

Comparative Analysis of Investment Behaviour Across Generations: Gen Z, Millennials and Older Retail Investors in India

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Abstract

Purpose: The study presents a comparative secondary-data analysis of investment behaviour across three generational cohorts (Generation Z: 18-28 years, Millennials: 29-44 years and Older Investors: 45+ years) of retail investors in India, with specific contextualisation to semi-urban markets including Uttar Pradesh. It draws on two authoritative secondary data sources: the SEBI Investor Survey 2025 (covering 91,950 households across India) and NSE/BSE investor registration and trading data for the period 2020-2024. **Design/Methodology:** The research design is descriptive analytical, secondary data. The data is derived from the SEBI Investor Survey 2025, NSE Annual Reports (2020–2024), BSE investor statistics and published regulatory data, and analysed using content analysis, trend analysis, and comparative cross-tabulation. Five dimensions are used to examine generational differences: investment preferences, risk tolerance, financial literacy, digital adoption and behavioural biases. **Findings:** The main findings obtained from the official data are as follows: (1) NSE's registered investor base grew from 4 crore in March 2020 to over 10 crore by August 2024, with 40% of investors now under 30 years of age; (2) SEBI Investor Survey 2025 found that 79% of Indian households — including 79% of Gen Z — exhibit risk-averse behaviour favouring capital preservation; (3) Only 36% of investors possess high or moderate financial literacy of securities market products; (4) Digital platform adoption is generationally stratified — Gen Z investors account for over 70% of new users on mobile trading platforms such as Zerodha, Groww, and Upstox; (5) Millennials and Gen Z together control approximately 48% of all mutual fund assets (Rs. 75.35 lakh crore AUM) as of 2025. **Originality/Value:** This study provides a comprehensive, evidence-based comparative framework built entirely on publicly available, audited institutional data – making its findings fully verifiable, replicable, and policy-ready. This addresses the lacuna in the research of simultaneous multi-generational comparison in Indian behavioural finance literature and contextualises the national level findings to semi-urban markets especially Uttar Pradesh (2.7 crore NSE accounts as of 2025).

Keywords: Investment Behaviour; Retail Investors; Generation Z; Millennials; Financial Literacy; Risk Tolerance; Digital Adoption; SEBI Investor Survey; NSE/BSE Data; India

1. Introduction

1.1 Background and Context

The capital market in India has gone through a historic transformation post-COVID. The SEBI Investor Survey 2025 — the most comprehensive household-level survey of Indian investors ever conducted, with 91,950 households studied across 400 cities and 1,000 villages — chronicles this transformation with unprecedented granularity (SEBI, 2025). According to the National Stock Exchange of India (NSE), the number of registered investors has increased from around 4 crore in March 2020 to more than 10 crore by August 2024 – more than 3x in just five years (NSE, 2024). By September 2025, unique registered investors on NSE crossed 12 crore and median investor age dropped from 38 years in 2020 to just 33 years in 2025 (Business Standard, 2025).

This demographic shift, largely powered by the Gen Z (18-28 years) and Millennial (29-44 years) cohorts is not just a quantitative increase in the investor base, but a qualitative transformation of investment culture, risk appetite, information channels and platform preferences. According to NSE data, almost 40% of registered investors are now below the age of 30. More than 70% of new users are in the age group of 18-30 years according to trading platforms like Zerodha, Groww and Upstox (IBEF, 2026). The BSE equity market capitalization has skyrocketed from around Rs. 101 lakh crore in FY2014-15 to nearly Rs. 470 lakh crore by October 2025 (SEBI, 2025).

At the same time, Uttar Pradesh, the most populous state in India and the context for this study, has become a major contributor to the growth of retail investors. According to data from the NSE, there are 2.7 crore investor accounts in Uttar Pradesh (U.P.) as of late 2025, second only to Maharashtra (4 crore), signifying the growth of retail investing from metropolitan to semi-urban districts such as Agra (NSE, 2025).

1.2 Problem Statement

But this dramatic growth is paradoxically reflected in the SEBI Investor Survey 2025: awareness does not translate into participation or financial literacy. 63% of Indian households have heard of at least one product in the securities market but only 9.5% (32 million out of the total 337 million households) are active investors. More critically for this study, risk aversion is widespread even among the young investors. 79% of Indian households including 79% of Gen Z households show a strong preference for capital preservation over higher returns (SEBI, 2025). According to SEBI (2025), only 36% of investors have high or moderate financial literacy regarding products of securities market.

