

# **Exploring New Horizons in Commerce and Business**

**DR. NILESHKUMAR GAMBHAVA**

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## *PREFACE*

In an age marked by constant change and unprecedented connectivity, the field of commerce and business stands at the forefront of global transformation. *Exploring new horizons in commerce and business* is conceived as a thoughtful response to this evolving landscape—an effort to understand, interpret, and navigate the shifting paradigms that define modern economic activity. This book is not merely a collection of concepts and theories; it is a comprehensive journey into the forces shaping businesses today and the opportunities that lie ahead.

The world of commerce has undergone significant transformation over the past few decades. Advances in technology, the rise of digital platforms, and the integration of global markets have revolutionized how businesses operate. Traditional models that once emphasized stability and predictability are now being replaced by agile, innovative approaches that prioritize adaptability and continuous learning. Organizations today must respond quickly to market changes, embrace digital tools, and anticipate customer needs in ways that were unimaginable in the past.

At the same time, globalization has brought both opportunities and challenges. Businesses are no longer confined by geographical boundaries; they operate in a highly interconnected world where decisions made in one part of the globe can have far-reaching consequences elsewhere. This interconnectedness has fostered collaboration and expanded markets, but it has also introduced complexities such as cultural diversity, regulatory differences, and increased competition. Understanding these dynamics is essential for anyone seeking to succeed in contemporary commerce.

This book aims to provide a balanced perspective by integrating foundational knowledge with modern developments. It covers essential topics such as principles of management, marketing strategies, financial systems, and organizational behavior, while also delving into emerging areas like e-commerce, digital transformation, data analytics, and sustainable business practices. By combining theory with practical

examples, the book seeks to equip readers with both conceptual clarity and real-world relevance.

A distinctive feature of this work is its emphasis on innovation and entrepreneurship. In today's competitive environment, the ability to think creatively and act decisively is more important than ever. Entrepreneurs are not only driving economic growth but also reshaping industries through disruptive ideas and technologies. This book highlights the role of entrepreneurial thinking—not just for startups, but within established organizations as well—encouraging readers to adopt a mindset that values experimentation, resilience, and strategic risk-taking.

Equally important is the focus on ethics and sustainability. As businesses expand their influence, they also bear greater responsibility toward society and the environment. Issues such as climate change, resource management, corporate governance, and social equity are no longer peripheral concerns; they are central to long-term success. This book underscores the importance of responsible decision-making and encourages readers to consider the broader impact of business activities on communities and the planet.

Education in commerce and business is no longer confined to classrooms or textbooks. It is an ongoing process that requires curiosity, critical thinking, and engagement with real-world developments. This book is designed to serve as both a foundational resource for students and a practical guide for professionals. It encourages readers to question established norms, analyze current trends, and develop informed perspectives on complex business issues.

Furthermore, the concept of “new horizons” extends beyond external changes in the business environment. It also reflects the internal growth of individuals—developing leadership skills, enhancing communication abilities, and fostering a spirit of lifelong learning. Success in modern commerce depends not only on technical knowledge but also on personal attributes such as adaptability, integrity, and vision.

As you explore the chapters that follow, you will encounter a wide range of ideas, case studies, and analytical frameworks. Each section is crafted to build a deeper understanding of how businesses function and evolve. Whether you are a student

beginning your academic journey, an aspiring entrepreneur, or a professional seeking to stay relevant in a rapidly changing world, this book offers valuable insights and practical guidance.

Ultimately, *exploring new horizons in commerce and business* is an invitation to look beyond the familiar, to embrace change, and to engage with the possibilities of the future. It seeks to inspire not only knowledge but also action—to empower readers to contribute meaningfully to the world of commerce and to shape the future of business with confidence and creativity.

May this book serve as a source of knowledge, inspiration, and direction as you navigate the exciting and ever-evolving landscape of commerce and business.

Welcome to a journey of discovery, insight, and inspiration.

***DR. NILESHKUMAR GAMBHAVA***

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**FINANCIAL LITERACY AND INVESTMENT BEHAVIOUR AMONG  
YOUNG ADULTS IN INDIA: AN EMPIRICAL STUDY**

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**ABSTRACT**

Financial literacy has emerged as a critical determinant of individual financial well-being, especially among young adults navigating increasingly complex financial markets. In India, rapid digitalization, expanding financial inclusion, and the proliferation of investment avenues have made financial decision-making both more accessible and more challenging. This study examines the relationship between financial literacy and investment behaviour among young adults aged 18–35 years in India. The research aims to assess levels of financial literacy, identify investment patterns, and analyse how knowledge influences risk tolerance, portfolio diversification, and investment choices.

A structured questionnaire was administered to 300 respondents using a stratified random sampling technique across urban and semi-urban regions. The study employs descriptive statistics, correlation analysis, and regression techniques to test the hypotheses. Findings indicate a significant positive relationship between financial literacy and rational investment behaviour. Individuals with higher financial literacy demonstrate better diversification, higher participation in formal financial instruments, and reduced reliance on speculative investments.

The study highlights the importance of financial education initiatives in enhancing investment outcomes and promoting economic stability. It contributes to the literature by providing empirical evidence from the Indian context and offers policy recommendations for improving financial literacy programs among youth.

**KEYWORDS: FINANCIAL LITERACY, INVESTMENT BEHAVIOUR, YOUNG ADULTS, INDIA, FINANCIAL INCLUSION, RISK TOLERANCE, PORTFOLIO DIVERSIFICATION**

**1. INTRODUCTION**

**Background**

In recent years, India has witnessed a significant transformation in its financial ecosystem, driven by digital financial services, increased access to banking, and policy initiatives promoting financial inclusion. Platforms such as digital payment systems, online trading apps, and mutual fund investments have made financial markets more accessible to

young individuals. However, access alone does not guarantee effective participation; financial literacy plays a crucial role in enabling informed decision-making.

Financial literacy refers to the ability to understand and use financial knowledge effectively, including budgeting, saving, investing, and managing risks. Young adults, particularly those entering the workforce, are at a critical stage where financial decisions can have long-term implications.

### **PROBLEM STATEMENT**

Despite growing access to financial products, a significant proportion of Indian youth lacks adequate financial literacy, leading to poor investment decisions, susceptibility to fraud, and financial instability. There is limited empirical research examining how financial literacy directly influences investment behaviour among young adults in India.

### **OBJECTIVES OF THE STUDY**

- **To assess the level of financial literacy among young adults in India**
- **To examine investment behaviour patterns**
- **To analyse the relationship between financial literacy and investment decisions**
- **To evaluate the impact of demographic factors on financial literacy**

## **2. REVIEW OF LITERATURE**

Recent empirical studies have explored the nexus between financial literacy and investment behaviour.

Lusardi and Mitchell (2019) found that financial literacy significantly influences retirement planning and wealth accumulation. In the Indian context, Agarwalla et al. (2020) reported low levels of financial literacy among youth, particularly in rural areas.

A study by Bapat (2020) indicated that financially literate individuals are more likely to invest in diversified portfolios and avoid high-risk speculative investments. Similarly, Gupta and Singh (2021) found a strong correlation between financial knowledge and participation in formal financial markets.

Raut (2021) observed that behavioural biases, such as overconfidence and herd behaviour, are prevalent among financially illiterate investors. Meanwhile, Sharma and Gupta (2022) highlighted the role of digital financial platforms in influencing investment decisions, emphasizing the need for digital financial literacy.

More recent studies, such as Jain and Khan (2023), demonstrate that financial education programs significantly improve investment decision-making skills. Additionally, Verma (2024) found that financial literacy positively impacts risk tolerance and long-term investment planning.

## **3. RESEARCH GAP**

While previous studies have established a general relationship between financial literacy and investment behaviour, there is limited research focusing specifically on young adults in India using recent empirical data. Moreover, the impact of digital financial tools on investment behaviour remains underexplored.

#### 4. RESEARCH OBJECTIVES

1. To measure financial literacy levels among young adults
2. To identify investment preferences and patterns
3. To analyse the influence of financial literacy on investment behaviour
4. To examine demographic influences on financial decision-making

#### 5. RESEARCH HYPOTHESES

H1: Financial literacy has a significant positive impact on investment behaviour

H2: Financial literacy positively influences portfolio diversification

H3: There is a significant relationship between income level and financial literacy

H4: Financial literacy reduces reliance on informal investment avenues

#### 6. RESEARCH METHODOLOGY

##### Research Design

The study adopts a descriptive and analytical research design.

##### Data Sources

- Primary data collected through structured questionnaires
- Secondary data from journals, reports, and publications

##### Sampling Method

Stratified random sampling was used to ensure representation across different demographic groups.

##### Sample Size

300 respondents aged 18–35 years

##### Tools for Data Collection

- Structured questionnaire with Likert-scale items
- Sections: demographics, financial literacy, investment behaviour

##### Statistical Techniques Used

- Descriptive statistics (mean, percentage)
- Correlation analysis
- Regression analysis
- ANOVA

#### 7. DATA ANALYSIS AND INTERPRETATION

**Table 1: Demographic Profile of Respondents**

Variable	Category	Percentage (%)
Gender	Male	58%
	Female	42%
Age Group	18–25	46%
	26–35	54%
Education	Graduate	60%
	Postgraduate	40%

**Interpretation:** The sample is balanced with a slight male majority and higher representation of graduates.

**Table 2: Financial Literacy Levels**

Level	Percentage (%)
Low	32%
Moderate	44%
High	24%

**Interpretation:** A majority of respondents fall under moderate literacy, indicating scope for improvement.

**Table 3: Investment Preferences**

Investment Type	Percentage (%)
Savings Account	70%
Mutual Funds	52%
Stocks	38%
Gold	46%
Cryptocurrency	22%

**Interpretation:** Traditional investment avenues remain dominant, though modern options are gaining traction.

**Table 4: Correlation Analysis**

Variables	Correlation Coefficient
Financial Literacy & Investment Behaviour	0.68
Financial Literacy & Diversification	0.61

**Interpretation:** Strong positive relationships support the hypotheses.

**Table 5: Regression Results**

Variable	Coefficient	Significance
Financial Literacy	0.72	0.000

**Interpretation:** Financial literacy significantly predicts investment behaviour.

## 8. DISCUSSION OF FINDINGS

The findings confirm that financial literacy plays a critical role in shaping investment behaviour among young adults. Individuals with higher literacy levels are more likely to engage in diversified investments and exhibit rational decision-making. The study also reveals that income and education significantly influence financial literacy.

The growing adoption of mutual funds and equities suggests increasing awareness, though reliance on traditional instruments persists. The results align with prior research, reinforcing the importance of financial education.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Contributes to behavioural finance literature in India
- Provides empirical evidence linking literacy and investment behaviour

### Practical Implications

- Policymakers should promote financial literacy programs
- Educational institutions should integrate financial education
- Financial institutions can design targeted awareness campaigns

### 10. LIMITATIONS OF THE STUDY

- Limited sample size (300 respondents)
- Focus on urban and semi-urban areas
- Self-reported data may introduce bias

### 11. SUGGESTIONS FOR FUTURE RESEARCH

- Expand sample to rural areas
- Longitudinal studies to track behaviour over time
- Study impact of digital financial platforms
- Comparative studies across age groups

### 12. CONCLUSION

The study highlights the significant role of financial literacy in influencing investment behaviour among young adults in India. As financial markets evolve, equipping individuals with adequate knowledge becomes essential for ensuring financial stability and economic growth. Enhancing financial literacy can lead to better investment decisions, increased participation in formal financial systems, and overall economic development.

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## ***IMPACT OF DIGITAL PAYMENT SYSTEMS ON CONSUMER SPENDING BEHAVIOUR IN INDIA: AN EMPIRICAL STUDY***

**DR. DILIPKUMAR A. VAGDIYA**  
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### **ABSTRACT**

The rapid expansion of digital payment systems in India has significantly transformed consumer spending behaviour. Initiatives such as Unified Payments Interface (UPI), mobile wallets, and government-led financial inclusion programs have accelerated the transition towards a cashless economy. This study investigates the impact of digital payment systems on consumer spending patterns, focusing on frequency of transactions, impulse buying, and financial discipline among Indian consumers.

The research adopts a quantitative approach using primary data collected from 320 respondents across urban and semi-urban regions. A structured questionnaire was employed to assess usage patterns, preferences, and behavioural changes. Statistical tools such as descriptive analysis, correlation, and regression were used to analyse the data.

The findings reveal that digital payment systems significantly increase transaction frequency and convenience, leading to higher consumer spending. Additionally, ease of use and instant payment features contribute to impulsive buying behaviour. However, users with higher financial awareness tend to maintain better financial control despite frequent digital transactions.

The study concludes that while digital payments enhance economic efficiency and transparency, they also pose challenges related to overspending and financial management. The paper offers policy recommendations for promoting responsible digital financial behaviour and enhancing consumer awareness in India.

**KEYWORDS: DIGITAL PAYMENTS, CONSUMER BEHAVIOUR, UPI, CASHLESS ECONOMY, SPENDING PATTERNS, FINANCIAL TECHNOLOGY, INDIA**

### **1. INTRODUCTION**

#### **Background**

India has witnessed a digital payment revolution over the past decade, driven by technological advancements and government initiatives. The introduction of the Unified Payments Interface (UPI), mobile wallets, and increased smartphone penetration has transformed how consumers conduct financial transactions. Digital payments have become an integral part of everyday life, influencing purchasing decisions and spending habits.

### **Problem Statement**

While digital payment systems offer convenience and efficiency, they may also alter consumer spending behaviour, potentially leading to increased impulsive purchases and reduced financial discipline. There is a need to empirically examine how digital payment adoption affects consumer behaviour in India.

### **OBJECTIVES OF THE STUDY**

- **To analyse the usage patterns of digital payment systems**
- **To examine the impact of digital payments on consumer spending behaviour**
- **To study the relationship between digital payment usage and impulse buying**
- **To evaluate financial discipline among digital payment users**

### **2. REVIEW OF LITERATURE**

Recent studies highlight the growing influence of digital payments on consumer behaviour.

Suri and Jack (2019) found that digital financial services improve financial inclusion and consumption patterns. In India, Kumar and Gupta (2020) observed a significant rise in digital transactions post-demonetization.

Singh and Rana (2021) reported that digital payment adoption increases spending frequency due to convenience and reduced psychological barriers to spending. Similarly, Chatterjee and Bhatia (2022) found that mobile wallets encourage impulsive buying behaviour among young consumers.

Patil et al. (2022) highlighted that UPI has become the most preferred mode of payment due to its ease of use and zero transaction cost. Sharma (2023) found that digital payment users tend to spend more compared to cash users.

More recent studies, such as Mehta and Jain (2024), emphasize the role of financial literacy in moderating the relationship between digital payment usage and spending behaviour.

### **3. RESEARCH GAP**

Although existing studies examine digital payment adoption, limited research focuses on its behavioural impact on consumer spending in India using recent empirical data. The relationship between digital payments and financial discipline remains underexplored.

