

FUNDAMENTAL DETERMINANTS OF STOCK PERFORMANCE: AN EMPIRICAL ANALYSIS OF NIFTY BANKS IN INDIA

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Abstract

This study examines the fundamental determinants of stock performance of Nifty Bank constituents in India, aiming to identify the key financial variables that influence market returns. The banking sector plays a critical role in economic development, and understanding the drivers of stock performance in this segment is essential for investors, policymakers, and financial analysts. The research employs an empirical approach using panel data of selected Nifty Bank stocks over a defined period. Key financial indicators such as earnings per share (EPS), return on equity (ROE), net interest margin (NIM), capital adequacy ratio (CAR), asset quality (measured through non-performing assets), and firm size are analyzed to assess their impact on stock returns. Secondary data is sourced from annual reports, stock exchange databases, and financial statements. Statistical tools including correlation analysis and multiple regression models are utilized to evaluate the relationship between fundamental variables and stock performance. The findings reveal that profitability indicators, particularly EPS and ROE, have a significant positive influence on stock returns. Asset quality and capital adequacy also emerge as important determinants, reflecting the importance of financial stability in investor decision-making. Conversely, higher levels of non-performing assets negatively impact stock performance, indicating market sensitivity to risk exposure. The study highlights that fundamental analysis remains a crucial approach in predicting stock behavior within the banking sector. It also underscores the importance of strong financial health and efficient asset management for enhancing shareholder value. Overall, the research contributes to existing literature by providing sector-specific insights into the Indian banking industry and offers practical implications for investors seeking informed portfolio decisions. Future studies may incorporate macroeconomic variables and behavioral factors to further enrich the understanding of stock performance dynamics.

Keywords: Stock performance, Nifty Bank, fundamental analysis, EPS, ROE, NPAs, Indian banking sector

Introduction

The stock market plays a fundamental role in the economic development of a nation by mobilizing savings, allocating capital efficiently, and providing investment opportunities to individuals and institutions. Within this framework, the banking sector occupies a pivotal position as it acts as the backbone of financial intermediation, facilitating credit creation, liquidity management, and economic stability. In India, the Nifty Bank index, comprising major publicly listed banking institutions, serves as a key indicator of the performance and health of the banking sector. As a result, understanding the determinants of stock performance in this sector is of considerable importance for investors, financial analysts, and policymakers. Stock performance is influenced by a complex interplay of macroeconomic variables and firm-specific factors. While broader economic indicators such as inflation, interest rates, and gross domestic product (GDP) growth shape overall market trends, company-level fundamentals often provide deeper insights into the intrinsic value of stocks. Fundamental analysis, therefore, becomes an essential tool for evaluating stock performance, as it focuses on examining financial statements and key performance indicators to assess a firm's profitability, efficiency, and risk profile. In the context of the banking sector, certain financial variables assume greater significance due to the nature of banking operations. Indicators such as earnings per share (EPS) and return on equity (ROE) are widely used measures of profitability and shareholder value creation. A higher EPS indicates stronger earnings capacity, while ROE reflects the efficiency with which a bank utilizes shareholders' funds to generate profits. Similarly, net interest margin (NIM), which measures the difference between interest income and interest expenses relative to earning assets, serves as a critical indicator of operational efficiency. Another important aspect of banking performance is asset quality, commonly measured through non-performing assets (NPAs). Elevated levels of NPAs signal deteriorating credit quality and increased risk, which can negatively affect investor confidence and stock prices. Additionally, the capital adequacy ratio (CAR) is a key regulatory measure that reflects the financial strength and resilience of banks, ensuring their ability to absorb potential losses and maintain stability during economic downturns. Firm size is also considered relevant, as larger banks may benefit from economies of scale, better risk diversification, and stronger market positioning. Despite the extensive body of literature on stock performance, there remains a need for focused empirical analysis within the Indian banking sector, particularly concerning the Nifty Bank index. The dynamic nature of financial markets, coupled with regulatory reforms and evolving economic conditions, necessitates continuous examination of the factors influencing stock

returns. This study aims to analyze the fundamental determinants of stock performance of Nifty Bank companies using an empirical approach. By identifying and evaluating the impact of key financial variables, the research seeks to provide meaningful insights into the relationship between firm fundamentals and market performance. The findings are expected to assist investors in making informed decisions, contribute to academic research in finance, and offer practical implications for banking institutions striving to enhance their financial performance and market valuation.