This raises an important research question: If there are such significant generational differences in digital adoption, market participation and financial exposure, why then is risk aversion seemingly so high across all generations? And how do generational cohorts – Gen Z, Millennials and Older Investors – differ in any meaningful way in terms of their investment preferences, depth of financial literacy, use of digital platforms and behavioural patterns? The present study aims to answer these questions by means of systematic comparative analysis of official secondary data.

1.3 Research Gap

But the SEBI Investor Survey 2025 and NSE/BSE data, though rich, have not been systematically synthesised and compared across generational lines in academic studies. The existing literature on Indian investors' behaviour is mostly based on primary data and is often limited to small samples from specific cities. There are no studies in the Indian behavioural finance literature that use nationally representative secondary data for generational comparisons. The study addresses this gap through a rigorous, evidence-based comparative analysis using publicly available, audited, institutional data sources.

1.4 Significance of the Study

The study findings have direct implications for SEBI's generation-specific investor education programmes, FinTech platform design, financial advisory frameworks and semi-urban financial inclusion policy. The findings of this research are statistically significant, derived from data of 91,950 households (SEBI, 2025) and over 12 crore NSE-registered investors (NSE, 2025) – a sample size not attainable by primary-data studies with 300–500 respondents.

2. Review of Literature

Theme 1: Demographic Factors and Investment Behaviour

The relationship between demographic characteristics and investment behavior is well established in the Indian financial literature. Sahi et al. (2013) found that demographic variables have a significant impact on asset allocation and risk-taking of Indian retail investors. Baveja and Verma (2024) found that education is positively related to diversification of investments with more educated investors tending to hold more complex portfolios. This is corroborated at a national level by the SEBI Investor Survey 2025 – investor participation varies widely with education, income and age, with the socio-economic classification (NCCS) being a strong predictor of participation in the securities market.

Theme 2: Age, Generation, and Risk Tolerance

According to the classical life-cycle hypothesis (Modigliani & Brumberg, 1954), risk tolerance should decrease with age. Rawal and Chowdhury (2025) also found significant prediction of risk tolerance with age among retail investors in Faridabad, Haryana. But SEBI's 2025 Investor Survey shows an unexpected nuance: risk aversion among Gen Z (18–28 years) is almost as high as among older cohorts, with 79% of Gen Z households prioritizing capital preservation — a figure close to the 79.7% national average across all age groups (SEBI, 2025). Such finding of “universal risk aversion” at scale across 53,357 surveyed households is an important empirical contribution to literature on generation risk tolerance.

Theme 3: Financial Literacy Across Generations

Lusardi and Mitchell (2014) found that financial literacy was positively related to sound investment behaviour worldwide. According to the SEBI Investor Survey 2025 in India, only 36% of investors have high or moderate knowledge of securities market products, with significant implications for all generational cohorts. Agarwal and Bhargava (2021) noted the existence of a ‘shallow literacy’ phenomenon among Gen Z, where general awareness (via social media and YouTube financial influencers) conceals a lack of depth of financial knowledge. This aligns with SEBI's discovery that short-form digital video tutorials are the most preferred financial education format by younger investors, while older investors prefer articles, podcasts and workshops (SEBI, 2025).

Theme 4: Digital Adoption and Generational Trading Behaviour

Digital trading platforms have changed the behaviour of retail investors, especially younger investors, in the post-COVID era. According to NSE data, 43% of new demat accounts in 2022 were opened by 18-30-year-olds, and over 70% of new users on major trading platforms (Zerodha, Groww, Paytm Money) are from this age group (IBEF, 2026). According to Zerodha, the proportion of its customers aged 20-30 rose from 50-55% before COVID to 69% by 2021 (Management Journal, 2022). In 2020, Groww's first-time investors grew by 206% and 95% in just two quarters of 2021. The SEBI Investor Survey 2025 also reflects this generational digital divide, noting that younger investors prefer digital and social media channels for financial education, while older investors prefer traditional formats.

Theme 5: Behavioural Biases and Generational Investment Decisions

The Prospect Theory of Kahneman and Tversky (1979) showed that loss aversion governs the investment decisions of all demographic groups. Gupta (2025) found that the most pronounced overconfidence and herd behaviour is among younger retail investors in India who often trade based on social media signals. This is empirically verified through SEBI Investor Survey 2025 data on finfluencer (financial influencer) impact: the survey records a vast presence of finfluencers among younger investors, prompting worries over herd-driven investment choices. The survey also shows that fear of losses is a key deterrent to investment across all cohorts, suggesting that loss aversion rather than risk appetite is the key behavioral dynamic even for younger investors.

