



RETAIL RISE AND MARKET LIQUIDITY: ANALYZING DEMAT ACCOUNT ACTIVITY AND ASSET TURNOVER RATIO

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ABSTRACT

This study investigates the impact of rising retail participation—measured through the growth of Demat accounts—on stock market liquidity in India, represented by the stock turnover ratio. Over the past decade, India has seen a substantial increase in individual investors opening Demat accounts, particularly through platforms such as CDSL. This paper analyzes data from 2018 to 2025, using monthly statistics from NSE, BSE, NSDL, and CDSL to examine whether an increase in Demat account holders correlates with higher stock turnover in the Indian equity market. The findings indicate a strong positive correlation between Demat account growth and market liquidity, especially during periods of economic recovery and digital brokerage expansion. This relationship is further influenced by sectoral investment trends and government-led financial inclusion initiatives. The results suggest that retail investors play a significant role in driving market activity and enhancing liquidity, underlining the importance of retail-focused market policies. This research contributes to the understanding of how individual investor behavior affects stock market dynamics in emerging economies like India.

KEY WORDS: Stock Market, Liquidity, Demat Account, Investor Behavior

INTRODUCTION

The growing involvement of retail investors in the stock market has transformed the dynamics of liquidity, greatly affecting how stocks are traded and valued. A clear indicator of this change is the surge in the number of Demat accounts, with millions of individuals now participating in the equity market. This increase in retail engagement has been driven by technological advancements and improved access to financial markets, resulting in a shift in the conventional market structure. To comprehend the effects of this rise in retail participation on market liquidity, it is essential to evaluate metrics such as the Asset Turnover Ratio (ATR), which serves as a crucial gauge of liquidity.

The Asset Turnover Ratio indicates how frequently assets, particularly stocks, are traded, with a higher ratio generally signifying superior liquidity. The impressive growth of the stock market in India is evident in the swift increase in Demat (dematerialized) accounts. These accounts, which store shares in a digital format, have surfaced as the primary gateway for retail investors. The monthly increase in the number of new Demat accounts serves as a clear indicator of the rapid expansion of the investor base. As more individuals participate in the market, their trading activities directly influence liquidity.

Liquidity refers to the ease with which an asset can be traded without significantly altering its price. A market with high liquidity is deemed healthy, as it facilitates seamless transactions, keeps the disparity between buying and selling prices (the bid-ask spread) minimal, and ensures that large transactions do not lead to substantial price fluctuations. The Indian stock market has experienced a significant transformation in recent years, driven by regulatory changes, advancements in technology, and an increase in retail investor activity. With market capitalization and mutual fund assets expanding significantly,

India is now recognized as one of the leading global markets. Concurrently, retail investors have taken a more active role, as evidenced by the swift rise in Demat accounts and investments made through digital platforms. Studies indicate that macroeconomic factors such as inflation, interest rates, and exchange rates are crucial in influencing stock market trends over both short and long durations. Additionally, liquidity, investor sentiment, and even psychological factors have been shown to affect trading patterns and market stability. The recovery following the pandemic has further boosted domestic investment and the adoption of digital methods, underscoring the importance of examining how retail participation and macroeconomic factors jointly influence market liquidity and efficiency in India.

REVIEW OF LITREATURE

Srikanth Potharla (2025) This research outlines the evolution of India's capital markets from 2010 to 2025, influenced by significant regulatory, structural, and technological changes. During this time, market capitalization soared from approximately \$1.6 trillion to more



than \$5.5 trillion, positioning India among the top five markets globally. The assets under management (AUM) for mutual funds increased tenfold to ₹72 trillion, and retail participation rose significantly, with demat accounts expanding from fewer than 20 million to over 130 million—indicative of genuine market democratization. The corporate bond market grew from 6% to 18% of GDP, although it is still relatively shallow compared to advanced economies. Reforms initiated by SEBI and RBI—including LODR norms, REITs/InvITs, SME listings, Retail Direct G-Secs, and universal exchanges—enhanced transparency, governance, and accessibility. Upgrades in technology, such as algorithmic trading regulations, T+1 settlement, and blockchain-based bond monitoring, improved efficiency and risk management.

