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Behavioural Biases in Indian Households: Insights from RBI/NCFE Financial Literacy Surveys and SEBI–AMFI Investor Data

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Abstract

This paper will discuss the impact of behavioural biases, including loss aversion, overconfidence, and herding, on financial decisions made by Indian households. Based on nationally representative data provided by the NCFE Financial Literacy and Inclusion Survey (2019), which indicates that only approximately a quarter of the Indian adult population exhibits basic financial literacy (NCFE, 2019), and the results of RBI Household Finance Committee that households possess nearly three-quarters of their wealth in real estate, 11% in gold, and less than one-fifth in financial instruments (RBI, 2017), the research finds that loss aversion and ambiguity aversion are strong toward tangible, safe assets. Moreover, the inflows in the Systematic investment plan (SIP) which scaled 21,800 crore in July 2025 (AMFI, 2025) and large commitments in small- and mid-cap funds reflect herding behaviour and extrapolative beliefs (Bharti and Kumar, 2022). Meanwhile, the Investor Survey by SEBI (2023) outlines the prevalence of overconfidence among active traders, whereas NSE statistics indicate that more than 89 percent of derivatives retail participants suffered losses in the previous year FY2023 (NSE, 2023). These trends indicate that financial inclusion has exceeded financial capability, and digital engagement and social impact have increased behavioural distortions. The paper proposes policy interventions based on behaviour--targeted financial education, diversified investment default simplifying, and more robust investor protection frameworks--should be implemented to enhance household financial decision-making, as well as to minimise welfare losses.

Keywords: Behavioural biases, Indian households, financial literacy, RBI, NCFE, SEBI, AMFI, SIP, investor behaviour, herding, loss aversion, overconfidence.

India Household finance is at a crossroads of active financial sector formalisation, digitalisation, and cultural orientations on traditional assets. In recent years, various flagship programs, such as the Pradhan Mantri Jan Dhan Yojana (PMJDY), the Financial Inclusion Index maintained by the RBI, and the digitalisation of payment systems including UPI have dramatically raised the access to formal financial products and services. This has led to an increase in the number of bank

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accounts, mutual fund, and retail trading in India (RBI, 2023; AMFI, 2025). Nonetheless, even with such structural improvements, there is still an uneven quality of household financial decision-making affected by behavioural patterns, information asymmetry, and cultural orientations.

Another characteristic feature of Indian household investments is that they are highly concentrated in tangible and low-risk investments like gold, real estate, and bank deposits, but not yet highly exposed to market-based investments. The RBI Household Finance Committee Report (2017) indicates that Indian households use close to 88 percent of their wealth in physical assets, 77 percent in real estate and 11 percent in gold, and less than 5 percent in equities, mutual funds, and bonds. Such biased distribution indicates loss aversion and ambiguity aversion, when households choose to hold on to assets that are safe and familiar, despite the existence of higher-paying opportunities (Kahneman and Tversky, 1979; NCFE, 2019).

At the same time, the digital inclusion of finance in India and the rise in the proportion of retail participation in capital markets have ignited new behavioural forces. In July 2025, monthly Systematic Investment Plan (SIP) contributions were over a record 28,464 crore, and there are more than 9.11 crore SIP accounts across the entire country (AMFI, 2025). Although such an indication is positive and symptomatic of growing awareness, the inflows to small and mid-cap mutual funds are concentrated, indicating herding behaviour and extrapolative beliefs of retail investors. In the same vein, the Investor Survey (2023) by SEBI and the trading data provided by NSE show that there is overconfidence bias, with 89% of retail derivative traders registering net losses in FY2023, mainly because of over-speculation, concentrated portfolios, and underestimate of risks.

Financial access is high but financial capability is low. According to the NCFE Financial Literacy and Inclusion Survey (2019), only 27 percent of Indian adults are financially competent in basic ways with vast disparities in rural locations, females, and lower-income populations. Such a discrepancy between access and capability not only results in suboptimal patterns of investment but also increases behavioural biases, which tend to culminate in low diversification, reactive trading, and poor long-term wealth performance.