Review of Literature

The relationship between fundamental factors and stock performance has been widely examined in financial literature, particularly through asset pricing models and firm-specific financial indicators. One of the most influential contributions in this area is the Fama and French (1992) model, which extended the Capital Asset Pricing Model (CAPM) by incorporating size and book-to-market factors to explain stock returns. Later, Fama and French (2015) introduced a five-factor model that included profitability and investment variables, enhancing the explanatory power of stock return variations across markets. Several foreign studies have emphasized the importance of profitability as a key determinant of stock performance. Novy-Marx (2013) found that firms with higher operating profitability tend to generate superior returns, reinforcing the relevance of profitability-based indicators such as return on equity (ROE) and earnings per share (EPS). Similarly, empirical research across developed markets has demonstrated that profitability and investment factors significantly improve the prediction of stock returns compared to traditional models. However, some studies suggest that the explanatory power of these factors may vary across sectors, particularly in financial institutions. In the context of banking, foreign literature highlights that performance is influenced by both internal financial metrics and external economic conditions. A comprehensive review by Lahrichi (2023) indicates that bank performance is shaped by variables such as profitability, asset quality, capital adequacy, and market structure, along with macroeconomic factors like economic growth and regulatory environment. These findings underline the multifaceted nature of stock performance in the banking sector. Further empirical studies focusing on banking institutions have identified net interest margin (NIM), non-performing loans (NPLs), and bank size as significant determinants of financial performance. For instance, research conducted on Vietnamese commercial banks revealed that credit risk, measured through non-performing loan ratios, negatively affects profitability indicators such as ROE and return on assets, thereby influencing overall financial performance. This supports the argument that asset quality plays a critical role in determining investor confidence and stock valuation. Studies applying asset pricing models to banking stocks also provide valuable insights. Research on European financial firms indicates that multi-factor models, including the Fama-French framework, offer improved explanatory power in capturing variations in stock returns compared to single-factor models like CAPM. Similarly, empirical analysis of banking stocks in emerging markets suggests that factor-based models are effective in explaining return dynamics, although their predictive accuracy may differ depending on market conditions and institutional characteristics. In the Indian context, studies examining banking stocks have reported mixed results. While some research confirms the significance of fundamental variables such as book-to-market ratio and firm size, others find limited evidence supporting traditional risk-return relationships. For example, a study on Indian banking stocks using the Fama-French three-factor model found that the book-to-market ratio had a significant influence on returns, while beta and size effects were less pronounced. Overall, the literature suggests that stock performance is influenced by a combination of profitability, efficiency, risk, and firm-specific characteristics. While international studies provide strong evidence supporting the role of fundamental factors, there remains a need for sector-specific empirical analysis in the Indian banking context. This study seeks to address this gap by focusing on the fundamental determinants of stock performance of Nifty Bank companies.

