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Financial Performance Evaluation of NSE AND BSE: A Comparative Assessment of Revenue Structure, Operating Efficiency, and Profitability (2020–2025)

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Abstract

Stock exchanges play a crucial role in today's financial systems by providing platforms for raising capital, enhancing market liquidity, and fostering economic growth. The National Stock Exchange of India Limited (NSE) and BSE Limited (BSE) in India have witnessed a sea change in the last decade due to technological advancements, regulatory reforms and increasing retail participation. They are regulated in the same way but differ in their revenue models, operating efficiencies and profitability.

The present study has made a comparative analysis of the financial performance of NSE & BSE for the period 2020-2025 with the help of secondary data collected from the annual reports & financial statements. Various approaches such as trend analysis and comparative ratio analysis are studied for key performance indicators such as revenue growth, operating margin, and return on equity. Initial results show NSE is operationally more efficient and profitable mainly due to its dominance in the equity derivatives and technology-based product market. By contrast, BSE has focused on innovations in SME listings and mutual fund platforms, but its scale is small. This research adds to the literature on financial market infrastructure by providing insight to regulators, investors and researchers.

Key Words: *National Stock Exchange, BSE Limited, Financial Performance, Revenue Structure, Operating Efficiency, Profitability Analysis, Financial Ratios, Capital Market, Stock Exchange, India.*

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1. Introduction

Financial markets are essential for saving money, efficiently distributing capital, creating investment opportunities, and fostering economic growth. Stock exchanges are key financial institutions that allow companies to access long-term capital while giving investors liquidity, transparency, and accurate pricing. The effectiveness of stock exchanges affects investor confidence, market stability, and overall economic expansion. India has one of the fastest-growing capital markets in the world, supported by strong regulations from the Securities and Exchange Board of India (SEBI). Over the last thirty years, the Indian securities market has changed significantly. Changes such as dematerialisation, electronic trading, algorithmic trading, digital settlements, and more retail investors getting involved have improved market transparency and operational efficiency. These advancements have strengthened India's position in global financial markets. The two main stock exchanges, the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE), are crucial for raising capital, facilitating trades, ensuring fair prices, and supporting overall economic development.

Evaluating financial performance is important for understanding how efficiently stock exchanges operate and their long-term viability. It helps to assess their ability to earn revenue, control costs, maintain profitability, and use resources wisely. Unlike typical businesses, stock exchanges earn money from various sources, including transaction fees, listing fees, market data services, technology solutions, clearing and settlement services, and investment income. Analysing their revenue sources, operational efficiency, and profitability provides a clear view of their financial health and competitive standing.

Since the financial year 2020 (FY2020), both the NSE and BSE have experienced significant changes in structure and operations. Major economic events, technology advancements, shifts in investor behaviour, and regulatory reforms have driven these changes. The COVID-19 pandemic created one of the toughest times for global financial markets. During the lockdown in India in 2020, the market saw high volatility and stock prices dropped sharply, causing uncertainty among investors.

Despite the challenges, both the NSE and BSE showed great resilience by maintaining trading operations through reliable electronic platforms and remote working arrangements. The pandemic sped up the use of digital technologies and highlighted how important a solid market infrastructure is for financial stability. As the economy started to recover and supportive policies restored market confidence, both exchanges experienced a quick rebound in trading activities and market capitalization.

During this time, India also saw a huge increase in retail investor participation. Low interest rates, growing household savings during lockdowns, better internet access, smartphone trading apps, and rising financial awareness motivated millions of first-time investors to join the equity market. The number of Demat accounts rose significantly, leading to increased trading volumes in both cash and derivatives segments. This surge in retail investors raised transaction-based revenues for both exchanges and prompted them to introduce new financial products and educational initiatives for investors.

Another major trend from FY2020 to FY2025 was the rapid digitalization of the securities market. Both the NSE and BSE invested significantly in advanced technology, cloud services, cybersecurity, algorithmic trading systems, AI-driven surveillance, and improved market data services. This digital transformation increased operational efficiency, lowered transaction costs, strengthened risk management, and enhanced the overall trading experience for investors. The growing reliance on electronic trading platforms and mobile apps allowed for quicker trade execution, better market access, and greater transparency, all of which contributed to the Indian capital market's competitiveness.

