

Rajan Yadav

Srishti_24_DMBA_238_Updated

 work

Document Details

Submission ID

trn:oid:::27535:139890598

Submission Date

May 21, 2026, 6:21 PM GMT+5:30

Download Date

May 21, 2026, 6:24 PM GMT+5:30

File Name

Srishti_24_DMBA_238_Updated.docx

File Size

2.2 MB

62 Pages

14,120 Words

100,604 Characters





7% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.




Filtered from the Report

- ▶ Bibliography
- ▶ Quoted Text
- ▶ Small Matches (less than 8 words)

Match Groups

-  **86 Not Cited or Quoted 7%**
Matches with neither in-text citation nor quotation marks
-  **2 Missing Quotations 0%**
Matches that are still very similar to source material
-  **0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
-  **0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 4%  Internet sources
- 2%  Publications
- 5%  Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- 86 Not Cited or Quoted 7%**
Matches with neither in-text citation nor quotation marks
- 2 Missing Quotations 0%**
Matches that are still very similar to source material
- 0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
- 0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 4% Internet sources
- 2% Publications
- 5% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Student papers	Erasmus University of Rotterdam on 2017-05-31	<1%
2	Student papers	University of Sunderland on 2025-08-07	<1%
3	Student papers	DC School of Management And Technology, Trivandrum on 2026-05-14	<1%
4	Internet	ijcrt.org	<1%
5	Internet	amypavel.com	<1%
6	Internet	mro.massey.ac.nz	<1%
7	Internet	cognizancejournal.com	<1%
8	Student papers	Delhi Technological University on 2019-04-12	<1%
9	Student papers	RMIT University on 2025-09-19	<1%
10	Student papers	University of Hull on 2026-01-08	<1%

11	Student papers	University of Sheffield on 2026-05-05	<1%
12	Internet	epublications.vu.lt	<1%
13	Internet	peerj.com	<1%
14	Student papers	National Economics University on 2026-03-31	<1%
15	Publication	Babeş-Bolyai University	<1%
16	Internet	dspace.dtu.ac.in:8080	<1%
17	Internet	www.coursehero.com	<1%
18	Internet	www.frbsf.org	<1%
19	Internet	www.scribd.com	<1%
20	Student papers	Kepler College on 2026-04-28	<1%
21	Student papers	University of Greenwich on 2025-03-29	<1%
22	Student papers	Leeds Beckett University on 2026-01-21	<1%
23	Student papers	North West University on 2023-06-02	<1%
24	Student papers	Colorado State University, Global Campus on 2021-07-04	<1%

25	Student papers	University of Hertfordshire on 2026-04-27	<1%
26	Internet	dissertations.umu.ac.ug	<1%
27	Internet	erepository.uonbi.ac.ke:8080	<1%
28	Internet	repository.mocu.ac.tz	<1%
29	Student papers	Roehampton University on 2025-05-02	<1%
30	Student papers	University of Birmingham on 2026-04-28	<1%
31	Internet	assets-eu.researchsquare.com	<1%
32	Internet	economictimes.indiatimes.com	<1%
33	Internet	vajiramandravi.com	<1%
34	Internet	www.preprints.org	<1%
35	Student papers	Napier University on 2026-05-15	<1%
36	Internet	public-pages-files-2025.frontiersin.org	<1%
37	Internet	www.aaos.org	<1%
38	Internet	www.cornerstone-business.com	<1%

39	Student papers	CECOS College London on 2024-12-08	<1%
40	Publication	Hackland, Charles. "The Impact of Selected Macroeconomic Variables on Sectors ...	<1%
41	Publication	Julie Pallant. "SPSS Survival Manual - A step by step guide to data analysis using I...	<1%
42	Student papers	University of Hull on 2025-05-18	<1%
43	Internet	acmcasereport.org	<1%
44	Internet	isjem.com	<1%
45	Internet	repository.uir.ac.id	<1%
46	Internet	www.studymode.com	<1%
47	Publication	Fitriani, Iwan Sugianto, Agoes Hari Edy Wibowo. "Analyzing How Capital Gains In...	<1%
48	Student papers	Nottingham Trent University on 2025-03-23	<1%
49	Student papers	University of Birmingham on 2018-09-08	<1%
50	Student papers	University of Ulster on 2025-06-01	<1%
51	Student papers	University of Ulster on 2026-05-01	<1%
52	Internet	africadigitalnewsnewyork.com	<1%

53	Internet	global.asrconference.com	<1%
54	Internet	norma.ncirl.ie	<1%
55	Internet	www.iiste.org	<1%
56	Student papers	Alliance University on 2026-04-30	<1%
57	Student papers	Associatie K.U.Leuven on 2026-05-20	<1%
58	Student papers	Delhi Technological University on 2026-05-18	<1%
59	Student papers	Dublin Business School on 2025-08-28	<1%
60	Publication	Eti Agarwal, Pooja Srivastava. "PERCEPTION AND INTERPRETATION OF THE NEW I...	<1%
61	Student papers	Graduate School (Long Term Use) on 2026-01-27	<1%
62	Student papers	Infrastructure University Kuala Lumpur on 2026-02-19	<1%
63	Publication	Nikiforos T. Laopodis. "Financial Economics and Econometrics", Routledge, 2021	<1%
64	Publication	Partha Ray, Ashok Banerjee, Sankarshan Basu. "The Routledge Handbook of Indi...	<1%
65	Student papers	Robert Kennedy College on 2025-04-21	<1%
66	Student papers	Sheffield Hallam University on 2026-05-14	<1%

67	Student papers	UCL on 2025-09-01	<1%
68	Student papers	University of KwaZulu-Natal on 2010-11-12	<1%
69	Internet	ir-library.ku.ac.ke	<1%
70	Internet	ischolar.informaticsglobal.com	<1%
71	Internet	mipb.ikn.army.mil	<1%
72	Internet	staging.preprints.org	<1%
73	Internet	vital.seals.ac.za:8080	<1%
74	Internet	www.amresearchreview.com	<1%
75	Internet	www.ros.hw.ac.uk	<1%

Project Dissertation Report

On

IMPACT OF DOMESTIC MACROECONOMIC INDICATORS ON RETAIL INVESTORS' DECISION-MAKING IN EQUITY MARKETS



DELHI SCHOOL OF MANAGEMENT
Delhi Technological University

Academic Year: 2024–2026

Date of Submission: 20th May 2026

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to my research supervisor Prof. Rajan Yadav for providing invaluable guidance, constructive feedback, and unwavering support throughout the entire duration of this major research project. Their expertise, critical insights, and mentorship have been instrumental in shaping this research into its present form.

I extend my sincere appreciation to all the respondents who participated in the survey, generously contributing their time and thoughtful responses. Their cooperation was essential in gathering the primary data that forms the empirical foundation of this study.

I am grateful to my institution for providing necessary academic resources, computational facilities, and access to research databases that facilitated comprehensive literature review and rigorous statistical analysis.

EXECUTIVE SUMMARY

74 The relationship between macroeconomic indicators and individual investor behavior represents a critical intersection of economic theory and behavioral finance. This research investigates how domestic macroeconomic indicators—specifically inflation, the Reserve Bank of India's repo rate, and GDP growth—influence the investment decision-making processes of retail investors in India's equity markets.

9
11 Through a quantitative survey of 50 retail investors administered during March-May 2026, this study employs comprehensive statistical methodologies to establish relationships between macroeconomic awareness variables and investor confidence, portfolio adjustment behavior, and information-seeking patterns. The research adopts an integrated approach combining descriptive statistics, reliability analysis, correlation analysis, multiple linear regression, analysis of variance, non-parametric testing, and chi-square analysis to provide multifaceted examination of these relationships.

Key Findings:

14 Inflation awareness emerges as the most influential macroeconomic factor affecting retail investor behavior, demonstrating a statistically significant positive relationship with investment decision confidence ($\beta = 0.449$, $p = 0.002$). This finding suggests that retail investors who consciously consider inflation dynamics during investment decision-making demonstrate substantially higher confidence levels and more proactive portfolio management behaviors.

Repo rate awareness represents the second-most influential factor, with awareness of monetary policy changes positively correlating with investment confidence ($\beta = 0.440$, $p = 0.015$). This relationship reflects the tangible impact of interest rate changes on borrowing costs, savings returns, and corporate earnings, making repo rate fluctuations directly relevant to retail investor decision-making processes.


GDP growth awareness demonstrates positive but non-significant influence on investment confidence ($\beta = 0.266$, $p = 0.190$), suggesting that while retail investors recognize GDP importance theoretically, they perceive it as insufficiently directly linked to personal investment outcomes. This indicates a comprehension gap wherein broad macroeconomic indicators receive lower integration into individual decision-making relative to micro-level indicators affecting personal financial circumstances.

The comprehensive regression model explains approximately 30.5% of confidence variability ($R^2 = 0.305$), indicating that macroeconomic awareness accounts for substantial but not exclusive variance in investor confidence. Additional factors including prior investment experience, risk tolerance, financial literacy, and information source quality collectively account for approximately 69.5% of unexplained variance, underscoring the complexity of investment decision-making.

Demographic analysis reveals that tracking frequency demonstrates moderate positive correlation with investment confidence ($r = 0.52$), suggesting that regular engagement with macroeconomic news moderately enhances investor self-assurance. However, the relationship remains imperfect, reflecting cognitive biases and information interpretation disparities among investors.

The research confirms substantial heterogeneity in retail investor responses to macroeconomic information, with significant variation across age groups, income levels, and investment experience. Younger investors demonstrate greater information accessibility and engagement with digital sources, while older investors rely more heavily on traditional media and financial advisors.

Contribution to Knowledge:

 This research contributes to behavioral finance literature by empirically quantifying the differential influence of macroeconomic indicators on retail investor behavior within emerging market contexts. The systematic application of rigorous statistical methodologies provides evidence-based insights complementing theoretical frameworks and enabling policy-level recommendations for market development and investor protection in India's increasingly democratized equity market landscape.

DECLARATION

I, Srishti student of DMBA bearing enrollment number 24/DMBA/238, hereby declare that the Major Research Project titled “How Domestic Macroeconomic Indicators Influence Retail Investor’s Decision Making (Equity Markets)” submitted in partial fulfillment of the requirements for the award of Master of Business Administration is an original work. I further declare that this work has not been submitted for the award of any other degree, diploma, fellowship, or similar titles.

Srishti

24/DMBA/238

Delhi School of Management

Delhi technological University

16

CERTIFICATE

This is to certify that the Major Research Project titled "How Domestic Macroeconomic Indicators Influence Retail Investor's Decision Making (Equity Markets)" has been submitted by Srishti for the requirement of MBA program of Delhi School of Management, Delhi Technological University.

Prof. Rajan Yadav**Delhi School of Management****Delhi Technological University**

Date: _____

Signature: _____

8

TABLE OF CONTENTS

Section	Page No.
Acknowledgement	2
Executive Summary	3 - 4
Declaration	5
Certificate	6
Table of Contents	7
CHAPTER 1: INTRODUCTION	8 - 17
CHAPTER 2: LITERATURE REVIEW	18 - 22
CHAPTER 3: RESEARCH METHODOLOGY	23 - 27
CHAPTER 4: DATA ANALYSIS AND INTERPRETATION	28 - 48
CHAPTER 5: FINDINGS AND STRATEGIC IMPLICATIONS	49 - 56
CHAPTER 6: CONCLUSION AND FUTURE DIRECTIONS	57 - 60
References	61 - 62

6

35

54

CHAPTER 1: INTRODUCTION

1.1 Background and Context

The Indian equity market has undergone transformative evolution over the past decade, transitioning from a market dominated by institutional investors and high-net-worth individuals to an increasingly democratized marketplace wherein retail investors constitute a substantial and growing proportion of market participants. This fundamental restructuring reflects multiple catalysts including technological advancement, financial inclusion initiatives, regulatory modernization, and shifting consumer preferences toward wealth creation through equity market participation. Simultaneously, the macroeconomic environment within which these retail investors operate has grown increasingly complex, volatile, and consequential for investment outcomes.

9
70
Macroeconomic indicators—including inflation rates, monetary policy measures such as the Reserve Bank of India's repo rate, and economic growth metrics encompassing GDP figures—constitute essential information signals that shape investment opportunity landscapes and influence portfolio construction decisions. The relationship between these macroeconomic variables and investor behavior represents a critical intersection of economic theory, market microstructure, and behavioral finance. While substantial research has established connections between macroeconomic aggregates and broad market movements, limited investigation has systematically examined how retail investors in emerging markets like India perceive, process, and respond to macroeconomic information in their individual investment decision-making processes.

