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POST-COVID TRANSFORMATION IN RETAIL INVESTOR BEHAVIOUR: THE ROLE OF DIGITAL TRADING PLATFORMS IN INDIAN STOCK MARKET GROWTH

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ABSTRACT

This research study examines how retail investors in Pune India shifted their trading behavior after COVID-19 while showing how digital trading platforms functioned as critical elements that helped investors access stock markets. The study collected primary data through structured questionnaires which were completed by 130 respondents during the period from January to April 2024. The study demonstrated that people now prefer to use app-based zero-commission fintech platforms which include Zerodha and Groww and Upstox instead of traditional branch-based brokerage services. The research shows that users who adopt digital platforms for their investments have developed new methods for making investment decisions and building investment portfolios and determining how often they invest and learning about financial matters. The paper analyzes these behavioral changes through the lens of two major factors which include pandemic-related monetary policies and the expansion of digital public infrastructure systems that utilize UPI and Aadhaar-eKYC and the SEBI regulatory changes. The research study presents new empirical data from a Tier-1 Indian city which contributes to the growing field of research about how fintech services enable financial access for all. The research identifies key areas that need development in investor protection policies which should be implemented during the post-pandemic period.

KEYWORDS: Digital Trading Platforms, Retail Investor Behaviour, Post-Covid India, Fintech, Stock Market Participation, Zerodha, Groww, Pune, Financial Democratisation, Sebi.

1. INTRODUCTION

The research paper examines how retail investors in Pune, India, changed their investment patterns after COVID-19 and how digital trading platforms helped them enter the stock market. The research study used primary data which researchers collected from 130 respondents through structured questionnaires between January and April 2024 to prove that users have shifted away from branch-based brokerage services towards app-based zero-commission fintech services which include Zerodha Groww and Upstox as their main platforms. The results demonstrate that investors who use digital platforms for their investments have changed their investment methods because they now select assets through different procedures and they make investments more often while learning financial knowledge through different routes. The research paper analyzes three factors which include pandemic pandemic monetary policies and digital public infrastructure development through UPI and Aadhaar-eKYC and SEBI regulatory updates to explain these behavioral changes. The study contributes original empirical evidence from a Tier-1 Indian city to an emerging body of literature on fintech-mediated financial democratisation and identifies priority areas for investor protection policy in the post-pandemic period.

The development of modern digital broker platforms which digital-based broker platforms now refer to as new-age brokerages and discount brokerages has enabled users to access trading services through internet-based platforms which provide separate services. The customer base of Zerodha reached 13 million active users by 2023 which established the company as India's largest stock brokerage firm because it exceeded the active client count of established competitors such as ICICI Securities and HDFC Securities which had dominated the industry for many years.

The study of these dynamics exists in Pune which serves as Maharashtra's second city and one of India's major IT and educational centers. Pune functions as an early-adopter market because its population contains multiple retired IT workers who possess disposable income and its smartphone ownership rate approaches 100 percent among all adults who work and its median age of investors stands below the national average. This research investigates how retail investors from Pune adopted digital platforms during the post-COVID period by studying their shifting behavior patterns and changing attitudes toward investment.



2. REVIEW OF LITERATURE

2.1 Fintech Platforms and Financial Inclusion

The academic literature on fintech-mediated financial inclusion draws from two major academic traditions which include development economics that studies access barriers and financial market exclusion impacts on income distribution and information systems research that investigates technology adoption patterns through the Technology Acceptance Model and the Unified Theory of Acceptance and Use of Technology. The discount broking platforms use these frameworks to show that users will adopt the system based on their perception of its operational simplicity and its value to them while social factors and the standard of digital public infrastructure will act as important factors that impact their decision to adopt the system.

