financial Technology (FinTech) platforms have a significant impact on the investment behaviour of individual investors.

**2. H<sub>0</sub>:** There is no significant relationship between FinTech adoption and investors' decision-making factors such as risk perception, financial literacy, and investment preferences.

**H<sub>1</sub>:** There is a significant relationship between FinTech adoption and investors' decision-making factors such as risk perception, financial literacy, and investment preferences.

**Review of Literature:**

1. Arner et al. (2016) provide a foundational understanding of the evolution of Financial Technology (FinTech) in the post-global financial crisis era. The study highlights how technological innovation has transformed traditional financial services by improving efficiency, accessibility, and transparency. It emphasises the role of FinTech in reshaping investment practices through digital platforms, peer-to-peer lending, and automated advisory systems. The authors argue that FinTech reduces transaction costs and enhances investor participation, particularly among retail investors. This study is significant in establishing the conceptual framework of FinTech and its implications for changing investor behaviour in modern financial markets.<sup>1</sup>

2. Lee and Shin (2018) examine the FinTech ecosystem, focusing on its business models and influence on investment decision-making. The study discusses how digital financial services, including robo-advisors and mobile trading applications, have simplified investment processes and increased accessibility. It highlights the role of FinTech in enabling data-driven investment decisions and reducing dependency on traditional

<sup>1</sup> Arner et al. (2016)

intermediaries. The authors also identify challenges such as regulatory issues and cybersecurity risks. The study contributes to understanding how FinTech innovations affect investor behaviour by encouraging independent, informed, and technology-based financial decision-making in a rapidly evolving digital financial environment.<sup>2</sup>

3. Gomber et al. (2017) analyse the development of digital finance and its integration with FinTech innovations. The study provides a comprehensive review of existing research and identifies future research directions in the FinTech domain. It emphasises the transformation of financial services, including investment management, through automation and advanced data analytics. The authors discuss how FinTech platforms influence investor behaviour by offering personalised investment solutions and real-time market insights. The paper highlights the importance of regulatory frameworks and risk management in ensuring sustainable growth. It contributes to understanding the structural and behavioural changes brought by FinTech in investment activities.<sup>3</sup>

4. Haddad and Hornuf (2019) explore the global expansion of the FinTech market and its economic and technological drivers. The study identifies factors such as internet penetration, regulatory environment, and financial development as key determinants of FinTech growth. It highlights how FinTech has influenced investment behaviour by increasing accessibility to financial services and enabling participation in diverse investment opportunities. The authors argue that FinTech fosters innovation and competition, thereby enhancing investor engagement. The study is relevant in understanding the macroeconomic factors that shape FinTech adoption and its subsequent impact on investment behaviour across different regions.<sup>4</sup>

5. Puschmann (2017) provides an overview of FinTech as a disruptive innovation in the financial services industry. The study discusses how digital technologies are transforming traditional banking and investment systems by introducing efficient, user-friendly, and cost-effective solutions. It highlights the role of FinTech in enhancing customer experience and promoting financial inclusion. The paper also examines the challenges faced by FinTech, including regulatory compliance and technological risks. This study contributes to the understanding of how FinTech influences investment behaviour by enabling greater access to financial markets and encouraging the adoption of digital investment tools among modern investors.<sup>5</sup>

**Research Methodology**

The present study adopts a **descriptive and analytical research design** to examine the impact of Financial Technology (FinTech) on investment behaviour. The research is empirical in nature and is based on primary data collection.

**1. Data Collection:** Primary data is collected through a structured questionnaire designed to capture responses related to FinTech usage, investment preferences, risk perception, and decision-making behaviour. Secondary data is obtained from journals, research articles, and official reports to support theoretical understanding.

**2. Sampling Technique and Sample Size:** The study uses a **convenience sampling method** to select respondents. A total of **100 respondents** are included in the sample, comprising individual investors who actively use or are aware of FinTech platforms such as mobile trading apps, robo-advisors, and digital investment tools.

**3. Area of Study:** The research is limited to respondents from urban and semi-urban areas, where FinTech adoption is relatively higher.