The post-COVID-19 era (2021-2026) has introduced unprecedented macroeconomic volatility into the Indian investment context. Supply chain disruptions, geopolitical uncertainties, energy price shocks, and rapid monetary policy adjustments by the Reserve Bank of India have created economic conditions substantially distinct from the pre-pandemic environment. Within this turbulent macroeconomic backdrop, retail investors increasingly find themselves navigating complex financial landscapes requiring sophisticated interpretation of economic signals and informed allocation decisions. Understanding how these investors respond to macroeconomic information becomes both academically relevant and practically essential for market development, investor protection, and systemic financial stability.

1.2 Rise of Retail Investors in Indian Equity Markets

The Indian equity market has experienced unprecedented expansion in retail investor participation since 2020, with participation metrics increasing dramatically across multiple indicators. The number of demat (dematerialized securities) accounts in India reached approximately 192.4 million by April 2025, representing cumulative growth exceeding 5,000% from pre-liberalization baselines. More dramatically, the financial year 2024-25 alone witnessed addition of 41.1 million new demat accounts—the highest annual increase on record—demonstrating continued acceleration in retail market participation.

Catalysts for Retail Investor Expansion:

Multiple structural and behavioral factors have driven this retail investor proliferation. First, digital trading platforms including Zerodha, Groww, Upstox, and others have substantially lowered barriers to market entry through user-friendly interfaces, minimal brokerage fees, and streamlined account opening procedures. Second, the COVID-19 pandemic paradoxically accelerated equity market participation by increasing household savings through reduced discretionary spending, providing extended time for financial exploration, and creating perceived investment opportunities amid accommodative monetary policy conditions. Third, financial media proliferation—encompassing television channels, YouTube content creators, financial influencers, and social media communities—has democratized investment knowledge and created aspirational narratives around wealth creation through equity markets.

Fourth, broader economic structural changes including inflation concerns, declining real returns on savings accounts, and growing recognition of equity market importance for long-term wealth accumulation have shifted retail investor consciousness toward market participation. Fifth, generational factors including millennial and Gen Z investor preferences for direct market participation and technology-enabled investing have contributed to demographic expansion of the retail investor base.

Market Composition Changes:

The changing composition of retail investors has created distinctive market dynamics. Newer market entrants exhibit different behavioral characteristics relative to experienced investors, including higher risk appetite, greater susceptibility to social media influence, and increased participation in volatile small-cap and micro-cap segments. Survey data from SEBI (2021) indicates that approximately 65% of retail investors classify as risk-averse, preferring mutual funds and systematic investment plans (SIPs) over direct equity investments, yet significant proportions of newer investors demonstrate substantially higher risk-seeking behavior through direct stock trading and derivatives participation.

The Economic Survey 2023-24 cautioned against excessive retail speculation, noting that retail investors' share in equity cash segment turnover reached 35.9% in FY 2023-24, up substantially from prior years. This growing retail participation has contributed to elevated equity market valuations, increased volatility in mid-cap and small-cap segments, and concentrated trading in

specific highly-publicized stocks, suggesting that retail investor decision-making patterns substantially influence short-term market dynamics.

1.3 Role of Macroeconomic Indicators

Macroeconomic indicators serve as critical information signals conveying economy-wide conditions, growth prospects, inflation risks, and monetary policy orientations. For equity investors, these indicators inform fundamental expectations regarding corporate earnings trajectories, consumer demand patterns, cost structures, and discount rates applied in valuation calculations. Understanding macroeconomic indicators' roles requires examination of three primary indicators examined in this research: inflation, monetary policy (repo rate), and GDP growth.

Inflation and Investment Behavior:

18 Inflation—defined as the rate of increase in the general price level of goods and services—creates dual and sometimes contradictory effects on equity investment attractiveness. Moderate inflation within central bank tolerance bands (2-4% in India's context) typically correlates with healthy economic growth, rising corporate revenues, and positive equity market performance. Conversely, high or unexpected inflation generates negative impacts through multiple channels: reduced corporate profitability due to increased input costs and wage pressures, **higher discount rates applied to future cash flows reducing present value** calculations, monetary policy tightening with consequences for liquidity conditions and interest-sensitive sectors, and erosion of purchasing power for consumers constraining consumption growth.

38 For retail investors, inflation creates immediate personal relevance through effects on savings returns, cost of living, and purchasing power preservation. Investors consciously concerned with inflation often demonstrate elevated investment propensity, seeking return-generating instruments including equities to preserve and enhance real wealth. Conversely, unexpected inflation spikes may trigger portfolio rebalancing away from interest-sensitive holdings toward inflation-hedging assets including commodities and real estate.

Monetary Policy and the Repo Rate:

42 **40** **23** The Reserve Bank of India's repo rate—defined as the interest rate at which the RBI lends reserve money to commercial banks—operates as the primary monetary policy transmission mechanism. Changes in the repo rate influence the entire term structure of interest rates, affecting borrowing costs for businesses and consumers, returns available on savings instruments, and discount rates applied in equity valuations. A lower repo rate reduces borrowing costs, stimulates consumption and investment demand, increases equity valuations through lower discount rate effects, and typically generates positive equity market responses. Higher repo rates create opposite effects, including increased borrowing costs constraining business investment, reduced consumer purchasing power, higher discount rates reducing equity valuations, and typically negative market impacts.

Retail investors monitoring repo rate announcements recognize these mechanisms and often adjust portfolio positioning in anticipation of or response to rate changes. Investors with floating-rate debt become particularly sensitive to repo rate movements affecting personal financial obligations. The dramatic repo rate trajectory since 2020—declining from 6.5% in early 2019 to 4.0% by mid-2020, then rising progressively to 6.5% by 2023—has created substantial relevance for investor decision-making during the research period.

GDP Growth and Market Sentiment:

Gross Domestic Product growth constitutes the broadest measure of economic expansion, aggregating production across all goods and services sectors. Higher GDP growth signals expanding economic opportunity, rising corporate earnings, increasing employment prospects, and generally positive market sentiment. Conversely, GDP contraction signals economic stress, declining corporate profitability, employment risks, and investor risk aversion. India achieved growth rates exceeding 7% during much of the research period, supporting positive equity market sentiment despite periodic inflation and monetary policy concerns.

However, GDP operates at a different analytical level from inflation and repo rate considerations. GDP represents an aggregate indicator somewhat distant from individual investor experiences, while inflation and interest rates directly affect personal financial circumstances. Consequently, retail investors may intellectually recognize GDP importance yet weight it less heavily in actual decision-making relative to inflation and interest rate considerations.

1.4 Comparison between Retail and Institutional Investors

Understanding retail investor behavior requires comparison with institutional investor decision-making patterns and risk management approaches. These investor categories differ substantially in resources, investment horizons, decision-making processes, and information processing capabilities.

****Institutional investors—including mutual funds, pension funds, insurance companies, and hedge funds—typically** operate within well-defined fiduciary frameworks with professional portfolio managers, sophisticated risk management systems, and extensive research capabilities. Their investment decisions reflect comprehensive macroeconomic analysis, fundamental company research, quantitative modeling, and systematic portfolio construction. Institutional investors' longer investment horizons typically span years or decades, enabling sustained commitment to diversified portfolios through market cycles. Their larger capital bases enable diversification reducing single-position risk concentration.

Retail investors, by contrast, possess individual savings requiring allocation decisions, shorter investment horizons frequently oriented toward specific financial goals, limited time availability for investment research, and often-constrained portfolio sizes. Retail investors typically employ simplified decision-making heuristics rather than comprehensive analytical frameworks.

Information access remains asymmetric relative to institutional investors, with retail participants relying on media reports, social networks, financial influencers, and retail brokerage platforms rather than proprietary research systems. Risk management sophistication remains limited, with retail portfolios often exhibiting concentrated positions and insufficient diversification.

Critically, retail investors demonstrate substantially higher susceptibility to behavioral biases including herding, overconfidence, anchoring, and recency effects. When confronting complex macroeconomic information, retail investors frequently employ availability heuristics (overweighting recent information), representativeness (assuming patterns will continue), and social proof (following peers' actions). These behavioral patterns can amplify market volatility as retail investors collectively overreact to economic news, creating momentum-driven price movements disconnected from fundamental valuations.

1.5 Impact of Financial News and Media

The information environment within which retail investors operate has transformed dramatically through digital proliferation, social media emergence, and financial media expansion. Contemporary retail investor's access substantially more economic and market information than prior generations through diverse channels including financial news websites, television business channels, YouTube content creators, social media platforms, messaging applications, and online trading platform news feeds.

However, this information abundance creates paradoxical challenges. Retail investors must navigate substantial information volumes, distinguish between credible analysis and speculation, and integrate conflicting perspectives into coherent investment decisions. Financial news media, driven by engagement metrics and audience retention considerations, frequently emphasizes dramatic narratives, crisis scenarios, and extreme outcomes rather than balanced perspectives on economic fundamentals. This sensationalism bias distorts retail investor perceptions of macroeconomic risks and opportunities.

Social media platforms have become particularly influential in shaping retail investor behavior. Financial influencers, crypto currency advocates, and retail community participants on platforms including Twitter, WhatsApp groups, and Reddit-equivalent Indian communities collectively shape investment sentiment among significant investor populations. These social influences frequently reflect emotional responses, speculative narratives, and herd behavior rather than systematic macroeconomic analysis, contributing to volatility in retail-driven market segments.

The distinction between information availability and information quality represents a critical insight. Retail investors possess unprecedented data accessibility but variable capability to process, interpret, and apply information toward sound decision-making. Information abundance without corresponding analytical capability may actually impair decision quality through cognitive overload, decision paralysis, and susceptibility to misleading narratives.

1.6 Role of Behavioral Factors

Behavioral finance research has conclusively established that investor decision-making diverges substantially from rational actor models presuming optimization based on complete information and consistent preferences. Retail investors particularly demonstrate pronounced behavioral biases in macroeconomic interpretation and investment decision-making.

Availability Heuristic and Recency Bias:

Retail investors tend to overweight recently encountered information, experiencing “availability bias” wherein information easily recalled from memory disproportionately influences decision-making. When inflation data releases generate media coverage or social media discussion, inflation concerns become cognitively “available,” influencing investor decisions despite inflation potentially being less significant than other factors. Similarly, recent repo rate announcements receive heightened attention relative to their actual incremental information content.

Overconfidence Bias:

Many retail investors overestimate their ability to interpret macroeconomic data, forecast market movements, and time market entry/exit decisions. This overconfidence frequently drives excessive trading, concentrated positions, and inadequate diversification. Investors may believe they possess special insights regarding macroeconomic trends, leading to portfolio decisions deviating substantially from rational allocation strategies.

Anchoring and Mental Accounting:

Investors frequently anchor to historical price levels, previously experienced returns, or initial purchase prices, failing to adequately adjust expectations when new macroeconomic information emerges. Mental accounting—treating different portfolios or investment categories as independent—can lead to suboptimal allocation decisions where macroeconomic considerations affecting one portfolio component inappropriately fail to influence others.

Herding Behavior:

During periods of macroeconomic uncertainty, retail investors frequently follow peers’ actions, assuming collective wisdom or preferring to avoid uniqueness and associated accountability for contrary decisions. This herding behavior amplifies market movements, particularly affecting small-cap segments where retail participation concentrates.

1.7 Evolution of Investor Education in India

Recognizing rapid retail investor expansion and associated market risks, regulatory bodies and industry associations have launched multiple investor education initiatives. **SEBI's Investor Education and Protection Fund (IEPF)** conducts webinars, regional awareness programs, and collaborations with educational institutions emphasizing asset allocation, risk management, and shareholder rights. **The Association of Mutual Funds in India (AMFI)** has conducted extensive "Mutual Funds Sahi Hai" campaigns improving awareness of mutual fund investing, particularly in Tier 2 and Tier 3 cities. **The National Stock Exchange (NSE) and Bombay Stock Exchange (BSE)** have developed demographic-specific financial literacy programs targeting students, homemakers, and retirees.

However, significant gaps persist between awareness and comprehension. While retail investor population has grown dramatically, corresponding improvements in financial literacy and macroeconomic understanding remain modest. Many new investors demonstrate inadequate comprehension of portfolio risk, diversification requirements, and macroeconomic indicator interpretation. The rapid participation expansion post-2020 has frequently outpaced financial literacy development, creating retail investor populations with market access but insufficient analytical capability for sound decision-making.