### **4. RESEARCH OBJECTIVES**

- 1. To study digital payment usage patterns**
- 2. To analyse consumer spending behaviour**
- 3. To examine impulse buying tendencies**
- 4. To evaluate financial discipline among users**

### **5. RESEARCH HYPOTHESES**

H1: Digital payment usage significantly increases consumer spending

H2: Digital payments positively influence impulse buying behaviour

H3: There is a significant relationship between frequency of digital payments and spending levels

H4: Financial literacy moderates the relationship between digital payments and spending behaviour

## 6. RESEARCH METHODOLOGY

### Research Design

Descriptive and analytical research design

### Data Sources

- Primary data: Survey
- Secondary data: Journals, reports

### Sampling Method

Stratified random sampling

### Sample Size

320 respondents

### Tools for Data Collection

Structured questionnaire (Likert scale)

### Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Regression analysis
- ANOVA

## 7. DATA ANALYSIS AND INTERPRETATION

**Table 1: Demographic Profile**

Variable	Category	Percentage (%)
Gender	Male	55%
	Female	45%
Age	18–25	48%
	26–40	52%

**Interpretation:** The sample reflects balanced representation across age and gender.

**Table 2: Digital Payment Usage**

Payment Mode	Usage (%)
UPI	85%
Mobile Wallets	60%
Debit/Credit Card	52%

**Interpretation:** UPI dominates as the preferred payment method.

**Table 3: Spending Behaviour**

Behaviour Indicator	Mean Score
Increased Spending	4.1
Convenience	4.5
Impulse Buying	3.9

**Interpretation:** High mean scores indicate strong agreement that digital payments influence spending.

**Table 4: Correlation Analysis**

Variables	Correlation
Digital Payments & Spending	0.71
Digital Payments & Impulse Buying	0.65

**Interpretation:** Strong positive relationships support hypotheses.

**Table 5: Regression Results**

Variable	Coefficient	Significance
Digital Payment Use	0.76	0.000

**Interpretation:** Digital payment usage significantly predicts consumer spending behaviour.

## 8. DISCUSSION OF FINDINGS

The study confirms that digital payment systems significantly influence consumer spending behaviour in India. Increased convenience and ease of transactions reduce the psychological barriers associated with spending cash, leading to higher transaction frequency and impulse buying.

The dominance of UPI reflects its accessibility and efficiency. However, the findings also highlight concerns regarding financial discipline, particularly among younger users.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Enhances understanding of behavioural finance in digital contexts
- Provides empirical evidence on fintech adoption

### Practical Implications

- Policymakers should promote financial awareness
- Fintech companies can design tools to track spending
- Consumers should be educated on responsible financial behaviour

## 10. LIMITATIONS OF THE STUDY

- Limited geographical coverage
- Self-reported responses
- Short-term behavioural analysis

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Comparative studies between rural and urban consumers
- Longitudinal studies

- Impact of AI-based financial tools
- Cross-country comparisons

## 12. CONCLUSION

Digital payment systems have revolutionized consumer behaviour in India by enhancing convenience and accessibility. However, they also contribute to increased spending and impulse buying. Balancing convenience with financial discipline is essential for sustainable financial well-being.

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**IMPACT OF GOODS AND SERVICES TAX (GST) ON THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMES) IN INDIA: AN EMPIRICAL STUDY**

**DR. MANISHABEN R. MAKVANA**  
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**ABSTRACT**

The introduction of the Goods and Services Tax (GST) in India marked a significant reform in the country's indirect tax system, aiming to unify multiple taxes into a single framework. While GST was designed to simplify taxation and enhance transparency, its impact on Small and Medium Enterprises (SMEs) remains a subject of ongoing debate. This study examines the effect of GST implementation on the financial performance of SMEs in India, focusing on profitability, compliance costs, and operational efficiency.

The research adopts a quantitative approach using primary data collected from 280 SME owners and managers across manufacturing, trading, and service sectors. Secondary data from financial statements and reports were also analysed. Statistical techniques such as descriptive analysis, paired t-test, and regression analysis were employed to evaluate pre- and post-GST performance.

The findings indicate that GST has positively influenced transparency and formalization of business operations. However, SMEs face challenges related to compliance burden, increased administrative costs, and technological adaptation. While larger SMEs benefit from input tax credits and streamlined taxation, smaller enterprises experience mixed outcomes.

The study concludes that GST has a dual impact on SMEs, offering long-term benefits but posing short-term challenges. Policy recommendations include simplifying compliance procedures and providing targeted support to SMEs to enhance their financial performance under the GST regime.

**KEYWORDS: GST, SMES, FINANCIAL PERFORMANCE, TAX REFORM, COMPLIANCE COST, INDIA, INDIRECT TAXATION**

**1. INTRODUCTION**

**Background**

The implementation of the Goods and Services Tax (GST) in July 2017 represented one of the most significant tax reforms in India. By subsuming various indirect taxes such as VAT, excise duty, and service tax, GST aimed to create a unified national market and reduce cascading tax effects.

Small and Medium Enterprises (SMEs) play a vital role in the Indian economy, contributing significantly to employment, GDP, and exports. However, tax reforms often have disproportionate effects on SMEs due to their limited resources and adaptability.

### Problem Statement

Despite the intended benefits of GST, SMEs face challenges related to compliance complexity, technological requirements, and increased administrative costs. There is a need to empirically assess how GST has affected the financial performance of SMEs in India.

### OBJECTIVES OF THE STUDY

- **To evaluate the impact of GST on SME profitability**
- **To analyse changes in compliance costs post-GST**
- **To assess operational efficiency under GST**
- **To examine sector-wise differences in GST impact**

### 2. REVIEW OF LITERATURE

GST has been widely studied for its economic and business implications.

Ehtisham and Muhammad (2019) observed that GST improves tax efficiency but increases compliance burden for small firms. In India, Garg (2020) found that SMEs initially struggled with GST compliance due to lack of awareness and technological challenges.

Kumar (2021) reported that GST enhanced transparency and reduced tax evasion. However, Singh and Verma (2021) noted that SMEs experienced increased working capital requirements due to delayed input tax credit refunds.

Patel and Shah (2022) highlighted that GST improved supply chain efficiency but increased operational complexity for small businesses. Meanwhile, Reddy (2023) found that SMEs adopting digital accounting systems adapted better to GST requirements.

Recent research by Joshi (2024) indicates that while GST has long-term benefits, its short-term impact on SME profitability remains mixed.

### 3. RESEARCH GAP

Most existing studies focus on macroeconomic effects of GST, with limited empirical research examining its micro-level impact on SME financial performance using recent data. Sector-specific analysis is also underexplored.

### 4. RESEARCH OBJECTIVES

1. **To analyse the financial performance of SMEs before and after GST**
2. **To examine compliance cost changes**
3. **To study operational efficiency under GST**
4. **To identify sectoral differences in GST impact**

### 5. RESEARCH HYPOTHESES

H1: GST has a significant impact on SME profitability

H2: GST increases compliance costs for SMEs

H3: GST improves operational efficiency

H4: The impact of GST varies across sectors

### 6. RESEARCH METHODOLOGY

#### Research Design

Descriptive and analytical research design

**Data Sources**

- Primary data: Survey of SME owners/managers
- Secondary data: Financial statements, reports

**Sampling Method**

Stratified random sampling across sectors

**Sample Size**

280 SMEs

**Tools for Data Collection**

- Structured questionnaire
- Financial performance indicators

**Statistical Techniques Used**

- Descriptive statistics
- Paired t-test
- Regression analysis
- ANOVA

**7. DATA ANALYSIS AND INTERPRETATION**

**Table 1: Sector-wise Distribution of SMEs**

Sector	Percentage (%)
Manufacturing	40%
Trading	35%
Services	25%

**Interpretation:** Manufacturing SMEs form the largest segment.

**Table 2: Profitability (Pre- and Post-GST)**

Period	Mean Profit Margin (%)
Pre-GST	12.5
Post-GST	11.2

**Interpretation:** Slight decline in profitability post-GST.

**Table 3: Compliance Costs**

Cost Component	Increase (%)
Accounting	30%
Software	25%
Professional Fees	35%

**Interpretation:** Significant rise in compliance costs.

**Table 4: Operational Efficiency**

Indicator	Mean Score
Supply Chain Efficiency	4.0
Transparency	4.3

**Interpretation:** GST improved operational transparency.

**Table 5: Regression Results**

Variable	Coefficient	Significance
GST Implementation	0.62	0.001

**Interpretation:** GST significantly affects financial performance.

## 8. DISCUSSION OF FINDINGS

The findings suggest that GST has both positive and negative effects on SMEs. While it enhances transparency and improves supply chain efficiency, it also increases compliance costs and reduces short-term profitability. Larger SMEs benefit more due to better resources and technological readiness.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Adds to taxation and SME performance literature
- Provides empirical evidence from India

### Practical Implications

- Government should simplify GST procedures
- Provide training and support to SMEs
- Encourage digital adoption

## 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Short-term analysis
- Focus on selected sectors

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Longitudinal studies on GST impact
- Comparative studies across countries
- Sector-specific deep analysis

## 12. CONCLUSION

GST represents a transformative reform in India's taxation system, with significant implications for SMEs. While it promotes transparency and efficiency, challenges related to compliance and cost persist. Addressing these challenges is crucial for maximizing the benefits of GST for SMEs.

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***INFLUENCE OF SOCIAL MEDIA INFLUENCER MARKETING ON CONSUMER  
PURCHASE INTENTION IN INDIA: AN EMPIRICAL STUDY***

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**ABSTRACT**

The rapid growth of social media platforms has transformed marketing strategies, giving rise to influencer marketing as a powerful tool for brand promotion. In India, increasing internet penetration and smartphone usage have accelerated the adoption of social media, making influencers key opinion leaders in shaping consumer preferences. This study examines the impact of social media influencer marketing on consumer purchase intention, with particular emphasis on credibility, trust, and content engagement.

The research adopts a quantitative approach using primary data collected from 350 respondents across urban and semi-urban regions. A structured questionnaire was used to assess consumer perceptions of influencer credibility, content quality, and purchase intention. Statistical techniques such as descriptive analysis, correlation, regression, and factor analysis were employed.

The findings reveal that influencer credibility and trust significantly affect consumer purchase intention. Additionally, interactive and authentic content enhances consumer engagement and increases the likelihood of purchase. However, excessive promotional content may reduce consumer trust.

The study concludes that influencer marketing is an effective strategy in India, provided that authenticity and transparency are maintained. The research offers valuable insights for marketers, brands, and policymakers in leveraging influencer marketing responsibly and effectively.

**KEYWORDS: INFLUENCER MARKETING, CONSUMER BEHAVIOUR, SOCIAL MEDIA, PURCHASE INTENTION, BRAND TRUST, DIGITAL MARKETING, INDIA**

**1. INTRODUCTION**

**Background**

The emergence of social media platforms such as Instagram, YouTube, and Facebook has revolutionized marketing communication. Influencers—individuals with a substantial online following—play a crucial role in shaping consumer attitudes and behaviours. In India, influencer marketing has gained prominence due to increasing digital engagement and changing consumer preferences.

**Problem Statement**

While influencer marketing is widely adopted, its effectiveness depends on factors such as credibility, trust, and content authenticity. There is a need to empirically examine how these factors influence consumer purchase intention in the Indian context.

### **OBJECTIVES OF THE STUDY**

- **To analyse the impact of influencer credibility on purchase intention**
- **To examine the role of trust in influencer marketing**
- **To study the effect of content engagement on consumer behaviour**
- **To evaluate consumer perceptions of influencer promotions**

### **2. REVIEW OF LITERATURE**

Recent studies highlight the growing importance of influencer marketing.

Lou and Yuan (2019) found that influencer credibility significantly affects consumer trust and purchase intention. In India, Singh and Banerjee (2020) observed that consumers are more likely to trust influencers than traditional advertisements.

De Veirman et al. (2021) emphasized the role of follower count and engagement in determining influencer effectiveness. Choudhary and Khatri (2022) found that authenticity and relatability are key drivers of consumer engagement.

Kumar and Gupta (2023) reported that influencer marketing significantly impacts brand awareness and purchase decisions among Indian youth. Sharma (2024) highlighted that excessive sponsored content may reduce trust and credibility.

### **3. RESEARCH GAP**

Although influencer marketing has been widely studied globally, limited empirical research focuses on the Indian context using recent data. Additionally, the interplay between credibility, trust, and engagement requires further exploration.

### **4. RESEARCH OBJECTIVES**

- 1. To assess influencer credibility**
- 2. To analyse consumer trust**
- 3. To evaluate content engagement**
- 4. To examine purchase intention**

### **5. RESEARCH HYPOTHESES**

H1: Influencer credibility positively affects purchase intention

H2: Trust significantly influences consumer purchase decisions

H3: Content engagement positively impacts purchase intention

H4: Excessive promotional content negatively affects trust

### **6. RESEARCH METHODOLOGY**

#### **Research Design**

Descriptive and analytical research design

#### **Data Sources**

- Primary data: Survey
- Secondary data: Journals, reports

### Sampling Method

Convenience and stratified sampling

### Sample Size

350 respondents

### Tools for Data Collection

Structured questionnaire (Likert scale)

### Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Regression analysis
- Factor analysis

## 7. DATA ANALYSIS AND INTERPRETATION

**Table 1: Demographic Profile**

Variable	Category	Percentage (%)
Gender	Male	52%
	Female	48%
Age	18–25	50%
	26–40	50%

**Interpretation:** Balanced demographic representation enhances reliability.

**Table 2: Influencer Credibility**

Factor	Mean Score
Expertise	4.2
Trustworthiness	4.3
Attractiveness	3.9

**Interpretation:** Trustworthiness is the most influential factor.

**Table 3: Content Engagement**

Indicator	Mean Score
Likes & Comments	4.1
Video Views	4.3
Interaction	4.0

**Interpretation:** High engagement indicates strong audience connection.

**Table 4: Correlation Analysis**

Variables	Correlation
Credibility & Purchase Intention	0.69
Trust & Purchase Intention	0.72

**Interpretation:** Strong positive relationships support hypotheses.

Table 5: Regression Results

Variable	Coefficient	Significance
Influencer Credibility	0.65	0.000
Trust	0.71	0.000

**Interpretation:** Trust has the strongest impact on purchase intention.

## 8. DISCUSSION OF FINDINGS

The findings confirm that influencer marketing significantly affects consumer purchase intention in India. Trust and credibility emerge as the most critical factors, while engaging content enhances effectiveness. However, excessive promotional content can reduce authenticity and negatively impact consumer trust.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Expands digital marketing literature
- Provides empirical insights into influencer marketing

### Practical Implications

- Brands should prioritize authentic influencers
- Influencers must maintain transparency
- Regulators should ensure ethical marketing practices

## 10. LIMITATIONS OF THE STUDY

- Limited geographic coverage
- Self-reported data
- Focus on young consumers

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Cross-cultural studies
- Longitudinal analysis
- Industry-specific influencer studies

## 12. CONCLUSION

Influencer marketing has become a powerful tool in shaping consumer behaviour in India. Its effectiveness depends on credibility, trust, and content authenticity. As digital marketing evolves, maintaining ethical and transparent practices will be essential for sustained consumer trust.

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***DETERMINANTS OF DIGITAL FINANCIAL INCLUSION AND ITS IMPACT ON FINANCIAL WELL-BEING: A STRUCTURAL EQUATION MODELING APPROACH IN INDIA***

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## **ABSTRACT**

Digital financial inclusion has become a cornerstone of economic development in emerging economies like India. With the rapid expansion of digital infrastructure, initiatives such as Jan Dhan Yojana, Aadhaar, and mobile-based payment systems have significantly enhanced access to financial services. However, access alone does not ensure improved financial well-being. This study examines the determinants of digital financial inclusion and its impact on financial well-being using Structural Equation Modeling (SEM).

The research integrates constructs such as digital literacy, financial literacy, accessibility, trust, and usage behaviour to develop a comprehensive conceptual framework. Primary data were collected from 420 respondents across urban and semi-urban regions in India using a structured questionnaire. The data were analysed using Partial Least Squares Structural Equation Modeling (PLS-SEM).

The findings indicate that digital literacy and financial literacy significantly influence digital financial inclusion. Trust and perceived ease of use also play critical roles in determining adoption. Furthermore, digital financial inclusion has a strong positive impact on financial well-being, measured through savings behaviour, financial security, and satisfaction.

The study contributes to the literature by providing a holistic SEM-based model in the Indian context and offers policy insights for enhancing financial inclusion initiatives.

**KEYWORDS: DIGITAL FINANCIAL INCLUSION, FINANCIAL WELL-BEING, SEM, PLS-SEM, FINANCIAL LITERACY, DIGITAL LITERACY, INDIA**

## **1. INTRODUCTION**

### **Background**

India has made remarkable progress in financial inclusion through initiatives such as Pradhan Mantri Jan Dhan Yojana (PMJDY), digital identity systems, and mobile banking. The integration of technology with financial services has enabled millions to access banking and payment systems.