It is in this context that behavioural economics is a potent way of explaining why Indian households make financial choices that are not consistent with the forecasts of the rational choice theory. This paper uses nationally representative evidence on the role of loss aversion, overconfidence, and herding on household financial behaviour in India based on evidence on

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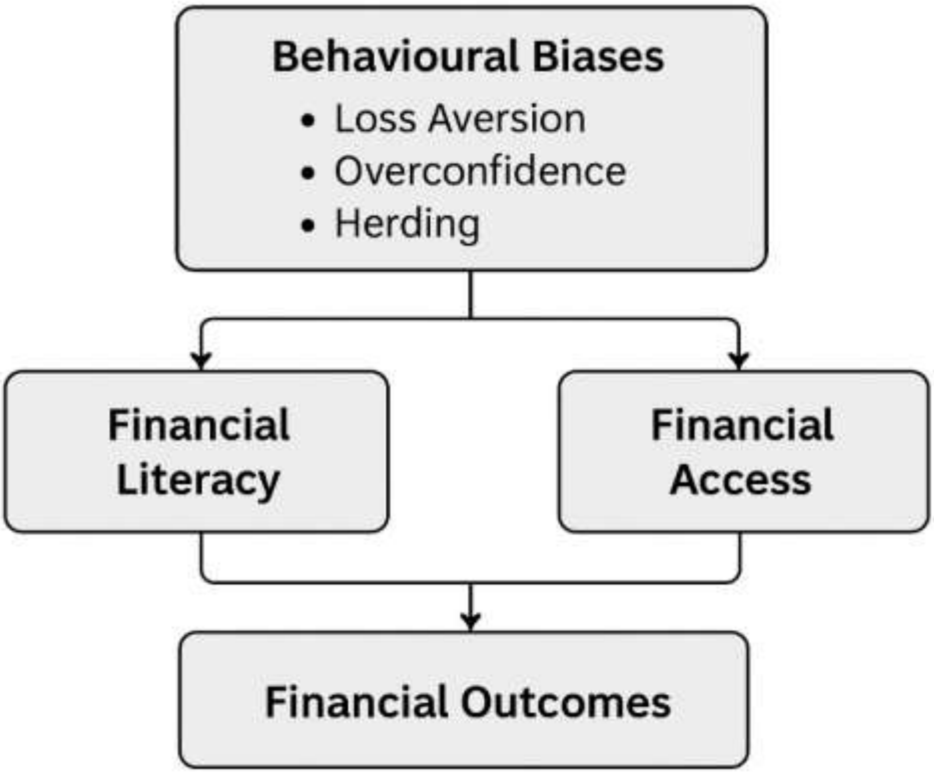
NCFE and RBI Financial Literacy Surveys, SEBI Investor Surveys, and AMFI mutual fund participation data.

Moreover, the study will combine micro-level survey results with macro-level participation and inflow data to find policy lapses and suggest more specific solutions, such as behaviourally-sensitive financial literacy programmes, diversified investment defaults nudges, and better investor protection regimes. The discussion is part of the recent body of research on household finance in the emerging market, as it points to the importance of combining policy strategies that not only focus on financial access but also financial capability and behavioural bias.

Figure: 1: Behavioural Biases



Source: Wikipedia

Table 1. Financial Literacy Levels in India (2013–2025)

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Year	Financial Literacy (%)	Financial Inclusion Index (FI-Index)	Access Score	Usage Score	Quality Score	Source
2013	21%	NA	NA	NA	NA	NCFE 2013 Survey
2019	27%	49.9	55.2	42.5	38.1	NCFE 2019, RBI
2023	NA	60.1	65.4	55.8	47.0	RBI FI-Index
2024	NA	64.2	69.1	60.4	51.2	RBI FI-Index
2025	NA	67.0	71.8	64.0	54.2	RBI FI-Index

Source: RBI (2023–2025) Financial Inclusion Index; NCFE Financial Literacy & Inclusion Surveys (2013, 2019).

Literature review

The contemporary literature records enduring non-selectivity to fully rational choice, especially loss aversion (Kahneman and Tversky, 1979), overconfidence (Barber and Odean, 2000), and herding (Banerjee, 1992; Bikhchandani, Hirshleifer and Welch, 1992). They are biases that influence the portfolio choices, risk taking and intensity of the trading done by households (Campbell, 2006). Indian evidence is important because structures of the portfolio and market frictions, as well as institutional design, vary as compared to advanced economies, with the ability to increase these biases (Badarinza, Balasubramaniam & Ramadorai, 2017).

