



Influence of Digitalization on Retail Investor Dynamics in the Indian Market: A Literature Review

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Abstract:

The emergence of the digital revolution has significantly changed the financial landscape in India, with major consequences for individual investors. This study explores the complex effects of digitization on the actions, choices, and results of retail investors in India. This study attempts to provide a thorough overview of these changing dynamics and understand the impact of digitization on the financial decisions made by retail investors through a thorough review of the body of existing literature. At the same time that internet accessibility has increased and mobile-based financial services have proliferated in India, digital financial inclusion has been greatly advanced by programs like Digital India. Careful examination of the corpus of research points to a progressive move away from traditional investment strategies and toward digital platforms. As more and more retail investors use digital financial services, things like ease of use, accessibility, and up-to-date information become critical. Under the direction of the Securities and Exchange Board of India, regulations have been modified to allow for digital investment platforms while maintaining investor protection and transparency (SEBI). The conclusions drawn from the literature review are supported by statistical analyses of market trends and highlight the revolutionary effects of digitization on the behaviour of retail investors, including risk

management, investment preferences, and trading frequency. The purpose of this study is to provide insightful information to help investors make wise choices when it comes to investing in digital assets. Furthermore, it aims to enhance understanding of the significant impact of digitization on Indian retail investors. The paper also emphasizes how important regulatory bodies are in dealing with cybersecurity, data privacy, and transparency issues in the rapidly changing digital financial industry. Future studies may examine the long-term effects of digitization on retail investors' financial security in addition to the dynamic role that fintech and digital platforms play in the Indian investment landscape.

Keywords: Automation, Small Investors, Inclusive Finance, Online platforms, Investment Behaviour, AI Driven Investment

1. Introduction

Digitalization's persistent progress has been a revolutionary force, reshaping the parameters of wealth management and investing in the dynamic realm of global finance. This paradigm shift is most evident in India, a nation of over a billion people, each with their own goals and financial objectives. A new era where traditional investment borders are rapidly disappearing has been brought in by rising smartphone use, rapidly expanding internet penetration, and the catalyst initiatives in "Digital India". However, the world of financial investments may be the one place where the effects of this digital renaissance are most apparent.

The premise of a retail investor has changed throughout time in India. Under the SEBI (Disclosure and Investor Protection) Guidelines, 2000, retail investors were defined as those who applied for allotments of up to 1000 units in a book-built offering or 10 or less marketable lots in a fixed issue till August 2003. This type of definition, which is based on the quantity of shares applied for, ignores the amount invested by the investor in question in any particular initial public offering (IPO), despite the fact that this is a crucial aspect in identifying the characteristics of various investors. This can be attributed to the fact that different firms' IPO prices and share values can differ. Then, in order to account for investment size, the retail investor was redefined to represent her choice of stock by value. The term was amended in August 2003 to encompass all private investors applying for stocks valued at Rs. 50,000 or less. Later, in March 2005, this amount was changed to Rs. 1,00,000 (which was then included in the SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009), then in November 2010, it was updated to Rs. 2,00,000.

This research article aims to give a comprehensive analysis of the important impacts that digitalization has had on the behaviors, preferences, and outcomes of Indian retail investors. This study aims to offer a comprehensive view of the dynamic convergence point where retail investments and digitalization meet by fusing ideas from a wide range of current literature, empirical data, and a rigorous statistical analysis of market patterns.