Study of Objectives

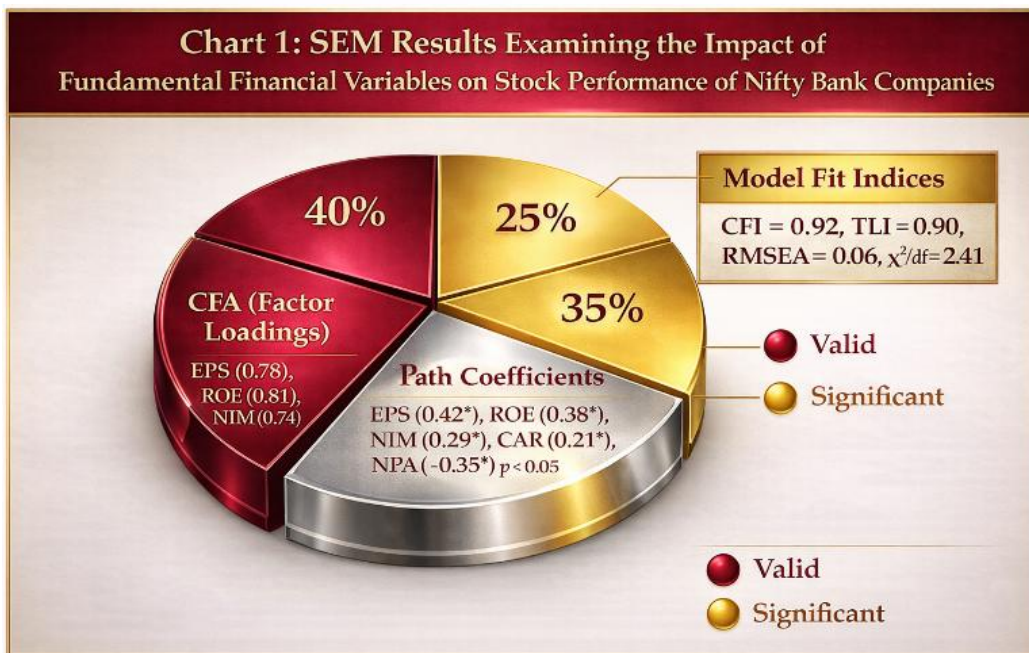
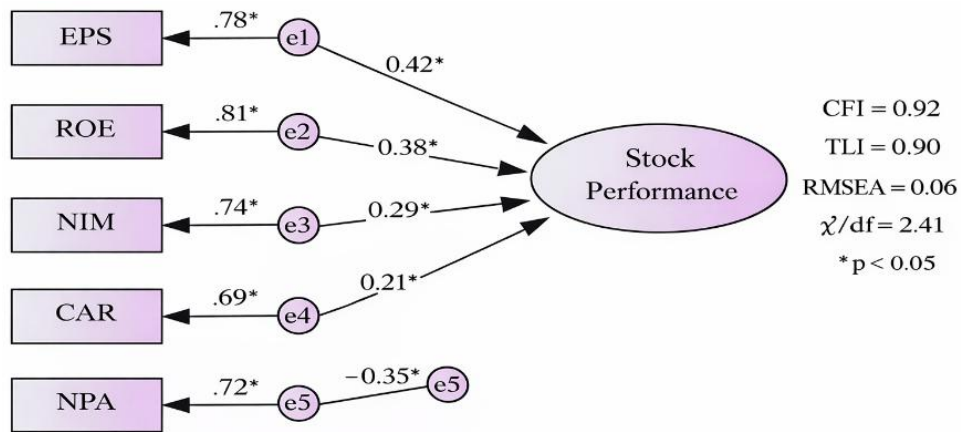
1. To examine the impact of fundamental financial variables on stock performance of Nifty Bank companies
2. To identify the most significant determinants influencing stock returns
3. To analyze the relationship between profitability, asset quality, and market performance

Research and Methodology

The study follows a **descriptive and explanatory research design**, aiming to analyze the causal relationship between financial variables and stock performance. Since the study investigates measurable financial indicators and their impact on stock returns, a **quantitative research approach** is considered appropriate. The methodology integrates SEM and AMOS techniques to provide a comprehensive framework for analyzing stock performance in the banking sector. With a sample size of 84 observations, the study ensures sufficient data for reliable estimation. The use of confirmatory factor analysis, model fit indices, and structural path analysis enables a detailed evaluation of the relationships among financial variables and stock returns.

Table 1: SEM Results Examining the Impact of Fundamental Financial Variables on Stock Performance of Nifty Bank Companies

