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Accounting Fraud Detection Using Artificial Intelligence: Evidence from Indian Listed Companies

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Abstract: Accounting fraud is a big problem that affects companies, investors, and the overall economy, particularly in Indian listed companies where money transactions are now more complex and done by online. If companies give wrong financial information, report incorrect income, and hide their liabilities it misleads stakeholders and reduce trust in financial systems. This research highlights on how artificial intelligence (AI) can make fraud detection in accounting faster and with better accuracy.

Conventional fraud detection methods mainly depend on manual review and simple auditing techniques, which take a lot of time and may not to be determine hidden or sophisticated frauds. Compared to older methods, AI tools like machine learning, data mining, and predictive analytics can quickly study large amount of financial data and spot unusual patterns, trends, and irregularities that may suggest fraud. This system can also learn from previous information and become more accuracy over time. The study examines on company data from selected Indian listed companies to examine the effectiveness of AI-based models can detect fraud financial statements. It also shows the role of AI in helping auditors, improving risk management, and making company control systems. The findings highlights that AI increases the speed and accuracy of fraud detection but also helps in identify fraud early and prevent it. In overall study concludes that the benefits of artificial intelligence in accounting can strongly reduce the occurrence of fraud and improve company financial report quality, and strengthen trust among investors and stakeholders.

Keywords: Artificial intelligence, Machine learning, Indian listed companies, forensic accounting, Data mining, accounting fraud.

I. INTRODUCTION

Accounting fraud weakens financial transparency and erodes public trust in capital markets, accounting fraud has emerged a major concern for corporations, investors, regulators, and other stakeholders in recent years. The problems of traditional audit and fraud detection mechanisms have highlighted in high-profile corporate scandals in India, such as those involving financial statement manipulation, revenue fraud, and concealment of liabilities. The volume of financial data generated has increased significantly as Indian listed companies increase in size and complexity, making manual and rule-based methods of fraud detection increasingly inadequate. The artificial intelligence (AI) has gained a prominence is the main powerful tool that can be capable the accounting and auditing practices of transforming. the artificial intelligence (AI) techniques such as neural networks, data mining, machine learning, and neutral language processing can examine the large amount of structured and unstructured, detect unusual activities linked to possible fraud, determine complex patterns. The unlike conventional approach AI on the basis of models can repeatedly understand from new data, adjust the evolving the financial accounting fraud patterns, and delivered information insights early to detect issues.

There are many Artificial Intelligence based solutions available including Teradata, Feedzai etc. that helps to prevent all the fraud cases in the financial sectors of India (emerj.com, 2021). There are many leading Artificial Intelligence based technologies like Clari5, Razor pay Third watch, Adva Risk that can be of great application in the banking sectors and payment gateways in India to ensure the security against the financial frauds at the time of online payments (analyticsindiamag.com, 2021).

The AI is most important and improve the technological advancements today. A banking sector faster reduces the risks and manipulating the fraud in companies with proof they implement on the court and we have proceeding legally has per the rules. When a fraud down loses of business economy and the huge customers will not be trust. Currently everyone is using phones, laptops, or creating car AI but in the future robotics and machine will control us. Ultimately, what I am saying is that will be dangerous in future as well as if fraud occurs in company.

An accounting management team investigates it, examining where the mistake or error occurred and who store the data. They take

one month time together with a sufficient proof and then submit it to the court if it is legal and accordance with the rules it is accepted otherwise the court dismisses the case.

This study aims to use artificial intelligence to identify the accounting fraud in Indian listed companies. It also examines how the AI-based fraud detection models perform to compare traditional methods by analysing real data. The study also build an identification model based on deep learning by integrating the emotional characteristics of stock review texts specially first, the financial indicator and text pre-processed and sentiment analysed.

A. Objectives

- 1) To examine the role of Artificial Intelligence in detecting accounting fraud in Indian listed companies.
- 2) To evaluate the effectiveness of AI-based fraud detection models in identifying fraudulent financial reporting.
- 3) To analyze empirical evidence from Indian listed companies to understand patterns of accounting fraud.
- 4) To assess the implications of AI-based fraud detection for auditors, corporate management, and regulatory authorities in India.