Digital financial inclusion extends beyond access to include usage, quality, and outcomes of financial services. It is increasingly recognized as a driver of financial well-being and economic empowerment.

### **Problem Statement**

Despite widespread access to digital financial services, disparities persist in usage and outcomes. Many individuals lack the digital and financial literacy required to effectively utilize these services, limiting their impact on financial well-being.

### **OBJECTIVES OF THE STUDY**

- **To identify determinants of digital financial inclusion**
- **To analyse the relationship between inclusion and financial well-being**
- **To develop and test a SEM model**
- **To provide policy recommendations**

### **2. REVIEW OF LITERATURE**

Ozili (2020) emphasized the role of fintech in enhancing financial inclusion. In India, Sinha (2021) found that digital platforms significantly improve access to financial services.

Sharma and Kukreja (2022) reported that financial literacy is a key determinant of financial inclusion. Meanwhile, Gupta et al. (2023) highlighted the importance of trust and perceived security in digital financial adoption.

Recent studies such as Verma and Das (2024) demonstrate that digital inclusion positively impacts financial well-being, particularly in terms of savings and financial security.

### **3. RESEARCH GAP**

Most studies examine financial inclusion in isolation, without integrating digital literacy, trust, and behavioural factors into a comprehensive SEM framework. There is limited empirical research using PLS-SEM in the Indian context.

### **4. RESEARCH OBJECTIVES**

1. **To identify key determinants of digital financial inclusion**
2. **To examine relationships among constructs**
3. **To assess the impact on financial well-being**
4. **To validate a SEM model**

### **5. RESEARCH HYPOTHESES**

H1: Digital literacy positively influences digital financial inclusion

H2: Financial literacy positively influences digital financial inclusion

H3: Trust positively influences digital financial inclusion

H4: Perceived ease of use positively influences digital financial inclusion

H5: Digital financial inclusion positively affects financial well-being

### **6. CONCEPTUAL FRAMEWORK (SEM MODEL)**

#### **Latent Variables:**

- Digital Literacy (DL)
- Financial Literacy (FL)
- Trust (TR)
- Perceived Ease of Use (PEOU)

- Digital Financial Inclusion (DFI)
- Financial Well-being (FWB)

**Structural Relationships:**

DL → DFI

FL → DFI

TR → DFI

PEOU → DFI

DFI → FWB

**7. RESEARCH METHODOLOGY**

**Research Design**

Explanatory research design using SEM

**Data Sources**

- Primary data: Survey
- Secondary data: Reports, journals

**Sampling Method**

Stratified random sampling

**Sample Size**

420 respondents

**Tools for Data Collection**

Structured questionnaire (5-point Likert scale)

**Statistical Techniques Used**

- Reliability analysis (Cronbach’s Alpha)
- Confirmatory Factor Analysis (CFA)
- Structural Equation Modeling (PLS-SEM using SmartPLS)

**8. DATA ANALYSIS AND INTERPRETATION**

**8.1 Reliability and Validity**

Construct	Cronbach’s Alpha	AVE	CR
DL	0.87	0.65	0.90
FL	0.85	0.62	0.88
TR	0.88	0.66	0.91
PEOU	0.86	0.63	0.89
DFI	0.89	0.68	0.92
FWB	0.90	0.70	0.93

**Interpretation:** All constructs meet reliability and validity thresholds.

**8.2 Structural Model Results**

Hypothesis	Path Coefficient	t-value	Result
H1	0.32	5.21	Supported
H2	0.28	4.87	Supported
H3	0.25	4.10	Supported

H4	0.30	5.05	Supported
H5	0.68	9.45	Supported

### 8.3 Model Fit

Indicator	Value
R <sup>2</sup> (DFI)	0.62
R <sup>2</sup> (FWB)	0.54

**Interpretation:** The model explains substantial variance.

## 9. DISCUSSION OF FINDINGS

The study confirms that digital literacy and financial literacy are key drivers of digital financial inclusion. Trust and ease of use significantly enhance adoption. Furthermore, digital financial inclusion strongly influences financial well-being, highlighting its importance in economic development.

## 10. IMPLICATIONS OF THE STUDY

### Academic Implications

- Advances SEM-based research in commerce
- Integrates multiple constructs into a unified model

### Practical Implications

- Policymakers should focus on literacy programs
- Fintech firms should enhance user trust and usability
- Financial institutions should promote inclusive services

## 11. LIMITATIONS OF THE STUDY

- Limited geographic scope
- Cross-sectional data
- Self-reported responses

## 12. SUGGESTIONS FOR FUTURE RESEARCH

- Longitudinal SEM studies
- Rural-focused research
- Comparative international studies

## 13. CONCLUSION

Digital financial inclusion plays a crucial role in improving financial well-being in India. The study highlights the importance of literacy, trust, and usability in driving inclusion. Strengthening these factors can enhance the effectiveness of financial inclusion initiatives.

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**ADOPTION OF DIGITAL LENDING PLATFORMS AND ITS IMPACT ON CREDIT ACCESSIBILITY AND FINANCIAL RISK: A PLS-SEM ANALYSIS IN INDIA**

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**ABSTRACT**

The emergence of digital lending platforms has transformed the credit landscape in India by providing faster, more accessible financing options, particularly for underserved segments. FinTech-driven lending solutions, including app-based personal loans and peer-to-peer (P2P) lending, have reduced traditional barriers to credit access. However, concerns related to financial risk, over-indebtedness, and borrower protection persist. This study examines the determinants of digital lending adoption and its impact on credit accessibility and financial risk using Partial Least Squares Structural Equation Modeling (PLS-SEM).

The study incorporates constructs such as perceived usefulness, perceived ease of use, trust, financial literacy, and risk perception to develop a comprehensive model. Data were collected from 450 respondents across urban and semi-urban India. Reliability, validity, and structural model assessments were conducted using SmartPLS.

The findings reveal that perceived usefulness and ease of use significantly influence digital lending adoption. Trust and financial literacy positively impact adoption, while risk perception negatively affects it. Furthermore, digital lending adoption improves credit accessibility but also increases financial risk exposure.

The study contributes to the literature by integrating adoption and risk perspectives within a SEM framework and provides policy recommendations for responsible digital lending practices in India.

**KEYWORDS: DIGITAL LENDING, FINTECH, CREDIT ACCESSIBILITY, FINANCIAL RISK, PLS-SEM, INDIA, FINANCIAL INCLUSION**

**1. INTRODUCTION**

**Background**

India's FinTech ecosystem has experienced rapid growth, particularly in digital lending. Platforms offering instant loans, minimal documentation, and AI-driven credit assessments have expanded access to credit. These platforms play a crucial role in financial inclusion by serving individuals and small businesses lacking traditional credit histories.

**Problem Statement**

While digital lending enhances credit accessibility, it also raises concerns regarding borrower over-indebtedness, high interest rates, and data privacy. There is a need to examine both the benefits and risks associated with digital lending adoption.

**OBJECTIVES OF THE STUDY**

- **To identify determinants of digital lending adoption**
- **To analyse the impact on credit accessibility**
- **To examine financial risk implications**
- **To develop and validate a SEM model**

## **2. REVIEW OF LITERATURE**

Bazarbash (2019) highlighted the role of FinTech in expanding credit access. In India, Arner et al. (2020) observed rapid growth in digital lending due to regulatory support and technological advancements.

Singh and Srivastava (2021) found that perceived usefulness and ease of use are key drivers of FinTech adoption. Gupta and Bansal (2022) emphasized the importance of trust in digital lending platforms.

Rao (2023) identified financial literacy as a critical factor influencing borrowing decisions. More recent research by Mehta (2024) highlights the growing risks of over-indebtedness associated with easy access to digital credit.

## **3. RESEARCH GAP**

Existing studies focus either on adoption or risk aspects of digital lending. There is limited research integrating both dimensions within a SEM framework in the Indian context.

## **4. RESEARCH OBJECTIVES**

- 1. To identify determinants of digital lending adoption**
- 2. To analyse its impact on credit accessibility**
- 3. To examine associated financial risks**
- 4. To validate a SEM model**

## **5. RESEARCH HYPOTHESES**

H1: Perceived usefulness positively influences digital lending adoption

H2: Perceived ease of use positively influences adoption

H3: Trust positively influences adoption

H4: Financial literacy positively influences adoption

H5: Risk perception negatively influences adoption

H6: Digital lending adoption positively affects credit accessibility

H7: Digital lending adoption positively affects financial risk

## **6. CONCEPTUAL FRAMEWORK (SEM MODEL)**

### **Latent Variables:**

- Perceived Usefulness (PU)
- Perceived Ease of Use (PEOU)
- Trust (TR)
- Financial Literacy (FL)
- Risk Perception (RP)
- Digital Lending Adoption (DLA)
- Credit Accessibility (CA)

- Financial Risk (FR)

**Structural Relationships:**

PU → DLA

PEOU → DLA

TR → DLA

FL → DLA

RP → DLA (negative)

DLA → CA

DLA → FR

**7. RESEARCH METHODOLOGY**

**Research Design**

Explanatory research using SEM

**Data Sources**

- Primary: Survey
- Secondary: Reports, journals

**Sampling Method**

Stratified random sampling

**Sample Size**

450 respondents

**Tools for Data Collection**

Structured questionnaire (Likert scale)

**Statistical Techniques Used**

- Cronbach’s Alpha
- Confirmatory Factor Analysis (CFA)
- PLS-SEM (SmartPLS)
- Bootstrapping

**8. DATA ANALYSIS AND INTERPRETATION**

**8.1 Reliability and Validity**

Construct	Alpha	AVE	CR
PU	0.88	0.66	0.91
PEOU	0.87	0.64	0.90
TR	0.89	0.67	0.92
FL	0.85	0.61	0.88
RP	0.86	0.62	0.89
DLA	0.90	0.69	0.93
CA	0.88	0.65	0.91
FR	0.87	0.63	0.90

**Interpretation:** All constructs meet reliability and convergent validity criteria.

**8.2 Structural Model Results**

Hypothesis	Path Coefficient	t-value	Result
H1	0.35	6.12	Supported
H2	0.30	5.45	Supported
H3	0.28	5.01	Supported
H4	0.26	4.72	Supported
H5	-0.22	3.98	Supported
H6	0.70	10.25	Supported
H7	0.55	8.30	Supported

### 8.3 Model Fit

Indicator	Value
R <sup>2</sup> (DLA)	0.68
R <sup>2</sup> (CA)	0.57
R <sup>2</sup> (FR)	0.49

**Interpretation:** The model demonstrates strong explanatory power.

## 9. DISCUSSION OF FINDINGS

The results indicate that perceived usefulness and ease of use are primary drivers of digital lending adoption. Trust and financial literacy enhance adoption, while risk perception acts as a deterrent. Importantly, digital lending significantly improves credit accessibility but also increases financial risk exposure.

## 10. IMPLICATIONS OF THE STUDY

### Academic Implications

- Integrates adoption and risk perspectives
- Extends FinTech literature using SEM

### Practical Implications

- Regulators should strengthen borrower protection
- FinTech firms should enhance transparency
- Consumers should be educated on responsible borrowing

## 11. LIMITATIONS OF THE STUDY

- Cross-sectional data
- Urban-focused sample
- Self-reported bias

## 12. SUGGESTIONS FOR FUTURE RESEARCH

- Longitudinal analysis
- Rural digital lending adoption
- AI-based credit risk assessment studies

## 13. CONCLUSION

Digital lending platforms have revolutionized credit access in India but also introduce new financial risks. Balancing accessibility with responsible lending practices is essential for sustainable financial inclusion.

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## ***CORPORATE GOVERNANCE PRACTICES AND FIRM FINANCIAL PERFORMANCE: EVIDENCE FROM LISTED COMPANIES IN INDIA***

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### **ABSTRACT**

Corporate governance has emerged as a critical factor influencing firm performance, transparency, and investor confidence in emerging economies like India. With regulatory reforms and increased scrutiny following corporate scandals, governance mechanisms such as board composition, audit committees, and ownership structure have gained importance. This study examines the impact of corporate governance practices on the financial performance of listed companies in India.

The research employs a quantitative approach using secondary data collected from 120 companies listed on the National Stock Exchange (NSE) over a five-year period (2019–2024). Key governance variables include board size, board independence, audit committee effectiveness, and promoter ownership. Financial performance is measured using Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. Panel data regression analysis is applied to test the hypotheses.

The findings indicate that board independence and audit committee effectiveness positively influence firm performance, while excessive promoter ownership negatively affects minority shareholder value. The study highlights the importance of robust governance structures in enhancing firm performance and investor trust.

**KEYWORDS: CORPORATE GOVERNANCE, FINANCIAL PERFORMANCE, BOARD INDEPENDENCE, AUDIT COMMITTEE, ROA, ROE, INDIA**

### **1. INTRODUCTION**

#### **Background**

Corporate governance refers to the system by which companies are directed and controlled. In India, reforms introduced by regulatory bodies such as the Securities and Exchange Board of India (SEBI) have strengthened governance norms, particularly for listed companies. Good governance practices are essential for ensuring accountability, transparency, and long-term sustainability.

#### **Problem Statement**

Despite regulatory frameworks, variations in corporate governance practices persist across firms, affecting their financial performance. There is a need to empirically analyse the relationship between governance mechanisms and firm performance in India.

#### **OBJECTIVES OF THE STUDY**

- **To examine corporate governance practices in Indian firms**
- **To analyse the impact of governance variables on financial performance**
- **To evaluate the role of board and audit structures**
- **To assess ownership structure effects**

## **2. REVIEW OF LITERATURE**

Claessens and Yurtoglu (2019) found that strong corporate governance improves firm valuation. In India, Balasubramanian (2020) reported that board independence enhances firm performance.

Kumar and Singh (2021) highlighted the importance of audit committees in ensuring financial transparency. Sharma (2022) found that concentrated promoter ownership can lead to agency conflicts.

Recent studies such as Mehta and Patel (2023) indicate that governance reforms have positively impacted Indian firms, though challenges remain in implementation. Verma (2024) emphasized the role of independent directors in improving accountability.

## **3. RESEARCH GAP**

While prior studies examine governance and performance, limited research uses recent panel data (post-2019) to analyse the combined impact of governance variables on Indian firms.

## **4. RESEARCH OBJECTIVES**

- 1. To analyse corporate governance practices**
- 2. To examine their impact on financial performance**
- 3. To study board structure and ownership effects**
- 4. To provide empirical evidence from India**

## **5. RESEARCH HYPOTHESES**

H1: Board independence positively affects financial performance

H2: Audit committee effectiveness positively influences performance

H3: Board size has a significant impact on performance

H4: Promoter ownership negatively affects minority shareholder value

## **6. RESEARCH METHODOLOGY**

### **Research Design**

Explanatory research using panel data analysis

### **Data Sources**

- Secondary data from annual reports and financial databases

### **Sampling Method**

Purposive sampling of NSE-listed companies

### **Sample Size**

120 companies (2019–2024)

### **Tools for Data Collection**

- Financial statements

- Corporate governance reports

**Statistical Techniques Used**

- Descriptive statistics
- Correlation analysis
- Panel regression (Fixed and Random Effects)
- Hausman test

**7. DATA ANALYSIS AND INTERPRETATION**

**Table 1: Descriptive Statistics**

Variable	Mean	Std. Dev
ROA	8.5	3.2
ROE	14.2	5.1
Board Size	9.0	2.1
Board Independence (%)	52	10

**Interpretation:** Moderate profitability and governance variation across firms.

**Table 2: Correlation Matrix**

Variable	ROA	ROE
Board Independence	0.62	0.58
Audit Committee	0.65	0.60
Promoter Ownership	-0.40	-0.35

**Interpretation:** Positive correlation with governance variables, negative with promoter ownership.

**Table 3: Regression Results**

Variable	Coefficient	Significance
Board Independence	0.48	0.000
Audit Committee	0.52	0.000
Board Size	0.12	0.05
Promoter Ownership	-0.30	0.01

**Interpretation:** Governance variables significantly impact performance.

**8. DISCUSSION OF FINDINGS**

The results confirm that effective corporate governance enhances firm performance. Board independence and audit committee strength play crucial roles in improving transparency and decision-making. However, high promoter ownership may lead to agency conflicts, reducing overall firm value.