Table 1: Summary of Key Secondary Data Sources and Literature

Source	Type	Year	Key Data / Finding Relevant to This Study
SEBI Investor Survey 2025	Official Government Report	2025	91,950 HH survey; 79% risk aversion incl. 79% Gen Z; 36% financial literacy; generation-wise awareness, participation, and digital adoption data
NSE Press Release / Annual Data	Official Exchange Data	2020–2025	Investor base: 4cr (2020) to 12cr (2025); 40% investors under 30; median age fell from 38 to 33; UP: 2.7cr accounts
IBEF Investment Report	Industry Report	2026	Gen Z and Millennials hold 48% of MF AUM; 70%+ new users on trading apps under 30; 40% new SIP accounts opened by under-35s in 2025
Rawal & Chowdhury	Peer-reviewed journal	2025	Age significantly predicts risk tolerance; younger investors exhibit higher risk appetite in Faridabad context
Baveja & Verma	Peer-reviewed journal	2024	Financial literacy positively impacts investment diversification across India
Gupta	Peer-reviewed journal	2025	Overconfidence and herd behaviour prevalent; most pronounced among younger retail investors
Management Journal Study	Academic journal	2022	Zerodha: 20-30 age group grew from 50-55% to 69% of customers post-COVID; Groww 206% new investor growth 2020
Lusardi & Mitchell	Peer-reviewed journal	2014	Financial literacy positively correlated with portfolio diversification and retirement savings globally
Kahneman & Tversky	Foundational Theory	1979	Prospect Theory: loss aversion as primary behavioural bias across investor demographics

3. Research Gap

The SEBI Investor Survey 2025, and NSE/BSE data, are publicly available and nationally representative, but they have not been synthesized in a systematic comparative generational framework in the peer-reviewed academic literature. There are three specific gaps:

- There has been no academic research based on SEBI Investor Survey 2025 data as the main empirical input for a comparative generational study of investment behaviour in India.
- Indian studies in behavioural finance are largely based on small city-specific samples of primary data and not on the statistical power of nationally representative data.
- The semi-urban and Uttar Pradesh context, now the second largest state by NSE investor accounts (2.7 crore), has been largely ignored in academic synthesis of official investor data.

This study addresses all three gaps by undertaking a systematic, evidence-based comparative analysis based on publicly available, audited data only, and by contextualising findings to the semi-urban markets of Uttar Pradesh including Agra District.

4. Research Objectives

1. To analyze and compare investment preferences (selection of asset classes and composition of portfolio) across Gen Z, Millennials and Older Investors through SEBI and NSE/BSE secondary data (2020-2024).
2. To compare the risk tolerance levels across generational cohorts using SEBI Investor Survey 2025 data.
3. To examine the generational differences in financial literacy levels as per SEBI Investor Survey 2025 findings.
4. To study generation-wise differences in adoption of digital investment platform using NSE/BSE data and platform-level data.
5. To study behavioural biases among different generational cohorts through official data and finfluencer impact data from SEBI Investor Survey 2025.

5. Research Hypotheses

The following hypotheses are formulated based on existing theory and preliminary secondary data evidence:

Table 2: Research Hypotheses

Hypothesis	Null (H0)	Alternative (H1)
H01/H11	No significant difference in investment preferences across generations	Significant difference in investment preferences across generations
H02/H12	No significant difference in risk tolerance across generations	Significant difference in risk tolerance across generations
H03/H13	No significant difference in financial literacy across generations	Significant difference in financial literacy across generations

H04/H14	No significant difference in digital platform adoption across generations	Significant difference in digital platform adoption across generations
H05/H15	Behavioural biases do not differ significantly across generations	Behavioural biases differ significantly across generations

6. Research Methodology

6.1 Research Design

This study is a descriptive-analytical, secondary data research design. It does not collect primary data. Instead, it systematically extracts, synthesises and compares analyses data from publicly available, officially published sources. The method is consistent with the accepted approach to secondary data research in financial research (Saunders et al., 2019) and ensures the full reproducibility and verifiability of the study's results by the academic community.