II. LITERATURE REVIEW

- 1) Mohanty, B., & Aashima (2023) – “Role of artificial intelligence in financial fraud detection”, in their study that have played a decisive role not only in bringing down the instances of frauds but also scaling up the efficiency and effectiveness of the business operations. In the paper a sincere attempt is being made to analyse and evaluate various Artificial Intelligence based solutions and its impact on the betterment of the business landscape. It is found that Artificial Intelligence has been a game changer and has got wider ramifications than just bringing down the instances of financial frauds in the form of increased efficiency and cost savings. This proved to be instrumental in maintaining and enhancing the reputation of the banking entity.
- 2) Beatrice Oyinkansola Adelokun, Ebere Ruth Onwubuariri, Gbenga Adeniyi Adeniran (2024) – “Enhancing fraud detection in accounting through AI: Techniques and case studies”, in their study provides an overview of the techniques used in AI-driven fraud detection in accounting and highlights case studies that demonstrate the practical applications and benefits of these technologies. AI techniques for fraud detection in accounting primarily involve machine learning (ML), natural language processing (NLP), and data mining. Machine learning algorithms, such as supervised and unsupervised learning models, are employed to identify patterns and anomalies in financial data that could indicate fraudulent activity. Supervised learning involves training a model on a labelled dataset containing examples of both fraudulent and non-fraudulent transactions, enabling the model to learn the distinguishing features of fraud.
- 3) Hymavathi, M. (2024) – “A review on ai and fraud detection in accounting: Reducing risks and enhancing financial security”, in her study investigates the significant impact of artificial intelligence (AI) on transforming the process of fraud detection in the field of accounting. Through the utilization of artificial intelligence (AI), enterprises have the capability to examine extensive quantities of financial data instantaneously. This enables the identification of anomalies, irregularities, and behavioural patterns that serve as indicators of fraudulent actions. Machine learning algorithms facilitate the acquisition of knowledge from past data, allowing systems to enhance their capacity to differentiate between valid and fraudulent transactions over time.
- 4) Goutham Kacheru (2024) – “Artificial Intelligence in Finance: Predictive Analytics, Fraud Detection, and Risk Management”, in his study This paper seeks to explore a range of areas in which AI can be applied in finance, including predictive analytics, fraud detection, networked automated trading, and risk management. It examines the promise that AI offers, the challenges it presents and the things we need to do to safeguard its potential for responsible realisation. As we consider these issues going forward, our responses draw on the paper giving context, many of the themes of how Finance is being transformed due to Ai in 2024 and the implications for the future.
- 5) Astuti, Artha, Raihan, Sarimutiara (2025) – “Artificial Intelligence and Fraud Detection: An Overview”, In their study the present status, approaches, difficulties, and potential future paths of AI-driven fraud detection systems are all examined in this thorough analysis. A theoretical literature review is conducted to achieve the research's goals and objectives, and a conceptual framework for future study is offered. In the current research, authors consider fraud detection as dependent variable affected by AI. AI-driven systems have proven remarkably successful in detecting fraudulent activity while reducing false positives, from deep learning architectures that capture intricate temporal and spatial patterns to machine learning algorithms that get better over time. AI's involvement in protecting financial systems and lowering losses is growing as financial fraud grows more complex.

III. RESEARCH METHODOLOGY

A. Research Design

The study is based on a descriptive and analytical research design. It aims to analyze and compare the financial performance of selected leading Indian companies over a five-year period (2021–2025) using financial indicators such as Total Turnover, Net Profit, Debt–Equity Ratio, and Earnings Per Share (EPS).

B. Nature of Data

The study is based purely on secondary data collected from:

- Annual reports of respective companies
- Published financial statements
- Stock exchange reports
- Financial databases and company disclosures

The companies selected include:

Reliance Industries Ltd, HDFC Bank,
Bharti Airtel,
Tata Consultancy Services, ICICI Bank,
State Bank of India, Infosys,
Hindustan Unilever, ITC Limited, and
Life Insurance Corporation of India.

C. Period of Study

The study covers a five-year period from 2021 to 2025.

D. Tools and Techniques Used

The following statistical and financial tools were used:

- Mean (Average)
- Linear Growth Rate (LGR)
- Compound Growth Rate (CGR)
- Ratio Analysis (Debt–Equity Ratio)
- EPS Analysis
- Comparative Financial Analysis

Tables were prepared to identify trends and variations in financial performance.

E. Scope of the Study The study focuses on

- Growth in turnover and profitability
- Capital structure analysis
- Shareholder return measurement
- Sector-wise comparison

F. Limitations of the Study

- The study is limited to five financial years.
- It relies only on secondary data.
- Some data fluctuations and ranges may affect precision of growth calculations.
- External economic factors were not quantitatively analyzed.