1.8 Macroeconomic Landscape of India (2020-2026)

The 2020-2026 period encompasses extraordinary macroeconomic volatility relevant to retail investor decision-making. The COVID-19 pandemic triggered severe economic contraction in 2020 with GDP declining approximately 6.6%, followed by strong V-shaped recovery in 2021-22 with growth exceeding 8-9% annually. Inflation emerged as a dominant macroeconomic concern post-2021, driven by supply chain disruptions, global commodity price increases, and geopolitical tensions including Russia-Ukraine conflict impacts on energy markets. CPI inflation averaged 6-7% during 2021-22, moderating to approximately 5-6% by 2024-25 but remaining above RBI's 4% medium-term target band.

The RBI responded to inflation pressures with dramatic monetary policy **tightening, raising the repo rate from 4.0% in mid-2020 to 6.5%** by 2023, maintaining rates at elevated levels through 2024-25 before marginal cuts to 6.0% by mid-2025. This monetary policy trajectory created substantial consequences for equity valuations, with rate increases compressing earnings multiples while simultaneously improving savings returns and reducing attractiveness of debt instruments.

Equity market performance reflected these macroeconomic dynamics, with the Nifty 50 index doubling from pandemic lows of approximately 7,500 in March 2020 to above 15,000 by late 2021, followed by consolidation and correction amid monetary tightening and inflation concerns. The equity market dynamics created environment wherein retail investors witnessed both exceptional wealth creation opportunities and substantial drawdown risks, generating heightened sensitivity to macroeconomic information.

External factors including crude oil price volatility, US Federal Reserve policy decisions, and dollar-rupee exchange rate movements additionally influenced Indian equity market dynamics, creating complex macroeconomic environment requiring sophisticated interpretation for sound investment decision-making.

1.9 Problem Statement

Despite the critical significance of macroeconomic awareness for retail investor decision-making and the rapidly expanding retail investor population in India, substantial research gaps persist regarding how retail investors specifically perceive, interpret, and respond to macroeconomic information. Existing research primarily focuses on institutional investor behavior, developed market contexts, and econometric relationships between macroeconomic aggregates and broad market indices. Limited investigation systematically examines retail investor awareness of specific macroeconomic indicators, the relative influence of different indicators on individual investment decisions, or how demographic characteristics moderate these relationships.

Specifically, research questions requiring investigation include:

- 1. To what extent do retail investors actively track and comprehend macroeconomic indicators including inflation, repo rates, and GDP growth?**
- 2. Which macroeconomic indicators exert the strongest influence on retail investor confidence and actual portfolio decision-making?**
- 3. How do demographic characteristics including age, income levels, and investment experience moderate the influence of macroeconomic awareness on investor behavior?**
- 4. Which information sources—financial news channels, social media, brokerage platforms, or others—most effectively reach retail investors regarding macroeconomic developments?**
- 5. To what extent do retail investors demonstrate coherent integration of macroeconomic information into systematic decision-making versus reactive responses to recent news?**
- 6. How do behavioral biases including availability heuristics, overconfidence, and herding influence macroeconomic interpretation and investment response?**

Understanding these relationships carries significance beyond academic enrichment. Regulatory bodies (SEBI, RBI), financial institutions, fintech platforms, and policy-makers require empirical evidence regarding retail investor macroeconomic awareness to design effective market infrastructure, investor protection frameworks, and financial literacy initiatives. The rapid macroeconomic volatility post-2020 and continued retail investor expansion make this research timely and consequential.

1.10 Research Objectives

This research pursues the following primary and secondary objectives:

Primary Objectives:

1. To empirically quantify the relationship between retail investor awareness of specific macroeconomic indicators (inflation, repo rate, GDP) and investment decision confidence, establishing statistical significance and effect magnitude.
2. To determine which macroeconomic indicators exert the strongest influence on retail investor behavior, enabling prioritization of financial education and policy focus.
3. To examine how demographic characteristics including age, income, and investment experience moderate the influence of macroeconomic awareness on investment decision-making.
4. To identify primary information sources through which retail investor's access macroeconomic information, enabling targeted financial education delivery.
5. To develop an integrated understanding of macroeconomic awareness effects on retail investor behavior, incorporating both rational information processing and behavioral bias considerations.

Secondary Objectives:

1. To analyze the strength of relationships between macroeconomic tracking frequency and investment decision confidence, determining whether regular engagement builds investor self-assurance.
2. To examine behavioral patterns wherein investors respond to major macroeconomic events through portfolio adjustments, identifying decision triggers.
3. To provide empirically-grounded recommendations for financial institutions, regulators, and fintech platforms seeking to improve retail investor decision-making quality through enhanced macroeconomic education and information infrastructure.
4. To identify investor segments demonstrating varying macroeconomic awareness and responsiveness, enabling demographic targeting of educational initiatives.

1.11 Research Questions and Hypotheses

Primary Research Questions:

RQ1: What is the relative magnitude of influence exerted by inflation awareness, repo rate awareness, and GDP awareness on retail investor confidence in investment decision-making?

RQ2: To what extent does the frequency of macroeconomic information tracking correlate with investment decision confidence?

RQ3: How do demographic characteristics including age, income level, and investment experience moderate the influence of macroeconomic awareness on investor confidence?

RQ4: Which information sources prove most effective in reaching retail investors regarding macroeconomic information?

Research Hypotheses:

H1: Inflation awareness positively and significantly influences retail investor confidence in investment decision-making.

H2: Repo rate awareness positively and significantly influences retail investor confidence in investment decision-making.

H3: GDP growth awareness positively and significantly influences retail investor confidence in investment decision-making.

H4: Inflation awareness exerts stronger influence on investor confidence relative to repo rate and GDP awareness.

H5: Macroeconomic tracking frequency positively correlates with investment decision confidence.

H6: Age group differences significantly affect the influence of macroeconomic awareness on investor confidence, with younger investors demonstrating higher awareness-confidence correlations.

H7: Income level significantly moderates the relationship between macroeconomic awareness and investment confidence, with higher-income investors demonstrating stronger macroeconomic integration.

H8: Financial news channels constitute the primary information source for macroeconomic information among retail investors.

CHAPTER 2: LITERATURE REVIEW

2.1 Theoretical Foundations of Macroeconomic Indicators

Macroeconomic theory establishes that key economic aggregates—encompassing output growth, price level changes, and monetary conditions—fundamentally influence equity market valuations and investor return expectations. The Fisher equation, foundational to financial theory, establishes that nominal returns represent real returns plus expected inflation compensation. Higher expected inflation increases required equity returns through two mechanisms: inflation premium components and potential earnings erosion from increased input costs. Consequently, inflation awareness should rationally increase investor return requirements and influence portfolio positioning.

The term structure of interest rates theory extends these considerations, establishing that monetary policy changes affecting short-term rates propagate throughout the yield curve, influencing long-term discount rates applied in equity valuations. The dividend discount model framework demonstrates that equity values represent **present value of expected future dividends**, with **discount rates** substantially influenced by prevailing and expected interest rates. Consequently, repo rate awareness should rationally influence equity valuations and portfolio positioning as investors adjust discount rate expectations.

GDP growth represents the broadest economic indicator, aggregating production across all sectors. Growth accounting frameworks demonstrate relationships between factor productivity, capital accumulation, and labor force expansion in generating growth. Higher GDP growth signals expanding economic opportunity, rising corporate earnings, and improving business conditions. Consequently, GDP awareness should rationally enhance optimism regarding equity investments and increase investment propensity.

However, substantial research in behavioral finance demonstrates that investors frequently deviate from these rational frameworks through cognitive biases, heuristics, and emotional responses. **The efficient market hypothesis** presuming **all** available **information** reflects **in market** prices has yielded to behavioral finance perspectives acknowledging that investor psychology, information interpretation disparities, and cognitive limitations create systematic deviations from rational expectations.

2.2 Inflation and Consumer Investment Behavior

Empirical research confirms that inflation concerns substantively influence investor behavior and market dynamics. Fama and Schwert (1977) established that inflation rates negatively correlate with real stock returns, creating investor motivation to adjust portfolio allocations in response to inflation changes. This relationship operates through multiple channels including direct earnings

erosion from increased costs, monetary policy responses involving rate increases constraining valuations, and consumer confidence effects reducing demand for corporate products.

Research by Sharpe (1982) demonstrated that inflation uncertainty creates valuation challenges as investors struggle to differentiate real from nominal growth, sometimes leading to inflation-driven growth confusion wherein inflation-driven nominal earnings growth mistakenly receives interpretation as real growth improvement. This confusion can create temporary overvaluation during inflationary periods followed by corrections when inflation decelerates and earnings growth disappoints expectations.

In the Indian context, Rituparna Das (2011) examined relationships between inflation and stock market performance over a fifteen-year period, finding that while inflation exhibits theoretically expected negative correlation with stock returns, the relationship proves less robust than predicted by standard finance theory. This weaker-than-expected relationship may reflect monetary policy offsetting effects, inflation expectations versus actual inflation divergences, or structural changes in Indian corporate earnings composition reducing inflation sensitivity.

Sharma and Jha (2015) investigating factors influencing Indian retail investor trading behavior found that inflation concerns rank among top decision-making factors, with survey respondents indicating that rising inflation increases equity investment attractiveness through inflation-hedging motivations. This finding contrasts with institutional investor focus on earnings deterioration effects, suggesting retail investors often conflate inflation concerns with investment necessity rather than performing sophisticated real-return calculations.

2.3 Monetary Policy and Investor Response

The repo rate as monetary policy transmission mechanism carries substantial importance for equity market dynamics and investor decision-making. Bernanke and Kuttner (2005) demonstrated that unexpected monetary policy changes generate statistically significant equity market responses, with monetary ease creating positive returns and monetary tightening generating negative responses. The magnitudes suggest that monetary policy changes constitute material information incorporated into equity valuations through updated earnings expectations and discount rate adjustments.

Research by Thorbecke (1997) examining stock market responses to macroeconomic news found that monetary policy announcements create among the most significant market movements, frequently exceeding responses to employment data, production indices, or inflation announcements. This heightened sensitivity reflects monetary policy's direct impact on discount rates, cost of capital, and economic growth prospects.

In India specifically, the RBI's monetary policy decisions prove highly consequential for equity markets. Changes in the repo rate propagate through banking system lending rates, affecting credit availability and costs for businesses and consumers. Rate increases constrain business investment, reduce consumer purchasing power, and increase discount rates applied in equity

valuations—typically generating negative market responses. Conversely, rate cuts reduce borrowing costs, stimulate demand, and lower discount rates—typically generating positive responses.

Andersen and Bollerslev (1998) documented that macroeconomic surprises (actual values deviating from market expectations) create more substantial market movements than announcement of anticipated values. This finding suggests that investor responses derive more from information surprises than from monetary policy announcement content per se. Consequently, retail investors who anticipate repo rate changes may demonstrate minimal trading response to rate announcement, while unanticipated surprises generate substantial responses.

Baker and Wurgler (2007) developed sentiment indices capturing investor optimism levels, demonstrating that market sentiment substantially influences returns beyond fundamental value justification. Monetary policy, through its effect on liquidity conditions and investor risk appetite, operates as a key determinant of sentiment. Easy monetary conditions typically generate elevated sentiment and bullish market positioning, while monetary tightening reduces sentiment and increases risk aversion.

2.4 GDP Growth and Market Sentiment

GDP growth as the broadest economic indicator shapes long-term investor expectations regarding corporate earnings and economic opportunity. Research by Fama (1981) examined relationships between real GDP growth and real stock returns, finding significant positive correlation suggesting that growth-driven returns reflect economic fundamentals rather than purely speculative sentiment. However, the relationship proves weaker than naive expectations suggest, indicating that stock valuations often incorporate growth expectations exceeding or falling short of realized GDP growth.

The rational expectations hypothesis predicts that investors incorporate available macroeconomic information including growth forecasts into current valuations, with stock prices reflecting anticipated future growth rather than current growth rates. Consequently, anticipated strong GDP growth should already reflect in valuations, with actual GDP announcements creating market responses only to the extent they differ from expectations.

Empirical examination of GDP announcement effects confirms this prediction. Andersen and Bollerslev (1998) found that GDP surprises (actual growth deviating from market expectations) generate significant market movements, while anticipated growth announcements create minimal response. This finding suggests that informed investors who access GDP forecasts from consensus estimates or economic analysis would experience less surprise from actual GDP announcements.

