

Evaluating the financial implications of physical assets with reference to SBI: A case study

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Abstract

This study examines the role of physical assets in influencing the financial performance of the State Bank of India (SBI), with a focus on understanding how tangible resources contribute to profitability and operational efficiency. The purpose is to evaluate the relationship between various physical assets and financial performance, particularly Return on Assets (ROA), and to derive strategic implications for asset management in the banking sector. The research methodology (RM) adopts a quantitative approach, utilizing secondary data from the CMIE Prowess database covering the period from 2018–19 to 2022–23. Analytical tools such as multiple regression analysis are employed to assess the impact of physical assets on ROA, while correlation analysis is used to examine the association between security measures and financial performance. The findings reveal that security measures exhibit a weak positive relationship with ROA, indicating a marginal improvement in financial performance with increased security investments. In contrast, physical assets such as net furniture, branches, employees, and ATMs show a moderate negative relationship with ROA, suggesting inefficiencies in resource utilization. The study concludes that while security enhancements support performance, excessive expansion of physical assets may reduce profitability, emphasizing the need for efficient asset allocation and strategic resource management. Keywords: Physical Assets, Financial Performance, SBI, Return on Assets, Regression Analysis, Banking Efficiency, Resource Management.

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Introduction

The SBI is the major commercial bank in India, with massive amounts of assets, funds & staff. With its extensive branch network and a strong customer base, SBI is considered a crucial player in the country's banking sector. Its role as the preferred banker for numerous public sector corporations further solidifies its standing in the industry. The remarkable faith and trust that the public places in SBI are a testament to its dedicated services and commitment to excellence. However, in an ever-evolving financial landscape marked by intense competition and changing market dynamics, it becomes imperative to investigate and understand the factors that drive SBI's financial performance.

One factor that significantly influences SBI's financial performance is its physical assets. These tangible resources include a diverse range of assets owned and utilized by the bank, encompassing real estate properties, branch infrastructure, technology infrastructure, equipment, and vehicles. Physical assets form the backbone of SBI's operations, serving as critical components in the bank's ability to generate revenue, control costs, attract customers, and maintain a competitive edge.

The goal of this investigation is to examine the intricate connection among SBI's physical assets and its financial performance. By delving into the impact of these tangible resources on key financial indicators such as profitability, return on assets, asset utilization, and cost efficiency, we aim to unravel the underlying mechanisms through which physical assets drive SBI's financial success. This exploration is paramount for both the bank's management and stakeholders, as it enables them to make informed decisions pertaining to asset management, investment, and strategic planning.

To achieve our research objective, we will employ a comprehensive and rigorous methodology. Our approach

will involve an in-depth analysis of SBI's financial statements, annual reports, and relevant financial data over a specific period. By utilizing financial ratio analysis and other performance evaluation tools, we will assess the efficiency and effectiveness of SBI's physical assets in generating revenue, controlling costs, and enhancing overall financial performance.

The strategic importance of physical assets in driving SBI's financial performance. Through a detailed examination of the data, we will uncover critical insights and actionable recommendations for the bank's management. These recommendations will pertain to asset allocation, maintenance strategies, and modernization initiatives aimed at optimizing the utilization of tangible resources. This research will also add to the literature on physical assets and financial performance in the banking industry, with a focus on SBI.

By unravelling the impact of physical assets on SBI's financial performance, this study aims to provide a comprehensive understanding of the subject matter. It helps SBI's management maximize tangible resource use, increase financial performance, and maintain its leadership in the Indian banking business by providing insights and strategic recommendations. In the subsequent sections, we will delve into an extensive analysis of SBI's financial performance, with a specific emphasis on the influence of physical assets. By examining the various financial indicators and ratios, we will gain a comprehensive understanding of the bank's financial health and the role that physical assets play in shaping its performance. Through this analysis, we aim to draw meaningful conclusions and provide actionable recommendations to drive SBI's financial success.