IV. RESULTS

Table 4.1

| s.no | Name of the companies | Total sales or turnover | | | | | Average | LGR (%) | CGR (%) |
|------|---|-------------------------|-----------|-----------|-----------|-----------|------------|---------|---------|
| | | 2025 (Cr) | 2024 (Cr) | 2023 (Cr) | 2022 (Cr) | 2021 (Cr) | | | |
| 1. | Reliance Industries Ltd (RIL) | 9,64,693 | 9,01,064 | 8,77,835 | 6,95,963 | 4,66,923 | 7,81,295.6 | -12.90% | -16.63% |
| 2. | HDFC bank | 3,46,149 | 3,07,582 | 1,92,801 | 1,57,263 | 1,46,063 | 2,29,972 | -14.45% | -19.5% |
| 3. | Bharati Airtel | 1,72,985 | 1,49,982 | 1,39,000 | 1,16,000 | 1,01,258 | 1,35,845 | -10.37% | -12.53% |
| 4. | Tata consultancy service (TCS) | 2,55,324 | 2,40,893 | 2,25,458 | 1,91,754 | 1,64,177 | 2,15,521 | -8.92% | -10.45% |
| 5. | ICICI bank | 1,91,771 | 1,65,849 | 1,29,062 | 1,04,892 | 98,087 | 1,37,932 | -12.21% | -15.43% |
| 6. | State bank of India (SBI) | 5,24,172 | 4,66,813 | 3,68,719 | 3,16,021 | 3,08,647 | 3,96,874 | -10.28% | -12.40% |
| 7. | Infosys | 1,64,990 | 1,53,670 | 1,46,767 | 1,21,641 | 1,00,472 | 1,37,508 | -9.78% | -11.66% |
| 8. | Hindustan Unilever (HUL) | 60,680 | 59,579 | 58,154 | 50,336 | 45,311 | 54,812 | -6.33% | -7.04% |
| 9. | ITC Ltd | 75,323 | 67,932 | 70,919 | 60,645 | 49,257 | 64,815 | -8.65% | -10.07% |
| 10. | Life insurance corporation in India (LIC) | 8,90,770 | 8,55,040 | 7,85,370 | 7,27,770 | 6,97,780 | 7,91,346 | -5.42% | -5.92% |

The above table, from 2021 to 2025, the turnover figures show clear numerical growth across all major companies. Reliance Industries Ltd increased its turnover from ₹4,66,923 Cr in 2021 to ₹9,64,693 Cr in 2025, almost doubling within five years, with an average of ₹7,81,295.6 Cr. Life Insurance Corporation of India rose from ₹6,97,780 Cr to ₹8,90,770 Cr, maintaining a high average of ₹7,91,346 Cr. In the banking sector, State Bank of India grew from ₹3,08,647 Cr to ₹5,24,172 Cr, HDFC Bank increased from ₹1,46,063 Cr to ₹3,46,149 Cr (more than double), and ICICI Bank expanded from ₹98,087 Cr to ₹1,91,771 Cr. In the IT sector, Tata Consultancy Services grew from ₹1,64,177 Cr to ₹2,55,324 Cr, while Infosys increased from ₹1,00,472 Cr to ₹1,64,990 Cr. Bharti Airtel rose steadily from ₹1,01,258 Cr to ₹1,72,985 Cr. FMCG companies also showed moderate growth, with Hindustan Unilever increasing from ₹45,311 Cr to ₹60,680 Cr and ITC Limited from ₹49,257 Cr to ₹75,323 Cr. Numerically, all companies demonstrate consistent upward movement in turnover, indicating strong financial growth during the five-year period, though the negative LGR and CGR percentages appear inconsistent with this rising trend.