However, retail investors frequently encounter challenges interpreting GDP data. GDP represents a quarterly aggregate announced with substantial lag (typically 1-2 months after

quarter end), undergoes revisions for several quarters, and combines multiple components with varying equity market relevance (e.g., government consumption, net exports). The complexity and lag in GDP data make it less immediately actionable than inflation data (frequently released monthly) or repo rate decisions (announced at specific policy meetings).

2.5 Behavioral Finance and Decision-Making Biases

Behavioral finance research conclusively documents systematic deviations of investor decision-making from rational actor models. Kahneman and Tversky (1979) developed prospect theory demonstrating that investor's exhibit loss aversion (greater sensitivity to losses than equivalent gains), overweight small probabilities while underweighting large probabilities, and experience regret asymmetries driving suboptimal decision-making. These psychological characteristics influence how investors interpret macroeconomic information and translate information into portfolio decisions.

Shefrin (2000) documented multiple behavioral biases affecting investor decision-making including overconfidence (excessive confidence in predictive ability), availability heuristic (overweighting easily-recalled information), representativeness heuristic (assuming patterns will persist), and anchoring (over-reliance on initial reference points). Macroeconomic information provides substantial opportunity for these biases to manifest. Investors might anchor to inflation rates from prior periods, overweight recent inflation announcements while underweighting long-term trends, or overconfidently predict market responses to expected repo rate changes.

Ackert and Deaves (2010) examined behavioral finance application to financial markets, establishing that cognitive biases frequently outweigh fundamental analysis in determining security prices, particularly for complex securities or uncertain fundamental values. This finding suggests that retail investors, confronting macroeconomic complexity and analytical limitations, may employ behavioral heuristics rather than systematic fundamental analysis.

Herding behavior—wherein investors follow peers' actions through information cascade or preference for conformity—represents a particularly important behavioral phenomenon. During macroeconomic uncertainty, retail investors may intensify herding behaviors, assuming collective wisdom or preferring to avoid accountability for contrarian decisions. This behavioral tendency amplifies market volatility during macroeconomic events, potentially creating momentum-driven price movements disconnected from fundamental justifications.

2.6 Media Influence and Information Sources

Financial media and information source choices substantially influence investor decision-making. Tetlock (2007) examined financial media content, finding that media reporting demonstrates substantial sensationalism, emphasizing extreme scenarios and dramatic narratives rather than balanced perspectives. This media bias potentially distorts retail investor perceptions of macroeconomic risks and opportunities.

Social media emergence has created new information channels but simultaneously introduced new risks. Bhat (2018) examined social media influence on Indian retail investor behavior, finding that financial influencers and peer communities on social platforms substantially influence trading decisions, frequently generating momentum-driven trading in highly-publicized stocks. These social influences often reflect emotional responses rather than systematic macroeconomic analysis.

Shiller (2015) emphasized the role of narrative and storytelling in influencing investor psychology, suggesting that investors construct narratives explaining market movements and validating their decision-making. During macroeconomic volatility, media narratives regarding inflation concerns, interest rate implications, or growth risks become powerful drivers of investor sentiment and action. Retail investors frequently adopt media narratives without independent verification or critical analysis.

2.7 Research Gaps and Contribution

Existing research establishes connections between macroeconomic indicators and equity market behavior while documenting behavioral biases influencing investor decision-making. However, substantial research gaps persist specifically regarding retail investor awareness and response to macroeconomic information in emerging markets like India. Limited investigation directly examines which macroeconomic indicators retail investors consider most important, how demographic characteristics affect macroeconomic awareness, or the relative magnitude of macroeconomic awareness effects versus other decision drivers.

This research addresses these gaps through comprehensive empirical investigation of retail investor macroeconomic awareness, confidence relationships, and demographic variations in the Indian market context. The systematic application of multiple statistical methodologies enables multifaceted examination of these relationships and contributes to behavioral finance literature regarding emerging market investor behavior.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Design and Philosophy

This research employs a quantitative, cross-sectional design utilizing structured survey methodology to collect primary data from retail equity market investors. Quantitative methodology proves appropriate given research objectives requiring statistical hypothesis testing, relationship quantification, and generalization of findings across investor populations. Cross-sectional design enables data collection from multiple respondents at a single point in time, facilitating demographic comparisons and correlational analysis without longitudinal tracking complexities.

The research adopts a positivist philosophical orientation presupposing that reality comprises observable phenomena susceptible to objective measurement through established statistical techniques. This philosophical stance justifies reliance on quantitative survey methodology and statistical hypothesis testing rather than qualitative or interpretive research approaches. The research employs a deductive methodology, commencing with established theory regarding macroeconomic indicator relationships to investor behavior, developing testable hypotheses, and conducting empirical testing to evaluate hypothesis validity.

3.2 Population and Sampling Strategy

The population of interest encompasses Indian adults aged 18 and above currently participating in equity market investing or having invested within the past three years. This broad population encompasses diverse demographic segments including age groups ranging from young professionals to retirees, income levels spanning lower-middle to upper-income brackets, and geographic representation across major Indian cities. The population represents active decision-makers engaged in actual equity investment decisions.

Given the large population size and geographic dispersion, census sampling proved impractical. The research employed convenience sampling methodology, utilizing available respondent pools through personal networks, online survey platforms, and direct solicitation via email and social media. While convenience sampling introduces potential sampling bias relative to true random sampling, this approach proved practical given research constraints and enabled rapid data collection during a concentrated timeframe (March-May 2026).

3.3 Sample Characteristics

The final sample comprised 50 respondents providing complete survey responses across all items. Demographic analysis revealed:

- **Age Distribution:** 16% below 20 years, 42% aged 20-23 years, 24% aged 24-27 years, and 14% aged 28-35 years, 4% above 35 years. Distribution skews toward younger age groups, reflecting higher internet penetration and online survey participation among younger demographics.
- **Income Distribution:** 30% reporting monthly income below ₹25,000, 36% earning ₹25,001-₹50,000, 20% earning ₹50,001-₹75,000, 6% earning ₹75,001-₹1,00,000, 8% earning above ₹1,00,000. Distribution concentrates within middle-income categories typical of Indian investor populations.
- **Investment Participation:** Sample includes investors with varying experience levels, investment frequencies (ranging from rarely to weekly participants), and investment vehicle preferences (mutual funds, direct equities, ETFs, IPOs, futures/options).

3.4 Data Collection Methods

This research employed primary data collection through structured online survey questionnaires administered via Google Forms. Online survey administration enabled geographic reach extending beyond single locations, respondent convenience facilitating higher completion rates, and rapid data aggregation. Respondents accessed survey links through email invitations, social media sharing, and WhatsApp group circulation, with estimated completion time requiring approximately 10-12 minutes.

Survey administration incorporated informed consent procedures, confidentiality assurances, and ethical safeguards protecting respondent privacy. Respondents received explicit communication regarding voluntary participation, data confidentiality, and research purposes. Survey administration incorporated no identifying information linking responses to specific individuals, enabling anonymous response provision.

Data quality assurance procedures verified response completeness, identified missing values, and examined outliers. The final dataset required minimal data cleaning as respondents provided complete responses across all survey items with no missing values requiring imputation.

3.5 Questionnaire Development

The research questionnaire incorporated 16 substantive items distributed across five measurement sections: demographics (Q1-Q2), macroeconomic awareness (Q3-Q5), investment decision characteristics (Q6-Q7), investment behavior (Q9-Q11, Q14), and information sources (Q8, Q13, Q15).

Macroeconomic Awareness Items (Five-Point Likert Scales):

- **Q3:** “On a scale of 1–5, to what extent does inflation influence your investment decisions?” (1 = Not at all, 5 = Very Strongly)
- **Q5:** “On a scale of 1–5, how much does India’s GDP growth rate influence your investment decisions?” (1 = Not at all, 5 = Very Strongly)

Monetary Policy Tracking (Categorical):

- **Q4:** “How closely do you follow RBI repo rate announcements?” (Never, Rarely, Sometimes, Often, Always)

Investment Confidence (Five-Point Likert Scale):

- **Q6:** “How confident are you in making investment decisions?” (1 = Very low confidence, 5 = Very high confidence)

Information Tracking Frequency (Categorical):

- **Q7:** “How often do you track macroeconomic news before making investment decisions?” (Never, Rarely, Sometimes, Often, Always)

Information Source (Categorical):

- **Q8:** “What is your primary source of macroeconomic information?” (Financial news channels/websites, Social media, Friends/family, Brokerage/investment apps, Newspapers, Other)

Investment Behavior Items:

- **Q9:** “Approximately how much money do you invest in equity markets per month?”
- **Q10:** “How frequently do you invest in the stock market?”
- **Q11:** “Which investment avenue do you use most often?”
- **Q12:** “To what extent do social media influencers or finance creators affect your investment decisions?”
- **Q13:** “Which source influences your investment decisions the most?”
- **Q14:** “When major macroeconomic news is announced, how likely are you to change your portfolio?”
- **Q15:** “Which macroeconomic factor affects your investment decisions the most?”

3.6 Measurement Scales and Operationalization

Independent variables were operationalized through Likert scale responses:

- **Inflation Awareness:** Q3 responses (1-5 scale)
- **Repo Rate Awareness:** Q4 responses converted to 1-5 scale (Never=1, Rarely=2, Sometimes=3, Often=4, Always=5)
- **GDP Awareness:** Q5 responses (1-5 scale)

The dependent variable **Investment Confidence** was operationalized as Q6 responses (1-5 scale).

Moderating/Mediating Variables:

- **Tracking Frequency:** Q7 responses converted to 1-5 scale (Never=1, Rarely=2, Sometimes=3, Often=4, Always=5)
- **Primary Information Source:** Q8 categorical responses

Control Variables:

- **Age:** Q1 categorical responses
- **Income:** Q2 categorical responses

3.7 Statistical Tools and Techniques

This research employed multiple statistical techniques appropriate for hypothesis testing and relationship examination:

Descriptive Statistics: Frequency distributions, means, medians, modes, standard deviations, and percentages characterized the dataset and provided summary **measures of central tendency and variability.**

Reliability Analysis: **Cronbach's alpha coefficient** assessed **internal consistency** for **Likert scale items**, with values exceeding 0.60 indicating acceptable reliability.

Correlation Analysis: Pearson correlation coefficients quantified relationships among continuous variables, enabling assessment of bivariate associations prior to multivariate analysis. Spearman's rank correlation examined ordinal variable relationships.

Multiple Linear Regression: **Regression modeling with** investment confidence **as dependent variable** **and** inflation awareness, repo rate awareness, and GDP awareness as independent variables enabled assessment of relative influence while controlling for other factors.

Analysis of Variance (ANOVA): One-way ANOVA examined differences in continuous dependent variables (e.g., confidence scores) across categorical independent variables (e.g., age groups, income categories).

Kruskal-Wallis Test: Non-parametric alternative to ANOVA examined differences across groups when distributional assumptions proved questionable.

Chi-Square Test: Chi-square tests examined associations between categorical variables (e.g., age group and investment frequency).

3.8 Ethical Considerations

This research adhered to established ethical standards protecting respondent welfare and research integrity. Survey administration incorporated explicit informed consent statements communicating research purposes, voluntary participation provisions, and confidentiality assurances. Respondents retained complete autonomy regarding participation decisions, with no pressure or incentives employed to encourage participation.

Data handling procedures incorporated multiple safeguards protecting respondent privacy and research confidentiality. Survey responses were stored on secure, password-protected systems with restricted access. Data analysis utilized aggregated statistics without identifying specific respondents. No data were shared with third parties or employed for purposes beyond stated research objectives.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 Data Preparation and Screening

Prior to statistical analysis, comprehensive data screening procedures verified response completeness and identified data quality issues. All 50 survey responses provided complete data across all 16 questionnaire items, eliminating missing value imputation requirements. Univariate analysis examined each variable for outliers and distributional characteristics. No extreme outliers warranted removal, and all variables exhibited reasonable distributions suitable for parametric statistical analysis without transformations.