Sidharth J (2025) Liquidity is crucial in the stock market as it influences investors' portfolio choices and impacts the broader economic outlook. Robust liquidity enables markets to withstand economic shocks and facilitates quicker recoveries. This research investigates how two significant events—the 2008 Global Financial Crisis and the COVID-19 pandemic—impacted liquidity in the Indian stock market. By analyzing data from 655 companies listed on the National Stock Exchange (NSE) spanning 17 years (2005–2022), the study explores various facets of liquidity. The results indicate that both crises had a substantial influence; however, the 2008 financial crisis resulted in a more profound and enduring impact compared to COVID-19. In all liquidity metrics, the 2008 crisis was found to be more severe. Notably, during the COVID-19 pandemic, trading volumes surged even as other liquidity indicators declined, while during the 2008 crisis, both trading volumes and all liquidity metrics fell simultaneously.

Patrick Luo, Enrichetta Ravina, Marco C. Sammon, and Luis M. Viceira (2025) breakdowns of the data confirm these patterns across categories such as firm size and institutional ownership. We also observe that younger and more active retail investors are particularly prone to contrarian trading. Company-specific factors—including dividend yield, leverage, size, book-to-market ratio, and the extent of analyst coverage—are linked to the degree of contrarian activity around earnings announcements. While evidence of the disposition effect and stale limit orders is present in our sample, these do not explain our results. Overall, the findings are consistent with behavioral theories related to investor conservatism, persistent beliefs, cognitive uncertainty, and the misinterpretation of the “Law of Small Numbers.

Xiaozhou Zhou, Feng Zhan and Chang Chan (2025) Leveraging the expansion of price limit regulation as a quasi-natural experiment, this research investigates the balance between stock market liquidity and price efficiency, with retail investors functioning as de facto market makers. Our empirical findings reveal a notable fluctuation in retail investors' trading behavior following the increase in the daily price limit. In economic terms, this fluctuation equates to approximately \$26.73 million fewer shares traded daily after the regulatory adjustment. Additionally, our analysis demonstrates that this decline in retail investors' involvement results in reduced liquidity, yet enhances stock price efficiency. These empirical results enrich the theoretical contributions of Subrahmanyam (1991) and Han et al. (2016), emphasizing the significance and intricacy of retail investors' trading behaviors.

R Bird, DR Gallagher , A Khan, & Yeung, D(2025) Although psychology and marketing have extensively explored how emotions influence decision-making, the field of finance has largely overlooked this aspect. Our research addresses this gap by examining how emotions, as reflected in news and social media, affect investment decisions and stock prices. We present compelling evidence that emotions significantly influence investors' choices. Positive feelings such as trust and optimism exert a greater effect than negative emotions. Additionally, we discover that emotional indicators derived from news sources have a more substantial impact on stock prices than those extracted from social media.

Sanjay Singh Chauhan , Pradeep Suri , Firoz Alam ' Umme Hani , Amar Johri & Farman Ali(2025) This study explores the relationship between India's stock market and important macroeconomic variables, since stock prices are often influenced by changes in the overall economy. For a developing country like India, this link is highly relevant for investors, researchers, and policymakers because it helps in making better investment choices and designing effective policies. The study covers the period from April 2009 to March 2023 and uses the Autoregressive Distributed Lag (ARDL) model to examine both short-term and long-term effects of macroeconomic factors on stock prices. This model is useful as it captures immediate market reactions as well as long-term trends. The findings clearly show that stock prices in India are affected by movements in macroeconomic indicators such as inflation, interest rates, and exchange rates. Moreover, the results of the Granger causality test provide further evidence that these economic variables not only influence but also have predictive power over stock market performance. In simple terms, changes in the Indian economy can be used to forecast how stock prices may move in the future. These insights are valuable as they highlight the importance of macroeconomic stability for a healthy and efficient capital market, supporting both investors and policymakers.

M Berchmans and Dr. S Vasanthi (2025) The COVID-19 pandemic brought major changes in how people invest, especially in India, where many individuals started joining the stock market through digital platforms. This paper studies the reasons behind this change



using ideas from behavioral economics. It looks at how fintech apps and platforms influenced people's investment choices by making access easier and quicker. The study also explores the psychology of retail investors, focusing on factors like how much risk they can handle, how herd behavior shapes their actions, and how financial stress affects their decisions. Findings suggest that while digital adoption grew fast after COVID, this alone is not enough to ensure long-term participation. To make financial inclusion sustainable, it is important to combine technology with behavioral financial literacy. By improving awareness, guiding decision-making, and reducing anxiety, investors can be more confident and balanced in their approach to the market.