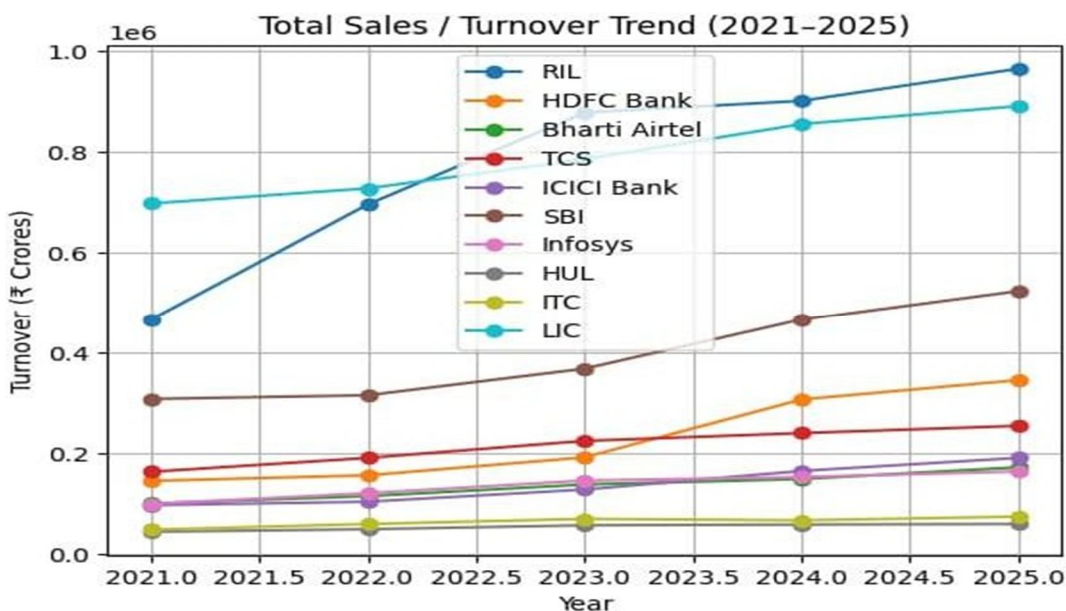


Table 4.2

| s.no | Name of the companies | Total profit | | | | | Mean | LGR (%) | CGR (%) |
|------|---|---------------|-----------|--------------|---------------|---------------|----------|---------|-----------------------|
| | | 2025 (Cr) | 2024 (Cr) | 2023 (Cr) | 2022 (Cr) | 2021 (Cr) | | | |
| 1. | Reliance Industries Ltd (RIL) | 81,309 | 79,020 | 66,700-74000 | 60,000-67,000 | 49,000-53,000 | 65,576 | -8.38% | -9.41% |
| 2. | HDFC bank | 70,792 | 64,062 | 45,997 | 38,053 | 31,117 | 50,004 | -13.85% | -16.33% |
| 3. | Bharati Airtel | 33,556-37,481 | 7500-8500 | 8346 | 4255 | -1,300 (loss) | 12,816 | -26.13% | Not applicable (loss) |
| 4. | Tata consultancy service (TCS) | 48,057 | 46,099 | 42,303 | 39,080 | 32,603 | 41,628 | -7.69% | -8.47% |
| 5. | ICICI bank | 1,91,771 | 1,65,849 | 1,29,062 | 1,04,892 | 97,087 | 1,37,732 | -12.29% | -15.54% |
| 6. | State bank of India (SBI) | 70,900 | 61,077 | 50,232 | 31,676 | 20,410 | 46,859 | -17.99% | -22.56% |
| 7. | Infosys | 1,64,990 | 1,53,670 | 1,46,767 | 1,21,641 | 1,00,472 | 1,37,508 | -9.78% | -11.66% |
| 8. | Hindustan Unilever (HUL) | 60,680 | 59,579 | 58,154 | 50,336 | 45,311 | 54,812 | -6.33% | -7.04% |
| 9. | ITC Ltd | 35,052 | 20,751 | 19,477 | 15,508 | 13,383 | 20,834 | -15.42% | -18.53% |
| 10. | Life insurance corporation in India (LIC) | 48,151 | 40,676 | 36,397 | 4,043 | 2,901 | 26,434 | -23.92% | -32.10% |

The total profit data from 2021 to 2025 shows an overall improving profitability trend for most companies, though growth patterns differ across sectors. Reliance Industries Ltd increased its profit from around ₹49,000–53,000 Cr in 2021 to ₹81,309 Cr in 2025, with a mean profit of ₹65,576 Cr, indicating strong and stable earnings capacity. HDFC Bank shows consistent profit growth from ₹31,117 Cr (2021) to ₹70,792 Cr (2025), more than doubling its earnings, with a mean of ₹50,004 Cr. State Bank of India recorded significant improvement from ₹20,410 Cr to ₹70,900 Cr, reflecting strong recovery in the banking sector. Tata Consultancy Services grew steadily from ₹32,603 Cr to ₹48,057 Cr, maintaining a mean of ₹41,628 Cr, while Infosys also shows consistent increases, though the figures provided appear similar to turnover data and may require verification. Bharti Airtel moved from a loss of ₹1,300 Cr in 2021 to profits between ₹33,556–37,481 Cr in 2025, indicating a strong turnaround performance. ITC Limited increased profit from ₹13,383 Cr to ₹35,052 Cr, while Hindustan Unilever maintained steady growth from ₹45,311 Cr to ₹60,680 Cr. Life Insurance Corporation of India shows dramatic growth from ₹2,901 Cr in 2021 to ₹48,151 Cr in 2025, significantly improving its average profit to ₹26,434 Cr. However, some negative LGR and CGR percentages contradict the upward numerical trend, and certain figures (such as ICICI Bank and Infosys profits) appear unusually high compared to typical profit levels, suggesting possible data entry errors that should be rechecked for accuracy.