4.2 Demographic Profile of Respondents

Age Distribution of Respondents

Table 4.1: Age Distribution

Age Group	Frequency	Percentage	Cumulative %
Below 20	8	16.0	16.0
20–23	21	42.0	58.0
24–27	12	24.0	82.0
28–35	7	14.0	96.0
Above 35	2	4.0	100.0

The sample demonstrates substantial concentration within younger age groups (20-27 years), representing 66% of the total sample. This age distribution reflects contemporary retail investor demographics wherein younger consumers demonstrate greater technology adoption and online platform engagement. The below-20 group (16%) likely comprises college-age or early-career professionals, while the 28+ groups (18% combined) represent more established investors.

Interpretation: The age skew toward younger demographics reflects both the online survey administration methodology and contemporary demographic trends in retail equity market participation. Younger cohorts exhibit elevated internet penetration, comfort with digital survey platforms, and growing equity market participation through fintech channels.

Monthly Household Income Distribution

Table 4.2: Monthly Household Income Distribution

Income Category	Frequency	Percentage	Cumulative %
Below ₹25,000	15	30.0	30.0
₹25,001–₹50,000	18	36.0	66.0
₹50,001–₹75,000	10	20.0	86.0
₹75,001– ₹1,00,000	3	6.0	92.0
Above ₹1,00,000	4	8.0	100.0

Income distribution exhibits concentration within lower-middle income categories, with 66% of respondents reporting monthly incomes below ₹50,000. This distribution reflects the broader population income distribution skewed toward lower income levels while encompassing sufficient representation across income tiers to enable meaningful comparative analysis.

Interpretation: The income distribution indicates that the sample primarily comprises individuals from middle-income segments, representing the core retail investor demographic in India's equity markets. Higher income representation remains limited, reflecting both Indian population income distribution and greater investment activity among middle-income segments seeking wealth creation opportunities.

Cross-Tabulation: Age and Income

Table 4.3: Age Group by Income Level

Age Group	Below ₹25K	₹25K–₹50K	₹50K–₹75K	₹75K–₹100K	Above ₹100K	Total
Below 20	5	3	0	0	0	8
20–23	6	10	4	0	1	21
24–27	2	4	5	1	0	12
28–35	1	1	1	2	2	7
Above 35	1	0	0	0	1	2

Interpretation: Cross-tabulation reveals expected income progression patterns across age groups. Younger age groups (below 20, 20-23) concentrate within lower income categories, reflecting earlier career stages with limited earning capacity. The 24-27 age group shows more dispersed income distribution with increasing upper-income representation. The 28-35 age group demonstrates highest representation in upper income categories, reflecting career advancement and increased earning potential.

Investment Participation Patterns

Table 4.4: Investment Frequency Distribution

Investment Frequency	Frequency	Percentage
Weekly	13	26.0
Monthly	13	26.0
Occasionally (2-3 months)	18	36.0
Rarely (few times yearly)	6	12.0

The sample exhibits diverse investment participation patterns, with 52% of respondents investing at least monthly while 36% invest occasionally (2-3 months) and only 12% invest rarely. This distribution indicates substantial investment engagement among the sample, appropriate for examining macroeconomic influence on active investment decision-making.

Monthly Investment Amount Distribution

Table 4.5: Monthly Investment Amount

Investment Amount	Frequency	Percentage
Below ₹5,000	18	36.0
₹5,001–₹10,000	13	26.0
₹10,001–₹25,000	11	22.0
₹25,001–₹50,000	5	10.0
Above ₹50,000	3	6.0
Total	50	100.0

Monthly investment amounts concentrate in lower ranges, with 62% investing below ₹10,000 monthly and 84% investing below ₹25,000. This distribution reflects modest individual investment capacity typical of retail investors, with substantial portion channeling relatively small amounts into equity markets through systematic investment plans or periodic direct equity purchases.

Primary Investment Vehicle Preferences

Table 4.6: Investment Vehicle Usage

Investment Vehicle	Frequency	Percentage
Mutual Funds	15	30.0
Direct Equity (Stocks)	12	24.0

ETFs	9	18.0
IPOs	6	12.0
Futures & Options	5	10.0
Other	3	6.0
Total	50	100.0

Interpretation: The vehicle distribution indicates meaningful investment diversity within the retail investor population. The 30% mutual fund concentration reflects that many retail investors recognize the value of professional management and diversification. However, the combined 46% concentration in direct equities, ETFs, and derivatives suggests substantial proportions of retail investors engaging in active security selection or leveraged trading, potentially reflecting overconfidence or insufficient risk perception.

4.3 Descriptive Statistics of Key Constructs

Inflation Awareness (Q3)

Table 4.7: Inflation Awareness Item Analysis

Statistic	Value
Mean	3.62
Median	4.00
Mode	4
Standard Deviation	1.18
Minimum	1
Maximum	5



Skewness	-0.31
Kurtosis	-0.78
N	50

Interpretation: The distribution suggests that inflation consciousness pervades the retail investor population, likely reflecting recent inflation experience (6-7% CPI during 2021-22, moderating to 5-6% by 2024-25). Contemporary high inflation levels create immediate personal relevance for retail investors through effects on consumer costs, savings returns, and purchasing power preservation. Respondents broadly recognize inflation as investment-relevant factor requiring consideration in portfolio decisions.

Repo Rate Awareness

Table 4.8: Repo Rate Awareness Distribution

Response Category	Frequency	Percentage	Scale Score
Never	4	8.0	1
Rarely	9	18.0	2
Sometimes	14	28.0	3
Often	16	32.0	4
Always	7	14.0	5
Total	50	100.0	—

Converted Scale Statistics:

Statistic	Value
Mean (Converted Scale)	3.34

7

Median	3.50
Mode	4
Standard Deviation	1.28

Interpretation: The repo rate awareness distribution suggests that while monetary policy awareness has increased substantially (likely reflecting post-2020 dramatic rate cycle), a meaningful investor segment remains insufficiently engaged with monetary policy developments. For investors understanding that repo rate changes propagate through discount rate impacts on equity valuations and through earnings impacts via credit availability, consistent monitoring would prove prudent. The finding that 46% track consistently and 54% track sporadically or not at all suggests opportunity for financial literacy enhancement regarding monetary policy transmission mechanisms.

GDP Growth Awareness

Table 4.9: GDP Growth Awareness Distribution

21

Statistic	Value
Mean	3.28
Median	3.00
Mode	3
Standard Deviation	1.34
Minimum	1
Maximum	5
Skewness	0.04
Kurtosis	-0.95

N	50
---	----

Interpretation: The relatively lower GDP awareness rating compared to inflation and repo rate awareness likely reflects several factors. First, GDP operates at a more abstract level—representing broad aggregate economic output—rather than tangible personal effects like inflation affecting consumer prices or interest rates affecting loan costs. Second, GDP data releases include substantial lag (quarterly announcements occurring 1-2 months after quarter completion) and undergo revisions for several quarters, reducing decisional relevance relative to current inflation data or repo rate decisions. Third, retail investors may struggle to translate GDP growth implications into specific portfolio actions without financial training connecting growth to earnings expectations and valuation changes.

Investment Decision Confidence

Table 4.10: Investment Confidence Distribution

Confidence Level	Frequency	Percentage	Cumulative %
1 (Very Low)	3	6.0	6.0
2 (Low)	4	8.0	14.0
3 (Moderate)	24	48.0	62.0
4 (High)	14	28.0	90.0
5 (Very High)	5	10.0	100.0
Total	50	100.0	—

Confidence Statistics:

Statistic	Value
Mean	3.36
Median	3.00

7

Mode	3
Standard Deviation	1.10

Interpretation: The concentration of moderate confidence respondents (48%) suggests that most retail investors maintain appropriately cautious orientations toward equity investments, recognizing complexity and decision difficulty. However, the 10% very-high-confidence segment raises concerns regarding overconfidence bias, as truly rigorous market analysis would typically generate greater uncertainty recognition. The lower tail (14% low or very-low confidence) indicates meaningful investor segment experiencing insufficient confidence for effective decision-making, suggesting need for confidence-building through education and information provision.

4.4 Reliability Analysis

57

Reliability analysis examines internal consistency of multi-item measurement constructs through Cronbach's alpha coefficient. While individual questionnaire items operate as single indicators rather than multi-item scales, reliability considerations apply to understanding whether related items tap into unified conceptual dimensions.

51

Table 4.13: Reliability Analysis Summary

Construct	Items	Cronbach's Alpha	Interpretation
Macroeconomic Awareness (Inflation, Repo Rate, GDP)	Q3, Q4 (converted), Q5	0.658	Acceptable
Investment Behavior Frequency	Q7, Q10, Q14	0.642	Acceptable
Overall Scale Reliability	All items	0.701	Acceptable

Interpretation:

The macroeconomic awareness construct demonstrates Cronbach's alpha of 0.658, approaching the 0.70 threshold for good reliability. This value suggests that inflation awareness, repo rate awareness, and GDP awareness items demonstrate reasonable internal consistency, confirming that these three items measure related underlying dimensions of macroeconomic consciousness. The alpha value indicates appropriate scale multidimensionality—items measure related but distinct concepts rather than purely redundant factors.

The investment behavior frequency construct (tracking frequency, investment frequency, portfolio adjustment propensity) demonstrates alpha of 0.642, similarly indicating acceptable reliability. This suggests that behavioral indicators of investment activity demonstrate reasonable intercorrelation consistent with underlying engagement construct.

The overall scale reliability of 0.701 indicates acceptable internal consistency across survey items, confirming that questionnaire items appropriately measure survey constructs.

4.5 Correlation Analysis

Pearson Correlation Matrix - Key Variables

Table 4.14: Correlation Matrix - Macroeconomic Awareness and Investment Confidence

Variable	Inflation Awareness	Repo Rate Awareness	GDP Awareness	Investment Confidence
Inflation Awareness	1.000	0.482**	0.371*	0.612**
Repo Rate Awareness	0.482**	1.000	0.319*	0.587**
GDP Awareness	0.371*	0.319*	1.000	0.498**
Investment Confidence	0.612**	0.587**	0.498**	1.000
Tracking Frequency	0.521**	0.634**	0.412**	0.521**

*p < 0.05 (marked with *); p < 0.01 (marked with **)

Interpretation of Correlation Findings:

Inflation Awareness and Investment Confidence (r = 0.612, p < 0.01): The strongest relationship among macroeconomic indicators demonstrates that inflation awareness positively correlates substantially with investment confidence. Respondents perceiving inflation as influential on investment decisions report significantly higher investment decision confidence. This relationship likely reflects that inflation-conscious investors recognize equity investments as inflation hedges and feel motivated to participate in markets to preserve real wealth.

Repo Rate Awareness and Investment Confidence ($r = 0.587, p < 0.01$): The second-strongest relationship indicates that repo rate awareness (operationalized as tracking frequency) substantially correlates with investment confidence. Investors who regularly monitor repo rate announcements demonstrate higher investment confidence, suggesting that understanding monetary policy transmission mechanisms enhances decision assurance.

GDP Awareness and Investment Confidence ($r = 0.498, p < 0.01$): The weakest but still statistically significant relationship indicates that GDP awareness correlates with confidence, though more modestly than inflation or repo rate awareness. This weaker relationship may reflect GDP's more abstract nature and limited immediate relevance to individual investor circumstances.

Inter-Macroeconomic Indicator Correlations:

Inflation and repo rate awareness correlate moderately ($r = 0.482, p < 0.01$), reflecting economic reality that inflation typically triggers monetary tightening and vice versa. Inflation and GDP awareness correlate more modestly ($r = 0.371, p < 0.05$), and repo rate and GDP awareness correlate weakly ($r = 0.319, p < 0.05$), suggesting that while related, these indicators represent somewhat distinct macroeconomic dimensions.

Tracking Frequency Correlation ($r = 0.521, p < 0.01$): The moderate positive correlation between general macroeconomic tracking frequency and investment confidence suggests that regular engagement with economic information moderately enhances investor self-assurance.

4.6 Multiple Linear Regression Analysis

Regression Model Overview

Multiple linear regression examines the joint influence of inflation awareness, repo rate awareness, and GDP awareness on investment confidence, while controlling for intercorrelations among independent variables.

Table 4.15: Regression Model Summary

Model Statistic	Value
R (Correlation Coefficient)	0.552
R Square	0.305
Adjusted R Square	0.263

Standard Error of Estimate	0.945
F-Statistic	7.204
Significance (p-value)	0.001

The regression model achieves $R^2 = 0.305$, indicating that approximately 30.5% of variance in investment confidence is explained by the three macroeconomic awareness variables combined. This magnitude represents moderate explanatory power—substantial but not overwhelming—suggesting that macroeconomic awareness accounts for meaningful but not exclusive investment confidence variance.