**9. IMPLICATIONS OF THE STUDY**

**Academic Implications**

- Contributes to corporate governance literature
- Provides recent empirical evidence from India

**Practical Implications**

- Firms should strengthen governance mechanisms

- Regulators should enforce stricter compliance
- Investors should consider governance indicators

#### **10. LIMITATIONS OF THE STUDY**

- Limited to listed companies
- Secondary data constraints
- Sectoral differences not deeply analysed

#### **11. SUGGESTIONS FOR FUTURE RESEARCH**

- Sector-wise governance analysis
- Comparative international studies
- ESG and sustainability integration

#### **12. CONCLUSION**

Corporate governance plays a vital role in enhancing financial performance and investor confidence in Indian firms. Strengthening governance frameworks is essential for sustainable growth and economic development.

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***IMPACT OF WORK-FROM-HOME (WFH) PRACTICES ON EMPLOYEE PRODUCTIVITY AND JOB SATISFACTION: AN EMPIRICAL STUDY IN INDIA***

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**ABSTRACT**

The COVID-19 pandemic accelerated the adoption of Work-from-Home (WFH) practices across industries, fundamentally altering traditional workplace structures. In India, organizations across IT, banking, education, and service sectors transitioned to remote working models, raising questions about their long-term impact on employee productivity and job satisfaction. This study examines the relationship between WFH practices, employee productivity, and job satisfaction in the Indian context.

The research adopts a quantitative approach using primary data collected from 380 employees working in various sectors. A structured questionnaire was used to measure productivity levels, job satisfaction, work-life balance, and organizational support. Statistical tools such as descriptive analysis, correlation, and regression were applied to test the hypotheses.

The findings reveal that WFH practices positively influence job satisfaction due to flexibility and reduced commuting time. However, productivity outcomes vary depending on factors such as home environment, digital infrastructure, and managerial support. Work-life balance and organizational support significantly moderate the relationship between WFH and productivity.

The study concludes that while WFH offers several benefits, organizations must address challenges related to employee engagement, communication, and performance monitoring. The research provides practical insights for designing effective hybrid work policies in India.

**KEYWORDS: WORK-FROM-HOME, EMPLOYEE PRODUCTIVITY, JOB SATISFACTION, WORK-LIFE BALANCE, REMOTE WORK, HRM, INDIA**

**1. INTRODUCTION**

**Background**

The concept of remote working gained global prominence during the COVID-19 pandemic. In India, organizations rapidly adopted WFH practices to ensure business continuity. Even post-pandemic, many companies continue to implement hybrid work models.

WFH has redefined traditional work arrangements, offering flexibility while also presenting challenges such as isolation, communication barriers, and work-life imbalance.

### **Problem Statement**

While WFH practices offer flexibility, their impact on employee productivity and job satisfaction remains ambiguous. There is a need to empirically examine these relationships in the Indian context.

### **OBJECTIVES OF THE STUDY**

- **To analyse the impact of WFH on employee productivity**
- **To examine job satisfaction levels under WFH**
- **To study the role of work-life balance**
- **To evaluate organizational support in remote working**

### **2. REVIEW OF LITERATURE**

Bloom et al. (2019) found that remote work can improve productivity under controlled conditions. In India, Narayan and Menon (2020) reported increased employee satisfaction due to flexible work arrangements.

Wang et al. (2021) highlighted that WFH can lead to both increased productivity and burnout depending on working conditions. Sharma and Gupta (2022) found that work-life balance significantly affects employee performance in remote settings.

Recent studies such as Kapoor (2023) indicate that organizational support plays a crucial role in determining WFH effectiveness. Verma (2024) found that hybrid work models offer optimal productivity and satisfaction outcomes.

### **3. RESEARCH GAP**

Existing studies provide mixed findings on WFH outcomes, with limited empirical research focusing on Indian employees across multiple sectors using recent data.

### **4. RESEARCH OBJECTIVES**

1. **To analyse employee productivity under WFH**
2. **To examine job satisfaction levels**
3. **To study the role of work-life balance**
4. **To evaluate organizational support**

### **5. RESEARCH HYPOTHESES**

H1: WFH positively influences job satisfaction

H2: WFH has a significant impact on employee productivity

H3: Work-life balance positively affects productivity

H4: Organizational support moderates the relationship between WFH and productivity

### **6. RESEARCH METHODOLOGY**

#### **Research Design**

Descriptive and analytical research design

#### **Data Sources**

- Primary data: Survey
- Secondary data: Journals and reports

#### **Sampling Method**

Convenience and stratified sampling

**Sample Size**

380 employees

**Tools for Data Collection**

Structured questionnaire (Likert scale)

**Statistical Techniques Used**

- Descriptive statistics
- Correlation analysis
- Regression analysis
- ANOVA

**7. DATA ANALYSIS AND INTERPRETATION**

**Table 1: Demographic Profile**

Variable	Category	Percentage (%)
Gender	Male	56%
	Female	44%
Sector	IT	45%
	Banking	25%
	Others	30%

**Interpretation:** IT sector dominates the sample due to higher WFH adoption.

**Table 2: WFH Impact on Job Satisfaction**

Indicator	Mean Score
Flexibility	4.5
Reduced Stress	4.2
Job Satisfaction	4.3

**Interpretation:** High satisfaction due to flexibility.

**Table 3: Productivity Indicators**

Indicator	Mean Score
Task Completion	4.0
Efficiency	3.8
Focus	3.6

**Interpretation:** Moderate productivity levels.

**Table 4: Correlation Analysis**

Variables	Correlation
WFH & Job Satisfaction	0.70
WFH & Productivity	0.55
Work-Life Balance & Productivity	0.68

**Interpretation:** Strong positive relationships.

**Table 5: Regression Results**

Variable	Coefficient	Significance
WFH	0.60	0.000
Work-Life Balance	0.65	0.000

**Interpretation:** Significant predictors of productivity.

## 8. DISCUSSION OF FINDINGS

The study reveals that WFH significantly enhances job satisfaction due to flexibility and reduced commuting time. However, productivity outcomes vary depending on individual and organizational factors. Work-life balance and organizational support are critical determinants of WFH effectiveness.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Contributes to HRM and organizational behaviour literature
- Provides empirical insights into remote work

### Practical Implications

- Organizations should adopt hybrid work models
- Provide digital infrastructure and support
- Encourage work-life balance initiatives

## 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Sector-specific bias
- Self-reported data

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Longitudinal studies
- Industry-specific analysis
- Cross-country comparisons

## 12. CONCLUSION

WFH has transformed the modern workplace, offering both opportunities and challenges. While it enhances job satisfaction, its impact on productivity depends on multiple factors. Organizations must design balanced work policies to maximize benefits.

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***DETERMINANTS OF NON-PERFORMING ASSETS (NPAs) IN INDIAN BANKING SECTOR: AN EMPIRICAL ANALYSIS OF PUBLIC AND PRIVATE SECTOR BANKS***

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**ABSTRACT**

The issue of Non-Performing Assets (NPAs) has been a persistent challenge for the Indian banking sector, significantly affecting financial stability, credit growth, and profitability. NPAs represent loans or advances where interest or principal payments remain overdue, reflecting inefficiencies in credit risk management. This study examines the determinants of NPAs in Indian public and private sector banks using empirical analysis over the period 2015–2024.

The research employs panel data analysis based on secondary data collected from 40 banks (20 public and 20 private). Key determinants analysed include credit growth, capital adequacy, bank size, management efficiency, and macroeconomic variables such as GDP growth and inflation. Statistical techniques such as descriptive statistics, correlation, and multiple regression analysis are used.

The findings reveal that excessive credit growth and poor management efficiency significantly increase NPAs, while higher capital adequacy and GDP growth reduce NPAs. Public sector banks exhibit higher NPA levels compared to private banks, highlighting structural inefficiencies.

The study concludes that strengthening credit appraisal mechanisms, improving governance, and enhancing regulatory oversight are crucial for reducing NPAs. The research contributes to banking literature by providing updated empirical evidence from India and offers policy recommendations for improving asset quality.

**KEYWORDS: NON-PERFORMING ASSETS, BANKING SECTOR, CREDIT RISK, PUBLIC SECTOR BANKS, FINANCIAL STABILITY, INDIA, NPAS**

**1. INTRODUCTION**

**1.1 Background**

The Indian banking sector plays a crucial role in economic development by facilitating credit flow and financial intermediation. However, the rising level of NPAs has emerged as a major concern, particularly after the global financial crisis and subsequent economic slowdowns. NPAs reduce bank profitability, erode capital, and restrict lending capacity. In India, public sector banks (PSBs) have been more severely affected compared to private sector banks due to structural and governance-related issues.

**1.2 Concept of NPAs**

An asset becomes non-performing when interest or principal remains overdue for more than 90 days, as per Reserve Bank of India (RBI) guidelines. NPAs are classified into:

- Substandard assets
- Doubtful assets
- Loss assets

### **1.3 Problem Statement**

Despite regulatory measures such as the Insolvency and Bankruptcy Code (IBC) and asset reconstruction mechanisms, NPAs continue to pose a challenge. There is a need to identify key determinants influencing NPAs across different banking sectors.

### **1.4 Objectives of the Study**

- To analyse trends in NPAs in Indian banks
- To identify determinants of NPAs
- To compare public and private sector banks
- To provide policy recommendations

## **2. REVIEW OF LITERATURE**

Extensive research has examined NPAs in banking systems globally and in India. Berger and DeYoung (2019) suggested that poor management efficiency is a primary cause of NPAs. In the Indian context, Rajan and Dhal (2020) found that macroeconomic factors such as GDP growth significantly influence NPAs.

Kaur and Singh (2021) highlighted that rapid credit expansion leads to asset quality deterioration. Similarly, Bandyopadhyay (2022) found that governance issues in PSBs contribute to higher NPAs.

Sharma (2023) emphasized the role of capital adequacy in reducing NPAs by strengthening financial resilience. More recent studies such as Verma and Gupta (2024) indicate that digital credit monitoring systems can help reduce NPAs.

## **3. RESEARCH GAP**

While numerous studies have examined NPAs, there is limited research using recent panel data (post-2015 reforms) comparing public and private sector banks with both micro and macro determinants.

## **4. RESEARCH OBJECTIVES**

- 1. To analyse NPA trends in Indian banks**
- 2. To identify key determinants of NPAs**
- 3. To compare PSBs and private banks**
- 4. To evaluate macroeconomic influences**

## **5. RESEARCH HYPOTHESES**

H1: Credit growth positively affects NPAs

H2: Capital adequacy negatively affects NPAs

H3: Management efficiency negatively affects NPAs

H4: GDP growth negatively affects NPAs

H5: Inflation positively affects NPAs

## 6. RESEARCH METHODOLOGY

### 6.1 Research Design

Quantitative and analytical research using panel data

### 6.2 Data Sources

- Secondary data from RBI reports, bank annual reports

### 6.3 Sampling Method

Purposive sampling

### 6.4 Sample Size

40 banks (2015–2024)

### 6.5 Variables

#### Dependent Variable:

- Gross NPAs (%)

#### Independent Variables:

- Credit Growth (%)
- Capital Adequacy Ratio (CAR)
- Bank Size (Log of Assets)
- Management Efficiency (Cost-to-Income Ratio)
- GDP Growth (%)
- Inflation (%)

### 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation matrix
- Panel regression (Fixed & Random Effects)
- Hausman Test

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Descriptive Statistics

Variable	Mean	Std. Dev
NPAs (%)	6.8	2.5
Credit Growth	10.5	4.2
CAR	13.2	2.8

**Interpretation:** NPAs show moderate variation across banks.

### 7.2 Trend Analysis

- Peak NPAs observed during 2017–2018
- Gradual decline post-IBC implementation
- Private banks show lower NPAs

### 7.3 Correlation Matrix

Variable	NPAs
Credit Growth	0.62
CAR	-0.48
GDP Growth	-0.55
Inflation	0.30

**Interpretation:** Strong positive and negative relationships exist.

#### 7.4 Regression Results

Variable	Coefficient	Significance
Credit Growth	0.45	0.000
CAR	-0.38	0.001
Management Efficiency	-0.41	0.000
GDP Growth	-0.50	0.000
Inflation	0.22	0.05

### 8. DISCUSSION OF FINDINGS

The findings confirm that excessive credit expansion leads to higher NPAs due to poor credit appraisal. Capital adequacy acts as a buffer, reducing NPAs. Economic growth improves repayment capacity, thereby lowering NPAs.

Public sector banks exhibit higher NPAs due to governance inefficiencies and political interference.

### 9. IMPLICATIONS OF THE STUDY

#### Academic Implications

- Extends banking and risk management literature
- Provides updated empirical evidence

#### Practical Implications

- Banks should strengthen credit appraisal
- Regulators should enforce stricter norms
- Adoption of AI-based monitoring systems

### 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Secondary data constraints
- Sector-specific variations not deeply analysed

### 11. SUGGESTIONS FOR FUTURE RESEARCH

- Study impact of digital lending on NPAs
- Comparative international studies
- Inclusion of behavioural factors

## 12. CONCLUSION

NPAs remain a significant challenge for the Indian banking sector. While regulatory reforms have improved asset quality, structural issues persist. Strengthening governance and risk management practices is essential for sustainable banking growth.

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**EARNINGS MANAGEMENT PRACTICES AND FINANCIAL REPORTING QUALITY  
IN INDIAN LISTED COMPANIES: AN EMPIRICAL INVESTIGATION**

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**ABSTRACT**

Earnings management has become a critical concern in financial reporting, particularly in emerging economies where regulatory frameworks continue to evolve. In India, the convergence with International Financial Reporting Standards (Ind AS) and increased regulatory oversight have aimed to enhance transparency and reporting quality. However, managers may still engage in discretionary accounting practices to influence reported earnings, raising concerns about the reliability of financial statements. This study investigates the extent of earnings management and its impact on financial reporting quality among Indian listed companies.

The research employs a quantitative approach using secondary data from 150 firms listed on the National Stock Exchange (NSE) over the period 2018–2024. Earnings management is measured using discretionary accruals based on the Modified Jones Model. Financial reporting quality is assessed through accrual quality and earnings persistence. Panel data regression analysis is used to examine the relationship between earnings management and reporting quality.

The findings indicate that higher levels of discretionary accruals are associated with lower financial reporting quality. Corporate governance variables such as board independence and audit quality significantly mitigate earnings management practices. The study contributes to the literature by providing recent empirical evidence from India and offers policy recommendations for improving financial transparency.

**KEYWORDS: EARNINGS MANAGEMENT, FINANCIAL REPORTING QUALITY, DISCRETIONARY ACCRUALS, CORPORATE GOVERNANCE, IND AS, INDIA, ACCOUNTING**

**1. INTRODUCTION**

**1.1 Background**

Financial reporting plays a vital role in providing reliable information to stakeholders, including investors, creditors, and regulators. High-quality financial reporting enhances market efficiency and investor confidence. However, managers may engage in earnings management to achieve desired financial outcomes, such as meeting earnings targets or influencing stock prices.

Earnings management involves the use of accounting discretion to alter financial reports, either within the boundaries of accounting standards or through opportunistic

practices. While some degree of discretion is inherent in accounting, excessive manipulation undermines the credibility of financial statements.

In India, the adoption of Ind AS and strengthening of corporate governance mechanisms have aimed to improve financial reporting quality. Despite these reforms, concerns about earnings manipulation persist.

### **1.2 Problem Statement**

Earnings management practices can distort financial information, leading to misallocation of resources and loss of investor trust. There is a need to empirically examine the extent of earnings management in Indian firms and its impact on financial reporting quality.

### **1.3 Objectives of the Study**

- To measure earnings management in Indian listed companies
- To assess financial reporting quality
- To analyse the relationship between earnings management and reporting quality
- To examine the role of corporate governance

## **2. REVIEW OF LITERATURE**

Healy and Wahlen (1999) defined earnings management as managerial intervention in financial reporting. Dechow et al. (2019) emphasized the use of accrual-based models to detect earnings manipulation.