India's march toward digitalization has been highlighted by important turning points. Notable accomplishments include the rapid uptake of mobile-based financial services and the rise in internet users. The government's foremost "Digital India" campaign has been instrumental in advancing digital financial inclusion. Retail investors are feeling the significant effects of digitalization on their investment journey, which has been driving these changes in the financial services industry. The analysis of the literature shows that changes are occurring gradually, illustrating how retail investors' attitudes toward digitalization are shifting. Investors are moving away from traditional investment methods and toward digital platforms in greater numbers, and their decision-making criteria now give priority to elements like accessibility, ease, and real-time access to financial data. This change affects retail investors' trading patterns, investment preferences, and trading methods in addition to their choice of investment platforms. This study will explore the evolving world of digital investing services on the pages that follow, including online brokerage services, digital wallets, robo-advisors, and AI-driven investments. The behaviors and tastes of retail investors have been significantly shaped by these technologies. The appeal of these digital services has sparked changes in trading frequency, investing preferences, and risk management in a world where information travels more quickly than ever before and convenience is of the utmost importance. Given that these platforms provide investors with a wide range of sophisticated risk management capabilities, it is important to study how risk management is evolving as a fundamental aspect of digitalization. Beyond risk assessment, this evolution includes cutting-edge instruments like stop-loss orders and automated portfolio rebalancing. The regulatory structure that oversees the digital world is also changing along with it. Regulators have been proactive in modifying rules to account for digital investment platforms, most notably the Securities and Exchange Board of India (SEBI). In order to maintain investor protection and market transparency while supporting innovation and accessibility, a delicate balance has been developed. This research is more than just an academic project; it serves as a prism through which we may appreciate and comprehend the significant changes that digitization has brought about. It will explore the core of India's digital financial transformation to learn how retail investors navigate this changing environment, the decisions they make, and the risk management techniques they use. The research has practical consequences for regulatory

agencies working to protect market players' interests as well as for retail investors looking to maximize their strategy. It is not merely of academic relevance. This study goes beyond scholarly investigation to take the reader on a tour through the dynamic world of retail investing in the digital age.

The structure of the paper is as follows: Section 2 talks about the idea of digitalization in the context of India; Section 3 highlights the study's methodology; Section 4 describes the behaviour and preferences of retail investors; Section 5 displays the literature on gauging the effect of online brokerage and trading platforms on retail investors' engagement; Section 6 sheds light on emerging financial robo-advisors and AI-driven investments; and Section 7 offers recommendations. The study's conclusion is given in Section 8, and the study's scope is highlighted in Section 9.

2. Digitalization in India

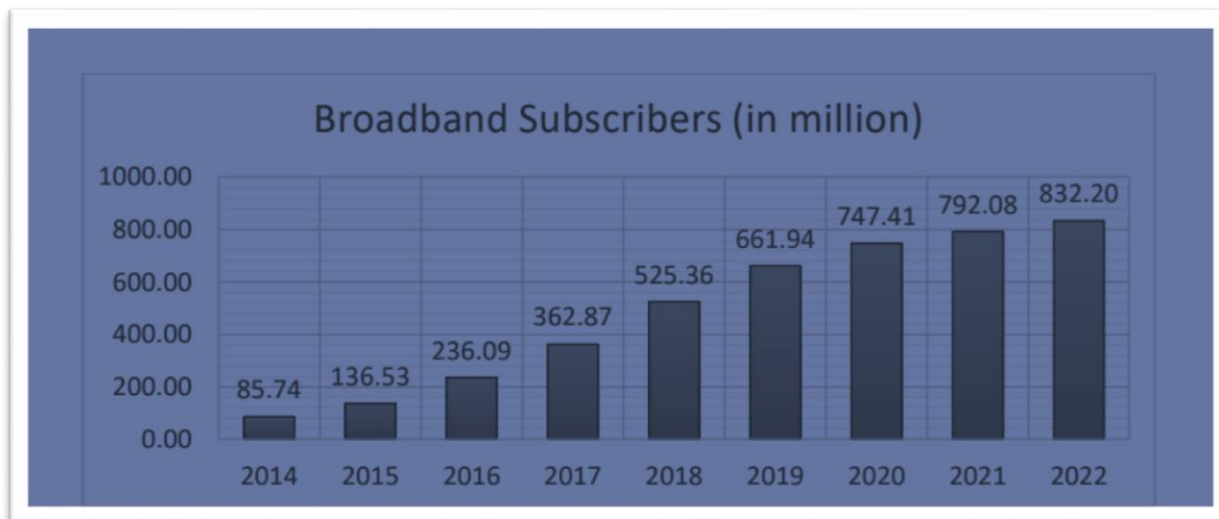
Karan. (2023). The financial sector has changed recently due in large part to the increased adoption of digital technologies, which has resulted in a record number of Indians investing their own money in the stock market. The study also stresses how crucial it is to look into how digitization affects Indian financial markets and investments, what that means for investors and other stakeholders, and what steps need to be taken in terms of policy to make sure that digitization is used to promote equitable and sustainable economic growth.

IMF (2023). Significant turning points in India's digitalization journey, such as the emergence of mobile-based financial services and the increase in internet users, have been noticeable. Digital financial inclusion has been greatly advanced by programs like Digital India.