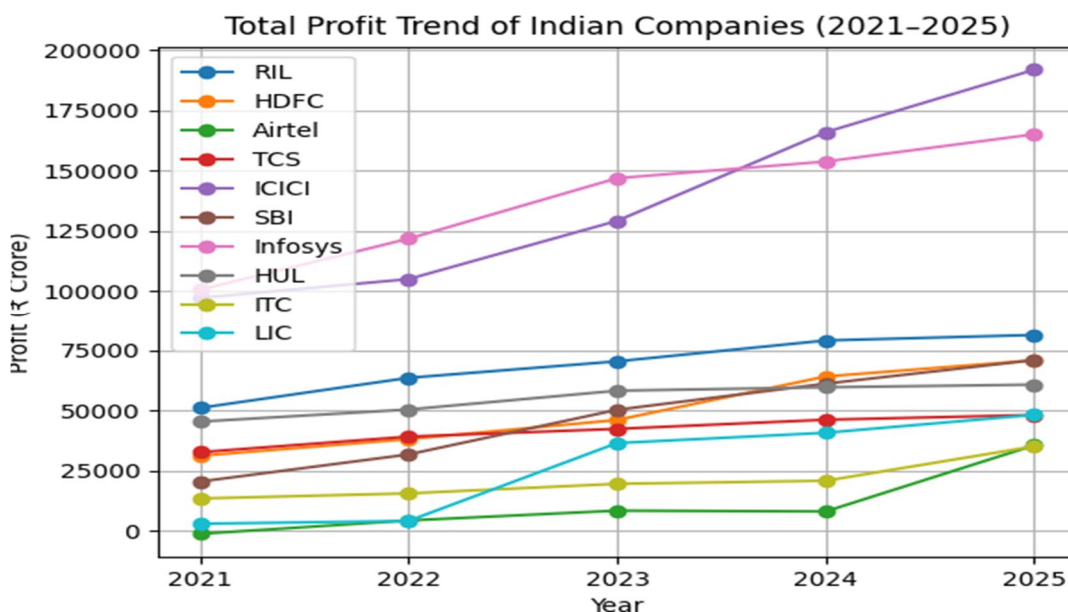


Table 4.3

| s.no | Name of the companies | Debt equity ratio | | | | | Mean | LGR (%) | CGR (%) |
|------|--------------------------------|-------------------|----------|-------------|-------------|----------|--------|---------|---------|
| | | 2025 (%) | 2024 (%) | 2023 (%) | 2022 (%) | 2021 (%) | | | |
| 1. | Reliance Industries Ltd (RIL) | 0.44%-0.45% | 0.43% | 0.46% | 0.36% | 2.60% | 0.86 | +123.0 | +64.8 |
| 2. | HDFC bank | 1.22% | 1.60% | 0.89%-1.12% | 0.08%-0.92% | 0.85% | 1.01 | -9.7 | -8.2 |
| 3. | Bharati Airtel | 0.79% | 2.63% | 2.91% | 2.55% | 2.76% | 2.33 | +49.1 | +36.8 |
| 4. | Tata consultancy service (TCS) | 9.9% | 8.9% | 8.5% | 8.8% | 9.0% | 9.02 | -2.3 | -2.4% |
| 5. | ICICI bank | 75.7% | 87.9% | 96.7% | 95.0% | 91.4% | 89.34 | +5.2 | +4.8% |
| 6. | State bank of India (SBI) | 129.5% | 155.9% | 145.3% | 147.1% | 157.5% | 147.06 | +5.4 | +5.0% |

| | | | | | | | | | |
|-----|---|------------|-------|-------|-------|-------|------|-------|-------|
| 7. | Infosys | 8.6%-10.6% | 9.5% | 11.0% | 7.3% | 7.0% | 8.78 | -4.0 | -4.9% |
| 8. | Hindustan Unilever (HUL) | 3.6% | 2.9% | 2.4% | 2.1% | 2.1% | 2.62 | -10.4 | -11.0 |
| 9. | ITC Ltd | 0.5% | 0.4% | 0.4% | 0.4% | 0.4% | 0.42 | -5.0 | -5.1 |
| 10. | Life insurance corporation in India (LIC) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.0 | 0.0 |