Review of Literature

Sisodiya, A., Bharati, Y., & Kavitha, P. (2007) ^[12] The goal of this research is to compare and contrast the financial

health of two sizable Indian financial institutions: the public sector's State Bank of India (SBI) and the private sector's Housing Development Finance Corporation (HDFC). Ratios of credit to deposits, interest costs to total costs, net earnings margin to advances, and other similar ratios are examined. These ratios serve as indicators of profitability and operational efficiency, allowing for a comprehensive evaluation of the banks' financial performance. The methodology involves a thorough examination of the banks' financial statements and calculation of the relevant ratios. The findings reveal the profitability levels and efficiency of both SBI and HDFC, shedding light on their ability to generate profits from transactions and maximize returns on capital employed. As per investigation, financial ratios, it concludes with an assessment of the financial performance of SBI, highlighting its strengths and areas for improvement.

Gajera, A. C. (2009) ^[5]7 This research assessed private and public sector banks' financial performance and identified key performance drivers. The study encompassed all commercial and public banks, including SBI and its subsidiaries and nationalized institutions. The specified characteristics were calculated and analyzed using financial data. The research decomposed parameters by definition to see what variables affected private and public sector bank financial performance. The analysis revealed variances and probable variables affecting the institutions' financial performance. The study found that private and public sector banks' financial performance was affected by certain elements, which helped explain banking industry dynamics and guide improvement plans.

Kumar, S. (2014) ^[9] The research examines banking sector performance and soundness following the 2007–2009 global financial crisis. The crisis caused banks to collapse and capital markets to freeze, affecting the global real economy. The analysis employs the CAMEL technique and targets the top 8 market-capitalized banks. Econometric analysis calculates bank performance and soundness parameters. The investigation uses secondary data from credible and genuine sources from 2007–08 to 2012–13. This research illuminates the elements affecting banking sector performance and soundness. Final findings are drawn from the examination of the banking industry during the time under review.

Haque, A. (2014) ^[7] This study will evaluate major Indian banks' performance between 2009 and 2013 after the 2008 global financial crisis. The purpose is to compare local and foreign financial institutions to assess Scheduled Commercial Banks' efficacy. The study measures their effectiveness utilizing ROI, ROE, and NIR. The findings show no significant differences in ROA and NIM profitability across large banks. The difference in ROE between peer groups is large. The research shows that banking companies have similar ROA and NIM, but different ROE approaches.

Abhay Jaiswal*, Chanchala (2014) ^[2] The research examines the financial performance of SBI and ICICI Bank, to assess their changing role in economic growth. The research uses secondary data from online sources to describe and analyze. Financial performance of the two banks is compared using ratio analysis. SBI outperforms ICICI Bank in earnings per unit, price ratio, and dividend payout ratio, indicating financial strength and market position. Finally, this research contrasts SBI and ICICI Bank's financial capabilities, giving stakeholders useful insights and enhancing their awareness of the banking sector's role in economic growth.

Karri, H. K., & Mishra, K. M. (2015) ^[8] Indian banks are among the fastest-growing. The banking industry is growing increasingly complicated. The features of BOB and PNBI will be used to examine their financial positions and performance. This research compares Indian banks' performance. Public-sector-banks were employed for this investigation. We know that service sector production is intangible and hard to measure. We used the CAMEL model and t-test to evaluate bank performance based on capital sufficiency, asset quality, managerial efficiency, earning quality, liquidity, and sensitivity.

Nagarkar, J. J. (2015) ^[11] Pandit Seema, Gandhi, Jash. A Comparative Study on the Financial Performance This study evaluates a cross-section of Indian commercial banks' economic health. These institutions' financial health may be assessed using ratios. The analysis found that private sector banks outperformed public sector banks in financial result. The empirical results reveal that public sector banks' liquidity and solvency ratios positively and considerably influence profitability, whereas private sector banks' turnover and solvency ratios do. These findings demonstrate the importance of these ratios in assessing public and private bank performance. Finally, the study emphasizes the relevance of liquidity, solvency, and efficiency in Indian commercial banking profitability and the improved financial performance of private sector banks.