2. LITERATURE REVIEW

The transformation of stock exchanges from member-owned organisations into professionally managed, technology-driven corporate entities has attracted considerable academic attention. Earlier studies primarily focused on market efficiency, liquidity, and price discovery, whereas more recent research has examined governance, operational efficiency, revenue diversification, and profitability of exchange operators.

- The Efficient Market Hypothesis (EMH) developed by **Eugene F. Fama (1970)** is one of the most influential theories in financial economics. It is the basic framework of understanding how stock exchanges are functioning. EMH suggests that security prices incorporate all available information and adjust rapidly so that investors cannot consistently earn abnormal returns by analysing publicly available data. This idea points out the importance of stock exchanges in efficient price discovery and optimal allocation of financial resources.Although the theory doesn't explain the financial performance of the stock exchanges, the market efficiency theory can be used to explain the financial performance of the stock exchanges as well. Efficient trading platforms, transparent information dissemination and robust market infrastructure lead to more investor confidence, more trading volumes, more liquidity and finally better revenue generation and long-term profitability of stock exchanges.
- **Aggarwal (2002)** conducted an in-depth analysis of the subsequent governance reforms and underscored the numerous advantages associated with the process of corporatisation. He contended that these reforms play a critical role in promoting transparency and accountability within the operational frameworks of exchanges. By shifting from a member-owned structure to a shareholder model, exchanges are better positioned to implement practices that enhance operational efficiency and stimulate innovation. Furthermore, Aggarwal pointed out that improved corporate governance mechanisms empower stock exchanges to broaden their revenue streams by exploring diverse income opportunities beyond trading fees, such as market data sales and technology services. This strategic diversification not only enhances the financial stability of exchanges but also strengthens their competitive edge in an increasingly interconnected and dynamic financial market landscape. As exchanges adapt to these changes, they are better equipped to respond to the evolving demands of investors and stakeholders, thereby reinforcing their role as crucial players in the global economy.
- **Hasan and Schmiedel (2004)** conducted a comprehensive investigation into the operational efficiency of various international stock exchanges. Their research revealed that significant

investments in technology play a crucial role in reducing transaction costs, thereby enhancing overall profitability for those exchanges. The findings indicate that stock exchanges that implement sophisticated electronic trading platforms consistently achieve better operational efficiency compared to their more traditional counterparts. This trend highlights the advantages of modernising trading systems, as technologically advanced exchanges are better positioned to deliver faster, more cost-effective services to investors, ultimately leading to improved market performance.

- Research conducted by **Malkamäki and Topi (2013)** highlights that technology-driven exchanges are increasingly shifting their revenue streams. Rather than relying heavily on traditional transaction-based income, these exchanges are now focusing more on generating revenue through value-added services. These services include comprehensive data analytics that provide insights into market trends, access to specialised market information that aids in decision-making, and technology licensing arrangements that allow other entities to utilise their technological innovations. This strategic pivot not only diversifies their income sources but also enhances their overall resilience in a rapidly changing financial landscape.
- In the context of the Indian financial markets, several studies have delved into the concepts of market efficiency and trading performance, revealing critical insights about their evolution over time. For instance, **Gupta and Basu (2007)** conducted a comprehensive analysis that demonstrated significant advancements in informational efficiency that coincided with the implementation of electronic trading systems. Their research indicated that these systems not only streamlined the trading process but also enhanced the accuracy with which prices reflected available information, thereby promoting a more transparent and efficient marketplace.
- In a similar vein, **Kumar (2016)** examined the impact of technological modernisation on market dynamics. His findings underscored how the adoption of advanced technologies has played a pivotal role in bolstering investor confidence. By improving various aspects of market quality—such as liquidity, transparency, and transaction speed—these technological innovations have created a more robust trading environment. Kumar emphasised that as investors became more confident in the integrity and efficiency of the market, overall participation and trading volume increased, further contributing to the market's maturation. Together, these studies highlight the transformative effects of technology on the Indian stock market, illustrating a clear trajectory toward greater efficiency and improved trading performance.
- Research conducted by **Patel and Patel in 2018** highlighted that the National Stock Exchange (NSE) exhibited significantly higher liquidity levels and operational efficiency compared to the Bombay Stock Exchange (BSE). This advantage was attributed to the NSE's more robust derivatives trading activity and its advanced technological infrastructure, which facilitated smoother and quicker transactions. Furthermore, the study underscored that the authors concentrated predominantly on analysing trading statistics—such as trading volume and turnover—rather than delving into comprehensive financial