6.2 Secondary Data Sources

Table 3: Secondary Data Sources

Source	Publisher	Data Type	Period	Access
SEBI Investor Survey 2025	Securities and Exchange Board of India	National household survey, 91,950 HH; age/generation-wise investment data	2025	Public: sebi.gov.in
NSE Annual Reports / Press Releases	National Stock Exchange of India	Registered investor base; age-wise demat data; state-wise distribution	2020–2025	Public: nseindia.com
BSE Investor Statistics	Bombay Stock Exchange	Retail investor participation; demat account trends	2020–2024	Public: bseindia.com
AMFI / CAMS Data	Association of Mutual Funds in India	Mutual fund AUM; SIP data by age cohort; millennial/Gen Z MF preference	2020–2025	Public: amfiindia.com
IBEF India Investment Report	India Brand Equity Foundation	Generational investor trends; platform adoption data	2026	Public: ibef.org
Academic Journals (JETIR, Management Journal)	Peer-reviewed journals	Secondary analysis of SEBI/NSE/CDSL investor data	2022–2025	Open access

6.3 Analytical Approach

Four analytical techniques are used:

- **Trend Analysis:** Long-term study of the growth of demat accounts, age-wise registration of investors, and adoption of platforms based on data from the NSE/BSE from FY2020 to FY2024.
- **Comparative Cross-Tabulation:** Generation-wise comparison of investment preferences, risk tolerance, financial literacy and digital adoption from tables of SEBI Investor Survey 2025.
- **Content Analysis:** Generation-specific findings were systematically extracted and coded from the SEBI Investor Survey 2025 chapters on risk tolerance, financial literacy, digital channels and behavioural biases.
- **Contextualisation Analysis:** Mapping of Uttar Pradesh and semi-urban India to national findings using state-wise NSE data and urban/rural breakdowns from SEBI Investor Survey 2025.

7. Data Analysis and Findings

7.1 Growth of Retail Investor Base: NSE/BSE Data (2020–2024)

Post COVID is the biggest expansion ever in India’s retail investor base.” NSE data suggests that the pace of investor registration is speeding up, with growth milestones being reached at an increasingly rapid pace:

Table 4: NSE Registered Investor Base Growth (2020–2025)

Milestone	Year Achieved	Time Taken	Key Driver
4 crore registered investors	March 2021	25 years (since 1994)	COVID lockdown; digital platform proliferation
5 crore registered investors	~September 2021	~6 months	Continued retail participation surge
6 crore registered investors	~March 2022	~6 months	Post-pandemic bull market; zero-brokerage platforms
7 crore registered investors	~September 2022	~6 months	Continued Gen Z and Millennial onboarding
8 crore registered investors	~March 2023	~6 months	SIP normalisation; UPI investment integration
9 crore registered investors	February 2024	~6 months	Record IPO activity; retail investor awareness
10 crore registered investors	August 2024	~5 months	Digital India; FinTech expansion to Tier-2 cities
12 crore unique investors	September 2025	~13 months	Sustained market performance; UP, Gujarat growth

Source: NSE Press Release, August 2024; Business Standard, September 2025 The investor base has witnessed more than 3x jump in 5 years (NSE, 2024). During periods of maximum growth, daily new unique investor registrations were between 50,000 and 78,000. Uttar Pradesh is the most prominent semi-urban investment growth state in the country, with 2.7 crore investor accounts as of the second half of 2025, the second largest in the country.

7.2 Generational Distribution of Investors

Data from NSE and at the platform level, show a clear shift in the demographics of India's investor base. The median age of NSE-registered investors declined from 38 years in 2020 to 33 years in 2025 — a five-year decline of five years in the median, consistent with massive onboarding of the younger cohort (Business Standard, 2025). Major industry and official data on generation metrics:

Table 5: Generational Distribution of Indian Retail Investors (2020–2024)

Metric	Gen Z (18–28 yrs)	Millennials (29–44 yrs)	Older Investors (45+ yrs)	Source
Share of new demat accounts (2022)	43% (18-30 age)	Majority of remainder	Declining share	NSE, 2022
Share of new users on trading apps	70%+ of new users	Significant share	Minority	IBEF, 2026
Share of total MF assets (2025)	Combined 48% with Millennials	Combined 48% with Gen Z	52%+	IBEF, 2026
New SIP accounts opened (2025)	Included in 40% under-35	Included in 40% under-35	60%+	IBEF, 2026
MF investors under 30	50% of all MF folios	—	—	IBEF, 2026
Zerodha user share post-COVID	69% aged 20–30	Remainder	Minimal	Mgt. Journal, 2022
Groww new investor growth 2020	206% growth; mostly under-30	Moderate growth	Low growth	Mgt. Journal, 2022
NSE median investor age 2025	33 years (median)	—	—	Business Standard, 2025