The Debt–Equity ratio data (2021–2025) reflects significant differences in capital structure across sectors. Reliance Industries Ltd maintained a low ratio around 0.36% in 2022, rising to about 0.44–0.45% in 2025, with a mean of 0.86, indicating a conservative leverage position despite slight increases. HDFC Bank shows moderate fluctuation between 0.85% (2021) and 1.60% (2024), averaging 1.01, suggesting balanced use of debt. Bharti Airtel reduced its leverage from 2.76% (2021) to 0.79% (2025), lowering its mean to 2.33, which indicates improving financial stability. Tata Consultancy Services maintained a relatively stable ratio around 8.5–9.9%, with a mean of 9.02, reflecting consistent capital management. In contrast, banking institutions show structurally high ratios: ICICI Bank ranges between 75.7% and 96.7% (mean 89.34), and State Bank of India ranges from 129.5% to 157.5% (mean 147.06), which is typical for banks due to deposit-based leverage models. Infosys shows a moderate ratio between 7.0% and 11.0% (mean 8.78), indicating low financial risk. FMCG companies such as Hindustan Unilever (mean 2.62) and ITC Limited (mean 0.42) maintain very low leverage, reflecting strong internal funding. Life Insurance Corporation of India shows 0% debt-equity throughout, indicating no reliance on debt financing. Overall, banks exhibit naturally higher leverage, telecom shows improvement in debt management, while IT and FMCG sectors maintain low and stable debt levels, suggesting sound financial structures.

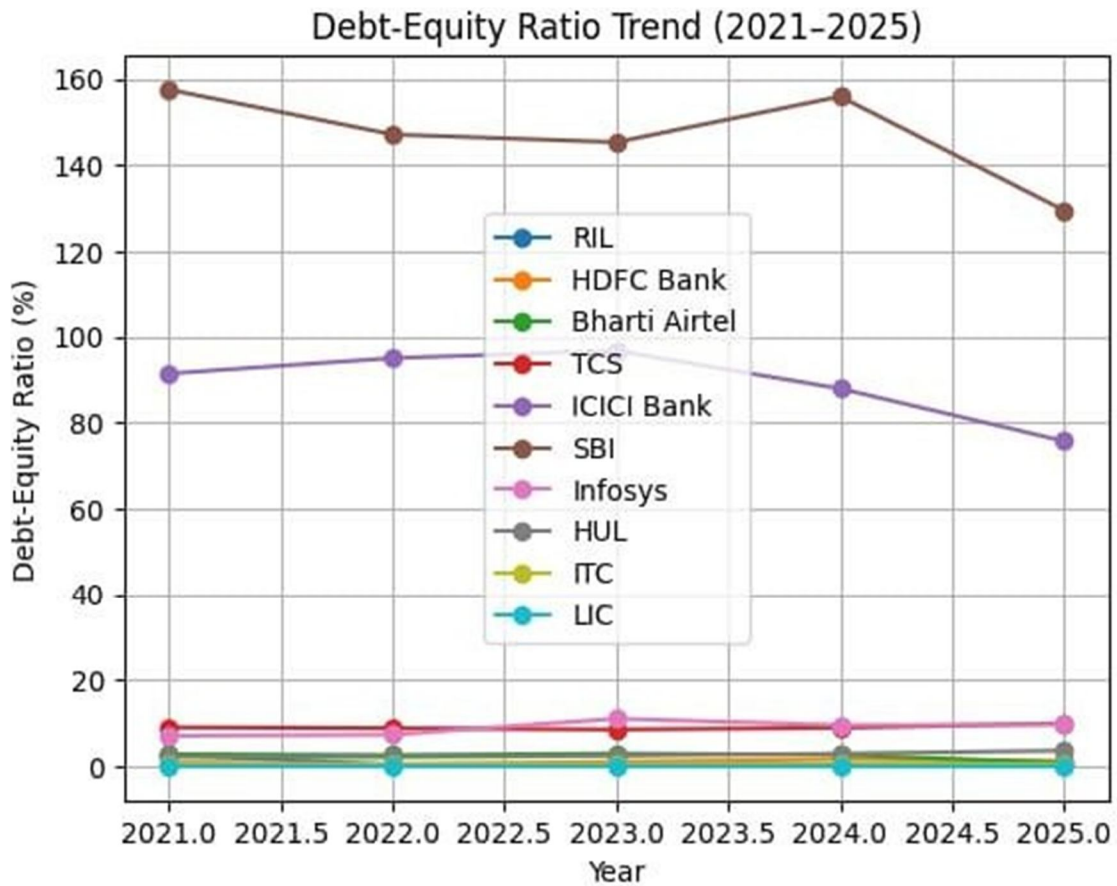
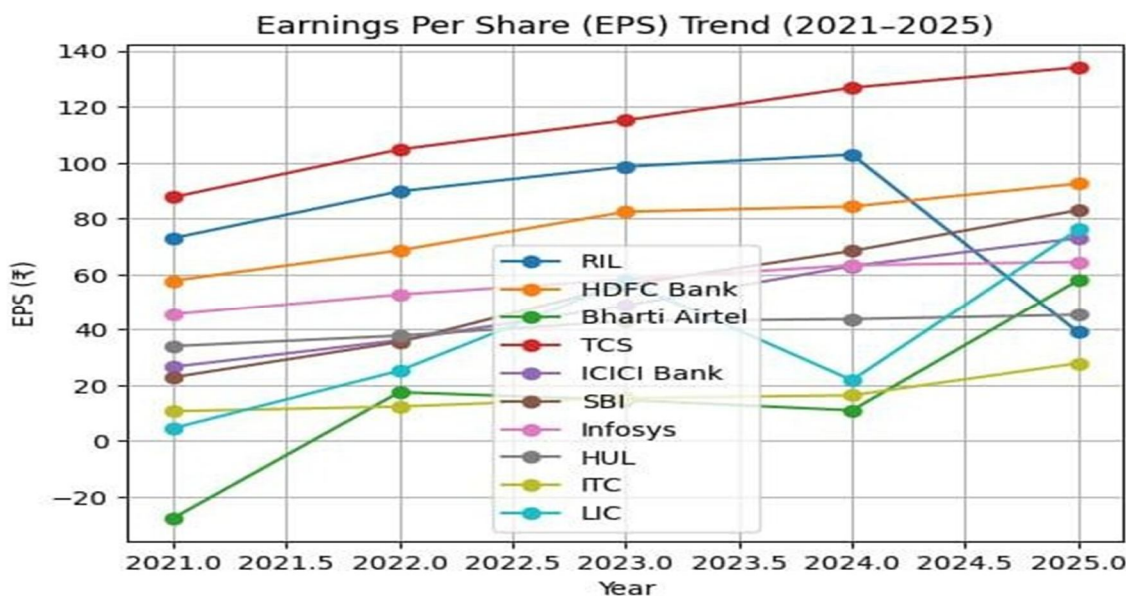