performance indicators like profit margins or return on investment. This focus meant that while insights into trading dynamics were provided, a broader understanding of the financial health and profitability of these exchanges was not fully explored.

- **Sharma and Mehta (2020)** conducted a comprehensive analysis of how digitalisation has influenced the functioning of stock exchanges in India. Their research highlighted that the integration of advanced technologies into trading systems has led to a marked improvement in operational efficiency. They found that the adoption of digital tools not only streamlined trading processes but also minimised settlement risks, thereby increasing the reliability of transactions. Additionally, the study revealed that technological advancements contributed to a significant reduction in administrative costs, enabling stock exchanges to operate more economically while enhancing overall market performance. This transformation underscores the vital role of digitalisation in modernising financial markets and promoting investor confidence.
- The COVID-19 pandemic sparked a renewed focus on the resilience of stock exchanges worldwide. According to a report by the Organisation for Economic Co-operation and Development (OECD) in 2021, despite facing unprecedented levels of volatility due to the pandemic, numerous exchanges recorded historic trading volumes. This surge was largely fuelled by an increase in retail participation, with many individual investors entering the market, as well as the rise of digital trading platforms that made investing more accessible to a broader audience. Such patterns of resilience highlight the critical need for exchanges to implement diversified revenue models and maintain robust operational capabilities to navigate future uncertainties.

3. OBJECTIVES OF THE STUDY

The objectives are:

- To compare the revenue structure of NSE and BSE.
- To evaluate operating efficiency.
- To compare profitability trends.
- To identify key drivers of financial performance.
- To recommend strategies for improving financial sustainability.

4. RESEARCH QUESTIONS

- Which exchange generated higher revenue during FY2020–FY2025?
- Which exchange maintained better operating efficiency?
- Which exchange achieved superior profitability?
- What factors explain the differences in financial performance?

5. VARIABLES AND FINANCIAL RATIOS

The present study evaluates the financial performance of the National Stock Exchange of India (NSE) and BSE Limited over the period 2020–2025 using a comprehensive set of financial variables and performance indicators. These variables are selected based on prior empirical studies on financial performance evaluation, stock exchange governance, and corporate financial analysis. The selected indicators facilitate a multidimensional assessment of revenue generation, operational efficiency, profitability, liquidity, and financial sustainability. Secondary data are obtained from the audited annual reports of NSE and BSE, ensuring the reliability and consistency of the analysis.

5.1. Dependent Variable

The primary dependent variable is Financial Performance, which reflects the overall operational and financial success of the stock exchanges. Since financial performance is multidimensional, it is measured using multiple profitability and efficiency indicators rather than a single financial ratio. These include Return on Assets (ROA), Return on Equity (ROE), Operating Profit Margin (OPM), Net Profit Margin (NPM), Earnings per Share (EPS), EBITDA Margin, and Revenue Growth Rate. Collectively, these indicators capture the ability of the exchanges to generate profits, utilize assets efficiently, manage operating expenses, and create value for shareholders.

5.2. Independent Variables

The independent variables represent the major determinants influencing the financial performance of NSE and BSE. These variables are grouped into three broad dimensions:

A. Revenue Structure Variables

Revenue diversification has become a key determinant of the financial sustainability of modern stock exchanges. Accordingly, the following revenue variables are considered:

- Trading transaction income
- Listing fees
- Clearing and settlement income
- Market data and information services revenue
- Technology and software licensing income
- Treasury and investment income
- Index licensing fees
- Other operating income

These variables assess the extent to which each exchange has diversified its revenue sources beyond conventional trading fees.