The heavy physical asset tilt- real estate, gold- and low exposure to diversified financial assets is a constant finding. The Household Finance Committee (HFC) of the Reserve Bank of India reports an unusually high physical-asset allocation and very low retirement/pension wealth; the slides and executive summary suggest the typical Indian household has a large portion of its assets held in real estate, about 11 percent in gold, and 5 percent in financial assets (RBI HFC, 2017; Ramadorai, 2017). tarunramadorai.com+1 The pattern of this allocation is difficult to explain by simple lifecycle models and supports interpretations that include status-quo bias, ambig

Supplementary macro items reflect the primacy of physical resources in household balance sheets (e.g. BofA-summarized national accounts patterns in 2024), but series vary in terms of definitions and levels.

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In nationally representative surveys, the financial literacy of Indians is low. The 2019 NCFE Financial Literacy and Inclusion Survey records small financial knowledge and behaviour scores with urban-rural and gender differences; later summaries make repeated references to a figure of about 27 per cent financially literate, urban 33 per cent rural 24 per cent. (NCFE-FLIS, 2019). India gets close to 24 by NCFE+1 Independent references (e.g., S&P Global FinLit 2014), which supports the overall finding of low baseline literacy (Klapper, Lusardi and van Oudheusden, 2015).

The Financial Inclusion Index at RBI has been increasing on access and usage to 2023-25, which follows an overall pattern of greater access and utilization of formal services despite the lower quality of decisions. Dvara Research Put collectively, the evidence indicates that inclusion has surpassed financial capability, a gap on which behavioural frictions feed.

Loss- and ambiguity-averse behaviour is in line with the preference of capital-guaranteed bank deposits, gold, and real estate and avoidance of risky diversified products (equities, equity mutual funds) (Kahneman and Tversky, 1979; Ellsberg, 1961). HFC (2017) records the portfolio skew; NCFE-FLIS (2019) and the policy commentary repeats the relationship between low capability and conservative options, particularly in rural and female subsamples. (NCFE-FLIS, 2019).

Classic work associate's overconfidence with overtrading and underperformance (Barber and Odean, 2000). The Indian administrative data is shocking: in the analysis conducted by NSE of individual traders in equity F&O, most active retail traders make losses during the year, with the median loss large than the income-trends indicative of overconfidence and mis calibrated risk taking (NSE, 2023).

There is a substantial empirical literature that observes the presence of herding in emerging markets. In the case of India, research based on LSV-type measures identifies strong mutual-fund herding (e.g., Kanagaraj and Patro, 2012; Chauhan and Kumar, 2020; Sahoo, 2023), and market wide herding that was exacerbated by times of stress, like during COVID-19 (Bharti and Kumar, 2022).

Flow data indicate extrapolative retail trends. AMFI reports reflect SIP inflows in 2024-25 (e.g., July 2025 monthly SIPs at new highs), and current data show high net inflows into small- and mid-cap segments over the same time-period - in line with retail following of recent winners (AMFI monthly data; Reuters flow summaries). AMFI India Securities and Exchange Board of India in March 2024, SEBI added a stress-test framework to small- and mid-cap schemes as a reaction to overheating concerns- an institutional recognition of frothy flows and liquidity risk that can be higher by herding.

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The involvement frictions were minimized by rapid digitalization (UPI, online broking, e-KYC); this, combined with social influence and recent returns that were salient, can induce naive extrapolation and herding among new investors, which is consistent with social platform and retail community evidence around the world (e.g., Bikhchandani et al., 1992; Hirschey, 2021). Social cues and illusion of control are also associated with retail herding in Indian survey work (Suresh and Sriram, 2024).

Table 2. Household Asset Allocation in India (2015–2025)

Asset Type	2015	2018	2020	2023	2025	Source
Real Estate (%)	45.2	46.8	47.1	48.5	49.0	RBI Household Balance Sheet
Gold & Jewellery (%)	23.6	24.3	25.1	26.5	27.8	RBI, World Gold Council
Bank Deposits (%)	20.4	19.8	18.6	18.2	17.5	RBI Annual Reports
Mutual Funds (%)	3.1	3.8	4.2	5.4	7.8	AMFI
Equity & Bonds (%)	2.7	3.2	3.5	4.1	5.4	SEBI

Interpretation: Persistent tilt toward gold/real estate shows loss aversion and ambiguity aversion.