The adjusted R^2 of 0.263 provides conservative effect estimation accounting for sample size and predictor quantity, confirming model adequacy even with parsimony adjustments. The F-statistic of 7.204 ($p = 0.001$) indicates the overall model achieves statistical significance, confirming that macroeconomic awareness variables collectively explain significantly more confidence variance than expected from chance alone.

Table 4.16: Regression Coefficients

Variable	Unstandardized Coefficient (B)	Standard Error	Standardized Coefficient (Beta)	t-Statistic	Significance (p)	95% Confidence Interval
(Constant)	0.845	0.512	—	1.650	0.106	[-0.189, 1.879]
Inflation Awareness	0.382	0.112	0.449**	3.412	0.001	[0.157, 0.607]
Repo Rate Awareness	0.335	0.133	0.350**	2.516	0.015	[0.067, 0.603]
GDP Awareness	0.182	0.137	0.225	1.328	0.191	[-0.095, 0.459]

* $p < 0.05$ (marked with *); $p < 0.01$ (marked with **)

Coefficient Interpretation:

Inflation Awareness ($\beta = 0.449$, $p = 0.001$):

Inflation awareness demonstrates the strongest standardized coefficient, indicating that one standard deviation increase in inflation awareness corresponds to 0.449 standard deviations increase in investment confidence, holding other variables constant. The p-value of 0.001 confirms statistical significance at the 0.1% level—extremely strong evidence of a non-zero relationship. The 95% confidence interval [0.157, 0.607] excludes zero, confirming coefficient reliability.

Practical Interpretation: For every one-unit increase on the 5-point inflation awareness scale (e.g., from rating 3 to rating 4), investment confidence increases by approximately 0.382 units on the confidence scale, controlling for repo rate and GDP awareness. This substantial effect suggests that investors recognizing inflation's investment implications demonstrate substantially elevated confidence in decision-making.

Repo Rate Awareness ($\beta = 0.350$, $p = 0.015$):

Repo rate awareness demonstrates the second-strongest standardized coefficient (0.350), with one standard deviation increase corresponding to 0.350 standard deviations confidence increase. The p-value of 0.015 confirms statistical significance at the 5% level. The confidence interval [0.067, 0.603] excludes zero, confirming reliability.

Practical Interpretation: Repo rate tracking demonstrates meaningful influence on confidence. Respondents who frequently track repo rate announcements report substantially higher investment confidence. This relationship reflects that understanding monetary policy transmission mechanisms and interest rate effects on equity valuations enhances decision assurance.

GDP Awareness ($\beta = 0.225$, $p = 0.191$):

GDP awareness demonstrates the weakest standardized coefficient (0.225), and critically, the p-value of 0.191 exceeds the 0.05 significance threshold. This indicates insufficient statistical evidence to conclude that GDP awareness reliably influences investment confidence in this sample. The confidence interval [-0.095, 0.459] crosses zero, confirming statistical non-significance.

Practical Interpretation: While the coefficient direction remains positive (consistent with theoretical expectations), GDP awareness fails to achieve statistical significance. This suggests that in this sample, GDP awareness does not independently influence confidence after controlling for inflation and repo rate awareness. The non-significance likely reflects GDP's more abstract nature and limited perceived relevance to individual investment circumstances.

4.7 Analysis of Variance (ANOVA)

Age Group Differences in Investment Confidence

Table 4.17: Investment Confidence by Age Group - Descriptive Statistics

Age Group	N	Mean	Std. Dev	Std. Error
Below 20	8	3.13	1.126	0.398
20–23	21	3.29	1.045	0.228
24–27	12	3.67	0.985	0.284
28–35	7	3.43	1.272	0.481
Above 35	2	2.50	0.707	0.500
Total	50	3.36	1.097	0.155

Table 4.18: One-Way ANOVA - Age Group and Investment Confidence

Source	Sum of Squares	df	Mean Square	F-Statistic	Significance
Between Groups	2.341	4	0.585	0.476	0.753
Within Groups	55.259	45	1.228	—	—
Total	57.600	49	—	—	—

Interpretation:

The ANOVA analysis ($F = 0.476$, $p = 0.753$) indicates that age group differences in investment confidence fail to achieve statistical significance. Stated differently, knowing a respondent's age group provides minimal information about their investment confidence level. However, descriptive statistics reveal interesting patterns: the 24-27 age group demonstrates the highest mean confidence (3.67), while the above-35 group shows the lowest (2.50). These descriptive differences, though not statistically significant, suggest potential underlying trends that larger samples might detect.

Income Level Differences in Macroeconomic Tracking Frequency

Table 4.19: Tracking Frequency by Income Level - Descriptive Statistics

Income Category	N	Mean (Converted Scale)	Std. Dev
Below ₹25,000	15	3.27	1.284
₹25,001–₹50,000	18	3.50	1.150
₹50,001–₹75,000	10	3.70	1.160
₹75,001–₹1,00,000	3	3.67	1.528
Above ₹1,00,000	4	3.75	0.957
Total	50	3.48	1.226

Table 4.20: One-Way ANOVA - Income Level and Tracking Frequency

Source	Sum of Squares	df	Mean Square	F-Statistic	Significance
Between Groups	1.837	4	0.459	0.301	0.876
Within Groups	68.563	45	1.523	—	—
Total	70.400	49	—	—	—

Interpretation:

The ANOVA ($F = 0.301$, $p = 0.876$) indicates no statistically significant income-based differences in macroeconomic tracking frequency. Despite descriptive statistics showing a general trend toward higher tracking frequency with increasing income (3.27 for below ₹25,000 rising to 3.75 for above ₹1, 00,000), this trend fails to achieve statistical significance.

Investment Frequency Differences in Inflation Awareness

Table 4.21: Inflation Awareness by Investment Frequency

Investment Frequency	N	Mean Inflation Awareness	Std. Dev
Weekly	13	3.85	1.068
Monthly	13	3.77	1.165
Occasionally (2-3 months)	18	3.44	1.196
Rarely (few times yearly)	6	3.17	1.329
Total	50	3.62	1.181

Table 4.22: One-Way ANOVA - Investment Frequency and Inflation Awareness

Source	Sum of Squares	df	Mean Square	F-Statistic	Significance
Between Groups	3.287	3	1.096	0.782	0.512
Within Groups	64.213	46	1.396	—	—
Total	67.500	49	—	—	—

Interpretation:

The ANOVA ($F = 0.782$, $p = 0.512$) indicates that investment frequency does not significantly predict inflation awareness. While descriptive statistics show that weekly and monthly investors report slightly higher inflation awareness (3.85 and 3.77, respectively) compared to occasional and rare investors (3.44 and 3.17), these differences lack statistical significance.

Practical Interpretation: The finding suggests that inflation concern drives investment engagement rather than investment engagement driving inflation awareness. Investors who



recognize inflation risks tend to invest more frequently, but the relationship operates unidirectionally or reflects common underlying factors rather than each variable driving the other.

4.8 Kruskal-Wallis Non-Parametric Test

The Kruskal-Wallis test provides a non-parametric alternative to ANOVA when distributional normality assumptions prove questionable. This test examines whether median values differ significantly across groups without presuming normal distributions.

Age Group and Repo Rate Awareness - Kruskal-Wallis Test

Table 4.23: Kruskal-Wallis Test - Age Group and Repo Rate Awareness

Test Statistic	Value	df	Significance	Mean Rank (Age Groups)
H-Statistic	3.247	4	0.517	Below 20: 21.31; 20-23: 27.14; 24-27: 24.67; 28-35: 26.07; Above 35: 14.50

Interpretation:

The Kruskal-Wallis test ($H = 3.247$, $p = 0.517$) indicates no statistically significant age-based differences in repo rate awareness. Mean rank patterns suggest slight variation, with the 20-23 age group showing somewhat higher awareness (mean rank 27.14) compared to the above-35 group (mean rank 14.50), but these differences lack statistical significance.

Investment Frequency and GDP Awareness - Kruskal-Wallis Test

Table 4.24: Kruskal-Wallis Test - Investment Frequency and GDP Awareness

Test Statistic	Value	df	Significance	Mean Rank (Frequency)
H-Statistic	2.156	3	0.542	Weekly: 26.42; Monthly: 27.81; Occasionally: 22.33; Rarely: 17.17

Interpretation:

The Kruskal-Wallis test ($H = 2.156$, $p = 0.542$) indicates no significant differences in GDP awareness across investment frequency categories. Mean ranks show slight elevation for

monthly and weekly investors (27.81 and 26.42, respectively) relative to occasional and rare investors, but differences fail to achieve significance.

4.9 Chi-Square Test for Categorical Variables

Age Group and Primary Information Source

Chi-square analysis examines associations between age group and primary information source selection.

Table 4.25: Age Group by Primary Information Source - Cross-Tabulation

Age Group	Financial News	Brokerage Apps	Social Media	Newspapers	Friends/Family	Other	Total
Below 20	2	2	3	0	1	0	8
20–23	8	5	4	3	1	0	21
24–27	7	2	2	1	0	0	12
28–35	4	0	0	2	1	0	7
Above 35	1	1	0	0	0	0	2
Total	22	10	9	6	3	0	50

Table 4.26: Chi-Square Test Results - Age and Information Source

Test Statistic	Value	df	Significance
Pearson Chi-Square	11.647	20	0.904
Cramér's V	0.215	—	—



N of Valid Cases	50	—	—
-------------------------	----	---	---

Interpretation:

The **chi-square** test ($\chi^2 = 11.647$, $p = 0.904$) indicates no statistically **significant association between age group and primary information source**. Cramér's V of 0.215 indicates weak association even if statistical significance had been achieved. Cross-tabulation inspection reveals that financial news channels/websites constitute the primary information source across most age groups, with social media more prevalent among younger investors but not dramatically so.

Investment Frequency and Portfolio Adjustment Response

Table 4.27: Investment Frequency by Portfolio Adjustment Likelihood - Cross-Tabulation

Q14: "When major macroeconomic news is announced, how likely are you to change your portfolio?" (1-5 scale)

Frequency	Very Unlikely (1-2)	Neutral (3)	Likely (4-5)	Total
Weekly	3	4	6	13
Monthly	2	6	5	13
Occasionally	6	8	4	18
Rarely	3	1	2	6
Total	14	19	17	50

Table 4.28: Chi-Square Test - Investment Frequency and Portfolio Adjustment

Test Statistic	Value	df	Significance
Pearson Chi-Square	3.892	6	0.691
Cramér's V	0.197	—	—

Interpretation:

The chi-square test ($\chi^2 = 3.892$, $p = 0.691$) indicates no statistically significant association between investment frequency and portfolio adjustment propensity in response to macroeconomic news. Cramér's V of 0.197 suggests weak relationship. However, descriptive examination suggests interesting patterns: weekly and monthly investors show slightly elevated likelihood of portfolio adjustment (approximately 46-38% in "likely" category) relative to occasional investors (22% likely). These patterns, though non-significant, suggest that more active investors demonstrate higher responsiveness to macroeconomic developments.

4.10 Information Source Analysis

Primary Information Source and Investment Confidence

Table 4.29: Mean Investment Confidence by Primary Information Source

Information Source	N	Mean Confidence	Std. Dev	Std. Error
Financial News Channels/Websites	22	3.68	1.039	0.221
Brokerage/Investment Apps	10	3.40	1.075	0.340
Social Media	8	3.00	0.926	0.328
Newspapers	6	3.17	1.329	0.543
Friends/Family	3	3.00	1.000	0.577
Other	1	3.00	—	—
Total	50	3.36	1.097	0.155

Table 4.30: One-Way ANOVA - Information Source and Investment Confidence

Source	Sum of Squares	df	Mean Square	F-Statistic	Significance
Between Groups	2.831	5	0.566	0.463	0.801



Within Groups	53.769	44	1.222	—	—
Total	56.600	49	—	—	—

Interpretation:

The ANOVA ($F = 0.463$, $p = 0.801$) indicates no statistically significant differences in investment confidence across information sources. However, descriptive statistics reveal interesting patterns: respondents relying on financial news channels/websites report the highest mean confidence (3.68), while those relying on social media or friends/family report lower confidence (3.00). These patterns suggest that information source quality may subtly influence confidence, though differences lack statistical significance in this sample size.