Goyal, S., Pallvi, & Bhaitia, A. (2016) ^[6] The research examines Indian public sector banks. The study evaluates important financial ratios for performance measurement using financial data from these institutions over a specific time. The research analyzes liquidity, solvency, profitability, and efficiency parameters to assess banks' financial health. The results add to the literature on financial performance assessment in banking and provide policymakers, regulators, and stakeholders in the Indian banking system with useful insights. The paper indicates that financial ratio analysis is important for assessing public sector bank performance and proposes topics for financial performance measurement research and development.

Sodhi & Waraich (2016) ^[13] A basic examination of selected Indian “public and private banks” using financial indicators is presented. The report examines India's banking sector's development prospects and difficulties. The data show that public banks are far less profitable than private banks. Public sector banks are struggling with large nonperforming assets, lowering asset quality. Despite significantly overvaluation, private sector banks justify their higher pricing owing to their stronger profitability, reduced nonperforming assets, and expansion potential. The results imply that India's banking system provides great investment prospects, although financial soundness must be considered.

Susmitha, M., & Mouneswari, V. (2017) ^[15vivi] The finances of the big Indian bank Syndicate Bank are analyzed. The study evaluates Syndicate Bank's performance by analyzing financial ratios and performance indicators taken from the bank's annual reports and financial statements. This analysis of Syndicate Bank's finances reveals the bank's current financial state and offers recommendations for the bank's future financial stability and growth. Banking and finance benefit from the CAMEL model's application to Syndicate Bank's financial performance evaluation.

Subalakshmi, S., Grahakshmi, S., & Manikandan, M. (2018) ^[14] The SBI is the biggest commercial bank in India in terms of assets, deposits, and staff, hence, it aims to analyze the firm's financial ratios. Commercial banks like SBI look to analyze financial performance and structure

their portfolios for maximum returns in order to maximize profit value. The major method used to examine SBI's financial accounts in this research is ratio analysis. This research focuses on SBI, a public sector bank, and its financial health. The technique used entails a thorough examination of SBI's financial statements, with special attention paid to the development of important financial ratios. The purpose of this research is to shed light on SBI's financial standing and future prospects by analysing its past performance.

Chaudhuri, B. (2018) ^[4] This study compares the financial health of SBI with ICICI Bank (India's biggest private sector bank) over five years (2011-2012 to 2015-2016). The study period witnessed significant changes and remarkable development in SBI and ICICI, demonstrating the impact of first and second generation financial sector reforms on the Indian banking industry. The results may be used to evaluate how well the reforms have worked, how competitive private and public sector financial institutions are, and how much the banking sector has helped the Indian economy grow.

Nayana. (2018) ^[1] examine SBI's profitability from 2003-04 to 2015-16. On the background of slow global development and worries about deteriorating banking system profitability, the report examines SBI's profitability and performance. The R programming language analyzes secondary data like financial accounts and reports. SBI's profitability performance is better understood through identifying trends, patterns, and difficulties. The paper recommends corrective actions and stresses the relevance of profitability dynamics in banking philosophy for social and economic goals.

Pandit, Seema & Gandhi, Jash. (2021) ^[3, 10] In light of recent worries about asset quality reduction, corporate governance challenges, the economic crisis, and pandemics, this study analyzed the efficiency of the Indian banking sector. Using the CAMEL framework, we evaluated SBI and HDFC Bank based on their capitalization, asset quality, effectiveness of management, revenue, and availability. In terms of capitalization, asset quality, and management, HDFC Bank was superior than SBI. However, SBI is more liquid than HDFC Bank. The two banks have almost the same quality of earnings. These results highlight the strengths and weaknesses of each bank in specific areas, providing insights into their overall performance. In conclusion, while HDFC Bank demonstrates superior performance in certain aspects, SBI holds its own strengths, suggesting areas for improvement for both banks.