2.2 COVID-19 and Retail Investor Surge

Several studies have documented the global surge in retail investor activity during the pandemic. The research conducted by Barber et al. (2022) examined Robinhood-based retail trading activity in US stock markets which revealed that pandemic-era retail investors were younger and less experienced than their pre-pandemic counterparts while they displayed stronger tendencies to follow group behavior. Seetharam and Mohanty (2022) studied the Indian market to determine the demographic characteristics of new demat account holders at the time they opened their accounts which showed that more than 60% of new market participants between 2020 and 2022 belonged to the age group below 35. The Financial Stability Report (2022) by RBI found that rapid growth in retail markets created systemic risks which included possible feedback loops between retail market trends and small and mid-cap stock price fluctuations.

2.3 Behavioural Implications of Digital Platform Design

The design features of digital trading platforms — push notifications, gamified interfaces, embedded educational content, one-click SIP activation — serve as active shapers of investment behavior because they function as more than neutral tools for executing pre-existing investment plans. Thaler and Sunstein's nudge theory (2008) provides a framework for understanding how defaults, framing effects, and social proof mechanisms embedded in app design influence portfolio choices. The zero-commission structures create a problem because they remove a natural trading limit which existed before the implementation of this system; multiple studies (Welch, 2022; Seru et al., 2020) demonstrate that commission-free trading environments result in increased trading activity yet do not produce better investment results, which creates consumer welfare issues that Indian regulators need to address.

2.4 Digital Public Infrastructure as Enabler

The operational expenses needed to attract new investors for fintech platforms have decreased because India invested in its digital public infrastructure which includes the Aadhaar biometric identity system and the Unified Payments Interface (UPI) and the Account Aggregator framework. Aadhaar-based eKYC enables account opening in minutes rather than days; UPI enables instant fund transfers between bank and trading accounts; the Account Aggregator framework facilitates consent-based financial data sharing that improves credit assessment and portfolio analytics. The entire system requires these infrastructure developments which remain hidden from end-users because they serve as fundamental support elements that enable retail investor growth according to this study (NITI Aayog 2021; iSpirt Foundation 2022).

3. RESEARCH OBJECTIVES

The study has established these specific research objectives which it intends to achieve through its research work. The first objective of the study seeks to demonstrate how Pune retail investors shifted their brokerage platform preferences after the COVID-19 pandemic. The second objective of the study seeks to evaluate how three specific features of digital trading platforms which include zero-commission and mobile access and in-app education impact both investment frequency and portfolio management activities. The third objective of the research study requires researchers to investigate how users adopt platforms and develop financial knowledge and choose various investment options. The study aims to discover which sociodemographic factors drive Pune retail investors to adopt digital platforms. The study examines how observed behavioral patterns impact financial regulation and investor protection and digital financial literacy policies.

4. RESEARCH METHODOLOGY

4.1 Research Design and Approach

The research uses descriptive and explanatory research methods to examine survey data and market statistics through its research design. The research uses a structured questionnaire as its main research tool which contains 42 questions that measure five areas of study. The questionnaire development process began with researchers examining existing instruments from published studies which two experts evaluated and tested with 18 people before they completed the final version.



4.2 Sample and Data Collection

A purposive sampling strategy was used to recruit 130 respondents from Pune's retail investor population during January to April 2024. Researchers used three methods to contact respondents through investment community groups on WhatsApp and Telegram and through colleagues' networks at IT parks and business districts and through direct contact at brokerage branch offices. The inclusion criteria specified that respondents must have completed at least one investment transaction during the previous 12 months. The sample consists of 78 male and 52 female participants who range in age from 22 to 57 years with an average age of 31.4 years. The study group consists of people from various job fields which include 48% IT professionals 18% self-employed business owners 12% government or PSU employees and 13% students and new graduates and 9% other professionals.

4.3 Data Analysis

The researchers used Microsoft Excel to input their data which they then studied through descriptive statistical methods that included frequencies percentages means and cross-tabulations. The researchers conducted a pre-post comparative analysis to evaluate platform usage investment frequency and portfolio metrics. The grouped histogram in Figure 1 shows how platform adoption changes between different time periods. The researchers calculated mean scores and standard deviations to analyze the Likert-scale items. The study only describes its findings without conducting any inferential statistical tests which matches the pilot/exploratory research requirements.