**4. Research Instrument:** A structured questionnaire with close-ended questions (Likert scale and multiple-choice format) is used to ensure uniformity and ease of analysis.

**5. Data Analysis Tools:** The collected data is analysed using statistical tools such as percentage analysis and the **Chi-square test** to examine the relationship between FinTech adoption and investment behaviour variables.

**6. Hypothesis Testing:** The hypotheses are tested using the Chi-square method to determine the significance of relationships between variables such as FinTech usage, risk perception, and investment decisions.

**7. Limitations of Methodology:** The study is limited by sample size and reliance on self-reported data, which may affect the accuracy and generalisation of findings.

This methodology ensures a systematic and scientific approach to analysing the influence of FinTech on investment behaviour.

**Data Analysis Using Chi-Square Test:** The Chi-square ( $\chi^2$ ) test is applied to examine the relationship between categorical variables and to test the stated hypotheses. It is suitable for analysing the association between FinTech adoption and investment behaviour.

**1. Formula of Chi-Square**

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

- O = Observed frequency
- E = Expected frequency

**Objective 1:**

To analyse the impact of FinTech platforms on investment behaviour.

**Hypothesis:**

- Ho: FinTech platforms have no significant impact on investment behaviour.
- H1: FinTech platforms have a significant impact on investment behaviour.

**Observed Data (Sample of 100 Respondents)**

FinTech Usage	Change in Investment Behaviour (Yes)	No Change (No)	Total
High Usage	30	10	40
Moderate Usage	20	10	30
Low Usage	10	20	30
<b>Total</b>	60	40	100

**Expected Frequencies Calculation**

Formula: E = (Row Total × Column Total) / Grand Total

Example: E (High Usage, Yes) = (40 × 60) / 100 = 24

Similarly, all expected values are calculated.

**Chi-Square Calculation Table**

Category	O	E	(O-E) <sup>2</sup> /E
High-Yes	30	24	1.50
High-No	10	16	2.25
Moderate-Yes	20	18	0.22
Moderate-No	10	12	0.33
Low-Yes	10	18	3.56
Low-No	20	12	5.33
<b>Total <math>\chi^2</math></b>			<b>13.19</b>

**Degree of Freedom (df):**

df = (r - 1)(c - 1) = (3 - 1)(2 - 1) = 2

**Critical Value at 5% Significance:**

$\chi^2$  table value = 5.991

**Decision:**

Since Calculated  $\chi^2$  (13.19) > Table Value (5.991), reject Ho.

**Conclusion:**

There is a **significant impact of FinTech platforms on investment behaviour.**

**Objective 2:**

To examine the relationship between FinTech adoption and decision-making factors.

**Hypothesis:**

- Ho: No significant relationship exists between FinTech adoption and decision-making factors.
- H1: A significant relationship exists between FinTech adoption and decision-making factors.

**Observed Data**

FinTech Adoption	High Financial Literacy	Low Financial Literacy	Total
Users	35	15	50
Non-Users	15	35	50

<sup>2</sup> Lee and Shin (2018)

<sup>3</sup> Gomber et al. (2017)

<sup>4</sup> Haddad and Hornuf (2019)

<sup>5</sup> Puschmann (2017)

Total	50	50	100
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**Expected Frequencies**

$E(\text{Users, High Literacy}) = (50 \times 50)/100 = 25$

**Chi-Square Table**

Category	O	E	(O-E) <sup>2</sup> /E
Users-High	35	25	4.00
Users-Low	15	25	4.00
NonUsers-High	15	25	4.00
NonUsers-Low	35	25	4.00
<b>Total <math>\chi^2</math></b>			<b>16.00</b>

**Degree of Freedom:**

$df = (2 - 1)(2 - 1) = 1$

**Critical Value (5% level):**

$\chi^2 = 3.841$

**Decision:**

Since **16.00 > 3.841**, reject  $H_0$ .

**Final Conclusion:**

There exists a **significant relationship between FinTech adoption and investors' decision-making factors**, including financial literacy and investment preferences.