7.3 Investment Preferences by Generation

The SEBI Investor Survey 2025 and AMFI/CAMS data show clear generational differences in the preference for instruments. The survey reaffirms the dominance of traditional capital protection instruments (Fixed Deposits, life insurance, gold) nationally, while younger cohorts tend to be more inclined towards equities and mutual funds:

Table 6: Investment Instrument Preferences by Generational Cohort — Secondary Data Evidence

Investment Instrument	Gen Z Trend	Millennials Trend	Older Investors Trend	Data Source
Equities / Direct Stocks	High; 69% of Zerodha users 20-30	Moderate-High	Low-Moderate	NSE/Zerodha data, 2021-22
Mutual Funds (especially SIP)	19% invest via SIP; 84% in equity MF	Highest adoption; balanced mix	Lower adoption; debt MF preference	IBEF, 2026; CAMS, 2023
ETFs	Growing adoption via digital platforms	Moderate adoption	Low adoption	SEBI Survey 2025
Fixed Deposits	Low preference; dominated by older cohorts	Moderate preference	Dominant preference	SEBI Survey 2025
Gold (Physical/SGB)	Low (SGBs via digital growing)	Moderate	High (traditional preference)	SEBI Survey 2025
Cryptocurrency	Grew from 11% (2020) to 17% (2023)	Moderate exposure	Minimal exposure	WazirX/Retail data, 2023
Bonds/Debentures	Low	Moderate	Moderate-High	SEBI Survey 2025
Real Estate	Low (capital constraints)	High (life-stage goal)	High (existing holdings)	SEBI Survey 2025

IBEF (2026) key finding: Mutual fund assets (of total AUM of Rs. 75.35 lakh crore) were held by millennials and Gen Z generations to the tune of around 48 per cent by 2025. A study from the Bain and

Groww platform shows that salaried young investors of Gen Z invest 55-65% of their assets in mutual funds. This contradicts a simple story of Gen Z as only speculative investors – they show substantial systematic investment behaviour along with equity participation.

7.4 Risk Tolerance Across Generations

The SEBI Investor Survey 2025 comes up with its most striking and counterintuitive finding in the risk tolerance dimension. Despite the commonly held assumption that younger investors have a higher risk appetite:

Table 7: Risk Tolerance Data — SEBI Investor Survey 2025

Risk Category	National Average	Gen Z Finding	Older Investors Finding	Source
Low risk appetite (capital preservation)	79.7% of households	79% of Gen Z households	Consistent with national average	SEBI Investor Survey 2025
Medium risk appetite	14.7% of households	Approx. 15%	Approx. 15%	SEBI Investor Survey 2025
High risk appetite	5.6% of households	Approx. 5-6%	Below national average	SEBI Investor Survey 2025
Primary barrier to investment	Lack of knowledge / fear of loss	Fear of loss; complexity	Fear of loss; perceived complexity	SEBI Investor Survey 2025
Securities market penetration (urban)	15% of urban households	Higher among younger urban	Lower among older urban	SEBI Investor Survey 2025
Securities market penetration (rural)	6% of rural households	Lower across all cohorts	Lower across all cohorts	SEBI Investor Survey 2025

The discovery that 79% of Gen Z households exhibit risk-averse behaviour in line with national norms fundamentally undermines the traditional assumption that younger investors are inherently more risk-tolerant. The SEBI Investor Survey 2025 indicates that although younger investors are more digitally savvy and market-aware, their core risk appetite could be more a function of low financial literacy and loss aversion than actual risk appetite. This is in line with Kahneman and Tversky's (1979) Prospect Theory, where loss aversion - not risk tolerance - is the dominant behavioural dynamic.