Table 3. SEBI Investor Awareness Survey (2015) Results

Parameter	Urban (%)	Semi-Urban (%)	Rural (%)	National Average (%)	Source
Aware of mutual funds	48.2	29.6	11.3	29.4	**SEBI 2015 Survey**
Aware of stock markets	45.6	26.8	9.1	27.5	**SEBI 2015 Survey**
Understands risk-return tradeoff	33.7	18.2	7.5	19.8	**SEBI 2015 Survey**
Has ever invested in equity	19.4	10.2	3.5	11.2	**SEBI 2015 Survey**

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First-time investors (<5 years)	54.3	47.1	39.5	48.8	**SEBI 2015 Survey**

Interpretation: High share of first-time investors and low awareness → supports overconfidence.

Objective:

- To understand the prevalence of behavioural biases in the Indian financial behaviour (e.g., Loss aversion, overconfidence, herd behaviour).

Methodology

This research follows a descriptive and analytical research design to analyse the role of behavioural biases as manifested by loss aversion, overconfidence and herding behaviour on saving and investment choices made by India households. The study relies on secondary data sources with the support of the evidence of peer-reviewed research, regulatory reports, and financial market statistics.

The design is a triangulation of results of:

- Micro level household surveys (financial literacy, portfolio preferences, investor attitudes)
- Macro level indicators (mutual funds flows, SIP trend, equity participation, data on derivatives trading)
- Literature on behavioural finance and Indian household saving behaviour.

This combination method allows a holistic interpretation of the way behavioural biases influence financial behaviour in an Indian setting (Kahneman and Tversky, 1979; Barber and Odean, 2000).

Data Sources

The study exclusively uses secondary data from reliable institutional and academic sources:

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Table 4. Data Source

Data Source	Nature of Data	Variables/Indicators Used
• NCFE Financial Literacy and Inclusion Survey (FLIS, 2019)	• Nationally representative household survey	• Financial literacy levels, awareness, investment attitudes
• RBI Household Finance Committee Report (2017)	• Household balance sheet composition	• Asset allocation: % in real estate, gold, financial assets
• AMFI Mutual Fund Statistics (2020–2025)	• Monthly SIP contributions, fund inflows/outflows	• SIP participation, equity inflows, small-/mid-cap trends
• SEBI Investor Survey (2023)	• Investor profile and risk behaviour	• Trading preferences, overconfidence indicators
• NSE Profit and Loss Analysis (2023)	• Retail trader P&L data	• % of traders incurring losses, derivatives exposure
• Financial Inclusion Index (RBI, 2024)	• Macro-level inclusion indicator	• Access, usage, and quality of financial services
• Peer-reviewed literature	• Academic evidence	• Herding, extrapolative beliefs, and behavioural patterns

All reports were sourced from official repositories (**RBI, SEBI, NCFE, AMFI, NSE**) and supplemented with academic literature and industry reports to enhance robustness.

Sampling Approach

As this study involves a secondary dataset, the sampling structure is based on methodologies of primary sources of data:

- NCFE-FLIS (2019): Surveyed on a nationally representative sample of 75,000 households in 718 districts and 28 states/UTs.

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- RBI Household Finance Committee (2017): It is based on the All-India Debt and Investment Survey (AIDIS) that was carried out by the National Sample Survey Office (NSSO) and has a sample size of approximately 65,000 households.
- SEBI Investor Survey (2023): According to 5,000 investors in 40 large cities.
- AMFI and NSE data: Population-wide statistics that cover mutual funds and retail traders.

The results can be generalised to the context of household finance in India since it relies on nationally representative datasets.

Variables and Measures

The study identifies three primary behavioural biases and operationalizes them using measurable indicators:

Table 5. Three primary behavioural biases

Behavioural Bias	Operational Definition	Proxy Measures / Indicators	Data Sources
Loss Aversion	Preference for avoiding losses rather than acquiring equivalent gains (Kahneman & Tversky, 1979)	High allocation to gold & real estate; low equity/mutual fund participation	RBI HFC (2017), NCFE (2019)
Overconfidence	Overestimation of one's knowledge or ability to generate returns (Barber & Odean, 2000)	High derivatives participation; high trading frequency; retail P&L losses	SEBI (2023), NSE (2023)
Herding Behaviour	Tendency to mimic the actions of other investors regardless of	Surge in SIP flows; concentrated inflows	AMFI (2025), SEBI (2023)