B. Operating Efficiency Variables

Operational efficiency reflects how effectively exchanges utilize their resources to generate revenue while minimizing costs. The variables include:

- Total operating expenses
- Employee benefit expenses
- Administrative and other operating expenses
- Technology expenditure
- Cost-to-Income Ratio

- Operating Expense Ratio
- Asset Turnover Ratio

These indicators measure managerial efficiency, cost control, and operational productivity.

C. Profitability Variables

Profitability measures evaluate the ability of the exchanges to generate earnings from their business operations. The study includes:

- Operating Profit
- Profit Before Tax (PBT)
- Profit After Tax (PAT)
- EBITDA
- Comprehensive Income
- Earnings per Share (EPS)

These variables provide insight into operational profitability as well as shareholder value creation.

6. FINANCIAL RATIOS USED IN THE STUDY

Financial ratio analysis constitutes one of the most widely accepted techniques for evaluating corporate financial performance. The present study employs the following ratios.

(A) Revenue Growth Ratio

Revenue Growth measures the annual increase in total operating revenue.

Formula

Revenue Growth (%) = (Current Year's Revenue − Previous Year's Revenue)/Previous Year's Revenue × 100

Purpose

Measures expansion of business operations.
Indicates the growth trajectory of the exchange.
Reflects increasing market participation.

(B) Operating Profit Margin (OPM)

Operating Profit Margin measures operational efficiency before interest and taxes.

Formula

Operating Profit Margin = Operating Profit/Revenue × 100

Interpretation

Higher operating margins indicate superior operational efficiency and effective cost management.

(C) EBITDA Margin

EBITDA Margin evaluates earnings generated from core operations before depreciation, interest, and taxes.

Formula

EBITDA Margin = EBITDA/Revenue × 100

Purpose

Measures operational profitability.
Eliminates the effects of capital structure and accounting policies.
Facilitates comparison between exchanges.

(D) Net Profit Margin (NPM)

Net Profit Margin indicates the proportion of revenue converted into net earnings.

Formula

Net Profit Margin = Profit After Tax/Revenue × 100

A higher net profit margin reflects superior profitability and financial strength.

(E) Return on Assets (ROA)

ROA measures management's efficiency in utilising total assets to generate profits.

Formula

ROA = Net Profit/Average Total Assets × 100

Higher ROA indicates better utilization of organizational resources.

(F) Return on Equity (ROE)

ROE measures the return generated on shareholders' investments.

Formula

ROE = Net Profit/Shareholders' Equity × 100

A higher ROE signifies effective utilisation of shareholders' funds.

(G) Earnings per Share (EPS)

EPS indicates the earnings attributable to each equity share.

Formula

EPS = (Profit After Tax − Preference Dividend)/Weighted Average Equity Shares

EPS is an important indicator of shareholder wealth creation.

(H) Cost-to-Income Ratio

This ratio measures the proportion of operating income consumed by operating expenses.

Formula

Cost-to-Income Ratio = Operating Expenses/Operating Income × 100

A lower ratio indicates better operational efficiency.

(I) Operating Expense Ratio

Operating Expense Ratio evaluates the efficiency of cost management.

Formula

Operating Expense Ratio = Operating Expenses/Revenue × 100

Lower operating expense ratios indicate greater efficiency.

(J) Asset Turnover Ratio

Asset Turnover measures the effectiveness of asset utilization in generating revenue.

Formula

Asset Turnover = Revenue/Average Total Assets

Higher values indicate more efficient utilisation of assets.

7. STATISTICAL TOOLS AND ANALYTICAL TECHNIQUES

To achieve the research objectives and provide a robust comparative evaluation of NSE and BSE, the study employs a combination of descriptive, comparative, and inferential statistical techniques. The use of multiple analytical tools enhances the reliability and validity of the findings by examining financial performance from different perspectives.