7.5 Financial Literacy Across Generations

The SEBI Investor Survey 2025 provides a sobering insight into financial literacy across all investor cohorts in India. Key findings:

Table 8: Financial Literacy Findings — SEBI Investor Survey 2025

Financial Literacy Metric	Finding	Generational Implication	Source
Investors with high/moderate knowledge of securities products	Only 36% of all investors	Literacy gap affects all generations	SEBI Investor Survey 2025
Awareness-to-participation gap	63% aware vs 9.5% invested	Knowledge alone insufficient; confidence gap	SEBI Investor Survey 2025
Preferred education format (younger investors)	Short-form digital video tutorials	Digital-native learning preference	SEBI Investor Survey 2025
Preferred education format (older investors)	Articles, podcasts, workshops	Traditional learning preference	SEBI Investor Survey 2025
Households with demat accounts	8.5% of all Indian households	Participation remains low despite awareness	SEBI Investor Survey 2025
Non-investors intending to invest within 1 year	22% of aware non-investors	Latent demand; literacy gap is key barrier	SEBI Investor Survey 2025
Primary barrier to investment	Lack of knowledge + perceived complexity	Universal literacy deficit	SEBI Investor Survey 2025
Gen Z shallow literacy phenomenon	High awareness; low depth	Consistent with Agarwal & Bhargava (2021)	SEBI Survey + Academic Literature

The phenomenon of ‘shallow literacy’ – documented by Agarwal and Bhargava (2021) and validated here by SEBI’s survey finding that 36% of investors have high or moderate product knowledge – is especially prevalent among Gen Z. This cohort consumes financial content on YouTube and social media voraciously but has limited understanding of complex instruments (debt mutual funds, derivatives, REITs, tax-efficient vehicles). Millennials, on the other hand, demonstrate higher financial literacy than both younger and older cohorts – in line with their work exposure to financial planning and systematic investment products such as SIPs.

7.6 Digital Adoption by Generation

The most evidenced dimension in all secondary data sources is the generational digital divide in investment platform adoption. NSE registration data, platform-level user demographics and SEBI Survey digital channel preferences converge consistently to indicate a stark age-stratification:

Table 9: Digital Adoption Evidence by Generation — NSE/BSE and Platform Data (2020–2024)

Digital Adoption Metric	Gen Z (18–28)	Millennials (29–44)	Older Investors (45+)	Source
Share of new users on trading apps	70%+ of new users	Significant minority	Minimal	IBEF, 2026
Zerodha user age composition	69% aged 20–30 (post-COVID)	Remainder	Negligible	Mgt. Journal, 2022
Groww new investor growth 2020	206% growth, mostly under-30	94.53% growth in 2 qtrs 2021	Slow growth	Mgt. Journal, 2022
Upstox: first-time investors under 36	70%+ of 4 million customers	—	—	Mgt. Journal, 2022
SIP registrations from beyond top 30 cities	55–60% of new SIPs	—	—	IBEF, 2026
Preferred financial education channel	Digital/social media; short videos	Digital + traditional	Traditional (articles, workshops)	SEBI Survey 2025
Finfluencer influence	High; significant reach documented	Moderate	Low	SEBI Survey 2025
UPI-based investment adoption	High (digital-native)	Moderate	Low	SEBI Survey 2025; NSE data

7.7 Behavioural Biases Across Generations

The SEBI Investor Survey 2025 records a number of behavioural patterns that are in line with the classic biases discussed in behavioural finance literature. The survey does not explicitly use the term ‘behavioural biases’, but the results of the survey on investor motivations, barriers, finfluencer influence and decision-making patterns provide clear evidence of generation-differentiated bias manifestation:

Table 10: Behavioural Bias Evidence by Generation — SEBI Investor Survey 2025

Bias Type	Gen Z Evidence	Millennials Evidence	Older Investors Evidence	Source
Overconfidence	High trading frequency; social media-driven decisions	Moderate; more research-based approach	Low; institutional reliance	SEBI Survey + NSE trading data
Herd Behaviour	High influencer reach and impact documented; social proof-driven investing	Moderate; peer and advisor influenced	Low; tradition-driven	SEBI Survey 2025 (Chapter 9)
Loss Aversion	79% risk aversion even in Gen Z; fear of loss primary barrier	Strong loss aversion; 2008 crisis memory	Very high loss aversion; capital protection dominant	SEBI Survey 2025
Disposition Effect	Higher trading frequency suggests premature profit-taking	Moderate	Low activity; holding bias	NSE F&O retail data 2025
Recency Bias	Strong bull market participation post-2020	Moderate	Lower susceptibility	NSE data 2020-24
Information Asymmetry Bias	High reliance on influencers; limited verified sources	Moderate; more advisor-guided	High; traditional advice channels	SEBI Survey 2025

SEBI Investor Survey 2025: A big takeaway – 62% of NSE's F&O (Futures & Options) segment volume is retail-driven (as of April 2025), said SEBI's F&O study, and most retail F&O participants are in younger age groups. This is in line with overconfidence bias, whereby younger investors overestimate their ability to profit from complex derivative instruments. SEBI's own data indicates that most individual F&O traders end up with net losses and this is one of the costliest manifestations of overconfidence bias in Indian retail investing.

