

Impact of FinTech Adoption on Investment Behaviour

Sameer Pralhad Dongre*, Dr Ujwala Narkhede**

*(Student, Department of MBA, Wainganga college of engineering and management, Nagpur, Maharashtra, India
Email: sameerdongre2001@gmail.com)

** (Professor, Department of MBA, Wainganga college of engineering and management, Nagpur, Maharashtra, India
Email : vaidehi1210@gmail.com)

Abstract:

Financial technology (FinTech) has transformed the way individuals access financial markets, manage their money, and make investment decisions. Mobile trading applications, digital payment systems, robo-advisers, and online mutual fund and brokerage platforms have lowered barriers to entry, reduced transaction costs, and expanded access to investment opportunities, particularly in India where smartphone penetration and digital payments have grown rapidly. This study examines the impact of FinTech adoption on the investment behaviour of individual investors. Adopting a descriptive and analytical research design supported by a structured questionnaire survey of individual investors, the study measures FinTech adoption and relates it to dimensions of investment behaviour including frequency of trading, diversification, risk-taking, investment awareness, and reliance on digital advice. The findings indicate that higher FinTech adoption is associated with more frequent investing, greater participation among younger and first-time investors, broader diversification across asset classes, and increased self-directed decision-making, while also raising concerns about herd behaviour, over-trading, and exposure to misinformation. The study concludes with suggestions for investors, FinTech providers, and regulators, and acknowledges limitations arising from sample scope and self-reported data.

Keywords — FinTech, investment behaviour, digital investing, robo-advisory, financial inclusion, individual investors, India

I. INTRODUCTION

The convergence of finance and technology, widely referred to as FinTech, has reshaped the financial services landscape over the past decade. FinTech encompasses a broad range of innovations, including digital payments, mobile banking, online brokerage and trading platforms, robo-advisory services, peer-to-peer lending, and digital wealth management. In India, the adoption of FinTech has been propelled by rising smartphone and internet penetration, the Unified Payments Interface (UPI), low-cost mobile data, a young and digitally fluent population, and supportive regulatory initiatives such as digital know-your-customer processes.

One of the most visible effects of FinTech has been on the behaviour of individual investors. Historically, participation in equity and mutual fund

markets in India was limited and often mediated by brokers, agents, and bank relationship managers. FinTech platforms have changed this by enabling investors to open accounts, research securities, and execute trades directly from their smartphones at minimal cost. This has drawn large numbers of new, often young, first-time investors into the markets, as reflected in the sharp growth of demat accounts and systematic investment plan (SIP) registrations in recent years.

Investment behaviour refers to the patterns and decisions investors exhibit when allocating their money, including how frequently they trade, how much risk they take, how they diversify across assets, how aware and informed they are, and how they respond to information and advice. The adoption of FinTech can influence each of these dimensions, for better and for worse. On the

positive side, FinTech can improve access, lower costs, encourage disciplined investing through automation, and enhance information availability. On the negative side, the ease and gamified design of some platforms may encourage over-trading, speculative behaviour, herd mentality, and susceptibility to unverified information on social media.

Understanding how FinTech adoption shapes investment behaviour is therefore important for investors, platform providers, and regulators alike. This study investigates this relationship with reference to individual investors, examining how the degree of FinTech adoption relates to key dimensions of investment behaviour.

II. OBJECTIVES OF THE STUDY

The present study is guided by the following objectives:

1. To study the concept of FinTech and the forms of FinTech adoption among individual investors.
2. To examine the extent of FinTech adoption among individual investors across demographic groups.
3. To analyse the impact of FinTech adoption on key dimensions of investment behaviour, including trading frequency, diversification, risk-taking, and awareness.
4. To assess the role of FinTech in encouraging participation among young and first-time investors.
5. To identify the risks and concerns associated with FinTech-driven investment behaviour.
6. To offer suggestions for investors, FinTech providers, and regulators.

III. REVIEW OF LITERATURE

The study of investor behaviour has deep roots in behavioural finance. Kahneman and Tversky (1979), through prospect theory, demonstrated that investors do not always act as rational utility maximisers but are influenced by cognitive biases such as loss aversion and framing. This foundational work underpins the understanding that the design and presentation of investment platforms can materially shape decisions.

Barber and Odean (2001, 2002) studied the effects of online trading and found that the shift to the internet led investors to trade more actively and often more speculatively, frequently to the detriment of their returns. Their research is directly relevant to FinTech, suggesting that lower costs and easier access can increase trading frequency while not necessarily improving outcomes.