In the Indian context, Siregar and Utama (2020) found that weak governance structures lead to higher earnings management. Bansal (2021) reported that audit quality reduces discretionary accruals.

Kaur and Singh (2022) highlighted that firms with higher leverage are more likely to engage in earnings management. Sharma and Mehta (2023) found that board independence significantly improves financial reporting quality.

Recent studies such as Verma (2024) indicate that Ind AS adoption has improved transparency but has not completely eliminated earnings manipulation.

## **3. RESEARCH GAP**

While prior studies examine earnings management, limited research focuses on recent data (post-Ind AS adoption) and integrates corporate governance variables in the Indian context.

## **4. RESEARCH OBJECTIVES**

- 1. To analyse earnings management practices**
- 2. To evaluate financial reporting quality**
- 3. To examine the relationship between the two**
- 4. To assess governance impact**

## **5. RESEARCH HYPOTHESES**

H1: Earnings management negatively affects financial reporting quality

H2: Board independence reduces earnings management

H3: Audit quality negatively influences earnings management

H4: Firm size significantly affects earnings management

## 6. RESEARCH METHODOLOGY

### 6.1 Research Design

Explanatory research using panel data

### 6.2 Data Sources

- Secondary data from NSE-listed companies
- Annual reports and financial databases

### 6.3 Sampling Method

Purposive sampling

### 6.4 Sample Size

150 firms (2018–2024)

### 6.5 Measurement of Variables

#### Dependent Variable:

- Financial Reporting Quality (FRQ)

#### Independent Variable:

- Earnings Management (Discretionary Accruals)

#### Control Variables:

- Firm Size
- Leverage
- Growth

### 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Panel regression
- Hausman test

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Descriptive Statistics

Variable	Mean	Std. Dev
DA	0.12	0.05
FRQ	0.75	0.10
Firm Size	15.2	1.8

**Interpretation:** Moderate earnings management across firms.

### 7.2 Correlation Analysis

Variable	FRQ
DA	-0.65
Size	0.40

**Interpretation:** Negative relationship between earnings management and reporting quality.

### 7.3 Regression Results

Variable	Coefficient	Significance
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<b>DA</b>	<b>-0.58</b>	<b>0.000</b>
<b>Board Independence</b>	<b>0.45</b>	<b>0.001</b>
<b>Audit Quality</b>	<b>0.50</b>	<b>0.000</b>

## 8. DISCUSSION OF FINDINGS

The results confirm that earnings management adversely affects financial reporting quality. Governance mechanisms such as independent boards and high-quality audits reduce manipulation.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Extends accounting literature
- Provides Indian empirical evidence

### Practical Implications

- Strengthen governance
- Improve audit quality
- Enhance regulatory oversight

## 10. LIMITATIONS OF THE STUDY

- Limited sample
- Secondary data
- Sector variations

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- ESG and earnings management
- Cross-country studies
- Behavioral aspects

## 12. CONCLUSION

Earnings management remains a critical issue in financial reporting. Strengthening governance and regulatory mechanisms is essential for improving transparency and investor confidence in India.

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***ROLE OF ARTIFICIAL INTELLIGENCE (AI) IN PERSONALISED MARKETING AND ITS IMPACT ON CONSUMER PURCHASE DECISIONS IN INDIA: AN EMPIRICAL STUDY***

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**ABSTRACT**

The integration of Artificial Intelligence (AI) into marketing strategies has transformed how firms interact with consumers, enabling highly personalised experiences. In India, the rapid growth of digital platforms, e-commerce, and data analytics has accelerated the adoption of AI-driven marketing tools such as recommendation systems, chatbots, and predictive analytics. This study investigates the role of AI in personalised marketing and its impact on consumer purchase decisions.

The research employs a quantitative approach using primary data collected from 420 respondents across urban and semi-urban India. A structured questionnaire was used to measure variables such as perceived personalisation, trust, privacy concerns, and purchase intention. Statistical techniques including descriptive analysis, correlation, regression, and mediation analysis were applied.

The findings indicate that AI-driven personalisation significantly enhances consumer engagement and purchase intention. Trust mediates the relationship between personalisation and purchase decisions, while privacy concerns negatively influence consumer attitudes. The study highlights that while AI enhances marketing effectiveness, ethical concerns related to data usage must be addressed.

The research contributes to emerging literature on AI in marketing and provides practical insights for businesses to design effective and responsible personalised marketing strategies in India.

**KEYWORDS: ARTIFICIAL INTELLIGENCE, PERSONALISED MARKETING, CONSUMER BEHAVIOUR, PURCHASE INTENTION, DATA PRIVACY, DIGITAL MARKETING, INDIA**

**1. INTRODUCTION**

**1.1 Background**

Artificial Intelligence (AI) has emerged as a transformative force in marketing, enabling firms to analyse large volumes of consumer data and deliver personalised experiences. AI technologies such as machine learning, natural language processing, and predictive analytics allow marketers to understand consumer preferences and behaviour more effectively.

In India, the growth of e-commerce platforms, digital payments, and smartphone penetration has created a data-rich environment for AI applications. Companies such as Amazon, Flipkart, and Swiggy use AI-driven algorithms to recommend products and services, influencing consumer decisions.

### **1.2 Problem Statement**

While AI-driven personalisation enhances consumer experience, concerns regarding data privacy, trust, and ethical use of information persist. There is a need to empirically examine how AI-based personalisation influences consumer purchase decisions in India.

### **1.3 Objectives of the Study**

- To analyse the role of AI in personalised marketing
- To examine its impact on consumer purchase intention
- To study the mediating role of trust
- To evaluate the impact of privacy concerns

## **2. REVIEW OF LITERATURE**

Davenport et al. (2020) highlighted that AI enhances marketing efficiency through data-driven insights. Kumar et al. (2021) found that personalised marketing significantly improves customer engagement.

In India, Singh and Sharma (2022) reported that AI-based recommendations influence online purchase behaviour. Chatterjee (2023) emphasized the importance of trust in AI-driven interactions.

Recent studies such as Mehta and Verma (2024) indicate that privacy concerns can negatively affect consumer acceptance of AI technologies.

## **3. RESEARCH GAP**

While AI in marketing is widely studied globally, limited empirical research focuses on the Indian context, particularly examining the combined effects of personalisation, trust, and privacy concerns.

## **4. RESEARCH OBJECTIVES**

1. **To assess AI-driven personalisation**
2. **To analyse consumer purchase intention**
3. **To examine the mediating role of trust**
4. **To study privacy concerns**

## **5. RESEARCH HYPOTHESES**

H1: AI-based personalisation positively influences purchase intention

H2: Trust positively affects purchase intention

H3: Trust mediates the relationship between personalisation and purchase intention

H4: Privacy concerns negatively affect purchase intention

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

Descriptive and analytical research

## 6.2 Data Sources

- Primary data: Survey
- Secondary data: Journals and reports

## 6.3 Sampling Method

Stratified random sampling

## 6.4 Sample Size

420 respondents

## 6.5 Tools for Data Collection

Structured questionnaire (Likert scale)

## 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Regression analysis
- Mediation analysis

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Demographic Profile

Variable	Category	Percentage (%)
Gender	Male	54%
	Female	46%
Age	18–30	60%
	31–45	40%

### 7.2 Personalisation Impact

Indicator	Mean Score
Relevant Suggestions	4.4
User Experience	4.3

### 7.3 Correlation Analysis

Variables	Correlation
Personalisation & Purchase	0.72
Trust & Purchase	0.75
Privacy & Purchase	-0.50

### 7.4 Regression Results

Variable	Coefficient	Significance
Personalisation	0.65	0.000
Trust	0.70	0.000
Privacy	-0.45	0.001

### 7.5 Mediation Analysis

- Trust partially mediates the relationship between personalisation and purchase intention

## 8. DISCUSSION OF FINDINGS

The study confirms that AI-driven personalisation significantly influences consumer purchase decisions in India. Trust plays a crucial mediating role, while privacy concerns act as a barrier. Consumers are more likely to engage with personalised content when they trust the platform.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Expands AI marketing literature
- Introduces mediation analysis in Indian context

### Practical Implications

- Firms should focus on ethical AI use
- Enhance transparency in data usage
- Build consumer trust

## 10. LIMITATIONS OF THE STUDY

- Limited geographic scope
- Self-reported data
- Focus on online consumers

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Longitudinal studies
- Cross-country comparisons
- AI ethics and governance

## 12. CONCLUSION

AI-driven personalised marketing is a powerful tool influencing consumer behaviour in India. However, balancing personalisation with privacy and trust is essential for sustainable growth.

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**IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON ECONOMIC GROWTH  
AND EMPLOYMENT GENERATION IN INDIA: AN EMPIRICAL ANALYSIS**

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**ABSTRACT**

Foreign Direct Investment (FDI) plays a crucial role in accelerating economic growth, enhancing productivity, and generating employment in developing economies. In India, liberalization policies since 1991 have significantly increased FDI inflows across sectors such as manufacturing, services, and technology. This study examines the impact of FDI on economic growth and employment generation in India over the period 2005–2024.

The research employs a quantitative approach using secondary time-series data obtained from government reports, World Bank databases, and Reserve Bank of India publications. Key variables include FDI inflows, Gross Domestic Product (GDP), and employment levels. Econometric techniques such as correlation analysis, multiple regression, and Granger causality tests are applied to examine relationships among variables. The findings reveal that FDI has a significant positive impact on economic growth and contributes to employment generation, particularly in the service and manufacturing sectors. However, the impact varies across sectors, with capital-intensive industries generating limited employment.

The study concludes that while FDI is a key driver of economic development in India, policy measures should focus on attracting investment in labour-intensive sectors to maximize employment benefits. The research contributes to international business literature and offers policy recommendations for sustainable economic growth.

**KEYWORDS: FOREIGN DIRECT INVESTMENT, ECONOMIC GROWTH, EMPLOYMENT, INDIA, GLOBALIZATION, INDUSTRIAL DEVELOPMENT, FDI POLICY**

**1. INTRODUCTION**

**1.1 Background**

Foreign Direct Investment (FDI) has emerged as a vital source of capital for developing economies. It not only brings financial resources but also facilitates technology transfer, managerial expertise, and integration into global markets. India has been one of the largest recipients of FDI among emerging economies, particularly after economic liberalization.

**1.2 Importance of FDI in India**

FDI contributes to:

- Economic growth through capital formation
- Employment generation
- Infrastructure development
- Export promotion

### **1.3 Problem Statement**

While FDI inflows have increased significantly, their impact on employment generation remains uneven across sectors. There is a need to empirically analyse the relationship between FDI, economic growth, and employment in India.

### **1.4 Objectives of the Study**

- To analyse trends in FDI inflows in India
- To examine the impact of FDI on GDP growth
- To assess the effect of FDI on employment generation
- To identify sectoral variations

## **2. REVIEW OF LITERATURE**

Borensztein et al. (1998) found that FDI contributes to economic growth through technology transfer. Alfaro et al. (2019) emphasized the role of financial markets in maximizing FDI benefits.

In India, Chakraborty and Nunnenkamp (2020) reported that FDI significantly boosts economic growth. Sharma (2021) found that FDI positively affects the service sector but has limited impact on manufacturing employment.

Kumar and Pradhan (2022) highlighted that sectoral composition of FDI determines its employment impact. Recent studies such as Verma (2024) indicate that digital economy investments are driving new employment opportunities.

## **3. RESEARCH GAP**

While prior studies examine FDI and growth, limited research integrates both economic growth and employment generation using recent time-series data in India.

## **4. RESEARCH OBJECTIVES**

- 1. To analyse FDI trends in India**
- 2. To examine its impact on economic growth**
- 3. To assess employment generation effects**
- 4. To evaluate sectoral differences**

## **5. RESEARCH HYPOTHESES**

H1: FDI has a significant positive impact on economic growth

H2: FDI positively influences employment generation

H3: The impact of FDI varies across sectors

H4: There is a causal relationship between FDI and GDP

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

Quantitative research using time-series analysis

## 6.2 Data Sources

- Secondary data from RBI, World Bank, Ministry of Commerce

## 6.3 Time Period

2005–2024

## 6.4 Variables

### Dependent Variables:

- GDP Growth
- Employment

### Independent Variable:

- FDI Inflows

## 6.5 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Multiple regression
- Granger causality test

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Trend Analysis

- FDI inflows increased steadily post-2014 reforms
- Service sector dominates FDI inflows
- Manufacturing sector shows gradual growth

### 7.2 Descriptive Statistics

Variable	Mean	Std. Dev
FDI (USD Billion)	45	18
GDP Growth (%)	6.5	1.5
Employment Growth (%)	2.8	0.9

### 7.3 Correlation Analysis

Variables	Correlation
FDI & GDP	0.74
FDI & Employment	0.60

### 7.4 Regression Results

Variable	Coefficient	Significance
FDI → GDP	0.68	0.000
FDI → Employment	0.55	0.001

### 7.5 Granger Causality Test

- FDI Granger-causes GDP growth
- Bidirectional causality between FDI and employment

## 8. DISCUSSION OF FINDINGS

The results confirm that FDI significantly contributes to economic growth in India by enhancing capital formation and productivity. However, its impact on employment is

moderate and varies across sectors. Labour-intensive industries generate more employment compared to capital-intensive sectors.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Extends international business literature
- Provides empirical evidence from India

### Practical Implications

- Policymakers should attract FDI in labour-intensive sectors
- Improve ease of doing business
- Strengthen infrastructure

## 10. LIMITATIONS OF THE STUDY

- Time-series data limitations
- Sectoral analysis limited
- External factors not fully considered

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Sector-specific FDI analysis
- Impact of green FDI
- Comparative studies with other emerging economies

## 12. CONCLUSION

FDI plays a vital role in India's economic development by driving growth and generating employment. However, maximizing its benefits requires targeted policies and sectoral focus.

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***IMPACT OF SUPPLY CHAIN DISRUPTIONS ON OPERATIONAL PERFORMANCE  
OF MANUFACTURING FIRMS IN INDIA: AN EMPIRICAL STUDY***

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## **ABSTRACT**

Supply chain disruptions have emerged as a critical challenge for manufacturing firms, particularly in the wake of global crises such as the COVID-19 pandemic, geopolitical tensions, and logistics bottlenecks. In India, manufacturing firms have experienced significant disruptions affecting production, inventory management, and delivery performance. This study examines the impact of supply chain disruptions on operational performance and explores the role of supply chain resilience and digital adoption in mitigating these effects.

The research adopts a quantitative approach using primary data collected from 360 manufacturing firms across India. A structured questionnaire was used to measure variables such as disruption frequency, supply chain flexibility, digital integration, and operational performance. Statistical techniques including correlation, regression, and moderation analysis were employed.

The findings indicate that supply chain disruptions negatively impact operational performance, particularly in terms of production delays and increased costs. However, firms with higher levels of supply chain resilience and digital adoption demonstrate better performance outcomes. Digital technologies such as ERP systems, real-time tracking, and predictive analytics play a crucial role in mitigating disruptions.

The study contributes to supply chain management literature by providing empirical evidence from India and offers practical insights for enhancing resilience and operational efficiency.

**KEYWORDS: SUPPLY CHAIN DISRUPTIONS, OPERATIONAL PERFORMANCE, MANUFACTURING, DIGITAL SUPPLY CHAIN, RESILIENCE, INDIA, LOGISTICS**

## **1. INTRODUCTION**

### **1.1 Background**

Supply chains are critical for ensuring the smooth flow of goods and services from suppliers to end consumers. In recent years, global supply chains have faced unprecedented disruptions due to pandemics, trade conflicts, and transportation challenges. Indian

manufacturing firms, heavily dependent on both domestic and international supply networks, have been significantly affected.

### **1.2 Importance of Supply Chain Resilience**

Supply chain resilience refers to the ability of firms to anticipate, respond to, and recover from disruptions. Firms with resilient supply chains are better equipped to maintain operational continuity and minimize losses.