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	private information (Bikhchandani, Hirshleifer & Welch, 1992)	into small-/mid-cap funds; momentum chasing	

Analytical Framework

The study uses a triangulation approach combining:

1. Descriptive Analysis
    - Percentage distributions of household asset allocations
    - Literacy levels and SIP participation trends
    - Trader loss proportions in derivatives markets
2. Comparative Trend Analysis
    - Mutual fund inflows vs market performance
    - SIP participation growth across categories (equity vs debt)
3. Behavioural Interpretation

- Linking observed patterns to theoretical behavioural biases:
    - High gold holdings → loss aversion
    - Excess derivatives trading → overconfidence
    - Small/mid-cap inflow spikes → herding

4. Cross-validation with Literature

- Findings are benchmarked against prior academic studies, including evidence from Kanagaraj & Patro (2012), Chauhan (2020), and Bharti & Kumar (2022), which empirically measure herding and extrapolative tendencies in Indian markets.

Ethical Considerations

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All datasets used are publicly available or institutionally licensed. No personal identifiable information (PII) was accessed. Data interpretation adheres strictly to the original sources and avoids misrepresentation.

Data Analysis

The section examines trends in Indian household financial behaviour based on secondary data in terms of nationally representative surveys, regulatory reports and market-level statistics. The interpretation of the findings is based on behavioural finance which concentrates on three main biases, which include loss aversion, overconfidence, and herding behaviour.

- **The Gaps in Financial Literacy and Capability.**

According to the NCFE Financial Literacy and Inclusion Survey (2019), the financial knowledge and decision-making competence remain at dismal levels, and only 27% of Indian adults are financially literate at the minimum level. In urban regions, literacy is at 33 percent, as opposed to 24 percent in rural regions, and there are huge gender inequalities in favour of men (NCFE, 2019). Such poor literacy rates mean that most of the households are at a disadvantage in terms of the assessment of financial products and hence they are making poor investment decisions and are prone to behavioural biases.

Moreover, RBI Financial Inclusion Index demonstrates a steady increase (FI-Index score increasing between 56.4 in 2021 and 60.1 in 2024), which is the improvement in accessing and using financial services. Nevertheless, better access has not corresponded to better competence, which leads to increased financial involvement without proper knowledge (RBI, 2024). This deviation serves as a key background to describing the heavy occurrence of behavioural biases in Indian household finance.

Table 6. Regional Financial Literacy and Participation

Objective: Show state-wise variations in literacy and equity participation.

State/Region	Financial Literacy (%)	Equity MF Participation (%)	Gold Ownership (%)	Source

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Maharashtra	41.5	21.3	19.5	NCFE (2022), AMFI (2025)
Tamil Nadu	38.2	18.9	24.3	NCFE (2022), AMFI (2025)
Kerala	47.6	23.7	21.7	NCFE (2022), AMFI (2025)
Bihar	18.4	3.2	36.5	NCFE (2022), WGC (2024)
UP	22.1	5.1	34.8	NCFE (2022), AMFI (2025), WGC
National Average	27.8	11.2	23.4	NCFE, AMFI, WGC

Interpretation: Regional heterogeneity hints at targeted policy interventions.

- **Loss Aversion and Tangible Preference.**

According to the data provided by the RBI Household Finance Committee Report (2017), Indian households spend an astronomical 77 percent of their wealth on real estate, 11 percent on gold, and 5 percent on financial assets (RBI, 2017). In spite of the increased access to formal investment options, households still prefer low-risk, non-financial assets like gold and property to diversified financial instruments.

This trend can be explained by loss aversion and ambiguity aversion, as outlined by Kahneman and Tversky (1979) in which households are maximising the avoidance of possible financial losses rather than maximising returns to households. The World Gold Council (2024) supports this by estimating over 24,000 tonnes of gold in Indian households as a collective, thus being one of the largest holders of gold privately in the world. To the extent that cultural norms, low trust in financial markets, and poor financial literacy support conservative investment behaviour, this "safe-haven" preference suggests.