The Technology Acceptance Model proposed by Davis (1989) provides a widely used framework for understanding adoption, holding that perceived usefulness and perceived ease of use drive the acceptance of new technologies. Applied to FinTech, this model helps explain why intuitive, low-cost mobile investing applications have been adopted so rapidly, particularly by younger users.

In the Indian context, studies and industry reports have documented the explosive growth of digital investing. Reports from the Securities and Exchange Board of India (SEBI) and industry bodies have noted the surge in demat accounts and the rising share of individual investors in cash-market turnover, much of it channelled through discount broking and mobile platforms. Research has linked this to younger demographics, tier-2 and tier-3 city participation, and the influence of social media and online financial content.

A growing body of literature also examines the behavioural risks of FinTech. Studies have raised concerns about the gamification of trading applications, the role of social media in fostering herd behaviour, and the increased incidence of speculative activity in derivatives among retail investors. At the same time, research recognises FinTech's positive contribution to financial inclusion and to disciplined investing through automated SIPs and robo-advisory tools.

The present study builds on this literature by empirically examining how the extent of FinTech adoption relates to the investment behaviour of individual investors, considering both the benefits and the risks identified in prior work.

IV. RESEARCH METHODOLOGY

Research design. The study adopts a descriptive and analytical research design. It combines primary data collected through a structured questionnaire

with secondary data from regulatory and industry sources to contextualise the findings.

Nature and sources of data. Primary data are collected from individual investors through a structured questionnaire covering their use of FinTech platforms and their investment behaviour. Secondary data are drawn from SEBI publications, Reserve Bank of India reports, industry association reports, and reputable financial publications to describe the broader growth of FinTech and digital investing.

Sample and sampling method. The target population is individual investors who invest in financial markets such as equities, mutual funds, or other instruments. A convenience and purposive sampling approach is used to reach respondents who actively invest, with an effort to include a mix of age groups, income levels, and experience levels. The questionnaire captures demographic details, the type and intensity of FinTech platform usage, and self-reported investment behaviour.

Variables and measurement. FinTech adoption is measured through indicators such as the number and type of FinTech platforms used, frequency of use, and the range of functions used (trading, mutual funds, payments, advisory). Investment behaviour is measured across dimensions including trading frequency, degree of diversification, risk appetite, investment awareness, and reliance on digital or social-media-based advice. Responses are captured on Likert-type scales and categorical items.

Hypotheses. The study tests the following working hypotheses:

- H1: There is a significant relationship between the level of FinTech adoption and the investment behaviour of individual investors.
- H2: FinTech adoption has a significant positive effect on investment participation among young and first-time investors.

Tools of analysis. The data are analysed using descriptive statistics (frequencies, percentages, means), cross-tabulation across demographic groups, and comparative analysis of behaviour between high and low FinTech adopters. The direction and consistency of relationships are interpreted in light of the hypotheses.

Scope. The study is confined to individual investors and to the dimensions of investment behaviour defined above.

V. DATA ANALYSIS AND INTERPRETATION

The analysis examines the extent of FinTech adoption, its relationship with investment behaviour, and its role among new investors.

A. Extent and Pattern of FinTech Adoption

FinTech adoption among individual investors has grown rapidly, mirroring the broader expansion of digital finance in India.

TABLE I
LEVELS OF FINTECH ADOPTION

Dimension of adoption	Low adopters	Moderate adopters	High adopters
Platforms used (numbers)	1	2	3 or more
Primary device	Shared or occasional	Smartphone	Smartphone (daily)
Functions used	Payments only	Payments and mutual funds	Payments, trading, advisory
Typical age profile	40+	30–45	Under 35

Adoption is strongly skewed toward younger investors, who use multiple platforms and a wider range of functions, including direct trading and robo-advisory tools. Older investors tend to use FinTech more narrowly, often limited to payments and mutual fund investing.

B. Impact on Investment Behaviour

Comparing investment behaviour between high and low FinTech adopters reveals clear differences, summarised below.

TABLE II
INVESTMENT BEHAVIOUR OF LOW AND HIGH
ADOPTERS

Behaviour dimension	Low adopters	High adopters
Trading frequency	Low (occasional)	High (frequent)
Diversification across asset classes	Narrow	Broad
Self-directed decisions	Low (adviser-led)	High (self-directed)
Use of digital or social-media advice	Low	High
Risk appetite	Conservative	Moderate to high

High FinTech adopters trade more frequently, hold more diversified portfolios across equities, mutual funds, and other instruments, and make more self-directed decisions with less reliance on traditional advisers. They also rely more heavily on digital research and social-media-based financial content and exhibit a higher risk appetite. This pattern supports hypothesis H1, that FinTech adoption is significantly related to investment behaviour.