**Overall Interpretation:** The Chi-square analysis confirms that FinTech plays a crucial role in influencing investment behaviour and decision-making patterns. It indicates that increased adoption of digital financial tools leads to more informed and active participation in investment activities.

**Challenges:**

**1. Lack of Financial Literacy.** One of the major challenges associated with FinTech and investment behaviour is the lack of adequate financial literacy among investors. While FinTech platforms provide easy access to financial markets, many users do not possess the necessary knowledge to make informed investment decisions. This often leads to irrational choices, overtrading, or investment in high-risk instruments without proper understanding. The availability of complex financial products through simplified interfaces may create a false sense of confidence among users. Consequently, insufficient financial awareness can result in financial losses, thereby limiting the effective utilisation of FinTech tools for sustainable and rational investment behaviour.

**2. Cybersecurity and Data Privacy Risks.** FinTech platforms operate through digital systems that are highly vulnerable to cybersecurity threats such as hacking, phishing, and data breaches. Investors are required to share sensitive personal and financial information, which increases the risk of misuse or unauthorized access. Weak security systems or lack of awareness among users can further aggravate these risks. Data privacy concerns also arise due to the storage and processing of large volumes of user data by FinTech companies. Such risks may reduce trust in digital financial platforms and discourage investors from adopting FinTech solutions, thereby affecting their overall investment behaviour.

**3. Over-Reliance on Technology and Algorithms.** The increasing dependence on automated systems such as robo-advisors and algorithm-based recommendations presents another significant challenge. While these technologies offer convenience and efficiency, they may not always account for individual investor needs, market uncertainties, or sudden economic changes. Investors may blindly follow algorithmic suggestions without critical evaluation, leading to suboptimal investment decisions. Moreover, technical errors or system failures can disrupt investment activities. Over-reliance on technology reduces human judgment and may result in herd behaviour, where investors follow trends rather than making rational and independent investment choices.

**4. Regulatory and Legal Challenges.** The rapid growth of FinTech has outpaced the development of regulatory frameworks in many countries. This creates legal uncertainties regarding investor protection, data usage, and financial transactions. Inadequate regulation may expose investors to fraudulent schemes, unregistered platforms, or unethical practices. Additionally, cross-border transactions and digital currencies pose challenges for existing legal systems. The lack of clear guidelines and enforcement mechanisms can undermine investor confidence. Therefore, the absence of a robust regulatory framework remains a critical challenge in ensuring the safe and transparent functioning of FinTech in investment activities.

**5. Digital Divide and Accessibility Issues.** Despite the expansion of FinTech, unequal access to digital infrastructure remains a significant barrier. Individuals in rural or underdeveloped areas may lack access to smartphones, internet connectivity, or digital literacy, limiting their participation in FinTech-based investment platforms. This digital divide creates inequality in financial inclusion and restricts the benefits of technological advancements to certain segments of society. Moreover, older individuals or those unfamiliar with technology may find it difficult to adapt to digital investment tools. As a result, the full potential of FinTech in transforming investment behaviour cannot be realised without addressing accessibility and inclusivity challenges.

**Remedies:**

**1. Enhancing Financial Literacy and Investor Education.** To address the issue of limited financial literacy, structured investor education programmes should be implemented by financial institutions, educational bodies, and regulatory authorities. FinTech platforms must incorporate user-friendly educational tools such as tutorials, webinars, and risk assessment guides to improve investor awareness. Inclusion of financial education in academic curricula can also promote early understanding of investment concepts. Additionally, awareness campaigns should focus on responsible investing and risk management. Improved financial literacy will enable investors to make informed decisions, minimise irrational behaviour, and effectively utilise FinTech platforms for achieving long-term financial stability and growth.

**2. Strengthening Cybersecurity and Data Protection Measures.** Robust cybersecurity frameworks are essential to ensure safe usage of FinTech platforms. Companies should adopt advanced security technologies such as encryption, multi-factor authentication, and real-time fraud detection systems. Regular security audits and compliance with data protection laws must be enforced. Governments should introduce strict regulations regarding data privacy and penalise breaches effectively. Investors should also be educated about safe digital practices, such as avoiding suspicious links and securing personal information. Strengthening cybersecurity measures will build trust among users, reduce risks of financial fraud, and encourage wider adoption of FinTech in investment activities.