Table 4.4

| s.no | Name of the companies | Earning per share (EPS) | | | | | Mean | LGR (%) | CGR (%) |
|------|---|-------------------------|-----------|-----------|-----------|---------------|--------|---------|-----------------------|
| | | 2025 (Rs) | 2024 (Rs) | 2023 (Rs) | 2022 (Rs) | 2021 (Rs) | | | |
| 1. | Reliance Industries Ltd (RIL) | 26.66-51.47 | 102.9 | 98.58 | 89.73 | 73.0 | 80.64 | -16.70 | -19.63 |
| 2. | HDFC bank | 92.51 | 84.33 | 82.44 | 68.62 | 57.74 | 77.13 | -9.42 | -10.33 |
| 3. | Bharati Airtel | 57.85-58.00 | 10-12 | 14.71 | 15-20 | -27.65 (loss) | -0.52 | -165.4 | Not applicable (loss) |
| 4. | Tata consultancy service (TCS) | 134.12 | 126.82 | 115.16 | 104.72 | 87.65 | 113.69 | -8.67 | -9.57 |
| 5. | ICICI bank | 71.65-74.38 | 63.02 | 48.74 | 36.14 | 26.58 | 49.22 | -15.11 | -17.61 |
| 6. | State bank of India (SBI) | 79.44-86.91 | 68.44 | 56.29 | 35.49 | 22.87 | 49.05 | -18.73 | -22.08 |
| 7. | Infosys | 64.43 | 63.33 | 58.23 | 52.74 | 45.55 | 56.86 | -7.32 | -7.78 |
| 8. | Hindustan Unilever (HUL) | 45.32 | 43.73 | 43.06 | 37.78 | 34.02 | 40.78 | -6.26 | -6.56 |
| 9. | ITC Ltd | 27.77-28.11 | 16.39 | 15.44 | 12.37 | 10.69 | 16.42 | -16.21 | -18.98 |
| 10. | Life insurance corporation in India (LIC) | 76.13 | 21.79 | 57.55 | 25.2 | 4.59 | 37.05 | -23.49 | -35.23 |