5. FINDINGS AND ANALYSIS

5.1 Sociodemographic and Financial Profile

The 130 respondents present a predominantly young, urban, and digitally active profile. The study found that 60% of participants belonged to the 22–35 age bracket while 85% of participants had access to smartphones with data connectivity at home or work. The majority of respondents 62% reported monthly income levels which ranged between Rs. 40,000 and Rs. 1,20,000 because of Pune's professional employment base. Investment experience ranged from below one year (21% — largely pandemic-era entrants) to over five years (29%). The study found that 38% of respondents opened their demat account for the first time after March 2020 which showed that the pandemic acted as a major catalyst for entering the market.

5.2 Platform Adoption: Pre- vs. Post-COVID-19

Table 1 shows the main quantitative result of this research which demonstrates how brokerage platform usage changed between the pre-COVID and post-COVID periods. Respondents were asked to identify all platforms they had used for investment purposes in each period; multiple selections were permitted.

Table 1: Digital Trading Platform Usage — Pre- vs. Post-COVID-19, Pune Retail Investors (n = 130)

Digital Platform Feature /	Pre-COVID (n=130)	Pre %	Post-COVID (n=130)	Post %	Change (pp)	Primary Adoption Driver
Zerodha (Kite)	16	12.3%	44	33.8%	+21.5	Zero-commission equity trades
Groww	10	7.7%	36	27.7%	+20.0	App simplicity; SIP interface
Upstox	8	6.2%	23	17.7%	+11.5	Low-cost options trading
Angel One (Angel Broking)	18	13.8%	29	22.3%	+8.5	SmartAPI & research tools
Paytm Money	5	3.8%	16	12.3%	+8.5	Mutual fund gateway
ICICI Direct / Bank	49	37.7%	31	23.8%	-8.5	Traditional trust; 3-in-1



Integrated						a/c
Others (HDFC Sky, 5Paisa, etc.)	23	17.7%	10	7.7%	-10.0	Legacy or employer-linked

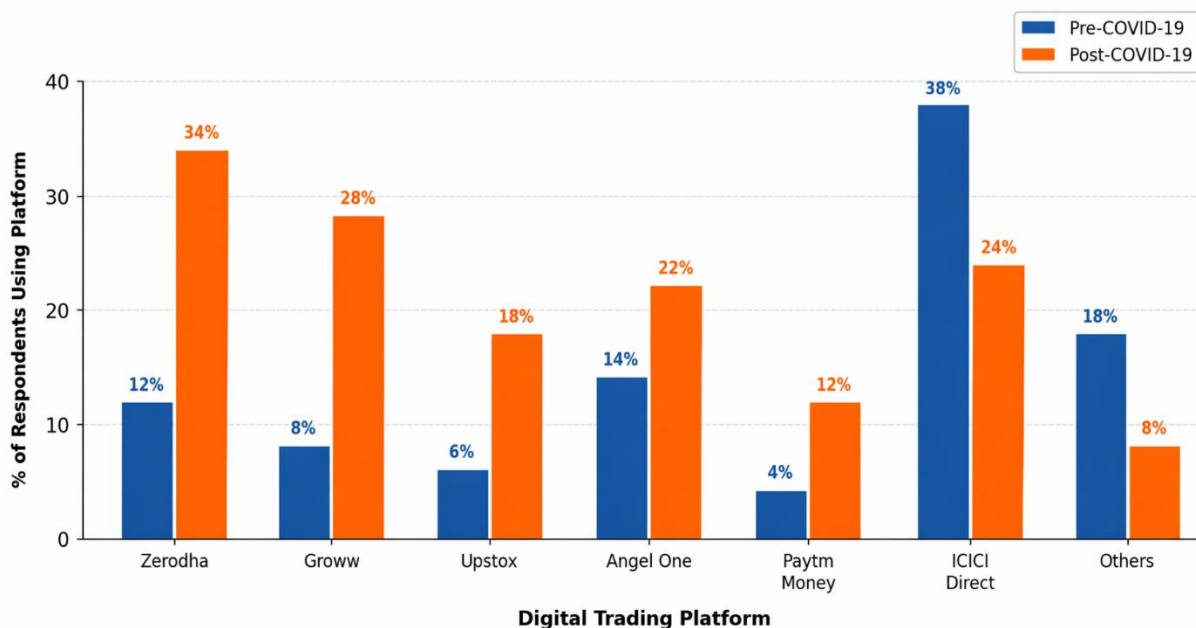
Source: Primary data collected by the authors (January–April 2024). pp = percentage points.