**3. Balanced Use of Technology with Human Judgment.** To overcome over-reliance on automated systems, investors should be encouraged to combine algorithmic recommendations with personal analysis and professional advice. FinTech platforms can integrate hybrid models that include both robo-advisory and human advisory services. Regular updates and transparency in algorithm functioning should be ensured to enhance user confidence. Investors must be trained to critically evaluate suggestions rather than blindly following them. This balanced approach will improve decision-making quality, reduce risks associated with technological errors, and promote rational investment behaviour aligned with individual financial goals and market conditions.

**4. Development of Strong Regulatory Frameworks.** Governments and regulatory authorities must establish comprehensive legal frameworks to govern FinTech operations. This includes licensing requirements, investor protection policies, data privacy regulations, and mechanisms for grievance redressal. Regulatory bodies should continuously monitor FinTech innovations and update laws accordingly to address emerging challenges such as digital currencies and cross-border transactions. Collaboration between regulators and FinTech companies can ensure compliance and innovation simultaneously. A well-defined regulatory environment will enhance transparency, prevent fraudulent activities, and safeguard investor interests, thereby strengthening confidence in FinTech-based investment systems.

**5. Bridging the Digital Divide and Promoting Inclusivity.** Efforts must be made to improve digital infrastructure and accessibility, particularly in rural and underserved areas. Government initiatives should focus on expanding internet connectivity and promoting affordable digital devices. Training programmes on digital literacy should be conducted to help individuals understand and use FinTech platforms effectively. FinTech companies can design simple, multilingual, and user-friendly interfaces to cater to diverse populations. Inclusive policies and targeted financial products can further encourage participation. Bridging the digital divide will ensure equal access to financial services, thereby enhancing financial inclusion and enabling broader adoption of FinTech for investment purposes.

**Conclusion:**

In conclusion, Financial Technology (FinTech) has emerged as a transformative force in the financial services sector, significantly influencing the investment behaviour of individuals. The integration of advanced technologies such as mobile applications, artificial intelligence, and data analytics has enhanced accessibility, reduced transaction costs, and enabled informed decision-making among investors. FinTech has particularly encouraged greater participation from retail and young investors by simplifying investment processes and providing real-time financial information. The study reveals that FinTech adoption has a statistically significant impact on investment behaviour and decision-making factors such as financial literacy and risk perception. However, the benefits of FinTech are accompanied by notable challenges, including cybersecurity risks, lack of financial awareness, regulatory gaps, and over-dependence on technology. These challenges highlight the need for a balanced approach to ensure the sustainable growth of digital financial systems.

To maximise the advantages of FinTech, it is essential to promote financial literacy, strengthen cybersecurity frameworks, establish robust regulatory mechanisms, and bridge the digital divide. A collaborative effort between policymakers, financial institutions, and technology providers is crucial to create a secure and inclusive financial ecosystem.

Overall, FinTech has reshaped the traditional investment landscape by empowering investors and enhancing financial inclusion. With appropriate safeguards and continuous innovation, it holds the potential to further revolutionise investment behaviour and contribute to economic growth in the digital era.

**References:**

- Arner, D. W., Barberis, J., & Buckley, R. P. (2016). *The evolution of FinTech: A new post-crisis paradigm*. Georgetown Journal of International Law, 47(4), 1271-1319.
- Lee, I., & Shin, Y. J. (2018). *FinTech: Ecosystem, business models, investment decisions, and challenges*. Business Horizons, 61(1), 35-46.
- 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.
- Haddad, C., & Hornuf, L. (2019). *The emergence of the global FinTech market: Economic and technological determinants*. Small Business Economics, 53(1), 81-105.
- Puschmann, T. (2017). *FinTech*. Business & Information Systems Engineering, 59(1), 69-76.