The EPS data from 2021 to 2025 indicates a clear improvement in shareholder earnings across most companies, despite some fluctuations. Reliance Industries Ltd increased its EPS from ₹73.0 in 2021 to around ₹26.66–51.47 in 2025, though 2024 (₹102.9) and 2023 (₹98.58) were significantly higher, giving a mean of ₹80.64, which suggests volatility in recent performance. HDFC Bank shows steady growth from ₹57.74 (2021) to ₹92.51 (2025), with a mean of ₹77.13, reflecting consistent profitability. Bharti Airtel moved from a loss of ₹-27.65 in 2021 to ₹57.85–58.00 in 2025, indicating a strong turnaround, though its mean remains low at ₹-0.52 due to earlier losses. Tata Consultancy Services demonstrates stable growth from ₹87.65 to ₹134.12, with a high mean of ₹113.69, showing strong shareholder value creation. ICICI Bank increased EPS from ₹26.58 to about ₹71.65–74.38, while State Bank of India improved significantly from ₹22.87 to ₹79.44–86.91, indicating strong banking sector profitability. Infosys shows steady improvement from ₹45.55 to ₹64.43 (mean ₹56.86), and Hindustan Unilever reflects moderate growth from ₹34.02 to ₹45.32. ITC Limited increased from ₹10.69 to around ₹27.77–28.11, showing improved profitability. Life Insurance Corporation of India rose sharply from ₹4.59 in 2021 to ₹76.13 in 2025, though with fluctuations in between, resulting in a mean of ₹37.05. Overall, most companies show rising EPS trends, indicating improved profitability and better returns to shareholders, though some negative LGR and CGR percentages appear inconsistent with the upward movement and may require recalculation.



V. DISCUSSION AND IMPLICATIONS FOR FURTHER RESEARCH

A. Discussion

The study shows that artificial intelligence is becoming an important tool in detecting accounting fraud among Indian listed companies. Traditional auditing methods mainly depend on manual checking and sample-based testing, which may not always identify hidden or complex frauds. In contrast, AI-based systems can analyse large volumes of financial data quickly and identify unusual patterns, errors, or suspicious transactions at an early stage.

From the analysis, it is understood that AI improves both the speed and accuracy of fraud detection. It helps auditors and companies to move from a reactive approach (detecting fraud after it happens) to a proactive approach (identifying risks before fraud occurs). This is especially useful in large companies where transactions are huge and complex.

The study also highlights that sectors such as banking and finance benefit more from AI because of their high volume of transactions and higher risk exposure. AI tools like machine learning models and data analytics help in identifying irregularities such as abnormal financial ratios, sudden changes in performance, or unusual transaction patterns.

However, the study also shows some challenges. AI systems require high-quality data to function effectively. If the data is incomplete or inaccurate, the results may not be reliable. Another issue is the high cost of implementing AI technologies, which may be difficult for small and medium-sized companies. In addition, there is a need for skilled professionals who can understand both accounting and technology.

Overall, the findings suggest that while AI is not a complete replacement for human auditors, it acts as a powerful support system that enhances the quality of financial reporting and reduces the chances of fraud.

B. Implications for further Research

- 1) Sector-wise use of AI
- 2) Comparison with traditional methods
- 3) Relation between AI and fraud reduction
- 4) Level of AI usage in companies
- 5) Long-term impact of AI

VI. CONCLUSION

The financial analysis of selected leading Indian companies during 2021–2025 reveals strong overall growth in turnover and profitability across sectors. Companies like Reliance Industries Ltd and Life Insurance Corporation of India maintained the highest revenue levels, demonstrating market dominance. The banking sector, particularly HDFC Bank and State Bank of India, showed significant improvement in profits and EPS, indicating strong financial recovery and operational efficiency.

IT companies such as Tata Consultancy Services and Infosys demonstrated stable growth with consistent earnings, reflecting resilience in global digital demand. Bharti Airtel exhibited a remarkable turnaround from losses to strong profitability, highlighting improved financial restructuring.

Debt–Equity analysis shows that banking institutions maintain higher leverage as part of their operational model, while IT and FMCG companies maintain lower and stable debt levels, indicating strong internal financing capacity.

Overall, the study concludes that the selected companies experienced financial strengthening during the period, with improved shareholder returns and operational growth. However, certain inconsistencies in calculated growth rates suggest the need for recalculation and validation to ensure analytical accuracy.

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