TRAI (2023). India also has the world's fastest-growing telecom sector, with an increase in active mobile broadband subscriptions of up to 40.8% between 2014 and 21. In FY 2021–2022, the Indian telecom industry generated a gross revenue of 2,78,183 crore². Notably, there were 1,170.38 million telecom subscribers in December 2022, a significant increase from the 970.97 million users there were in December of the previous year.

According to *figure 1*. the number of broadband subscriptions in the nation increased from 85.74 million in 2014 to 832.20 million in December 2022. From 267.39 million in 2014 to 865.90 million in December 2022, the number of internet subscribers has surged. The country's internet density climbed from 21.37 in 2014 to 62.56 as of September 2022, reflecting a notable rise in internet usage over time.

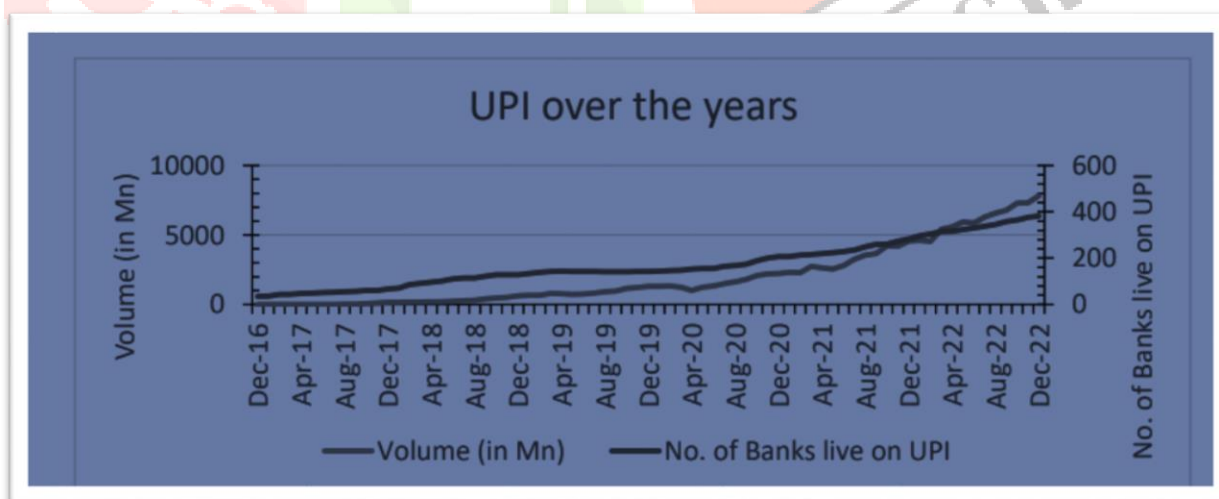
Figure 1. Increasing number of broadband subscribers nationwide



Source: TRAI Performance Indicator report

UPI, which was introduced in 2016, has completely changed how people and companies make digital transactions in the nation. UPI is a user-friendly framework that enables users to link bank accounts to mobile applications, enabling citizens from all demographic groups to conduct financial transactions via smartphones without going to the bank. Figure 2. shows the rise of UPI in terms of adoption and transactions.

Figure 2.



Source: National Payment Corporation Of India.

2. Methodology of the study

The study is based on secondary data that was mostly gathered by reviewing previously published works from a variety of sources, including books, journals, reports, and other publications. We have analysed various study that has been done on the topic of digitalization and how it affects retail investors. Following the review, all of those publications were categorized according to the type of findings they produced into distinct groups. The study comes to a number of conclusions through discussion and logical argument.

4. Retail Investor Behaviour and Preferences

Symons-Hicks, James. (2023). In order to better understand the characteristics that draw retail investors to specific equities, the article examines the relationship between market dynamics and investor attention. In addition to examining how media coverage affects investor interest, the author also examines how volatility, liquidity, returns, and daily trading volume affect it. The results imply that attention-grabbing events might cause an increase in idiosyncratic volatility and that retail investors are drawn to equities with high previous share volume and dollar-trading activity. The study holds significance for financial counsellors and investment experts who want to comprehend the actions of individual investors. They have mentioned how the financial sector has changed recently due in large part to the increased adoption of digital technologies, which has resulted in a record number of Indians investing their own money in the stock market. The study also stresses how crucial it is to look into how digitization affects Indian financial markets and investments, what that means for investors and other stakeholders, and what steps need to be taken in terms of policy to make sure that digitization is used to promote equitable and sustainable economic growth.