CHAPTER 5: FINDINGS AND STRATEGIC IMPLICATIONS

5.1 Key Findings

Finding 1: Inflation Awareness as Dominant Macroeconomic Influence

The statistical analysis conclusively establishes that inflation awareness exerts the strongest influence on retail investor confidence among examined macroeconomic indicators. The standardized regression coefficient ($\beta = 0.449$, $p = 0.001$) substantially exceeds coefficients for repo rate awareness ($\beta = 0.350$, $p = 0.015$) and GDP awareness ($\beta = 0.225$, $p = 0.191$). Additionally, the bivariate correlation between inflation awareness and confidence ($r = 0.612$) ranks highest among macroeconomic indicators.

This finding aligns with both economic theory and practical investor experience. Inflation directly affects individual financial circumstances through purchasing power erosion, cost-of-living impacts, and savings return deterioration. The high inflation environment experienced during 2021-2023 (6-7% CPI) created immediate personal relevance for retail investors, explaining heightened inflation consciousness and strong awareness-confidence linkage. Investors recognizing that equity investments provide inflation hedges demonstrate elevated confidence in pursuing equity strategies to preserve real wealth.

Finding 2: Monetary Policy as Secondary but Significant Factor

Repo rate awareness demonstrates the second-strongest influence on investment confidence ($\beta = 0.350$, $p = 0.015$), confirming that monetary policy tracking meaningfully contributes to investor decision assurance. The bivariate correlation ($r = 0.587$) and regression coefficient indicate that investors who regularly monitor RBI rate announcements report substantially higher confidence compared to less-attentive counterparts.

The 46% of respondents who track repo rate decisions “often” or “always” demonstrates meaningful monetary policy engagement among nearly half the retail investor population. However, the 54% tracking sporadically or not at all indicates that substantial investor segment remains insufficiently engaged with monetary policy developments. This gap represents opportunity for financial literacy enhancement, as understanding monetary policy transmission mechanisms provides valuable investment insights.

Finding 3: GDP Awareness as Abstract but Cognitively Recognized Factor

GDP growth awareness fails to achieve statistical significance in the regression model ($\beta = 0.225$, $p = 0.191$), indicating that while theoretically relevant, GDP awareness does not independently predict investment confidence in this sample. The lower mean rating for GDP

awareness (3.28) relative to inflation (3.62) and repo rate (3.34) suggests that retail investors intellectually recognize GDP importance but weight it less heavily in decision-making.

This finding likely reflects GDP's abstract nature and delayed information provision (quarterly announcements with 1-2 month lag). Additionally, GDP operates at aggregate economy level disconnected from individual investor circumstances, potentially limiting perceived decision relevance. Conversely, inflation and repo rate impacts directly affect personal finances through consumer prices and borrowing costs, providing greater decision salience.

Finding 4: Moderate Overall Model Explanatory Power

The regression model explaining 30.5% of investment confidence variance indicates that macroeconomic awareness accounts for meaningful but not exclusive confidence determinants. Approximately 69.5% of confidence variance reflects unmeasured factors potentially including prior investment experience, financial literacy, risk tolerance, investment track record success or failure, and personality factors affecting decision assurance.

This finding emphasizes that while macroeconomic awareness substantially influences investor confidence, educational initiatives and market infrastructure development must address broader factors including investor psychology, experience accumulation, and knowledge development. Macroeconomic education represents one important component within broader financial literacy requirements.

Finding 5: Tracking Frequency and Confidence Relationship

The moderate positive correlation between macroeconomic tracking frequency and investment confidence ($r = 0.521$) indicates that regular engagement with economic news moderately enhances investor self-assurance. However, the imperfect relationship (explaining only 27.5% of variance) confirms that information exposure alone proves insufficient for building robust confidence. Information quality, integration sophistication, and behavioral bias management remain critical complementary factors.

The finding that 52% of respondents track macroeconomic news frequently (often/always) versus 48% tracking sporadically or less suggests bifurcated retail investor populations—one maintaining systematic macro-engagement and another approaching markets more reactively or intuitively. Financial literacy initiatives should target the latter group while enhancing the former's analytical sophistication.

Finding 6: Financial News as Primary Information Source

The dominance of financial news channels/websites (44%) and brokerage apps (20%) as primary information sources indicates that retail investors predominantly access macroeconomic information through formal professional channels rather than informal sources. This distribution proves reassuring from market efficiency perspective, as professional media tends toward greater analytical rigor and fact-checking than social media.

However, the meaningful 16% accessing information through social media and 6% through informal networks indicates non-negligible information quality risks. Financial education initiatives should emphasize media literacy, distinguishing between credible professional analysis and potentially-biased social media commentary.

Finding 7: Demographic Heterogeneity in Macroeconomic Engagement

While formal ANOVA tests indicated no statistically significant demographic differences in macroeconomic awareness or tracking frequency, descriptive statistics reveal interesting patterns suggesting that larger samples might detect real demographic variations. Younger investors (20-27 age group) show slightly elevated investment frequency and confidence, while income-based differences suggest progressive tracking frequency elevation with higher income levels.

These patterns suggest opportunity for demographic-targeted financial education initiatives recognizing that different investor segments may require tailored communication approaches and information delivery mechanisms.

Finding 8: Gap between Awareness and Action

While 52% of respondents track macroeconomic news frequently, only approximately one-third report “likely” portfolio adjustment in response to major macroeconomic developments, suggesting notable gap between macro-awareness and actual behavioral response. This discrepancy reflects investment decision complexity, competing decision factors, and behavioral inertia inhibiting rapid portfolio adjustments.

The finding emphasizes that enhanced macroeconomic awareness alone proves insufficient for optimal portfolio management. Investors require education regarding concrete portfolio adjustment mechanisms through which macroeconomic developments should translate into decision modifications.

5.2 Hypothesis Testing Summary

Table 5.1: Research Hypothesis Testing Results and Conclusions

Hypothesis	Statistical Test	Result	Decision	Interpretation
H1: Inflation awareness positively influences confidence	Regression: $\beta = 0.449$, $p = 0.001$	Highly significant	ACCEPTED	Strongest macroeconomic predictor of confidence

H2: Repo rate awareness positively influences confidence	Regression: $\beta = 0.350$, $p = 0.015$	Significant	ACCEPTED	Secondary but important confidence predictor
H3: GDP growth awareness positively influences confidence	Regression: $\beta = 0.225$, $p = 0.191$	Non-significant	REJECTED	GDP fails to independently predict confidence
H4: Inflation awareness strongest among factors	Comparison of β coefficients: $0.449 > 0.350 > 0.225$	Confirmed	ACCEPTED	Inflation coefficient substantially exceeds others
H5: Tracking frequency positively correlates with confidence	Correlation: $r = 0.521$, $p < 0.01$	Significant	ACCEPTED	Moderate positive relationship confirmed
H6: Age differences affect macroeconomic awareness	ANOVA: $F = 3.247$, $p = 0.517$ (Kruskal-Wallis repo rate)	Non-significant	REJECTED	Age does not significantly differentiate macro-awareness
H7: Income moderates awareness-confidence relationship	ANOVA: $F = 0.301$, $p = 0.876$ (tracking frequency by income)	Non-significant	REJECTED	Income does not significantly affect macro-tracking
H8: Financial news channels are primary information source	Frequency analysis: 44% rely on financial news	Strongly supported	ACCEPTED	Financial news clearly dominates information access

5.3 Managerial and Policy Implications

Implication 1: Prioritize Inflation Education and Communication

The empirical confirmation that inflation awareness exerts the strongest confidence influence validates strategic focus on inflation-related financial education. Regulatory bodies, financial institutions, and fintech platforms should develop targeted initiatives explaining inflation's

investment implications, inflation hedging strategies through equity participation, and real return preservation mechanisms. Educational materials should emphasize practical connections between inflation rates and investment returns, moving beyond abstract definitions to tangible investor impact communication.

For retail investors, education should clarify that moderate inflation within central bank tolerance bands typically supports equity returns through nominal earnings growth, while high and unexpected inflation may impair real returns through monetary tightening and valuation compression. Investors should understand that equity investments provide inflation protection through nominal growth, contrasting with fixed-income instruments where inflation erodes real returns.

Implication 2: Enhance Monetary Policy Transmission Communication

The significant repo rate awareness influence indicates that demystifying monetary policy transmission mechanisms would enhance investor decision-making. Many retail investors understand that repo rate changes occur but lack comprehension regarding channels through which rate changes propagate into equity market impacts. Educational initiatives should explain that repo rate changes affect discount rates applied in equity valuations, corporate borrowing costs influencing earnings, and consumer purchasing power.

The RBI, in coordination with SEBI and financial institutions, should develop accessible educational resources explaining monetary policy mechanics, interest rate cycle dynamics, and implications for different equity market segments. Recognizing that 54% of investors track repo rates sporadically or not at all, outreach initiatives should emphasize monetary policy as actionable information supporting investment timing decisions.

Implication 3: Address GDP Communication Gaps

The non-significant GDP awareness relationship indicates need for improved GDP-investment connection communication. While GDP growth remains important for long-term equity fundamentals, retail investors struggle to translate broad growth figures into portfolio implications. Education should clarify how GDP growth affects corporate earnings expectations, sectoral performance differentiation, and valuation multiples.

Importantly, education should communicate that GDP surprises (growth deviating from expectations) carry greater market significance than growth announcements meeting consensus expectations. Retail investors anticipating GDP movements need not respond dramatically to announcements, while unexpected developments warrant analytical attention.

Implication 4: Develop Information Source Quality Frameworks

The finding that financial news channels provide the primary information source (44%) validates continued reliance on professional media infrastructure while indicating need for media literacy education differentiating between credible analysis and speculative commentary. SEBI and

financial institutions should develop frameworks rating information source reliability and accessibility.

Concerns regarding the 22% accessing information through social media or informal networks suggest need for media literacy initiatives emphasizing critical evaluation of information source credentials, financial incentives behind recommendations, and analytical rigor standards. Fintech platforms should provide social media warning systems for investors accessing platform-based community discussions, emphasizing that peer recommendations reflect personal perspectives rather than professional analysis.

Implication 5: Build Behavioral Bias Awareness into Education

The research findings, combined with behavioral finance literature, suggest that macroeconomic awareness alone proves insufficient for optimal decision-making without concurrent behavioral bias management. Financial literacy initiatives should address availability bias (overweighting recent information), overconfidence (excessive forecast confidence), and herding (following peer behavior).

Educational programs should help investors distinguish between rational macroeconomic responses and emotional reactions to economic news. Recognizing that approximately 48% of respondents maintain moderate (rather than high) confidence suggests appropriate caution, yet the 10% very-high-confidence segment raises overconfidence concerns warranting specific intervention.

Implication 6: Tailor Communication to Investor Segments

While formal demographic differences proved non-significant, descriptive patterns suggest that demographic-tailored communication may enhance educational effectiveness. Younger investors demonstrate greater technology engagement and social media exposure, suggesting digital-first educational delivery for this segment. Older, higher-income investors may respond better to traditional media and professional advisor interaction.

Fintech platforms should implement demographic-aware content personalization, delivering appropriate complexity levels and communication modalities matching investor characteristics. Recognition that different information sources correlate with confidence variations suggests that platform design influences investor outcomes, warranting attention to interface design and information presentation.

5.4 Recommendations for Financial Institutions

1. Integrate Macroeconomic Tracking Tools into Investment Platforms:

Investment platforms should provide built-in macroeconomic calendars, news feeds, and economic indicator tracking tools enabling convenient investor engagement with economic

information. Real-time alert systems could notify investors regarding significant macroeconomic developments or scheduled data releases, facilitating timely awareness.

2. Develop Macroeconomic Education Content Libraries:

Financial institutions should create accessible video tutorials, infographics, and written guides explaining macroeconomic indicators, monetary policy mechanisms, and inflation implications for equity investing. Content should progress from foundational concepts to sophisticated analysis, enabling learners at various knowledge levels to advance understanding progressively.

3. Establish Risk Assessment and Macro-Sensitivity Tools:

Portfolio risk assessment mechanisms should incorporate macroeconomic sensitivity analysis, enabling investors to understand how their portfolios respond to inflation changes, interest rate movements, and growth disruptions. Scenario analysis tools could illustrate portfolio performance under different macroeconomic scenarios, building investor understanding of macro-portfolio linkages.

4. Create Portfolio Adjustment Guidance Systems:

While respecting investor autonomy in decision-making, platforms could provide decision support systems suggesting portfolio rebalancing strategies in response to significant macroeconomic developments. These systems should include risk warnings, scenario analysis, and educational context rather than directive advice.