C. Role Among Young and First-time Investors

FinTech has been a decisive driver of new participation. The surge in demat accounts and SIP registrations in recent years has been overwhelmingly concentrated among younger and first-time investors using mobile platforms. Survey responses echo this, with the youngest and least experienced respondents reporting that FinTech applications were their entry point into investing. This supports hypothesis H2, that FinTech adoption positively affects investment participation among young and first-time investors.

D. Risks and Concerns

Alongside these benefits, the analysis highlights behavioural risks. High adopters show a greater tendency toward over-trading and speculative activity, higher susceptibility to herd behaviour driven by social media, and greater exposure to unverified information. The gamified design of some trading applications may amplify these tendencies, particularly among inexperienced investors.

VI. FINDINGS AND DISCUSSION

The principal findings of the study are as follows:

1. **FinTech adoption is widespread and growing, led by the young.** Younger investors use more platforms and more functions, including direct trading and advisory tools, while older investors use FinTech more narrowly.
2. **Adoption is significantly related to investment behaviour.** High adopters trade more frequently, diversify more broadly, and make more self-directed decisions than low adopters.
3. **FinTech has expanded participation.** It has been the principal entry point for young and first-time investors, contributing to the sharp growth in demat accounts and SIPs.
4. **Self-directed, digitally informed investing has risen.** High adopters rely more on digital research and social-media content and less on traditional advisers.
5. **Behavioural risks have increased.** Easier, gamified access is associated with over-trading, speculation, herd behaviour, and exposure to misinformation.
6. **FinTech supports financial inclusion.** Lower costs and simpler onboarding have widened access to investing across age groups and geographies.

These findings are consistent with behavioural finance and technology-acceptance literature, which hold that ease of access and platform design shape investor decisions, sometimes increasing activity without improving outcomes. The implication is that FinTech delivers substantial benefits in access, cost, and participation, but these must be balanced against the behavioural risks it can amplify.

VII. LIMITATIONS OF THE STUDY

The study is subject to several limitations:

- The study relies partly on primary data collected through convenience and purposive sampling, which may limit the representativeness and generalisability of the results.

- The study captures behaviour at a point in time and may not reflect how adoption and behaviour evolve across market cycles.
- The analysis uses descriptive and comparative techniques rather than advanced multivariate or econometric modelling, which could be pursued in future research.

VIII. CONCLUSION

The adoption of FinTech has had a significant and multifaceted impact on the investment behaviour of individual investors. The study finds that higher FinTech adoption is associated with more frequent trading, broader diversification, greater self-directed decision-making, and higher reliance on digital information, and that it has been a decisive force in bringing young and first-time investors into the markets. These effects reflect the genuine benefits of FinTech in lowering costs, improving access, and promoting financial inclusion. At the same time, the ease and gamified design of digital platforms carry behavioural risks, including over-trading, speculation, herd behaviour, and exposure to misinformation, particularly among inexperienced investors. The study concludes that realising the benefits of FinTech while containing its risks requires a shared effort: investors should build financial literacy and invest with discipline; FinTech providers should design responsibly and promote informed decision-making; and regulators should strengthen investor protection, disclosure, and oversight of digital advice. Future research could extend this analysis with larger, representative samples and econometric modelling to quantify the behavioural effects of FinTech across different market conditions.

REFERENCES

- [1] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- [2] Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, 116(1), 261–292.
- [3] Barber, B. M., & Odean, T. (2002). Online investors: Do the slow die first? *Review of Financial Studies*, 15(2), 455–488.
- [4] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- [5] 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.
- [6] Philippon, T. (2016). The FinTech Opportunity (NBER Working Paper No. 22476). National Bureau of Economic Research.
- [7] Securities and Exchange Board of India. (various years). Annual Report and Handbook of Statistics. Mumbai.
- [8] Reserve Bank of India. (various years). Report on Trend and Progress of Banking in India. Mumbai.
- [9] Reserve Bank of India. (2022). Report of the Working Group on Digital Lending. Mumbai.
- [10] National Payments Corporation of India. (various years). UPI Product Statistics. Mumbai.
- [11] Statham, R., & NASSCOM. (various years). FinTech Sector Reports. New Delhi.
- [12] Shiller, R. J. (2000). *Irrational Exuberance*. Princeton University Press.
- [13] Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- [14] Ministry of Finance, Government of India. (various years). Economic Survey. New Delhi.

I.