(A) Descriptive Statistics

Descriptive statistics summarise the key characteristics of the financial data and provide an overview of the performance of NSE and BSE during the study period. The following measures are calculated:

- Mean
- Median
- Standard Deviation
- Maximum Value
- Minimum Value
- Coefficient of Variation (CV)

These statistics facilitate comparison of financial stability, consistency, and variability across the selected variables.

(B) Trend Analysis

Trend analysis examines the direction and magnitude of changes in financial variables over time. Annual trends in revenue, profitability, operating expenses, and total assets are analysed using indexed values and percentage growth rates. Trend analysis helps identify:

- Long-term financial growth
- Changes in revenue composition
- Profitability patterns
- Business expansion

(C) Comparative Financial Statement Analysis

Comparative analysis involves examining year-on-year changes in financial statements of NSE and BSE. This includes:

- Comparative Income Statement Analysis
- Comparative Balance Sheet Analysis
- Horizontal Analysis
- Vertical (Common-Size) Analysis

These techniques reveal structural changes in revenue, expenses, assets, liabilities, and equity over the study period.

(D) Ratio Analysis

Ratio analysis forms the core analytical framework of the study. Financial ratios are calculated for each year and compared across both exchanges. The ratios are grouped into:

- Profitability Ratios
- Efficiency Ratios
- Growth Ratios
- Revenue Diversification Ratios

Ratio analysis enables standardized comparison irrespective of organizational size.

(E) Common-Size Analysis

Common-size analysis converts all financial statement items into percentages of a common base, allowing meaningful comparison between exchanges of different sizes.This technique helps evaluate:

- Revenue composition
- Expense structure
- Asset allocation
- Capital structure

(F) Compound Annual Growth Rate (CAGR) Analysis

CAGR is used to measure long-term growth in:

- Revenue
- Net Profit
- Total Assets
- Shareholders' Equity
- Market Capitalization (where relevant)

This provides a standardised measure of sustainable growth over the five years.

(G) Correlation Analysis

Pearson's correlation coefficient is used to examine the strength and direction of relationships among key financial variables such as revenue growth, operating expenses, profitability, and return on equity.

Correlation analysis helps identify whether improvements in one financial dimension are associated with improvements in another.

(H) Independent Samples t-Test

Where sufficient observations are available, an independent samples t-test may be used to determine whether the mean values of key financial indicators differ significantly between NSE and BSE.

This analysis assesses whether observed differences are statistically significant rather than attributable to random variation.

(I) Software Used

The data analysis can be performed using:

- Microsoft Excel for data cleaning, ratio computation, trend analysis, and graphical presentation.
- IBM SPSS Statistics (Version 26 or later) for descriptive statistics, correlation analysis, regression modelling, and hypothesis testing.

(J) Reliability and Validity

The study relies exclusively on audited annual reports and officially published financial statements of NSE and BSE, ensuring the authenticity and reliability of the data. Standardized financial ratios and established statistical techniques commonly used in accounting and finance research further strengthen the validity and comparability of the findings.

Table 1: Comparative Analysis of Financial Ratios: NSE vs BSE (FY2020 – FY2025)

Financial Ratio	NSE	BSE	Better Performer	Comparative Interpretation
Revenue Growth	Very High	High	NSE	NSE experienced stronger and more consistent revenue growth, driven by its dominant position in cash and derivatives trading, clearing services, and data products. BSE also grew significantly, particularly after expansion in derivatives, but from a smaller base.
Trading Revenue Ratio	Very High	Moderate	NSE	NSE derives a larger proportion of revenue from trading and clearing activities because it commands the majority of equity and derivatives trading volume in India.
Non-Trading Revenue Ratio	High	Moderate	NSE	NSE has a more diversified income base, including market data, index licensing, technology services, and investment income, making its earnings more resilient.
Operating Profit Margin	Very High	High	NSE	NSE consistently maintains higher operating margins due to economies of scale, efficient technology infrastructure, and higher trading volumes.
EBITDA Margin	Very High	Moderate–High	NSE	Superior EBITDA margins indicate better operating performance before depreciation, interest, and taxes.
Net Profit	Very	High	NSE	NSE converts a larger share of revenue into net profit, reflecting stronger cost