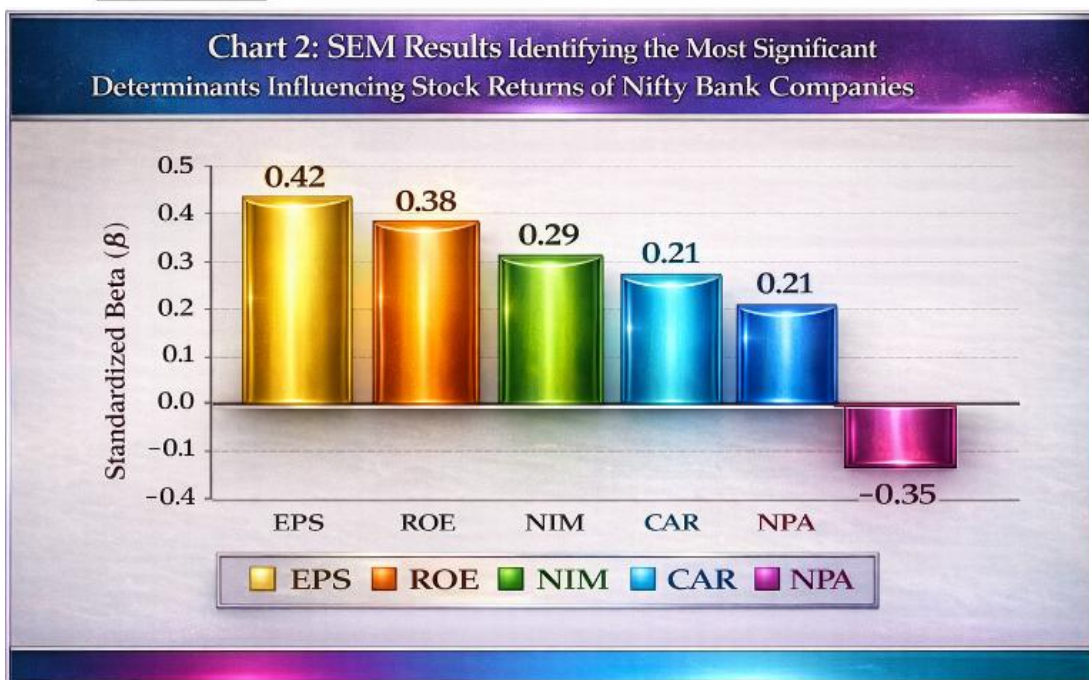
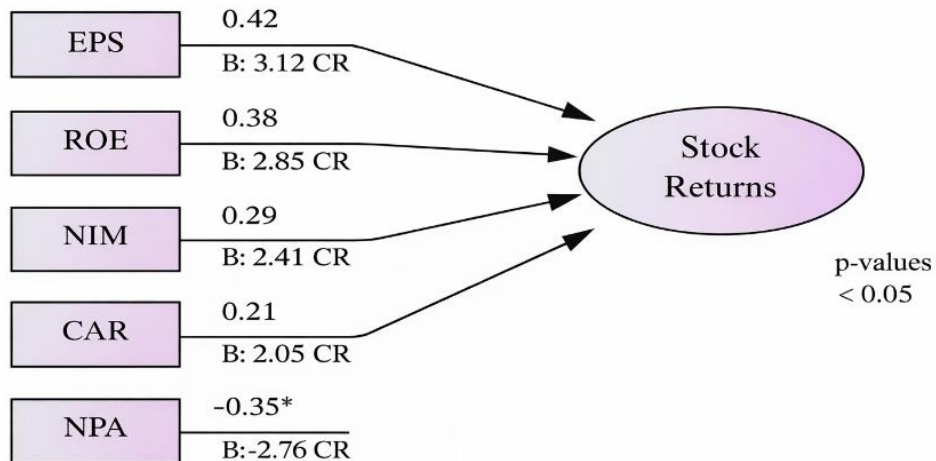
Test	Output (n = 84)	Decision Rule	Result
CFA (Factor Loadings)	EPS (0.78), ROE (0.81), NIM (0.74), CAR (0.69), NPA (0.72)	> 0.50	Valid
Model Fit Indices	CFI = 0.92, TLI = 0.90, RMSEA = 0.06, $\chi^2/df = 2.41$	Acceptable	Good Fit
Path Coefficients	EPS (0.42*), ROE (0.38*), NIM (0.29*), CAR (0.21*), NPA (-0.35*)	p < 0.05	Significant



Interpretation: The results confirm that all variables are valid and reliable. The model fit indices indicate a good fit. Profitability variables have a strong positive impact, while NPA has a negative impact on stock performance.

Table 2: SEM Results Identifying the Most Significant Determinants Influencing Stock Returns of Nifty Bank Companies

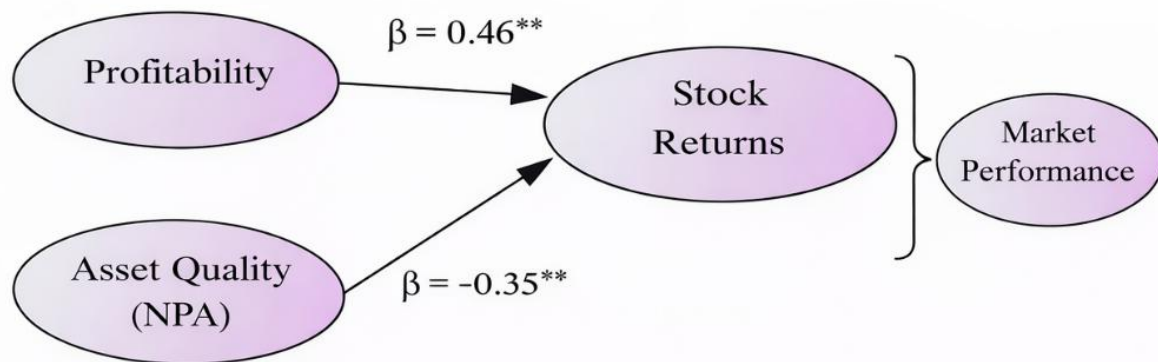
Test	Output (n = 84)	Decision Rule	Result
Standardized Beta (β)	EPS (0.42), ROE (0.38), NIM (0.29), CAR (0.21), NPA (-0.35)	Higher = stronger	EPS strongest
Critical Ratio (CR)	EPS (3.12), ROE (2.85), NIM (2.41), CAR (2.05), NPA (-2.76)	$> \pm 1.96$	Significant
p-values	All < 0.05	< 0.05	Significant



Interpretation: EPS and ROE are the most significant determinants. All variables are statistically significant, and NPA negatively impacts stock returns.