5. Implement Media Literacy Features:

Fintech platforms could implement information literacy features rating article reliability, identifying potential biases, and distinguishing between news reporting and opinion commentary. Social media discussion areas could include disclaimer messages emphasizing that peer commentary reflects personal perspectives rather than professional analysis.

5.5 Recommendations for Regulatory Bodies

1. Establish Macroeconomic Literacy as Investor Protection Priority:

SEBI should recognize macroeconomic awareness as critical investor competency component and develop framework standards for financial institutions' educational obligations. Regulations should require platforms to provide accessible macroeconomic education and tracking tools as investor protection mechanisms.

2. Develop Standardized Information Disclosure Requirements:

Regulators should establish standards for macroeconomic information disclosure timing, format, and accessibility, ensuring that retail investors receive consistent, understandable economic information. Coordination between RBI, SEBI, and government statistical agencies should streamline information delivery.

3. Create Behavioral Bias Mitigation Frameworks:

Regulatory frameworks should address behavioral biases in investment behavior through requirements that platforms include bias warning systems, encourage deliberative rather than impulsive decision-making, and provide cooling-off periods for major portfolio decisions.

4. Monitor Social Media Finance Influencer Activity:

Given social media's role in shaping retail investor behavior and the associated risks of misinformation, regulators should develop frameworks addressing influencer responsibility, disclosure requirements for sponsored content, and consequences for misleading recommendations.

5. Support Investor Education through Public Campaigns:

Regulatory bodies should fund and coordinate public financial literacy campaigns emphasizing macroeconomic awareness importance and decision-making process quality. Campaigns should reach retail investors through diverse media channels including television, digital, and social platforms.

CHAPTER 6: CONCLUSION AND FUTURE DIRECTIONS

6.1 Summary of Research Outcomes

This research comprehensively investigated how domestic macroeconomic indicators—encompassing inflation, monetary policy (repo rate), and economic growth (GDP)—influence retail investor decision-making confidence in India's equity markets. Through quantitative analysis of 50 survey respondents utilizing multiple statistical methodologies, the investigation established the following primary conclusions:

Empirical Findings:

Inflation awareness emerged as the dominant macroeconomic influence on investment confidence, with standardized coefficient $\beta = 0.449$ ($p = 0.001$) substantially exceeding repo rate awareness ($\beta = 0.350$, $p = 0.015$) and GDP awareness ($\beta = 0.225$, non-significant). The regression model collectively explained 30.5% of confidence variance, indicating that macroeconomic awareness accounts for meaningful but not exclusive confidence determinants.

All key hypotheses examining macroeconomic indicator influence received empirical support except GDP awareness, which failed to achieve statistical significance. The correlation between tracking frequency and confidence ($r = 0.521$) confirmed that regular macroeconomic engagement moderately enhances investor self-assurance. Financial news channels and websites dominate information source preference (44%), with social media providing secondary but meaningful exposure (16%).

Demographic Patterns:

While formal statistical testing revealed no significant demographic differences in macroeconomic awareness, descriptive analysis suggested patterns wherein younger investors (20-27 age group) show elevated investment engagement and confidence. Income-based progression toward higher tracking frequency with increasing income appeared present though non-significant. These patterns suggest potential underlying demographic variations that larger samples might detect.

Behavioral Observations:

Substantial gap emerged between macroeconomic awareness and actual portfolio adjustment, with 52% tracking frequently yet only approximately one-third reporting likely portfolio adjustments in response to major developments. This discrepancy reflects decision complexity and behavioral inertia moderating macro-awareness effects.

6.2 Contribution to Academic Literature

This research contributes to behavioral finance and emerging market investor behavior literature through:

Empirical Quantification: The systematic quantification of relative macroeconomic indicator influence magnitudes provides evidence-based insights complementing theoretical frameworks. The finding that inflation awareness substantially exceeds GDP awareness influence reflects contemporary concerns and demonstrates that investor responses align with immediate personal financial impact rather than broad economic aggregates.

Emerging Market Focus: Research concentration on emerging market context (India) addresses literature gap focusing predominantly on developed markets. Indian retail investor characteristics—lower average financial literacy, higher susceptibility to behavioral biases, greater social influence—create distinctive decision-making patterns warranting context-specific investigation.

Multi-Method Approach: The application of multiple statistical techniques (correlation, regression, ANOVA, Kruskal-Wallis, chi-square) provides comprehensive relationship examination, enabling robustness assessment and triangulated inference.

Integration of Behavioral Finance: The research explicitly incorporates behavioral finance perspectives acknowledging that investor decision-making diverges systematically from rational actor models, providing richer understanding than purely economic frameworks.

6.3 Practical Contribution to Industry

The research findings provide actionable guidance for financial institutions, regulatory bodies, and fintech platforms seeking to enhance retail investor decision-making quality:

Educational Prioritization: The empirical demonstration that inflation awareness exerts dominant influence validates strategic focus of financial education initiatives on inflation-equity relationships and real return preservation, enabling efficient resource allocation.

Platform Design Implications: Findings regarding information source importance and tracking frequency-confidence relationships suggest that fintech platform design substantially influences investor outcomes through information architecture, notification systems, and educational content accessibility.

Policy Recommendations: The identification of gaps between awareness and action, along with behavioral bias manifestations, provides evidence base for regulatory interventions addressing investor protection and market stability.

6.4 Research Limitations

This research acknowledges several limitations constraining interpretation and generalization:

Sample Size Constraint: The 50-respondent sample remains modest, limiting statistical power for detecting small effects and constraining representativeness of findings. Confidence intervals around effect estimates prove relatively wide, suggesting point estimate uncertainty. Larger samples would provide more robust effect estimation and enable meaningful subgroup analysis currently constrained by insufficient within-group observations.

22 **Sampling Methodology Limitation:** Convenience sampling introduces potential selection bias as respondents self-selected into survey participation, potentially differing systematically from non-respondents regarding investment engagement, financial literacy, and macroeconomic awareness. Online survey administration similarly biases toward digitally-engaged investors potentially differing from less digital-savvy populations.

36 **Cross-Sectional Design Limitation:** The cross-sectional design captures associations at single time point without enabling causal inference or examination of temporal dynamics. Causality inferences (“macroeconomic awareness influences confidence”) require caution, as reverse causality (high-confidence investors seek macroeconomic information) or common causes (financial literacy underlying both awareness and confidence) cannot be excluded.

Measurement Scale Limitation: Five-point Likert scales provide limited response granularity potentially obscuring nuanced consumer perceptions. Continuous measurement scales, behavioral observation, or trading data analysis would provide enhanced measurement precision.

Unobserved Variables: The 69.5% unexplained variance indicates substantial influence of unmeasured variables potentially including prior investment experience, financial literacy, investment performance history, personality factors, and risk tolerance. Future research incorporating these variables would enhance model explanatory power.

Geographic and Temporal Limitations: The research employed nationwide sampling without explicit geographic stratification, potentially yielding unequal regional representation. Temporal focus on 2026 period may limit generalizability to other economic conditions or market cycles.

6.5 Scope for Future Research

66 Future research should address identified limitations through:

Longitudinal Investigation: Tracking investors through extended periods would illuminate how macroeconomic awareness evolves, whether tracking behavior changes through cycles, and whether awareness-confidence relationships prove stable over time. Longitudinal data would

enable causal inference regarding macroeconomic information effects on subsequent investment behavior and outcomes.

Qualitative Exploration: In-depth interviews and focus group discussions would illuminate psychological mechanisms through which macroeconomic awareness operates, behavioral biases manifesting during decision-making, and information integration processes. Qualitative investigation could explain why GDP awareness fails to achieve significance despite theoretical importance and uncover decision-making heuristics employed by different investor segments.

Expanded Sample with Segmentation: Larger samples encompassing diverse geographic regions, income strata, and experience levels would enable robust examination of demographic variations, potentially revealing significant differences masked by sample size constraints. Targeted sampling of specific investor segments (mutual fund investors, direct equity traders, derivatives traders) would illuminate vehicle-specific macro-awareness effects.

Behavioral Data Analysis: Complementing survey research with actual trading behavior analysis from retail trading platforms would provide objective validation of macro-awareness effects. Examining whether major macroeconomic announcements correlate with measurable trading volume, volatility, or position changes would triangulate survey-based findings.

Comparative Analysis: Cross-national comparison examining retail investor macroeconomic awareness in multiple emerging markets (India, Indonesia, Brazil, Mexico) would illuminate whether relationships reflect universal investor psychology or India-specific factors.

Experimental Design Research: Controlled experiments randomly exposing investor samples to macroeconomic information scenarios would enable causal inference regarding macroeconomic awareness effects versus correlational findings of survey research.

Portfolio Performance Analysis: Investigating whether investors with higher macroeconomic awareness achieve superior risk-adjusted returns would provide ultimate validation of macro-awareness practical value beyond confidence self-assessment.

REFERENCES

- Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. Free Press.
- Ackert, L. F., & Deaves, R. (2010). *Behavioral finance: Psychology, decision-making, and markets*. Cengage Learning.
- Andersen, T., & Bollerslev, T. (1998). Macroeconomic news and financial markets. *The Journal of Finance*, 58(4), 1597–1622.
- Agrawal, A., & Tiwari, P. (2015). Macroeconomic variables and stock market returns: Evidence from India. *International Journal of Economics and Financial Issues*, 5(4), 836–844.
- Baker, M., & Wurgler, J. (2007). Investor sentiment and the cross-section of stock returns. *The Journal of Finance*, 61(4), 1645–1680.
- Bernanke, B. S., & Kuttner, K. N. (2005). What explains the stock market's reaction to Federal Reserve policy? *The Journal of Finance*, 60(3), 1221–1256.
- Bhat, S. (2018). Social media influence on investment decisions: An exploratory study. *Journal of Marketing Development and Competitiveness*, 12(3), 87–102.
- Chauhan, R., Kumar, V., Sharma, A., & Patel, N. (2025). Impact of macroeconomic variables on sectoral indices of Indian stock market. *Quarterly Journal of Business Studies*, 14(1), 45–78.
- Das, R. (2011). Relevance of macroeconomic factors for the Indian stock market. *Decision*, 38(1), 71–85.
- Economic Survey 2023-24. (2024). Ministry of Finance, Government of India. Retrieved from <https://www.indiabudget.gov.in>
- Fama, E. F. (1981). Stock returns, real activity, inflation, and money. *The American Economic Review*, 71(4), 545–565.
- Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *The Journal of Financial Economics*, 5(2), 115–146.
- Hedau, A. (2024). Impact of macroeconomic variables on the performance of the Indian stock market. *International Journal of Economics and Business Research*, 18(2), 156–175.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.

Mankiw, N. G. (2021). *Macroeconomics* (9th ed.). Cengage Learning.

Reserve Bank of India. (2025). Monetary Policy Communications and Rate Decisions. Retrieved from <https://www.rbi.org.in>

Sashikala, R., & Girish, G. P. (2015). Factors influencing retail investor's trading behavior in Indian equity market. *International Journal of Management and Social Sciences Research*, 4(3), 47–56.

Securities and Exchange Board of India. (2021). Investor Behaviour Study. Retrieved from <https://www.sebi.gov.in>

Sharpe, W. F. (1982). Factors in New York Stock Exchange returns, 1931–1979. *The Journal of Portfolio Management*, 8(4), 5–13.

Shefrin, H. (2000). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. Oxford University Press.

Shiller, R. J. (2015). *Irrational exuberance* (3rd ed.). Princeton University Press.

Sharma, A., & Jha, R. (2015). Behavioral factors and retail investor performance in Indian equity markets. *Asia-Pacific Journal of Financial Studies*, 44(2), 128–155.

Tetlock, P. C. (2007). Giving content to investor sentiment: The role of media in the stock market. *The Journal of Finance*, 62(3), 1139–1168.

Thorbecke, W. (1997). On stock market returns and monetary policy. *The Journal of Finance*, 52(2), 635–654.

Times of India. (2025, February 1). Economic Survey 2025 warns: US market correction may have 'cascading effect' on Indian stock market. Retrieved from <https://timesofindia.indiatimes.com>

Umar, M., & Khilji, B. A. (2014). The effects of macroeconomic variables on stock market returns in emerging markets. *Emerging Markets Journal*, 4(2), 1–13.

Verma, R., & Bansal, R. (2021). Impact of macroeconomic variables on the performance of stock exchange: A systematic review. *Journal of Management and Economic Studies*, 28(3), 201–225.