Deogirikar, S. B. (2023) Indian economy recovered drastically in financial year 2022 post pandemic. India's gross domestic product is estimated to be at rupees 301.75 trillion i.e. US\$3.62 trillion by the financial year end of 2023-24. It highly indicates the strength of India as a speediest growing economy in the world. This progression is reflected in the stock markets largely during the post pandemic period. Retail investors are keen on investments in mutual funds and direct investments through stock exchanges. This has enhanced the domestic investment in the Indian market. It is necessary to study the changing approach of retail investors in Indian stock markets on this background. Increasing number of Demat accounts and systematic investment plans in mutual funds is the strong push for the study of retail investors and changing scenario of investing in India.

RESEARCH GAP

While several studies have investigated the overall development of India's capital markets and the influence of macroeconomic elements like inflation, interest rates, and exchange rates, there is a scarcity of research that specifically connects retail investor involvement to market liquidity. Most of the current literature emphasizes institutional investors or general market trends, leaving an unexplored area regarding how the swift increase in Demat accounts and retail trading activities impacts stock turnover. Additionally, research frequently focuses on market capitalization and mutual fund inflows, while seldom addressing the distinct effect of retail investors on liquidity. As digital platforms and government initiatives for financial inclusion attract unprecedented numbers of new investors, it is crucial to examine this relationship. This paper addresses this omission by investigating how the growth of Demat accounts influences liquidity in the Indian equity market.

OBJECTIVES

1. To analyse the growth of retail participation in the Indian stock market.
2. To investigate the relationship between Demat account activity and market liquidity.
3. To determine the nature and strength of the correlation between retail participation and stock market liquidity.

HYPOTHESIS

H01: There is no significant linear correlation between Demat account activity and the stock market's asset turnover ratio.

RESEARCH METHODOLOGY

This research will employ a quantitative and analytical methodology to explore the connection between retail participation and market liquidity within the Indian stock market. The approach will be grounded in data, utilizing historical time-series data to evaluate a series of hypotheses. This methodological choice is advantageous for its capacity to objectively assess and analyse the relationship and predictive effect between significant financial variables.

The study will utilize a secondary data collection method, obtaining publicly accessible data from reputable and authoritative sources for the fiscal years from 2018-2019 to 2024-2025. This period has been selected to reflect the notable post-pandemic increase in retail investing in India. Retail Participation (Independent Variable): This will be quantified as the cumulative number of Demat accounts in India.

Data will be collected from the official annual publications and statistical releases of the Central Depository Services (India) Limited (CDSL) and the National Securities Depository Limited (NSDL). Market Liquidity (Dependent Variable): This will be assessed through the Asset Turnover Ratio of the entire Indian stock market. The data for this variable will be retrieved from the official financial statements and data repositories of key stock exchanges, including the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE)



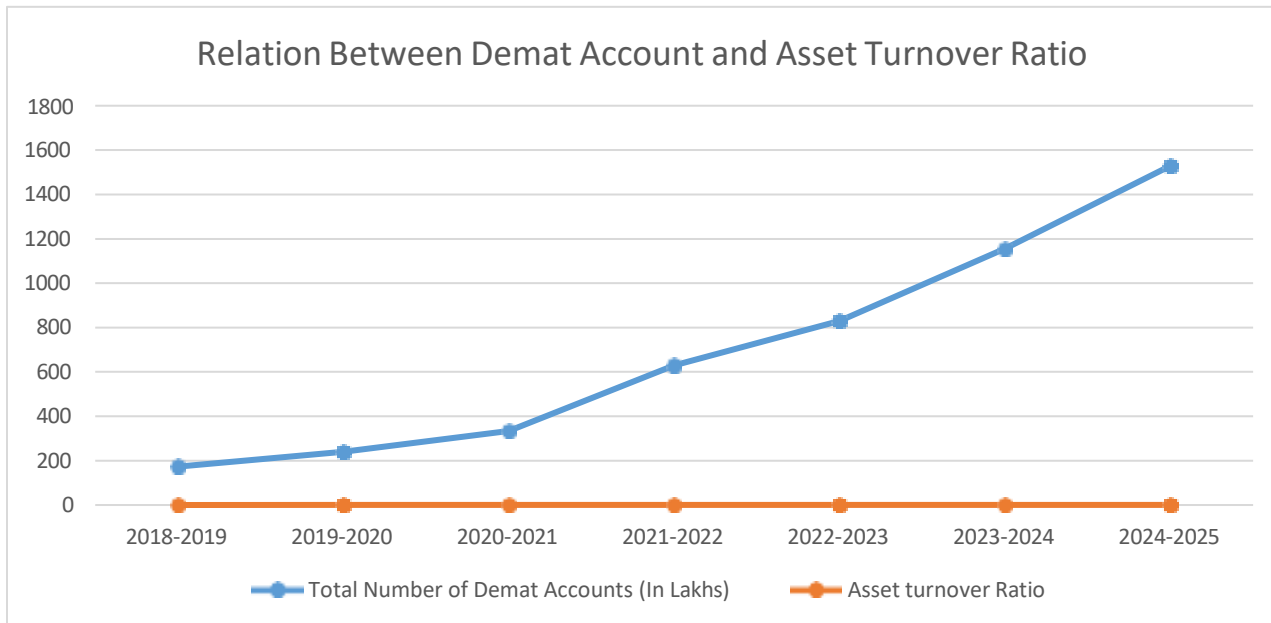
e CDSL timeline highlights key demat account milestones, especially:

Year	Milestone / Event Description
1999	Received certificate of commencement from SEBI (Feb); operations flagged off by Finance Minister (July)
2002	Launched internet facility 'easy' (electronic access to securities info)
2004	Introduced 'easiest' – access + execution of secured transactions
2005	CDSL surpassed 10 lakhs active demat accounts
2007	Launched SMART (SMS Alerts Related to Transactions)
2009	Inauguration of e-voting platform by Ministry of Corporate Affairs
2012	Over 10,000 issuers joined (equity, bonds, mutual funds, etc.)
2015	Active demat accounts with CDSL exceeded 1 crore
2016	Enabled donation in dematerialized securities to charitable trusts
2017	CDSL listed on NSE via IPO; first in Asia-Pacific to do so
2019	Became India's largest depository by number of demat accounts
2021	Enhanced e-DIS for secure digital trade settlement
2022	Introduced DDPI, T+1 settlement, and block mechanism for securities pay-in
2023	Implemented CUSPA (Client Unpaid Securities Pledge Account), single e-voting sign-on
2024	CDSL completed 25 years, crossed 11+ crore demat accounts; introduced T+0 optional settlement and 23-language e-CAS
2025	Became first depository to cross 15+ crore active demat accounts; introduced direct pay-out to investor demat accounts

Source: CDSL Annual Report 2023–24, Timeline of Corporate Milestones. Retrieved from <https://www.cdslindia.com>

Year	Total Number of Demat Accounts (In Lakhs)	Asset turnover Ratio
2018- 2019	173	0.27
2019- 2020	240	0.31
2020-2021	334	0.32
2021-2022	630	0.45
2022-2023	830	0.41
2023-2024	1156	0.5
2024-2025	1529	0.55

Calculations		
	Total Number of Demat Accounts (In Lakhs)	Asset turnover Ratio
Average	698.86	0.40
Standard Deviation	469.08	0.097
Correlation	0.9592	
Regression – Slope	0.000199	
Regression – Intercept	0.26215	



RESULTS AND DISCUSSION

In line with the first objective, an analysis of Demat account data shows a remarkable surge in retail participation over the last six years. The number of Demat accounts rose from 173 lakhs in 2018–2019 to 1,529 lakhs in 2024–2025. This represents a compound annual growth rate (CAGR) of more than 40 percent during the period.

The primary aim of this study was to examine the relationship between retail participation, measured by Demat account growth, and market liquidity, represented by the asset turnover ratio. A Pearson correlation test was carried out on the data for the period 2018–2019 to 2024–2025.

The analysis produced a correlation coefficient (r) of +0.9592, which reflects a very strong positive relationship between the two variables. In other words, years that witnessed faster growth in Demat accounts also recorded higher levels of liquidity in the stock market. This finding provides clear evidence to reject the null hypothesis (H_0 : no relationship exists) and to accept the alternative hypothesis that retail participation significantly influences liquidity.

CONCLUSION

The strong connection we found in the data, with a high correlation and a predictive model, shows that the big increase in everyday investors with Demat accounts is directly and significantly making the stock market more active and easier to trade in. While large foreign and domestic institutions used to control the market, this study proves that retail investors are now a key part of how the Indian market functions.

Interestingly, even though a huge number of new investors joined, the market's trading stability remained healthy. This tells us that the market was able to handle the new activity smoothly, leading to a much healthier and more vibrant trading environment.

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