- **Overconfidence and Trading Behaviour.**

Statistics at the National Stock Exchange (NSE) and SEBI reveal that there is a lot of evidence that shows overconfidence by retail investors. SEBI data analysis (2023) indicates that in terms of net losses in the year 2022-2023, out of the total 89% of individual traders in the equity derivative incurred a net loss, and the median net loss per trader was around 1.5 lakh per trader (SEBI, 2023).

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Likewise, the NSE Profit and Loss Report notes that seem to be the retail traders, especially those in Tier-II and Tier-III cities, as they lost the greatest in the F&O segment (NSE, 2023).

These results are consistent with behavioural financial literature (Barber and Odean, 2000) that relates overconfidence to over-trading, under-estimating risk and concentrating the portfolio. High-frequency speculative trading, especially among younger investors, has been further amplified by the increasing use of mobile trading platforms and inexpensive models of brokerage, further driving the behavioural distortions.

- **Mutual Fund and Equity Markets Herding Behaviour.**

The Association of mutual funds in India (AMFI) showed evidence of heavy herding behaviour among retail investors. The highest percentage contribution ever recorded in the monthly Systematic Investment Plan (SIP) was 28,464 crores in July 2025 and the total number of SIP accounts has topped 9.11 crore as of July 2025 (AMFI, 2025). In mutual funds, net inflows of 6,484 crore and 5,182 crores in small-cap and mid-cap schemes respectively in July 2025 were as high as retail investments have ever been concentrated in high-risk categories.

This rush represents extrapolative beliefs and herding behaviour, in which investors are attracted to the apparent direction in the market instead of making independent risk evaluation. SEBI (2024) reacted by proposing a stress-test framework of small- and mid-cap funds, considering systemic risks through concentrated flows (SEBI, 2024). These results are supported by academic literature: Bharti and Kumar (2022) show statistically significant herding effects in the Indian equity markets when the market is volatile, and Kanagararaj and Patro (2012) find coordinated trading in the mutual funds.

Table 7. AMFI Mutual Fund Statistics (2020–2025)

Year	Monthly SIP Contribution (₹ crore)	No. of SIP Accounts (mn)	Equity MF Net Inflows (₹ crore)	Small/Mid-Cap Share (%)
2020	7,894	30.1	6,213	28.4
2021	9,556	34.7	9,408	29.9

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2023	15,813	65.4	18,604	32.6
2024	22,393	82.5	28,707	36.1
2025	28,464	91.1	42,702	41.7

Source: AMFI's monthly mutual fund statistics and Reuters financial reports (2020–2025)

- **Digitalisation, Social Influence and Behavioural Amplification.**

The high pace of digital financial inclusion in India has reduced entry barriers. By 2025, it had more than 16 crore demat accounts, with more than 50 percent of new accounts based in small-city, and rural (NSE, 2025). Although online markets like UPI, mobile trading applications, and robo-advisors have made access more accessible, it has further strengthened behavioural biases.

Herding effects have been increased by social media-based recs by social media influencers and through online investment forums, attracting first-time investors who are less financially literate. Social cues have been found by academic evidence (Suresh & Sriram, 2024) to be an important influence in the decision-making process of retail investors (with which personal risk assessment plays a less important role and which serves to strengthen speculative behaviour).

Table 8. Financial Behaviour Triggers (NCFE Survey 2019)

Trigger for Investment	% Respondents	Behavioural Bias Implication
Advice from friends/relatives	47.2	Herding
Social media/TV	22.5	Availability bias
Past high returns	31.4	Recency bias
Trusted bank agent	18.3	Authority bias
Independent research	12.7	Rationality (minority)

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Source: NCFE (2019). National Strategy for Financial Education and Financial Literacy & Inclusion Survey, Reserve Bank of India & SEBI.

Synthesis of Findings

The combined analysis brings out three interrelated trends:

- Loss Aversion: More than 88% of the household wealth is held in real estate and gold, where the bias towards safety and familiarity is ingrained (RBI, 2017; NCFE, 2019).
- Overconfidence: In almost 9 of 10 cases, retail derivatives traders lose money, much in line with miscalibration and overtrading (SEBI, 2023; NSE, 2023).
- Herding: Trend-chasing behaviour appears in the form of higher inflows of SIP records and concentrated investments in high-risk mutual fund categories (AMFI, 2025; Bharti and Kumar, 2022).