8. Discussion

8.1 The Universal Risk Aversion Paradox

The most important and counter intuitive finding from this secondary data analysis is the near uniform aversion to risk across generational cohorts as documented by SEBI Investor Survey 2025. The common presumption of a higher Gen Z risk appetite needs to be seriously qualified. 79% of Gen Z households are risk-averse, capital preservation minded, similar to the national average of 79.7%. This finding is consistent with Prospect Theory by Kahneman and Tversky (1979): loss aversion, not risk appetite, seems to be the dominant and generationally persistent behavioral dynamic in Indian retail investing.

The apparent contradiction of high Gen Z market participation (40% of NSE investors under 30) and high Gen Z risk aversion (79% preferring capital preservation) can be explained by distinguishing participation (investing in any product, including lower-risk SIPs and mutual funds) from risk appetite (willingness to accept high volatility for higher returns). The SEBI Investor Survey 2025 and the IBEF data together indicate that the reason for the higher participation of Gen Z is primarily on account of systematic SIP investments in equity mutual funds, which is a relatively low entry and diversified approach, compared to high-risk direct stock trading or derivatives.

8.2 The Literacy-Participation Gap

The finding that 63% of households are aware of securities products but only 9.5% actually invest, and that only 36% of real investors have high or moderate financial literacy, shows a double gap: an awareness-to-participation gap and a participation-to-literacy gap. This has deep policy implications. This suggests that raising awareness alone (the traditional focus of investor education programmes) is not enough. Depth of financial literacy, building confidence and simplifying investment processes are the more critical levers to expand genuine market participation.

Younger investors prefer digital video content; older investors prefer articles and workshops. This generational difference in preferred format of education indicates that the investor education programmes of SEBI need to be fundamentally redesigned on generational lines to achieve effective financial literacy improvement.

8.3 Digital Adoption as Generational Differentiator

In all secondary data sources, the dimension that is most consistently and strongly differentiated by generation is digital platform adoption. Across the data, Gen Z consistently represents a disproportionate share of new users of digital trading platforms, while Older Investors remain largely offline or using traditional brokerage channels. This digital divide is not merely a matter of choosing convenience, but a critical factor in determining access to information, the pace of investment decisions, the exposure to behavioural triggers (influencers, trending stocks, social proof), and portfolio management capabilities.

8.4 Uttar Pradesh and Semi-Urban Context

For this study, the particular relevance is the NSE data which ranks Uttar Pradesh as the second largest state in India in terms of investor accounts (2.7 crore). The SEBI Investor Survey 2025's observation that participation in urban areas (15%) is much higher than in rural areas (6%) indicates that semi-urban districts like Agra that lie on the urban-rural divide are a crucial frontier for the growth of retail investors. Delhi leads the state-wise participation at 20.7% followed by Gujarat at 15.4%. Uttar Pradesh with its growing investor base driven by the growth of semi-urban cities in districts including Agra, Lucknow, Kanpur and Varanasi is a major untapped opportunity for FinTech platforms, financial advisors and regulatory outreach.

10. Results Summary: Hypothesis Testing Based on Secondary Data

Table 11: Hypothesis Testing Results — Secondary Data Evidence

Hypothesis	Evidence from Secondary Data	Decision	Strength of Evidence
H11: Investment preferences differ across generations	SEBI Survey 2025 + AMFI/CAMS + NSE/Zerodha/Groww data all confirm generational differences in instrument choice (SIP vs. direct equity vs. FD vs. gold)	H11 Accepted	Strong — multiple official sources
H12: Risk tolerance differs across generations	SEBI Survey 2025: 79% risk aversion across ALL generations including 79% Gen Z — smaller than expected difference; however, F&O participation and trading activity data show behavioural risk differences	Partially Accepted: Behavioural risk differs; stated risk preference largely uniform	Moderate — SEBI Survey data
H13: Financial literacy differs across generations	SEBI Survey 2025: format preference strongly generationally differentiated; only 36% of all investors have high/moderate literacy; Gen Z 'shallow literacy' documented	H13 Accepted	Strong — SEBI Survey + academic literature
H14: Digital adoption differs across generations	NSE data: 40% of investors under 30; 70%+ of trading app new users under 30; Zerodha 69% aged 20-30; Groww 206% growth among under-30	H14 Accepted	Very Strong — multiple official/platform sources
H15: Behavioural biases differ across generations	SEBI Survey: finfluencer impact; F&O retail dominance; herd behaviour documented among younger investors; universal loss aversion across all cohorts	H15 Partially Accepted: Some biases differentiated; loss aversion universal	Moderate — SEBI Survey + NSE F&O data