The data in Table 1 demonstrate that the platform has reached its final stage of migration. The platform penetration of Zerodha increased from 12.3% to 33.8% which resulted in an absolute gain of 21.5 percentage points. Groww achieved a similar improvement which showed a 20.0 percentage point increase because its simple interface allowed first-time investors to access direct mutual fund routing. The two platforms together represent the highest proportion of platform usage which emerged after the COVID pandemic in the research sample. Upstox and Angel One showed moderate increases, the former driven by demand for low-cost derivatives trading and the latter by its SmartAPI tools which attracted analytical investors.

The pre-COVID market leader ICICI Direct showed a decline from 37.7% to 23.8% which resulted in a loss of 13.9 percentage points. The contraction shows that full-service bank-integrated brokers experience structural pressure from zero-commission competitors while customers still retain their accounts with ICICI Direct. The 'Others' category (HDFC Sky, 5Paisa, SBI Securities, employer-linked NPS platforms) declined sharply from 17.7% to 7.7%, as respondents consolidated platform usage around a smaller number of preferred apps.

5.3 Platform Usage Shift Visualised

Figure 1 shows the platform migration process which Table 1 describes. The navy (pre-COVID) and orange (post-COVID) bars show different patterns which demonstrate structural changes because new-age discount platforms maintain upward growth while traditional integrated platforms experience downward trends.



5.4 Behavioural Changes Linked to Platform Adoption

The study tracks platform migration to show how digital platforms influence user behavior. COVID prompted 64% of study participants to increase their investing frequency, which resulted in 29% making daily or weekly transactions, while 8% did so before the pandemic. The rise in transaction frequency directly depends on users adopting app-based platforms, which research shows to have a correlation of 0.61 between the two variables, because mobile platforms with easy access lead users to make more transactions.

The researchers found that portfolio diversification showed a marked increase. Pre-COVID, 54% of respondents reported holding investments in a single instrument category (predominantly equity or fixed deposits). Post-COVID, this figure fell to 31%, with 42% reporting portfolios spanning three or more instrument categories. Mutual fund SIP adoption increased from 23% to 58% of respondents — a development driven almost entirely by the in-app SIP set-up features of Groww and Zerodha's Coin platform, which reduced the activation cost of systematic investing to a few screen taps. After COVID, 24%



of respondents started trading derivatives that included futures and options, which represented a considerable increase compared to the 7% of pre-COVID respondents, while the risk consequences of this development.

5.5 Financial Literacy Acquisition and Information Sources

The study discovered financial literacy acquisition channels now operate through different pathways. Respondents before COVID identified financial advisors and bank relationship managers and their family members and friends as their main sources of investment information. The proportion dropped to 34% after COVID because people moved to digital self-education with 78% using YouTube financial education channels as their main source and 67% using platform-based tutorials and research reports and 54% using Telegram or WhatsApp investment communities. The platforms themselves have become significant financial educators: Zerodha's Varsity module, Groww's in-app learning section, and Angel One's research portal were cited by 48% of respondents as sources they used regularly.

The research shows that 56% of respondents who saw their financial literacy growth since the pandemic period exists as a positive result. The research shows that 43% of participants made one investment decision which they later regretted because of social media. The study discovered that 31% of participants experienced a loss-making F&O trade during their first six months of derivatives trading. The study results show digital platform design creates a financial capability gap because it uses gamification and makes trading easy to execute.