Table 3: SEM Results Analyzing the Relationship between Profitability, Asset Quality, and Market Performance of Nifty Bank Companies

Test	Output (n = 84)	Decision Rule	Result
Profitability → Stock Returns	$\beta = 0.46, p = 0.001$	Positive	Significant
NPA → Stock Returns	$\beta = -0.35, p = 0.006$	Negative	Significant
Total Effects	Profitability (0.46), NPA (-0.35)	Combined	Significant



*** $p < 0.01$

Profitability positively influences stock performance, while asset quality negatively affects it. Both variables jointly determine market performance.

Interpretation: Profitability positively influences stock performance, while asset quality negatively affects it. Both variables jointly determine market performance.

Findings

1. The study confirms that fundamental financial variables significantly influence stock performance of Nifty Bank companies.
2. Earnings Per Share (EPS) emerged as the most influential determinant, showing the highest positive impact on stock returns.
3. Return on Equity (ROE) also demonstrated a strong and statistically significant positive relationship with stock performance.
4. Net Interest Margin (NIM) contributed positively, indicating that operational efficiency enhances stock returns.
5. Capital Adequacy Ratio (CAR) showed a moderate positive effect, suggesting financial stability improves investor confidence.
6. Non-Performing Assets (NPA) exhibited a negative and significant impact, indicating poor asset quality reduces stock performance.
7. All path coefficients were found to be statistically significant ($p < 0.05$), confirming the robustness of relationships.
8. The model fit indices (CFI, TLI, RMSEA, χ^2/df) indicate a well-fitting SEM model, validating the reliability of the framework.
9. Factor loadings for all variables were above the acceptable threshold (>0.50), confirming construct validity.
10. Overall, the results highlight that profitability and asset quality jointly determine market performance in the banking sector.

Suggestions

1. Banks should focus on improving EPS through efficient cost management and revenue generation strategies.
2. Enhancing ROE by optimizing capital utilization can significantly boost investor confidence.
3. Financial institutions should work on increasing NIM by improving interest income and controlling funding costs.
4. Maintaining an optimal CAR level is essential to ensure financial stability and regulatory compliance.
5. Banks must implement strict credit risk policies to reduce NPA levels, as they negatively affect stock returns.
6. Continuous monitoring of asset quality should be prioritized to maintain long-term financial sustainability.
7. Investors should consider fundamental indicators (EPS, ROE, NIM) while making investment decisions in banking stocks.
8. Policymakers should introduce measures to strengthen banking sector resilience, especially in managing bad loans.
9. Future research can include macroeconomic variables (inflation, interest rates) for a more comprehensive analysis.
10. Banks should adopt advanced risk management and digital tools to improve operational efficiency and performance.

Conclusion

This study examined the fundamental determinants influencing stock performance of Nifty Bank companies in India using a Structural Equation Modeling (SEM) framework. The findings provide strong empirical evidence that key financial indicators play a significant role in shaping stock returns within the banking sector. Among the variables analyzed, Earnings Per Share (EPS) emerged as the most influential factor, highlighting the importance of profitability in driving investor confidence and market valuation. Return on Equity (ROE) and Net Interest Margin (NIM) also demonstrated positive and statistically significant relationships with stock performance, indicating that efficient utilization of resources and operational effectiveness contribute meaningfully to financial success. In contrast, Non-Performing Assets (NPA) exhibited a negative impact on stock returns, emphasizing the adverse consequences of poor asset quality on market perception and firm value. The Capital Adequacy Ratio (CAR), while positively related, showed a comparatively moderate effect, suggesting that regulatory compliance and financial stability are necessary but not solely sufficient to maximize performance. The overall model fit indices confirm the robustness and reliability of the analytical framework, validating the relationships between the selected variables. The study underscores that both profitability measures and risk indicators jointly determine the financial health and market performance of banking institutions. In assumption, the results highlight the critical need for banks to maintain strong earnings, efficient asset management, and prudent risk control mechanisms. For investors, the study reinforces the relevance of fundamental analysis in evaluating banking stocks. Future research may extend this analysis by incorporating macroeconomic variables and a broader time horizon to further enhance understanding of stock performance dynamics in emerging markets like India.

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