10. Conclusion

This paper presents a detailed comparative analysis of investment behaviour of three generational cohorts – Gen Z, Millennials and Older Investors in India over 2020-2024 using secondary data from SEBI Investor Survey 2025 (91,950 households) and NSE/BSE data (12+ crore registered investors). The main findings from the study, based on the largest and most authoritative retail investor datasets in India, are as follows:

- India's retail investor base has undergone a generationally transformative shift with 40% of NSE-registered investors being below 30 years and the median age of investors dropping from 38 years to 33 years between 2020 and 2025. Investment preferences are highly generationally differentiated. Gen

Z and Millennials together hold 48% of mutual fund AUM, and have high digital platform adoption; while Older Investors prefer capital-protection instruments (FDs, gold, bonds) more.

- Generational risk tolerance is not much different when it comes to stated preferences, contrary to conventional wisdom — 79% of Gen Z households are risk averse and focused on preserving capital, almost identical to the national average. But behaviourally, risk-taking (participation in F&O, speculative equity trading) does skew younger.
- Financial literacy is low across generations: Only 36% of investors are highly or moderately knowledgeable about products. Distinct generational preferences for learning formats need to be factored into SEBI's education strategy.
- Digital adoption, the most generationally differentiated dimension, with Gen Z close to universal mobile trading platform adoption and Older Investors remaining predominantly offline.
- Uttar Pradesh, with 2.7 crore NSE investor accounts, is a huge semi-urban market for retail investor growth – with districts such as Agra representing the next wave of FinTech and capital market growth.

11. Recommendations

11.1 For SEBI

- Re-Designing Investor Education Programmes by Generation – Short-form Digital Video Content for Gen Z, Structured Deep-Literacy Content for Millennials, Simplified Traditional Format Materials for Older Investors
- Take a proactive approach to the universal finding of loss aversion: investor education should build risk-tolerance confidence, not just product awareness, across all generational cohorts.
- Regulate influencers more rigorously to mitigate herd behaviour risks for Gen Z investors, as seen in SEBI Survey 2025 highlighting influencer's large reach and influence.
- Build a district level outreach strategy for the semi-urban investor base in Uttar Pradesh, leveraging the state's second rank (2.7 crore accounts) and growth potential.

11.2 For FinTech Platforms and Brokers

- Create generationally differentiated onboarding experiences: gamified, social features rich interfaces for Gen Z; comprehensive research and SIP tools for Millennials; simplified, large-format accessibility features for Older Investors.
- Embed real-time financial literacy content into trading platforms to address the “shallow literacy” gap identified among younger users.
- Increase penetration of Tier-2 cities in Uttar Pradesh. 2.7 crore investor accounts in the state point to huge untapped potential in semi-urban markets.

11.3 For Policymakers

- Fund district-level financial literacy programmes in major cities of Uttar Pradesh with the NSE Investor Protection Fund (Rs. 2,644 crore as of August 2025, 21% year-on-year).
- Include financial literacy in the secondary and higher education curriculum of Uttar Pradesh to address the fundamental literacy gap identified in the SEBI Investor Survey 2025.

12. Limitations and Future Research Scope

The limitations of secondary data research used in this study are as follows:

- SEBI Investor Survey 2025 provides national and broad urban/rural disaggregation, but no district-

wise data for specific cities like Agra – limiting direct contextualisation to Agra District.

- Secondary data cannot capture the individual level investment decision narratives, motivations or behavioural nuances captured by primary survey instruments.
- Platform level data (Zerodha, Groww) are from media reports and industry analyses and not from exchange filed data directly, which may introduce measurement variability.

Future research directions include: (1) district level primary data study in Agra to validate the findings at the national level in a semi-urban context; (2) longitudinal tracking of generational investment behaviour as India's investor base matures; (3) gender wise generational analysis using SEBI's gender disaggregated data (as of 2025, women constitute one in four NSE investors).

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