Margin	High			control and higher operating leverage.
Return on Assets (ROA)	Higher	Moderate	NSE	NSE utilizes its asset base more efficiently to generate profits.
Return on Equity (ROE)	Higher	High	NSE	Higher ROE demonstrates superior returns generated on shareholders' funds.
Earnings per Share (EPS)	Higher	Lower	NSE	Higher profitability results in stronger earnings available to equity shareholders.
Cost-to-Income Ratio	Lower	Higher	NSE	Lower cost relative to income reflects better operational efficiency and stronger expense management.
Operating Expense Ratio	Lower	Higher	NSE	Efficient cost management enables NSE to retain a larger share of revenue as operating profit.
Asset Turnover Ratio	Higher	Moderate	NSE	NSE generates greater revenue per unit of assets employed due to its larger business scale.
Revenue Diversification Index	Higher	Moderate	NSE	NSE has developed multiple income streams beyond transaction fees, reducing business risk.
CAGR (Revenue & Profit)	Strong and Stable	Improving	NSE	Although BSE recorded rapid percentage growth in some recent years, NSE maintained stronger absolute growth and a larger earnings base.

Table 2: Comparative Analysis of Revenue Structure

Revenue Source	NSE	BSE	Comparative Findings
Transaction Charges	Very High	Moderate	NSE dominates equity and derivatives trading, generating significantly higher transaction income.
Listing Fees	High	High	BSE benefits from a larger number of listed companies, while NSE earns substantial listing income from large public issues.
Clearing & Settlement	Very High	Moderate	NSE's integrated clearing operations contribute significantly to total revenue.
Market Data Services	High	Moderate	NSE benefits from extensive institutional and algorithmic trading demand for market data.

Technology Services	Moderate	Moderate	Both exchanges have expanded technology-based solutions, though NSE remains larger in scale.
Treasury Income	Moderate	Moderate	Both exchanges generate investment income from surplus funds.

Analysis: The comparative revenue analysis shows that the National Stock Exchange (NSE) has a more diversified and scalable revenue structure compared to the Bombay Stock Exchange (BSE). While BSE generates significant revenue from listing services and has improved its derivatives business, NSE's strong position in trading, clearing, and data services provides a wider and more resilient income base. This diversification helps reduce reliance on any single revenue source and contributes to long-term financial sustainability.

Table 3: Comparative Analysis of Operating Efficiency

Indicator	NSE	BSE	Interpretation
Cost Management	Excellent	Good	NSE effectively controls operating expenses relative to revenue.
Operating Efficiency	Excellent	Good	Technology-driven processes and scale advantages improve NSE's productivity.
Asset Utilization	Excellent	Moderate	NSE generates more revenue from its asset base.
Employee Productivity	Higher	Moderate	Higher revenue per employee reflects greater operational efficiency at NSE.

Discussion: The comparative analysis indicates that the National Stock Exchange (NSE) consistently exhibits superior operating efficiency compared with BSE during the study period (2020–2025). This advantage can be attributed to its advanced technology-driven trading infrastructure, integrated clearing and settlement ecosystem, and substantially higher trading volumes across equity and derivatives segments. The combination of these factors enables NSE to benefit from significant economies of scale, resulting in lower average operating costs, enhanced resource utilisation, and higher operating and profit margins. In contrast, BSE has made considerable progress in improving its operational efficiency through continuous investments in digital infrastructure, technological modernisation, expansion of its derivatives segment, and the introduction of innovative market products and services. These strategic initiatives have strengthened BSE's operational capabilities and improved cost management. However, despite these improvements, BSE continues to operate at a comparatively smaller scale than NSE, limiting its ability to achieve similar economies of scale and operational leverage. Consequently, while BSE has narrowed the efficiency gap in recent years, NSE maintains a competitive advantage in terms of operational productivity, cost efficiency, and overall financial performance.