5. Online Brokerage and Trading Platforms

The digitization of financial goods and currency, or the widespread use of internet banking, has been a major factor in the rise in financial engagement. This is because it has made it simpler for regular people to open DEMAT/broking accounts, buy gold, cryptocurrency, global shares, and much more without having to leave their homes. According to State Bank of India research, the number of retail investors in the Indian market increased by a staggering 142 lakh in 2020–21, with 122.5 lakh new accounts at CDSL and 19.7 lakh at NSDL. The table below demonstrates an increase in DEMAT accounts. This is mostly the result of a significant market surge and a massive influx of retail investors into the equity market.



Source: SBI, CDSL, NSDL

(relli, 2021) The pandemic has surely been a major factor in this extraordinary rise of retail investors. But without the aid of technology, the pandemic alone could not have had such a profound impact. First off, Indians now have access to an entirely new online world thanks to the internet's widespread adoption in even the most rural parts of the country. This translated to increased accessibility to market news, investment education, and expanding knowledge of different investment kinds. Furthermore, a sizeable portion of investors from tier 2 and tier 3 cities now have access to more modern asset classes and methods of portfolio diversification. The way that India's investment landscape is evolving is largely due to the influx of investors from smaller towns and cities. Technological developments have also given investors access to powerful internet trading tools that provide transparency and real-time price movement information. Given that the only way to reach the markets in the past was by making numerous phone calls to brokers and other market players, this is a significant change from the days when real-time trade execution was uncommon. Easy-to-use investing tools have also been made possible by technological improvements, and social media has made community conversation accessible to everybody.

Fan, L (2022). This research is among the first to assess the internal attributes of investors, such as investment literacy, risk tolerance, and familiarity with mobile financial services, in relation to the adoption of mobile investing technology. according to this study, the majority of the factors influencing mobile investment decision-making were ownership of specific investment vehicles (like whole life insurance policies and exchange-traded

funds) and objective and subjective investment knowledge, along with prior experience using mobile banking for payments and money transfers. However, there was a high correlation found between mobile investment trading and certain investment vehicle types, subjective investing knowledge, risk tolerance, familiarity with mobile financial services, and portfolio value.

6. Financial Robo-Advisors and AI-driven Investments

Research shows that many retail investors look for financial assistance because they lack experience in making financial decisions (Bhattacharya et al., 2012). Nevertheless, as digitalization has resolved this issue, retail investors are now more likely to look for automated services based on artificial intelligence (AI) that are cheaply priced, like financial robo-advisors (FRAs). (Belanche et al., 2019). The 24/7 accessibility of robo-advisors is one of their possible advantages over more conventional investing guidance. Because robo-advisors offer more time flexibility and reduced consulting fees, even those with modest incomes find them appealing (D'Acunto and Rossi 2020).

A number of important factors were shown to have a substantial impact on investors' perceptions, including cost-effectiveness, trust, data security, behavioural biases, and investor mood. It was noted that certain investors see robo-advisors as merely a quantitative analytical substitute for fund/wealth managers/brokers. Furthermore, they firmly think that in order to assess the investors' emotions, human intervention is required. Because of this, robo-advisors for the Indian stock market currently serve solely as an adjunct to financial advisors, not as a replacement (Bhatia et al.2021).

In their study, (D'Acunto et al.2019) examine a Portfolio Optimizer that focuses on Indian equities and discover that robo-advice helps investors who are under diversified by enhancing portfolio diversification, lowering risk, and raising mean returns. The research also shows that not all investors are successful, since the robo-advisor did not enhance the performance of investors who were already well-diversified.