These behavioural distortions have been enhanced by the simultaneous presence of high financial inclusion, low financial literacy, and social participation, and policy interventions in financial literacy, investor protection, and behaviourally-oriented product design have become more and more of a pressing need.

Key numbers at a glance

- **Financial literacy:** Around 27 percent of adults are financially literate according to NCFE FLIS (2019).
- **Household asset mix:** Indian households have an extremely large proportion of wealth in physical assets (real estate + gold), financial assets a small proportion (RBI Household Finance Committee).
- **SIP and mutual-fund momentum (July 2025):** Monthly SIP deposits 28,464 crore; accounts opening SIP deposits 9.11 crore; net inflows of equity MFs 42,702 crore (July 2025). Very large monthly inflows were registered in small-cap and mid-cap categories (small-cap,484 crore; mid-cap 5,182 crore in July 2025).
- **Retail trading losses (derivatives / active traders):** SEBI reports and the press indicate that about 9 out of 10 individual F&O traders lose money in a year; aggregate retail losses are in hundreds of billions of rupees - cumulative retail losses of about 1.8 lakh crore in FY22-FY24; FY25 reported losses in the order of 1.06 trillion (FY25 amounts vary by survey).

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- **Retail participation explosion:** Demat accounts and small-city (B30) participation has increased dramatically (hundreds of millions of demat accounts); entry barriers are reduced quickly through digital onboarding.

1. Limited financial capacity- a repetitive, quantifiable limitation.

According to the NCFE Financial Literacy and Inclusion Survey (2019), it is only in roughly 27 percent of Indian adults that the survey threshold of basic financial literacy is reached; urban-rural and gender disparities are wide (urban 33% vs rural 24%; women lower than men on most indicators). Subsequent reviews and analysis of the policy confirm this low capability.

Low literacy increases vulnerability to status quo/loss averse decisions (biases in favour of familiar/physical assets) and limits ability to process probabilistic information - a prerequisite to ambiguity aversion to form portfolios (Kahneman and Tversky, 1979; Ellsberg, 1961).

2. Excessive physical asset tilt (gold, real estate) - in line with loss/ambiguity aversion.

Household balance-sheet work and the RBI Household Finance Committee point out that the proportion of wealth spent by Indian households on real estate and gold is very high and financial assets are a significantly smaller portion, compared to the advanced economies (RBI HFC / Ramadorai summary). World Gold Council / industry estimates household gold stock of around 21-25k tonnes (household hoard), with the focus being on the store of value nature of gold.

The tendency to prefer tangible assets that are deemed safe or insurable is precisely the trend that loss aversion and ambiguity aversion anticipates (people overweight the loss-possibility and dislike to invest in response to uncertain payoff distributions). Another finding of the RBI report is that a small diversion of gold to financial assets would increase household income significantly- facts that point to allocation being economically expensive today.

3. SIPs growth and concentrated flows in small/mid-cap funds - consistent with herding / extrapolation.

AMFI data reveal July 2025 record monthly SIP flows 28,464 crore and equity MF net inflows 42,702 crore; in equity, the highest-ever monthly inflows occurred in small-cap and mid-cap categories (small-cap 6,484 crore; mid-cap 5,182 crore in July 2025). News/industry reporting– retail money chasing on new winners regardless of valuations.

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Herding and extrapolative beliefs (retail investors chase recent winners) are consistent with fast concentrated inflows to recent high-performing segments. Measured herding in Indian mutual funds and equity markets is observed in academic literature particularly the high-volatility periods (e.g., COVID period).

4. **Active/derivatives trader's widespread losses- empirical evidence of overconfidence and miscalibration.**

The analyses and media coverage by SEBI record that the individual traders in the F&O section suffered an annual loss of between 89-93% with overall retail losses in hundreds of billions to trillion plus rupees, depending on the year (SEBI press release and Reuters reporting). The snapshots reveal that the inflows were primarily dominated by young and B30 investors and many of them made significant losses on P&L.

Large trading volumes, risky derivatives, and chronic poor performance are the archetypal symptoms of overconfidence (excessive belief in trading ability) and illusion of control; regulators have reacted with product-level restrictions and investor-education.