Table 4: Comparative Analysis of Profitability

Profitability Indicator	NSE	BSE	Better Performance
Operating Profit	Excellent	Good	NSE
EBITDA	Excellent	Good	NSE
Net Profit	Excellent	Good	NSE
ROA	Excellent	Moderate	NSE
ROE	Excellent	High	NSE
EPS	Excellent	Moderate	NSE

Discussion: The comparative profitability analysis indicates that the National Stock Exchange (NSE) consistently outperformed BSE Limited during FY2020–FY2025 across key financial indicators, including operating profit, net profit, ROA, ROE, EPS, and operating margins. NSE's superior financial performance is primarily attributable to its dominant market position, higher trading volumes, diversified revenue structure, advanced technology infrastructure, and efficient cost management. Its integrated business model and economies of scale enabled the exchange to achieve higher operational efficiency, lower cost-to-income ratios, and stronger shareholder returns.

In contrast, BSE demonstrated significant improvement in profitability during the study period through the expansion of its derivatives segment, SME listings, market data services, and technology-driven initiatives. Investments in digital infrastructure and operational modernisation further strengthened its financial performance and long-term sustainability. However, BSE's comparatively smaller operational scale limited its ability to achieve the same level of economies of scale and profitability as NSE.

Overall, while both exchanges experienced substantial financial growth driven by technological innovation, increasing investor participation, and favourable regulatory developments, NSE maintained a clear competitive advantage in profitability, operational efficiency, and financial sustainability. The findings highlight that revenue diversification; technological advancement, operational excellence, and effective resource utilisation are critical determinants of the long-term financial performance and competitiveness of modern stock exchanges.

Table 5: Overall Comparative Performance Matrix

Performance Dimension	NSE	BSE	Rank
Revenue Growth	★★★★★	★★★★☆	NSE 1
Revenue Diversification	★★★★★	★★★★☆	NSE 1
Operating Efficiency	★★★★★	★★★☆☆	NSE 1
Cost Management	★★★★★	★★★☆☆	NSE 1
Profitability	★★★★★	★★★★☆	NSE 1
Asset Utilization	★★★★★	★★★☆☆	NSE 1
Financial Sustainability	★★★★★	★★★★☆	NSE 1
Technology Leadership	★★★★★	★★★★☆	NSE 1

Innovation	★ ★ ★ ★ ★	★ ★ ★ ★ ☆	NSE 1
Market Competitiveness	★ ★ ★ ★ ★	★ ★ ★ ★ ☆	NSE 1

8. Conclusion

The comparative analysis of the financial performance of the National Stock Exchange (NSE) and BSE Limited from FY2020 to FY2025 highlights significant growth for both exchanges, driven by expanding capital markets, increased investor participation, digitalisation, technological advancements, SEBI reforms, and the growth of equity and derivatives trading. However, the NSE consistently outperformed the BSE in several key areas, including revenue generation, profitability, operational efficiency, asset utilisation, and cost management. This advantage is attributed to its dominant market share, diversified revenue streams, advanced technology infrastructure, and an integrated clearing ecosystem. While the BSE has also strengthened its financial position—primarily through growth in its derivatives segment, SME listings, market data services, and technology investments—its comparatively smaller operational scale limits its ability to match the NSE in terms of economies of scale and profitability.

In summary, although both exchanges demonstrated strong financial progress and adaptability, the NSE maintained a superior financial position. This highlights the importance of revenue diversification, technological innovation, operational efficiency, and sound corporate governance for the long-term sustainability and competitiveness of stock exchanges. The analysis shows that both exchanges significantly improved their financial performance during FY2020 to FY2025, reflecting increased investor engagement, the digitalisation of trading, and sustained growth in India's capital markets. Nonetheless, the NSE consistently surpassed the BSE across most financial metrics, including revenue generation, operating efficiency, profitability, asset utilisation, and revenue diversification. Its dominant position in the equity and derivatives markets, along with integrated clearing operations and diversified revenue streams, has allowed it to achieve better economies of scale and financial resilience. Conversely, the BSE has made notable progress, particularly through the expansion of its derivatives segment, SME platform, listing services, and technology initiatives, leading to faster percentage growth in several recent metrics. However, the gap in absolute scale and profitability still favours the NSE, indicating that while the BSE is narrowing the competitive distance, the NSE continues to hold a stronger overall financial position.

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