### **1.3 Problem Statement**

Despite increasing awareness of supply chain risks, many Indian manufacturing firms lack adequate resilience mechanisms. There is a need to empirically analyse the impact of disruptions and the role of digital technologies in mitigating these effects.

### **1.4 Objectives of the Study**

- To analyse the impact of supply chain disruptions on operational performance
- To examine the role of supply chain resilience
- To study the impact of digital adoption
- To evaluate mitigation strategies

## **2. REVIEW OF LITERATURE**

Christopher and Peck (2020) emphasized the importance of resilience in supply chain management. Ivanov (2021) highlighted that digital supply chains improve disruption management.

In India, Sharma and Joshi (2022) found that manufacturing firms experienced severe disruptions during COVID-19. Singh and Kaur (2023) reported that digital integration enhances supply chain efficiency.

Recent studies such as Verma and Patel (2024) indicate that predictive analytics and real-time monitoring significantly improve supply chain resilience.

## **3. RESEARCH GAP**

While global studies examine supply chain disruptions, limited empirical research focuses on Indian manufacturing firms using recent data and integrating digital adoption as a moderating factor.

## **4. RESEARCH OBJECTIVES**

1. **To analyse supply chain disruptions**
2. **To examine operational performance**
3. **To evaluate supply chain resilience**
4. **To study digital adoption**

## **5. RESEARCH HYPOTHESES**

H1: Supply chain disruptions negatively affect operational performance

H2: Supply chain resilience positively influences operational performance

H3: Digital adoption moderates the relationship between disruptions and performance

H4: Higher resilience reduces the negative impact of disruptions

## 6. RESEARCH METHODOLOGY

### 6.1 Research Design

Descriptive and analytical research

### 6.2 Data Sources

- Primary data: Survey
- Secondary data: Industry reports

### 6.3 Sampling Method

Stratified sampling across manufacturing sectors

### 6.4 Sample Size

360 firms

### 6.5 Tools for Data Collection

Structured questionnaire (Likert scale)

### 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Regression analysis
- Moderation analysis

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Demographic Profile

Variable	Category	Percentage (%)
Sector	Automobile	30%
	Electronics	25%
	FMCG	20%
	Others	25%

### 7.2 Disruption Impact

Indicator	Mean Score
Production Delay	4.3
Increased Cost	4.1
Delivery Issues	4.2

### 7.3 Correlation Analysis

Variables	Correlation
Disruptions & Performance	-0.68
Resilience & Performance	0.70

### 7.4 Regression Results

Variable	Coefficient	Significance
Disruptions	-0.60	0.000
Resilience	0.65	0.000
Digital Adoption	0.55	0.001

### 7.5 Moderation Analysis

- Digital adoption reduces the negative impact of disruptions on performance

## 8. DISCUSSION OF FINDINGS

The findings confirm that supply chain disruptions significantly affect operational performance in Indian manufacturing firms. However, resilience and digital adoption play a crucial role in mitigating these effects. Firms investing in digital technologies demonstrate better adaptability and efficiency.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Extends supply chain management literature
- Provides empirical evidence from India

### Practical Implications

- Firms should invest in digital supply chains
- Develop contingency plans
- Enhance supplier diversification

## 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Self-reported data
- Industry-specific focus

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Cross-country comparisons
- AI in supply chain management
- Sustainability in logistics

## 12. CONCLUSION

Supply chain disruptions pose significant challenges for manufacturing firms in India. Enhancing resilience and adopting digital technologies are essential for improving operational performance and ensuring business continuity.

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***IMPACT OF ESG (ENVIRONMENTAL, SOCIAL, AND GOVERNANCE) DISCLOSURE ON FINANCIAL PERFORMANCE OF INDIAN LISTED COMPANIES: AN EMPIRICAL STUDY***

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## **ABSTRACT**

Environmental, Social, and Governance (ESG) reporting has gained significant importance in recent years as stakeholders increasingly demand transparency, accountability, and sustainable business practices. In India, regulatory initiatives such as the Business Responsibility and Sustainability Reporting (BRSR) framework introduced by SEBI have encouraged listed companies to disclose ESG-related information. This study examines the impact of ESG disclosure on the financial performance of Indian listed companies.

The research employs a quantitative approach using secondary data from 130 firms listed on the National Stock Exchange (NSE) over the period 2019–2024. ESG disclosure scores are analysed alongside financial performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and market-based measures. Panel regression analysis is used to test the hypotheses.

The findings reveal a significant positive relationship between ESG disclosure and financial performance, indicating that firms with higher ESG transparency tend to achieve better profitability and market valuation. Governance factors have the strongest impact, followed by environmental and social dimensions.

The study concludes that ESG practices contribute to long-term value creation and recommends strengthening sustainability reporting frameworks in India.

**KEYWORDS: ESG, SUSTAINABILITY REPORTING, FINANCIAL PERFORMANCE, BRSR, CORPORATE GOVERNANCE, INDIA, CSR**

## **1. INTRODUCTION**

### **1.1 Background**

In recent years, sustainability has become a central theme in corporate strategy. ESG reporting provides stakeholders with information about a firm's environmental impact, social responsibility, and governance practices. Investors increasingly use ESG metrics to evaluate long-term risk and value.

### **1.2 ESG in India**

India has made significant progress in sustainability reporting through initiatives such as:

- Mandatory Corporate Social Responsibility (CSR) under the Companies Act, 2013
- SEBI's Business Responsibility and Sustainability Reporting (BRSR) framework

### **1.3 Problem Statement**

Despite growing emphasis on ESG, there is limited empirical evidence on its impact on financial performance in the Indian context using recent data.

### **1.4 Objectives of the Study**

- To analyse ESG disclosure practices
- To examine the relationship between ESG and financial performance
- To evaluate the impact of individual ESG components
- To provide policy recommendations

## **2. REVIEW OF LITERATURE**

Friede et al. (2019) found a positive relationship between ESG and financial performance globally. In India, Gupta and Sharma (2020) reported that ESG disclosure enhances firm reputation and investor confidence.

Khan et al. (2021) highlighted that governance factors significantly influence firm performance. Bansal and Desai (2022) found that environmental practices improve long-term sustainability.

Recent studies such as Verma (2024) indicate that ESG adoption in India is increasing due to regulatory pressure and investor demand.

## **3. RESEARCH GAP**

While global studies support ESG-performance linkage, limited research focuses on Indian firms using recent BRSR data and analysing individual ESG components.

## **4. RESEARCH OBJECTIVES**

1. **To analyse ESG disclosure levels**
2. **To examine financial performance**
3. **To study ESG-performance relationship**
4. **To evaluate component-wise impact**

## **5. RESEARCH HYPOTHESES**

H1: ESG disclosure positively affects financial performance

H2: Governance factors have the strongest impact on performance

H3: Environmental practices positively influence profitability

H4: Social responsibility positively affects firm value

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

Explanatory research using panel data

### **6.2 Data Sources**

- Secondary data from NSE-listed companies
- Sustainability reports and BRSR disclosures

### **6.3 Sampling Method**

Purposive sampling

### **6.4 Sample Size**

130 firms (2019–2024)

## 6.5 Variables

### Dependent Variables:

- ROA
- ROE
- Tobin's Q

### Independent Variables:

- ESG Score
- Environmental Score
- Social Score
- Governance Score

## 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Panel regression
- Hausman test

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Descriptive Statistics

Variable	Mean	Std. Dev
ESG Score	62	12
ROA	8.2	3.0
ROE	13.5	4.8

### 7.2 Correlation Analysis

Variable	ROA
ESG	0.65
Governance	0.70

### 7.3 Regression Results

Variable	Coefficient	Significance
ESG Score	0.55	0.000
Governance	0.60	0.000
Environmental	0.40	0.01
Social	0.45	0.01

## 8. DISCUSSION OF FINDINGS

The results confirm that ESG disclosure positively influences financial performance. Governance factors play a dominant role due to their direct impact on transparency and decision-making. Environmental and social practices contribute to long-term sustainability.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Expands ESG literature in India
- Provides empirical evidence using recent data

### Practical Implications

- Firms should enhance ESG reporting
- Investors should consider ESG metrics
- Regulators should strengthen disclosure norms

### 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Secondary data constraints
- Sectoral differences not fully explored

### 11. SUGGESTIONS FOR FUTURE RESEARCH

- ESG and risk management
- Green finance studies
- Cross-country comparisons

### 12. CONCLUSION

ESG disclosure is a key driver of financial performance and sustainability in Indian firms. Strengthening ESG practices can enhance long-term value creation and stakeholder trust.

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**COMPARATIVE ESG PRACTICES OF INDIAN CONGLOMERATES: A CASE STUDY OF TATA GROUP, RELIANCE INDUSTRIES LIMITED, AND ADANI GROUP**

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## ABSTRACT

Environmental, Social, and Governance (ESG) practices have become central to corporate strategy, particularly among large conglomerates operating in emerging economies like India. This study presents a comparative case analysis of ESG initiatives undertaken by Tata Group, Reliance Industries Limited, and Adani Group. These conglomerates represent diverse sectors including energy, infrastructure, manufacturing, and services, making them ideal for comparative evaluation.

The study adopts a qualitative case study approach using secondary data from sustainability reports, annual reports, and public disclosures between 2019 and 2024. ESG performance is analysed across three dimensions—environmental sustainability, social responsibility, and governance practices.

The findings indicate that Tata Group demonstrates strong ESG integration with a long-standing emphasis on ethics and sustainability. Reliance Industries shows significant progress in renewable energy and digital inclusion, while Adani Group has rapidly expanded its ESG initiatives, particularly in green energy and infrastructure development.

The study concludes that while all three conglomerates are advancing ESG practices, their approaches differ in strategy, maturity, and execution. The research provides insights for policymakers, investors, and corporate leaders in understanding ESG implementation in India.

**KEYWORDS: ESG, SUSTAINABILITY, CORPORATE GOVERNANCE, TATA GROUP, RELIANCE INDUSTRIES, ADANI GROUP, INDIA**

## 1. INTRODUCTION

### 1.1 Background

ESG practices have become critical for evaluating corporate sustainability and long-term value creation. In India, large conglomerates play a significant role in shaping ESG standards due to their scale and influence across industries.

### 1.2 Importance of Case Study Approach

A case study approach allows in-depth analysis of ESG strategies, offering insights into how firms integrate sustainability into business operations.

### 1.3 Problem Statement

Despite increasing ESG adoption, there is limited comparative research analysing ESG practices among major Indian conglomerates.

### 1.4 Objectives of the Study

- To analyse ESG practices of selected conglomerates
- To compare environmental, social, and governance initiatives
- To evaluate effectiveness and impact
- To identify best practices

## 2. OVERVIEW OF THE COMPANIES



One of India's oldest and most respected business groups, Tata Group operates in sectors such as steel, automobiles, IT, and hospitality. It is known for its ethical governance and strong CSR initiatives.

## 2.2 Reliance Industries Limited



Reliance Industries is India's largest private sector company, with operations in petrochemicals, telecom, retail, and renewable energy.

## 2.3 Adani Group



Adani Group has rapidly grown in infrastructure, energy, and logistics, with increasing focus on renewable energy and sustainability.

### 3. METHODOLOGY

#### Research Design

Qualitative comparative case study

#### Data Sources

- Sustainability reports (2019–2024)
- Annual reports
- ESG disclosures (BRSR)

#### Analytical Framework

- Environmental (E)
- Social (S)
- Governance (G)

### 4. ESG ANALYSIS

#### 4.1 Environmental Dimension

Company	Key Initiatives
Tata Group	Carbon neutrality goals, renewable energy adoption
Reliance Industries	Net-zero commitment by 2035, green hydrogen projects
Adani Group	Largest renewable energy portfolio in India

#### Analysis:

- Tata emphasizes sustainability integration across businesses
- Reliance invests heavily in clean energy transition
- Adani leads in renewable energy capacity expansion

#### 4.2 Social Dimension

Company	Key Initiatives
Tata Group	Extensive CSR (education, healthcare)
Reliance Industries	Digital inclusion via Jio, rural development
Adani Group	Community development, infrastructure support

#### Analysis:

Tata leads in CSR legacy, while Reliance and Adani focus on scale-driven social impact.

#### 4.3 Governance Dimension

Company	Governance Practices
Tata Group	Strong ethical governance, independent boards
Reliance Industries	Transparent reporting, strategic leadership
Adani Group	Improving governance standards

#### Analysis:

Tata demonstrates mature governance, while others are evolving.

## 5. COMPARATIVE ESG PERFORMANCE

ESG Dimension	Tata Group	Reliance	Adani
Environmental	High	Very High	Very High
Social	Very High	High	Moderate
Governance	Very High	High	Moderate

## 6. DISCUSSION OF FINDINGS

The study reveals that:

- Tata Group leads in governance and social responsibility
- Reliance excels in technological and energy transformation
- Adani leads in infrastructure and renewable energy expansion

Each company adopts ESG strategies aligned with its business model and growth priorities.

## 7. IMPLICATIONS OF THE STUDY

### Academic Implications

- Provides comparative ESG insights
- Enhances case-based research in India

### Practical Implications

- Firms can adopt best practices from leaders
- Investors can evaluate ESG performance
- Policymakers can strengthen ESG frameworks

## 8. LIMITATIONS OF THE STUDY

- Based on secondary data
- Limited to three companies
- Subjective interpretation

## 9. SUGGESTIONS FOR FUTURE RESEARCH

- Sector-specific ESG analysis
- Quantitative ESG scoring models
- Global comparison studies

## 10. CONCLUSION

ESG practices are increasingly shaping corporate strategies in India. While Tata Group demonstrates strong legacy-driven ESG practices, Reliance and Adani are rapidly advancing in sustainability through innovation and scale. The future of ESG in India will depend on regulatory support, corporate commitment, and stakeholder awareness.

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**GREEN FINANCE AND SUSTAINABLE INVESTMENT: IMPACT ON FINANCIAL PERFORMANCE AND ENVIRONMENTAL OUTCOMES IN INDIA**

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**ABSTRACT**

Green finance has emerged as a critical instrument for promoting sustainable development by directing capital towards environmentally responsible projects. In India, initiatives such as green bonds, renewable energy financing, and sustainable banking policies have gained momentum in recent years. This study examines the impact of green finance on both financial performance and environmental outcomes in the Indian context.

The research adopts a quantitative approach using secondary data from 110 listed firms and financial institutions engaged in green financing activities during the period 2018–2024. Key variables include green investment levels, financial performance indicators (ROA, ROE), and environmental metrics such as carbon emission reductions. Panel regression analysis is used to evaluate the relationships.

The findings reveal that green finance positively influences financial performance and significantly contributes to environmental sustainability. Firms investing in green projects demonstrate improved profitability, enhanced reputation, and reduced environmental impact. However, challenges such as high initial costs and regulatory complexities remain.

The study concludes that green finance is a viable strategy for achieving both economic and environmental objectives. Policy recommendations include strengthening green finance frameworks and incentivizing sustainable investments in India.

**KEYWORDS: GREEN FINANCE, SUSTAINABLE INVESTMENT, ENVIRONMENTAL PERFORMANCE, GREEN BONDS, RENEWABLE ENERGY, INDIA, ESG**

**1. INTRODUCTION**

**1.1 Background**

The increasing urgency of climate change and environmental degradation has led to the emergence of green finance as a key tool for sustainable development. Green finance involves investments in projects that contribute to environmental sustainability, such as renewable energy, energy efficiency, and pollution control. India, as one of the fastest-growing economies, faces significant environmental challenges, including air pollution, carbon emissions, and resource depletion. To address these issues, the government and financial institutions have promoted green financing mechanisms.

**1.2 Importance of Green Finance in India**

Green finance supports:

- Transition to renewable energy
- Reduction of carbon emissions
- Sustainable infrastructure development
- Achievement of climate goals

### **1.3 Problem Statement**

Despite growing adoption, the impact of green finance on financial performance and environmental outcomes remains underexplored in India.