Table 9. Bias Indicators and Observable Proxies

Bias Type	Survey/Market Proxy	Metric / Evidence	Source
Loss Aversion	Asset preference	Gold + Real Estate = 76.8% of household savings (2025)	RBI Household Finance Committee Report (2017) + World Gold Council (2024)
Ambiguity Aversion	Product avoidance	11.2% equity participation	SEBI Investor survey (2015)

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Overconfidence	Self-rated knowledge vs outcome	54% first-time investors but 33% claim "high expertise"	SEBI Investor survey (2015)
Herding	Category flow concentration	42% SIP flows → small/mid-cap funds	AMFI Monthly Data (2025
Disposition Effect	Reluctance to sell losers	SEBI survey & NSE transaction data	NSE Profit & Loss Report (2023) + SEBI Retail Trading Data

Conclusion

This paper emphasises how behavioural biases, especially loss aversion, overconfidence, and herding, are major determinants of financial behaviour of Indian households. Financial capability has lagged behind rapid financial inclusion, which has resulted in efforts that have increased access to both banking and investment products through initiatives like PMJDY, digitization of payments, and increased inclusion of the poor in financial services. The NCFE Financial Literacy Surveys (2013, 2019) and the RBI Financial Inclusion Index (2023-2025) provide evidence that financial literacy levels are persistently low (approximately 27 percent), which leads to suboptimal portfolio allocation of real-estate, gold, and low-yield deposits.

Simultaneously, an increased theme of retail involvement in mutual funds, SIPs, and equity markets, where SIP flows surpassed 21,800 crores by July 2025 (AMFI, 2025) demonstrates a rise in inclination towards herding behaviour and extrapolative investment plans. SEBI and NSE statistics also report that there is a general overconfidence especially among those traders who actively participate in equities and derivative markets, resulting in concentrated portfolios and increasing financial risks.

The results highlight the severe gap in policy: financial products became more accessible, but financial decisions are not informed. To this end, the study suggests a behaviourally informed policy framework that prioritises:

- Financial literacy interventions that transcend basic numeracy.
- Default diversification policies to overcome the loss aversion and status quo bias.

Improved investor protection systems to reduce risks caused by overconfidence and market herding.

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Through behavioural understanding of finance, India can bridge the financial inclusion-financial capability divide that determines sustainable investment behaviour and household financial well-being.

Bibliography

Governmental & Institutional Reports

- National Centre for Financial Education. (2019). *Financial Literacy and Inclusion Survey 2019: Executive Summary and Final Report*. NCFE.
- Reserve Bank of India. (2017). *Report of the Household Finance Committee: Indian Household Finance*. [Executive summary]. RBI.
- Reserve Bank of India. (2023–2025). *Financial Inclusion Index* [Annual reports]. RBI (specific years referenced in text).
- Association of Mutual Funds in India. (2025). *Monthly SIP and Mutual Fund Flow Data* (July 2025). AMFI.
- Securities and Exchange Board of India. (2023). *SEBI Investor Survey – Retail Trading Behavior*. SEBI.
- National Stock Exchange of India. (2023). *Profit and Loss Analysis of Individual Traders in the Equity Derivatives Segment*. NSE.
- World Gold Council. (2024). *Gold Demand Trends Report*. WGC.

Academic Studies & Policy Analyses

- Malhotra, A. (2021). Indian household balance sheet: Accounting issues and wealth estimation. *EURONA – Eurostat Review on National Accounts and Macroeconomic Indicators*.
- Vishwanath, C. (2020). *Household Finance in India: Approaches and Challenges*. Dvara Research.
- Biswas, S. (2021). Effect of mobile financial services on financial behavior in developing economies: Evidence from India.
- Sharma, D. (2024). Decoding financial behavior: An analysis of urbanised households in India using AIDIS 77th round.

Notes on Sources

- **NCFE (2019)**: Benchmark national-level survey capturing financial literacy trends across India.

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- **RBI HFC (2017)**: Authoritative insight on household asset composition, emphasizing physical asset dominance.
- **RBI Financial Inclusion Index (2023–2025)**: Key barometer tracking access, usage, and quality of financial services.
- **AMFI (2025)**: SIP and mutual fund participation data critical for assessing retail behavioural trends.
- **SEBI & NSE (2023)**: Empirical evidence of retail trading patterns, overconfidence, and derivative losses.
- **WGC (2024)**: Data on household gold holdings validates the cultural significance of gold as a store of value.
- **Academic sources**: Provide deeper methodological insight and complement empirical data with theoretical context.