(Oehler et al.2022). This study is done using a questionnaire-based survey of 231 undergraduate business students at a medium-sized German university, the study examines the impact of individual characteristics on the decision to use robo-advising. The study examines how retail investors' individual characteristics influence their decision to invest through a robo-advisor. The premise of the study is that younger persons are more likely than older adults to employ robo-advisors. The younger generation is less likely to be afraid of algorithms. They don't have a relationship with a human advisor, or their relationship is less solidified and based on trust. Young

adults are also a crucial target market for robo-advisors. Additionally, the study's findings support the theory that individuals who are willing to use robo-advisors are more willing to take financial risks because they show greater investment in stocks and bonds among those who are willing to use them. It also reveals statistically significant differences between those who use the robo-advisor just for stock and bond investments and those who use it along with some additional personal investment. The latter group makes overall larger investments in bonds and stocks. Nonetheless, their investments made through the robo-advisor are smaller than those made by people who use it just. Individuals who utilize the robo-advisor in addition to making their own stock and bond investments report higher levels of perceived financial knowledge and expertise than those who use the robo-advisor only.

(Sifat, Imtiaz.,2023) The advantages and disadvantages of applying artificial intelligence (AI) to retail investing are examined in this study. In order to examine the effects of AI on finance, the author provides an interdisciplinary paradigm that combines machine learning, ethics, and behavioural finance. The study examines the difficulties in interpreting and scaling data, the enduring nature of information asymmetry, and how narratives influence investment choices.

7. AVAILABILITY OF NEW AGE FINANCIAL ASSETS

Karan, 2023. The advent of new-age digital assets has brought about a huge upheaval in the Indian financial environment. The use of digital assets, including digital tokens, cryptocurrencies, and blockchain-based assets, is growing in popularity in India as more and more investors seek out alternative investment opportunities with better security and higher yields. All items mined and traded on a blockchain are collectively referred to as "digital assets" in this context.

Digital assets can be categorized using five main categories. Digital currencies, stablecoins, NFTs (Non-Fungible Tokens), CBDCs (Central Bank Digital Currencies), and Security Tokens are a few examples of these. As of May 2021, over 15 million individuals in India owned bitcoin assets valued at over \$6.6 billion, per a report released by Chainalysis, a business that specializes in the examination of blockchain data. This puts India's adoption of cryptocurrency in second place worldwide. The report's conclusions indicate that Indian investors are turning more and more to digital assets as a hedge against inflation and unstable economic conditions.

However, the emergence of digital assets has also prompted concerns about regulation and security measures.

The Reserve Bank of India (RBI) is concerned that cryptocurrency use may be channelled toward illicit activities such as financing terrorism and money laundering. It has frequently alerted investors to the dangers associated with making investments in digital assets.

7. Conclusion

In conclusion, digitalization has a revolutionary effect on Indian retail investors. With more frequent trading and the emergence of algorithmic trading, it has changed the way that people trade. Retail investor tastes and behaviour have been redefined by the digital transformation of the Indian financial landscape, which is characterized by the growth of fintech services and digital platforms. Due to their increased control and portfolio diversity, stocks and mutual funds have become the preferred investments. Tools and analytics help risk management, and financial literacy has increased. It's critical to strike a balance between security and legal issues and the advantages of knowledge and accessibility as we navigate the digital age. Future technological developments will have a significant impact on retail investing in India, necessitating flexibility from all parties involved.

8. Recommendations

For Retail Investors: Retail investors should invest in their financial education given the rising complexity of the digital investment market. Making wise judgments requires a solid grasp of risk management, digital platforms, and investment principles. They should also think about how well digital platforms match their own investment goals and risk appetite. The platform that best suits a user's demands must be chosen because not all platforms are made equal.

For Regulatory Authorities: It is imperative for regulatory agencies to consistently adjust to the dynamic world of digital finance. Transparency, data protection, and cybersecurity should be given top priority in this adaptation. To protect investors, laws and safeguards must adapt to the rapidly evolving digital landscape. Financial literacy becomes increasingly important as digitization increases. Initiatives for investor education and financial literacy should be aggressively supported by regulatory bodies. Giving novice investors the information and resources, they need can help prevent them from making poor judgments.

9. Future Research Directions

The long-term impact of digitization on the financial security of Indian retail investors may be the subject of future studies. Comprehending the long-term effects of digital platforms on investors' financial results might yield important information about their efficacy and viability. Studies may also concentrate on the attitude and actions of investors in a digital environment amid market turbulence. There is potential for more research on the dynamic nature of digitization and how it affects investor psychology in times of market turbulence.

All things considered, the literature on the effects of digitalization on Indian retail investors offers a wealth of opportunities for further research that can further our understanding of financial markets in the digital era.

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