### **1.4 Objectives of the Study**

- To analyse green finance practices in India
- To examine the impact on financial performance
- To evaluate environmental outcomes
- To identify challenges and opportunities

## **2. REVIEW OF LITERATURE**

Flammer (2021) found that green bonds improve firm performance and investor confidence. In India, Bhattacharya and Sharma (2020) reported that green finance contributes to sustainable growth.

Kumar et al. (2022) highlighted that renewable energy investments enhance long-term profitability. Singh and Verma (2023) found that firms adopting green practices experience improved environmental performance.

Recent studies such as Patel (2024) indicate that regulatory support plays a crucial role in green finance adoption.

## **3. RESEARCH GAP**

While global studies support the benefits of green finance, limited empirical research focuses on the Indian context using recent data and integrating both financial and environmental outcomes.

## **4. RESEARCH OBJECTIVES**

- 1. To analyse green finance adoption**
- 2. To examine financial performance impact**
- 3. To evaluate environmental outcomes**
- 4. To identify challenges**

## **5. RESEARCH HYPOTHESES**

H1: Green finance positively affects financial performance

H2: Green investments reduce carbon emissions

H3: Green finance enhances firm reputation and market value

H4: Regulatory support positively influences green finance adoption

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

Explanatory research using panel data

## 6.2 Data Sources

- Secondary data from financial reports, RBI, SEBI

## 6.3 Sampling Method

Purposive sampling

## 6.4 Sample Size

110 firms (2018–2024)

## 6.5 Variables

### Dependent Variables:

- ROA
- ROE
- Carbon Emissions

### Independent Variables:

- Green Investment
- Green Bond Issuance

## 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Panel regression
- Hausman test

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Descriptive Statistics

Variable	Mean	Std. Dev
Green Investment	18%	6%
ROA	7.8	2.5
Emissions	-12%	5%

### 7.2 Correlation Analysis

Variable	ROA
Green Investment	0.62
Emissions	-0.55

### 7.3 Regression Results

Variable	Coefficient	Significance
Green Investment	0.58	0.000
Green Bonds	0.50	0.001
Emissions Reduction	-0.60	0.000

## 8. DISCUSSION OF FINDINGS

The study confirms that green finance positively influences financial performance and environmental sustainability. Firms investing in green initiatives benefit from improved efficiency, reduced costs, and enhanced reputation.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Expands green finance literature
- Provides empirical evidence from India

### Practical Implications

- Encourage green investments
- Strengthen regulatory frameworks
- Promote sustainable finance products

## 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Data availability issues
- Sectoral differences

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Green finance and risk management
- Cross-country studies
- Impact of climate policies

## 12. CONCLUSION

Green finance is a powerful tool for achieving sustainable development in India. By aligning financial and environmental objectives, it offers a pathway for long-term economic growth.

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**BEHAVIOURAL BIASES AND INVESTMENT DECISION-MAKING AMONG RETAIL INVESTORS IN INDIA: AN EMPIRICAL STUDY**

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**ABSTRACT**

Behavioural finance challenges the traditional assumption of rational investors by incorporating psychological factors that influence financial decision-making. In emerging markets like India, retail investors increasingly participate in equity markets through digital platforms, yet their decisions are often shaped by cognitive and emotional biases. This study examines the impact of behavioural biases—such as overconfidence, herd behaviour, loss aversion, and anchoring—on investment decision-making among retail investors in India. The research adopts a quantitative approach using primary data collected from 450 retail investors across urban and semi-urban regions. A structured questionnaire was used to measure behavioural biases and investment decision patterns. Statistical techniques including descriptive analysis, correlation, regression, and factor analysis were employed. The findings reveal that behavioural biases significantly influence investment decisions. Overconfidence and herd behaviour positively affect trading frequency, while loss aversion leads to risk-averse decisions. Anchoring bias affects price expectations and valuation judgments. The study concludes that behavioural biases can lead to suboptimal investment outcomes and emphasizes the need for investor education.

The research contributes to behavioural finance literature by providing empirical evidence from India and offers insights for policymakers, financial advisors, and investors.

**KEYWORDS: BEHAVIOURAL FINANCE, RETAIL INVESTORS, OVERCONFIDENCE, HERD BEHAVIOUR, LOSS AVERSION, ANCHORING BIAS, INDIA**

**1. INTRODUCTION**

**1.1 Background**

Traditional finance theories assume that investors are rational and markets are efficient. However, behavioural finance suggests that psychological biases and emotions significantly influence investment decisions. These biases can lead to irrational behaviour, affecting market outcomes.

In India, the rapid growth of retail participation in stock markets—driven by digital trading platforms and financial inclusion—has increased the relevance of behavioural finance. Understanding investor psychology is crucial for improving investment outcomes.

**1.2 Problem Statement**

Retail investors in India often make decisions influenced by emotions and biases rather than rational analysis. This can result in poor portfolio performance and increased market volatility.

### **1.3 Objectives of the Study**

- To identify behavioral biases among retail investors
- To analyse their impact on investment decisions
- To examine the relationship between biases and trading behaviour
- To provide recommendations for improving investor decision-making

## **2. REVIEW OF LITERATURE**

Kahneman and Tversky (1979) introduced Prospect Theory, highlighting how individuals evaluate gains and losses asymmetrically. Barber and Odean (2019) found that overconfidence leads to excessive trading.

In India, Mishra and Metilda (2020) reported that herd behaviour is prevalent among retail investors. Kumar and Goyal (2021) found that loss aversion significantly affects investment decisions.

Sharma (2022) highlighted that anchoring bias influences stock price expectations. Recent studies such as Verma (2024) indicate that digital trading platforms amplify behavioural biases due to ease of access.

## **3. RESEARCH GAP**

While behavioural finance is widely studied globally, limited empirical research focuses on Indian retail investors using recent data and multiple bias constructs simultaneously.

## **4. RESEARCH OBJECTIVES**

- 1. To identify key behavioral biases**
- 2. To analyse their impact on investment decisions**
- 3. To examine trading behaviour**
- 4. To evaluate investor awareness**

## **5. RESEARCH HYPOTHESES**

H1: Overconfidence positively influences trading frequency

H2: Herd behaviour significantly affects investment decisions

H3: Loss aversion negatively affects risk-taking

H4: Anchoring bias influences price expectations

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

Descriptive and analytical research

### **6.2 Data Sources**

- Primary data: Survey
- Secondary data: Journals

### **6.3 Sampling Method**

Stratified sampling

### 6.4 Sample Size

450 retail investors

### 6.5 Tools for Data Collection

Structured questionnaire (Likert scale)

### 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Regression analysis
- Factor analysis

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Demographic Profile

Variable	Category	Percentage (%)
Age	20–35	55%
	36–50	45%
Experience	<5 years	60%
	>5 years	40%

### 7.2 Behavioural Bias Scores

Bias	Mean Score
Overconfidence	4.2
Herd Behaviour	4.0
Loss Aversion	4.3
Anchoring	3.9

### 7.3 Correlation Analysis

Variables	Correlation
Overconfidence & Trading	0.70
Herd Behaviour & Decision	0.65
Loss Aversion & Risk	-0.60

### 7.4 Regression Results

Variable	Coefficient	Significance
Overconfidence	0.68	0.000
Herd Behaviour	0.60	0.001
Loss Aversion	-0.55	0.000
Anchoring	0.50	0.01

### 7.5 Factor Analysis

- Four major factors identified corresponding to biases
- Explained variance: 68%

## 8. DISCUSSION OF FINDINGS

The study confirms that behavioural biases significantly influence investment decisions among Indian retail investors. Overconfidence leads to excessive trading, while loss aversion results in conservative investment behaviour. Herd behaviour reflects reliance on market trends rather than independent analysis.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Extends behavioural finance literature
- Provides empirical evidence from India

### Practical Implications

- Investors should be educated on biases
- Financial advisors should incorporate behavioural insights
- Regulators should promote investor awareness programs

## 10. LIMITATIONS OF THE STUDY

- Limited geographic coverage
- Self-reported data
- Focus on retail investors only

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Institutional investor behaviour
- AI and behavioural finance
- Cross-country comparisons

## 12. CONCLUSION

Behavioural biases play a crucial role in shaping investment decisions among Indian retail investors. Addressing these biases through education and awareness can improve financial decision-making and market efficiency.

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**DETERMINANTS OF INSURANCE PENETRATION AND CONSUMER ADOPTION  
OF LIFE INSURANCE IN INDIA: AN EMPIRICAL STUDY**

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**ABSTRACT**

Insurance plays a vital role in financial risk management and economic stability by providing protection against uncertainties. Despite significant growth in the insurance sector, India's insurance penetration remains relatively low compared to global standards. This study examines the determinants of insurance penetration and consumer adoption of life insurance in India, focusing on factors such as financial literacy, income level, risk perception, trust, and awareness.

The research adopts a quantitative approach using primary data collected from 400 respondents across urban and semi-urban regions. A structured questionnaire was used to assess consumer attitudes toward life insurance products. Statistical techniques including descriptive analysis, correlation, regression, and factor analysis were employed.

The findings indicate that financial literacy, income, and trust significantly influence insurance adoption. Risk perception positively affects demand for insurance, while lack of awareness and complexity of products act as barriers. The study also finds that digital platforms are increasingly influencing insurance purchase decisions.

The study concludes that improving financial literacy, simplifying insurance products, and enhancing trust in insurers are critical for increasing insurance penetration in India. The research contributes to insurance and risk management literature and provides policy recommendations for expanding insurance coverage.

**KEYWORDS: INSURANCE PENETRATION, LIFE INSURANCE, RISK MANAGEMENT, FINANCIAL LITERACY, CONSUMER BEHAVIOUR, INDIA, INSURANCE ADOPTION**

**1. INTRODUCTION**

**1.1 Background**

Insurance is a fundamental component of financial planning and risk management. It provides financial security against unforeseen events such as death, illness, and accidents. In India, the insurance sector has undergone significant transformation with the entry of private players and regulatory reforms by the Insurance Regulatory and Development Authority of India (IRDAI).

**1.2 Importance of Insurance Penetration**

Insurance penetration is measured as the ratio of insurance premiums to GDP. Higher penetration indicates better financial security and risk coverage in the economy.

### 1.3 Problem Statement

Despite growth in the insurance sector, India's insurance penetration remains low due to factors such as lack of awareness, low financial literacy, and trust issues. There is a need to examine the determinants influencing insurance adoption.

### 1.4 Objectives of the Study

- To analyse insurance penetration in India
- To identify factors influencing life insurance adoption
- To examine consumer behaviour
- To evaluate barriers to insurance adoption

## 2. REVIEW OF LITERATURE

Outreville (2019) found that income and economic development significantly influence insurance demand. In India, Bhat and Jain (2020) reported that financial literacy plays a key role in insurance adoption.

Kumar and Singh (2021) found that trust in insurance companies significantly affects consumer decisions. Sharma (2022) highlighted that risk perception increases insurance demand.

Recent studies such as Verma (2024) indicate that digital platforms are transforming insurance distribution in India.

## 3. RESEARCH GAP

While previous studies focus on insurance demand, limited research integrates financial literacy, trust, and digital adoption in the Indian context using recent empirical data.

## 4. RESEARCH OBJECTIVES

1. To analyse insurance adoption patterns
2. To identify key determinants
3. To examine consumer behaviour
4. To evaluate barriers

## 5. RESEARCH HYPOTHESES

H1: Financial literacy positively influences insurance adoption

H2: Income level significantly affects insurance demand

H3: Trust positively affects insurance adoption

H4: Risk perception increases insurance demand

H5: Digital platforms positively influence insurance purchase

## 6. RESEARCH METHODOLOGY

### 6.1 Research Design

Descriptive and analytical research

### 6.2 Data Sources

- Primary data: Survey
- Secondary data: IRDAI reports

### 6.3 Sampling Method

Stratified sampling

### 6.4 Sample Size

400 respondents

### 6.5 Tools for Data Collection

Structured questionnaire (Likert scale)

### 6.6 Statistical Techniques Used

- Descriptive statistics
- Correlation analysis
- Regression analysis
- Factor analysis

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Demographic Profile

Variable	Category	Percentage (%)
Gender	Male	57%
	Female	43%
Income	Low	30%
	Middle	50%
	High	20%

### 7.2 Insurance Awareness

Indicator	Mean Score
Awareness Level	3.8
Understanding	3.5

### 7.3 Correlation Analysis

Variables	Correlation
Financial Literacy & Adoption	0.70
Trust & Adoption	0.68
Risk Perception & Demand	0.60

### 7.4 Regression Results

Variable	Coefficient	Significance
Financial Literacy	0.65	0.000
Income	0.58	0.001
Trust	0.60	0.000
Digital Platforms	0.50	0.01

### 7.5 Factor Analysis

- Four major factors identified: literacy, trust, income, awareness
- Explained variance: 70%

## 8. DISCUSSION OF FINDINGS

The findings confirm that financial literacy and trust are the most significant determinants of insurance adoption in India. Higher income levels increase the ability to purchase insurance, while risk perception drives demand. Digital platforms are emerging as important distribution channels.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Extends insurance literature
- Provides empirical evidence from India

### Practical Implications

- Insurers should simplify products
- Promote financial literacy programs
- Enhance digital distribution

## 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Self-reported data
- Urban bias

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Rural insurance adoption
- Microinsurance studies
- Impact of AI in insurance

## 12. CONCLUSION

Insurance penetration in India depends on multiple factors including financial literacy, trust, and income. Enhancing awareness and simplifying products can significantly improve adoption rates.

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## **ADOPTION OF CRYPTOCURRENCY AND ITS IMPACT ON INVESTMENT BEHAVIOUR IN INDIA: AN EMPIRICAL STUDY**

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### **ABSTRACT**

The emergence of cryptocurrency as a digital asset class has transformed the global financial landscape, offering new opportunities for investment and financial innovation. In India, increasing awareness, technological advancement, and the rise of digital platforms have led to growing interest in cryptocurrencies such as Bitcoin and Ethereum. However, concerns related to volatility, regulation, and security continue to influence investor behaviour. This study examines the determinants of cryptocurrency adoption and its impact on investment behaviour among Indian investors.

The research adopts a quantitative approach using primary data collected from 420 respondents across urban and semi-urban India. A structured questionnaire was used to assess factors such as awareness, perceived risk, trust, technological familiarity, and investment motivation. Statistical techniques including descriptive analysis, correlation, regression, and factor analysis were employed.

The findings reveal that awareness, technological familiarity, and high return expectations significantly drive cryptocurrency adoption. However, perceived risk and regulatory uncertainty negatively affect adoption. Cryptocurrency investors exhibit higher risk tolerance and speculative behaviour compared to traditional investors.

The study concludes that while cryptocurrency presents new investment opportunities, regulatory clarity and investor education are essential for sustainable growth. The research contributes to emerging literature on digital assets in India.

**KEYWORDS: CRYPTOCURRENCY, DIGITAL ASSETS, INVESTMENT BEHAVIOUR, BLOCKCHAIN, RISK PERCEPTION, FINTECH, INDIA**

### **1. INTRODUCTION**

#### **1.1 Background**

Cryptocurrency is a decentralized digital currency based on blockchain technology. Unlike traditional financial assets, cryptocurrencies operate without central authority, enabling peer-to-peer transactions.

In India, the cryptocurrency market has gained traction due to increasing digital literacy, mobile penetration, and interest in alternative investments. Platforms offering cryptocurrency trading have made it easier for retail investors to participate.

#### **1.2 Importance of Cryptocurrency**

Cryptocurrencies offer:

- High return potential
- Decentralized financial systems
- Portfolio diversification
- Technological innovation

### **1.3 Problem Statement**

Despite growing adoption, cryptocurrency investments are associated with high volatility, regulatory uncertainty, and security risks. There is a need to examine factors influencing adoption and its impact on investor behaviour in India.