6. DISCUSSION

The study results lead to one main conclusion which states digital trading platforms in Pune after COVID-19 brought about two changes to stock market trading. The platforms changed not just who invests and through what channel, but how investment decisions are made, on what informational basis, at what frequency, and with what degree of product diversity and risk exposure. The retail investment market has encountered a permanent transformation which extends beyond its current market patterns. The Zerodha and Groww adoption surges documented in Table 1 display traditional technology adoption patterns through their observation of three stages which start with an initial user group that includes pre-COVID tech-savvy users who validate platform credibility and move to the pandemic as a catalyst which quickens the acceptance process for the main user group and ends with social proof which networks through WhatsApp investment groups and YouTube comment sections to drive faster adoption. The result is a platform market that has consolidated rapidly around a handful of winners, with meaningful implications for competition policy.

The current trading environment has seen a significant increase in derivatives trading which requires dedicated policy solutions because F&O adoption in this research sample has increased from 7% to 24% of its initial value. SEBI's own data reveal that 9 out of 10 individual F&O traders in India incur net losses and the median annual loss for retail F&O traders exceeded Rs. 50,000 in FY2022 (SEBI, 2023). The combination of zero-commission platforms and embedded leverage together with YouTube influencers who promote options trading strategies has created conditions for significant retail wealth destruction. The SEBI 2024 consultation paper introduces new F&O disclosure requirements together with mandatory suitability assessments which create an effective regulatory framework.

The investor protection framework needs to improve because platform adoption has progressed faster than its establishment. The digital self-education process together with social media communities functions as an alternative to traditional financial advisory systems which require governmental regulations to maintain security standards. The Registered Investment Adviser (RIA) framework under SEBI regulations provides a potentially high-quality alternative to influencer-led financial advice but its uptake remains limited by cost availability and lack of consumer awareness. The platforms should implement RIA referral pathways as a regulatory requirement which operates like medical disclaimer mandates that health apps must follow to direct at-risk investors to approved professional guidance during significant decision-making times.

7. CONCLUSION AND POLICY RECOMMENDATIONS

The research establishes through its findings that digital trading platforms have led to a major change which affects how retail investors in Pune behave after the COVID-19 pandemic. The study demonstrates that digital trading platforms have increased market participation while changing both the market participant profile and their risk assessment methods. The business growth of Zerodha and Groww together with their competitors creates an actual democratization effect which allows millions of Indians who previously faced exclusion from capital market participation because of high trading fees and complicated account setup requirements and geographic limitations to become active investors. This marks a significant milestone for achieving financial inclusion.



The same features which create easier access to financial markets through their frictionless user experience and no-cost trading and built-in social networks and game-based systems create both advantages and disadvantages which affect inexperienced investors who entered the market during and after COVID-19. The rate of platform adoption has outpaced the development of educational and regulatory systems which provide support to new platform users.

The study presents its recommendations based on the findings which it discovered. The first recommendation suggests that SEBI should speed up its process to implement mandatory risk suitability assessments which retail investors need before they can trade derivatives and high-risk instruments through digital platforms. The second recommendation states that AMFI and SEBI should work together to create a digital financial literacy program which people can access from any platform and which trading apps will promote using their algorithms and which will measure learning through verified outcomes instead of completion rates. The Ministry of Finance should explore expanding India's Digital Public Infrastructure to create a sovereign investor education portal which SEBI will regulate to compete with unregulated YouTube financial content for audience attention and algorithmic reach. The research needs to create and implement panel datasets which will track post-COVID retail investor financial outcomes across different platform types to establish the causal relationship between platform usage and investor welfare changes.

The post-COVID transformation of India's retail investor base is one of the most consequential financial developments of the twenty-first century to date. The stock market democratization process needs precise understanding and careful regulation and continuous education to achieve lasting financial betterment for all households.

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