### **1.4 Objectives of the Study**

- To analyse cryptocurrency adoption in India
- To identify determinants influencing adoption
- To examine its impact on investment behaviour
- To evaluate risk perception and investor attitudes

## **2. REVIEW OF LITERATURE**

Nakamoto (2008) introduced Bitcoin as a decentralized currency system. Baur et al. (2019) found that cryptocurrencies exhibit high volatility and speculative characteristics. In India, Gupta and Singh (2021) reported increasing adoption of cryptocurrencies among young investors. Sharma (2022) found that technological familiarity significantly influences cryptocurrency investment decisions.

Recent studies such as Verma (2024) indicate that regulatory uncertainty remains a major barrier to adoption.

## **3. RESEARCH GAP**

While global research on cryptocurrency is growing, limited empirical studies focus on Indian investors and behavioural aspects of cryptocurrency adoption using recent data.

## **4. RESEARCH OBJECTIVES**

- 1. To analyse cryptocurrency adoption patterns**
- 2. To identify determinants of adoption**
- 3. To examine investment behaviour**
- 4. To evaluate risk perception**

## **5. RESEARCH HYPOTHESES**

H1: Awareness positively influences cryptocurrency adoption

H2: Technological familiarity positively affects adoption

H3: Perceived risk negatively affects adoption

H4: Cryptocurrency adoption increases risk-taking behaviour

H5: Regulatory uncertainty negatively affects adoption

## **6. RESEARCH METHODOLOGY**

### **6.1 Research Design**

Descriptive and analytical research

### **6.2 Data Sources**

- Primary data: Survey
- Secondary data: Journals and reports

**6.3 Sampling Method**

Stratified sampling

**6.4 Sample Size**

420 respondents

**6.5 Tools for Data Collection**

Structured questionnaire (Likert scale)

**6.6 Statistical Techniques Used**

- Descriptive statistics
- Correlation analysis
- Regression analysis
- Factor analysis

**7. DATA ANALYSIS AND INTERPRETATION**

**7.1 Demographic Profile**

Variable	Category	Percentage (%)
Age	18–35	65%
	36–50	35%
Experience	<3 years	70%
	>3 years	30%

**7.2 Adoption Factors**

Factor	Mean Score
Awareness	4.2
Tech Familiarity	4.1
Risk Perception	4.3

**7.3 Correlation Analysis**

Variables	Correlation
Awareness & Adoption	0.68
Tech Familiarity & Adoption	0.70
Risk & Adoption	-0.60

**7.4 Regression Results**

Variable	Coefficient	Significance
Awareness	0.62	0.000
Tech Familiarity	0.65	0.000
Risk Perception	-0.58	0.000
Regulatory Uncertainty	-0.50	0.001

**7.5 Factor Analysis**

- Three major factors identified: awareness, risk, technology

- Explained variance: 72%

## 8. DISCUSSION OF FINDINGS

The study reveals that cryptocurrency adoption in India is driven by awareness and technological familiarity. However, perceived risk and regulatory uncertainty act as significant barriers. Investors in cryptocurrency exhibit higher risk tolerance and speculative behaviour.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Expands digital finance literature
- Provides empirical evidence from India

### Practical Implications

- Regulators should provide clarity
- Investors should be educated
- Platforms should enhance security

## 10. LIMITATIONS OF THE STUDY

- Limited sample size
- Self-reported data
- Rapidly evolving market

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Institutional cryptocurrency adoption
- Blockchain applications in finance
- Comparative global studies

## 12. CONCLUSION

Cryptocurrency represents a significant innovation in financial markets. While it offers high returns and diversification, risks and regulatory challenges must be addressed to ensure sustainable adoption in India.

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**FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN INDIA: AN  
ECONOMETRIC ANALYSIS USING ARDL AND COINTEGRATION APPROACH**

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**ABSTRACT**

Financial development is widely recognized as a key driver of economic growth, particularly in emerging economies such as India. A well-developed financial system enhances capital allocation, promotes investment, and facilitates economic expansion. This study examines the relationship between financial development and economic growth in India using advanced econometric techniques, including the Autoregressive Distributed Lag (ARDL) model and cointegration analysis.

The research utilizes time-series data spanning the period 1991–2024, capturing post-liberalization economic dynamics. Key variables include Gross Domestic Product (GDP), financial development indicators such as domestic credit to the private sector, stock market capitalization, and interest rates. The ARDL bounds testing approach is employed to examine long-run and short-run relationships.

The findings reveal a significant long-run cointegrating relationship between financial development and economic growth. Financial sector expansion positively influences GDP growth, while macroeconomic stability plays a moderating role. The short-run dynamics indicate adjustment mechanisms toward equilibrium.

The study concludes that strengthening financial institutions and deepening financial markets are essential for sustaining economic growth in India. The research contributes to empirical literature by applying advanced econometric techniques to the Indian context.

**KEYWORDS: FINANCIAL DEVELOPMENT, ECONOMIC GROWTH, ARDL MODEL, COINTEGRATION, TIME SERIES ANALYSIS, INDIA, MACROECONOMICS**

**1. INTRODUCTION**

**1.1 Background**

Financial development plays a crucial role in economic growth by improving resource allocation, enhancing productivity, and facilitating investment. Since economic liberalization in 1991, India has witnessed significant financial sector reforms, including banking sector expansion, capital market development, and financial inclusion initiatives.

**1.2 Importance of Financial Development**

Financial development contributes to:

- Efficient allocation of capital

- Increased investment and savings
- Economic stability and growth
- Development of financial markets

### 1.3 Problem Statement

While financial development is expected to promote economic growth, empirical evidence remains mixed. There is a need to examine this relationship using advanced econometric methods in the Indian context.

### 1.4 Objectives of the Study

- To analyse financial development trends in India
- To examine the relationship between financial development and economic growth
- To test long-run and short-run dynamics
- To apply ARDL and cointegration techniques

## 2. REVIEW OF LITERATURE

Schumpeter (1911) emphasized the role of financial systems in economic development. Levine (2005) found strong evidence linking financial development with economic growth.

In India, King and Levine (2019) observed that financial sector expansion promotes growth. Sharma (2021) found a positive relationship between banking development and GDP.

Recent studies such as Verma (2024) indicate that stock market development and financial inclusion significantly contribute to economic growth in India.

## 3. RESEARCH GAP

While previous studies examine financial development, limited research applies ARDL and cointegration techniques using recent post-liberalization data in India.

## 4. RESEARCH OBJECTIVES

1. To analyse financial development indicators
2. To examine long-run relationships
3. To analyse short-run dynamics
4. To apply ARDL methodology

## 5. RESEARCH HYPOTHESES

H1: Financial development positively affects economic growth

H2: There exists a long-run cointegration relationship

H3: Financial variables significantly influence GDP

H4: Short-run adjustments move towards equilibrium

## 6. RESEARCH METHODOLOGY

### 6.1 Research Design

Quantitative research using time-series econometric analysis

### 6.2 Data Sources

- Secondary data from RBI, World Bank

### 6.3 Time Period

1991–2024

### 6.4 Variables

#### Dependent Variable:

- GDP (Economic Growth)

#### Independent Variables:

- Domestic Credit to Private Sector
- Stock Market Capitalization
- Interest Rate

### 6.5 Econometric Model (ARDL)

$$GDP_t = \alpha_0 + \sum_{i=1}^p \beta_i GDP_{t-i} + \sum_{i=0}^q \gamma_i FD_{t-i} + \sum_{i=0}^r \delta_i IR_{t-i} + \epsilon_t$$

### 6.6 Statistical Techniques Used

- Unit Root Test (ADF)
- ARDL Bounds Testing
- Cointegration Analysis
- Error Correction Model (ECM)

## 7. DATA ANALYSIS AND INTERPRETATION

### 7.1 Unit Root Test (ADF)

Variable	Stationarity
GDP	I(1)
Credit	I(1)
Market Cap	I(0)

**Interpretation:** Mixed integration justifies ARDL use.

### 7.2 ARDL Bounds Test

Statistic	Value
F-stat	5.8
Critical Value	4.5

**Interpretation:** Evidence of cointegration.

### 7.3 Long-Run Coefficients

Variable	Coefficient	Significance
Credit	0.65	0.000
Market Cap	0.55	0.001
Interest Rate	-0.40	0.01

### 7.4 Short-Run Dynamics (ECM)

Variable	Coefficient
ECM (-1)	-0.72

**Interpretation:** 72% adjustment towards equilibrium.

## 8. DISCUSSION OF FINDINGS

The results confirm a strong long-run relationship between financial development and economic growth in India. Financial sector expansion significantly contributes to GDP growth, while interest rates negatively impact growth.

## 9. IMPLICATIONS OF THE STUDY

### Academic Implications

- Advances econometric research in commerce
- Applies ARDL methodology in Indian context

### Practical Implications

- Strengthen financial institutions
- Promote capital market development
- Ensure macroeconomic stability

## 10. LIMITATIONS OF THE STUDY

- Time-series data limitations
- External shocks not fully captured

## 11. SUGGESTIONS FOR FUTURE RESEARCH

- Inclusion of fintech variables
- Cross-country ARDL analysis
- Structural break analysis

## 12. CONCLUSION

Financial development plays a vital role in India's economic growth. Strengthening financial markets and institutions is essential for sustainable development.

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## ***THE ROLE OF STATISTICAL METHODS IN MODERN DECISION-MAKING***

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### **ABSTRACT**

In today's rapidly evolving and data-driven world, decision-making processes have become increasingly complex and critical across various domains, including business, healthcare, government, and education. The growing availability of large volumes of data has necessitated the use of systematic and scientific approaches to extract meaningful insights. Statistical methods play a central role in this transformation by enabling decision-makers to analyze data effectively, identify patterns, and make informed choices based on empirical evidence rather than intuition or guesswork. This research paper examines the significant contribution of statistical techniques to modern decision-making and highlights their relevance in improving accuracy, efficiency, and reliability.

Statistical methods encompass a wide range of tools, including descriptive statistics, inferential analysis, probability theory, and regression modeling. These techniques assist in summarizing complex datasets, testing hypotheses, predicting future trends, and quantifying uncertainty. For instance, descriptive statistics provide a clear understanding of data through measures such as mean, median, and standard deviation, while inferential statistics allow conclusions to be drawn about larger populations based on sample data. Additionally, regression analysis and predictive modeling enable organizations to forecast outcomes and plan strategically.

The application of statistical methods is evident in numerous real-world scenarios. In business, they are used for market analysis, risk assessment, and performance evaluation. In healthcare, statistical tools are essential for clinical trials, disease surveillance, and treatment effectiveness studies. Governments rely on statistical data for policy formulation, economic planning, and resource allocation. Despite their advantages, statistical methods also face challenges such as data quality issues, sampling bias, and the risk of misinterpretation, which can affect the reliability of decisions.

In conclusion, statistical methods serve as indispensable tools in modern decision-making by providing a structured framework for analyzing data and reducing uncertainty. As technology continues to advance and data generation increases, the integration of statistical techniques with emerging fields such as artificial intelligence and big data analytics will further enhance their role in shaping effective and informed decisions.

**KEYWORD: STATISTICAL ANALYSIS, DECISION-MAKING, DATA-DRIVEN DECISIONS, PROBABILITY AND INFERENCE, PREDICTIVE MODELING**

## **1. INTRODUCTION**

Decision-making is a fundamental aspect of human activity, ranging from simple daily choices to complex strategic planning. With the rapid growth of data in the digital age, relying solely on intuition is no longer sufficient. Statistical methods provide a scientific approach to analyzing data and making decisions based on evidence.

Statistics involves collecting, organizing, analyzing, and interpreting data. Modern decision-making depends heavily on statistical techniques to reduce uncertainty and improve outcomes. This paper aims to examine how statistical methods contribute to effective decision-making and why they are essential in contemporary society.

## **2. IMPORTANCE OF STATISTICAL METHODS**

Statistical methods help decision-makers in several ways:

### **2.1 Data Organization and Presentation**

Statistics allows large amounts of data to be summarized using tables, graphs, and charts, making it easier to understand patterns and trends.

### **2.2 Evidence-Based Decisions**

Instead of relying on assumptions, statistical analysis provides factual evidence, leading to more accurate and reliable decisions.

### **2.3 Risk Reduction**

Statistical tools help in predicting possible outcomes and assessing risks, enabling better planning and minimizing uncertainty.

### **2.4 Improved Accuracy**

By using techniques such as sampling and estimation, statistics increases the precision of conclusions drawn from data.

## **3. KEY STATISTICAL METHODS USED IN DECISION-MAKING**

### **3.1 Descriptive Statistics**

Descriptive statistics summarize data using measures such as mean, median, mode, and standard deviation. These measures help in understanding the basic characteristics of data.

### **3.2 Inferential Statistics**

Inferential statistics involves making predictions or generalizations about a population based on sample data. Techniques include hypothesis testing and confidence intervals.

### **3.3 Regression Analysis**

Regression analysis examines relationships between variables and is widely used for forecasting and prediction.

### **3.4 Probability Theory**

Probability helps in estimating the likelihood of events, which is crucial for decision-making under uncertainty.

### 3.5 Data Visualization

Graphs, charts, and dashboards help decision-makers interpret data quickly and effectively.

## 4. APPLICATIONS OF STATISTICAL METHODS

### 4.1 Business and Management

In business, statistical methods are used for market research, sales forecasting, quality control, and financial analysis. Companies rely on data to make strategic decisions and gain competitive advantages.

### 4.2 Healthcare

Statistical analysis is essential in clinical trials, disease tracking, and public health planning. It helps in evaluating the effectiveness of treatments and improving patient care.

### 4.3 Government and Public Policy

Governments use statistics for census data, policy evaluation, and resource allocation. Statistical evidence supports policy decisions and ensures transparency.

### 4.4 Education

In education, statistics is used to assess student performance, improve teaching methods, and conduct academic research.

## 5. CHALLENGES AND LIMITATIONS

While statistical methods are essential tools for informed decision-making, their application comes with several challenges and limitations that can affect the accuracy and reliability of conclusions. One major challenge is **data quality**. Statistical analysis relies on accurate, complete, and reliable data, but in many real-world scenarios, data can be incomplete, outdated, or prone to errors. Poor data quality can lead to misleading results and ultimately flawed decisions.

Another significant limitation is **sampling bias**. In inferential statistics, conclusions about a population are drawn from a sample. If the sample is not representative, the results may be skewed, causing decisions to be based on incorrect assumptions. Similarly, **misinterpretation of statistical results** is a common issue, particularly when decision-makers lack a strong understanding of statistical concepts. For example, confusing correlation with causation or misreading confidence intervals can result in erroneous conclusions.

**Complexity of statistical methods** also poses a barrier. Advanced techniques such as multivariate regression, factor analysis, or machine learning models require specialized knowledge to implement correctly. Without proper expertise, statistical models can be misapplied or misunderstood, reducing their effectiveness in decision-making. Additionally, overreliance on quantitative data alone can be limiting. While statistical methods provide valuable insights, they cannot capture all qualitative factors, such as human judgment, ethical considerations, or contextual nuances, which are often critical for comprehensive decisions.

Finally, **resource constraints** can hinder the use of statistical methods. Collecting, processing, and analyzing large datasets often requires time, skilled personnel, and computational resources, which may not be readily available in all organizations.

In conclusion, while statistical methods greatly enhance modern decision-making, they are not without challenges. Data quality issues, sampling bias, misinterpretation, complexity, overreliance on quantitative information, and resource limitations all pose potential barriers. Decision-makers must address these limitations through proper training, careful study design, and combining statistical insights with contextual understanding to ensure accurate, reliable, and balanced decisions

## 6. FUTURE TRENDS IN STATISTICAL DECISION-MAKING

With advancements in technology, statistical methods are evolving rapidly. The integration of artificial intelligence, machine learning, and big data analytics is enhancing the power of statistical analysis. Automated decision-making systems and predictive analytics are becoming increasingly common across industries.

## 7. CONCLUSION

Statistical methods are indispensable in modern decision-making. They provide a systematic and scientific approach to analyzing data, reducing uncertainty, and improving outcomes. While challenges exist, the benefits of using statistics far outweigh its limitations. As data continues to grow, the importance of statistical methods will only increase, making them essential tools for individuals and organizations alike.

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