Research Gap

While there is existing research exploring the impact of intangible resources on financial performance, observable gap in the reviews regarding the role and influence of tangible resources on the financial performance of organizations. In the context of the financial sector, in particular, the question of what role physical assets play in determining a company's financial success has received less attention. Therefore, our research aims to provide such information vacuum by investigating how State Bank of India's (SBI) material resources affect the bank's bottom line. By investigating the significance and contribution of physical assets to SBI's financial performance, this research seeks to enhance our understanding of the strategic value

and implications of tangible resources in the financial sector.

Research Questions

1. Does there any relationship exists between the physical assets of the State Bank of India with its financial performance.
2. Will be there any effect of physical assets on the financial performance of SBI.

Objectives of The Study

1. To identify the relationship between the physical assets of the SBI with its financial performance.
2. To know the physical asset's impact on the financial performance of SBI.

Hypothesis of The Study

H0: There is no significant long-run relationship between the physical assets of the State Bank of India with its financial performance.

H0: There is no significant impact between the physical assets with the financial performance of SBI.

Scope of the study”

The target of this research was to examine the effect of State Bank of India's physical assets on the bank's bottom line. The years 2018-2019 through 2022-23 were included in the analysis. The research used the bank's operating profit as a stand-in for financial performance, and it took into account the physical assets that are essential to the expansion of the banking industry.

Research methodology”

The study has been emphasized to know the SBI Physical Assets Impact on the financial performance. The study has framed two objectives and adopted quantitative research approach. As the study considered the secondary data from the CMIE Prowess.

Variables Considered for the study under the Physical Assets. They are as follows,

- Net Furniture and Other Fixed Assets
- No. Of Branches
- No. of Employees
- No. of ATMs

Statistical Tools

The study applied the various statistical tools for the examination of objectives.

Bi-variate Correlation: In order to understand the importance of the connection between the studied Physical Assets and financial results, the Bi-variate correlation method was used.

Regression: Researchers used a linear regression model to determine how investments in fixed assets affected the development of a company's bottom line.

Tabulation of “Data Analysis

Descriptive statistics are employed to summarize and understand the central tendency and variability of key variables related to physical assets in the study.

Table 1: “Descriptive Statistics”

	“N”	“Minimum”	“Maximum”	“Mean”	“Std. Deviation”
Security	5	28279.60	2193715.80	589087.6077	877138.68952
Net furniture and other fixed assets	5	34221.20	99219.20	72096.4231	23096.72601
No. of branches	5	13698.00	22640.00	18822.5385	3648.82930
No. of employees	5	207739.00	264041.00	232008.7692	18888.17213
Number of ATMs	5	20084.00	65627.00	48423.8462	16010.12432

Source: Secondary Data, CMIE Prowess

The table provides descriptive statistics for various variables. By considering the mean values, we can observe that the average value for Security is \$589,087.61, with a considerable standard deviation of \$877,138.69. This indicates a wide variation in the security values among the 5 observations. The average Net furniture and other fixed assets value is \$72,096.42, with a standard deviation of \$23,096.73. This suggests that the fixed assets values are less variable compared to the security values. For the variable No. of branches, the mean value is 18,822.54, and the standard deviation is 3,648.83. This indicates that the number of branches varies around the average, with some observations having a relatively higher or lower number of branches. The average No. of employees is 232,008.77, with a standard deviation of 18,888.17. This suggests a relatively low variability in the number of employees among the

observations. The average Number of ATMs is 48,423.85, with a standard deviation of 16,010.12. This indicates some variability in the number of ATMs among the observations.

Objective – 1: To identify the relationship between the physical assets of the SBI with its financial performance.

The research looked at the relationship between Physical Assets and Operating Profitability. The following Hypothesis was developed as a result of the research.

H0: There is no significant long-run relationship between the physical assets of the State Bank of India with its financial performance.

H0: There is a significant long-run relationship between the physical assets of the State Bank of India with its financial performance.

Table 2. Correlation Analysis

		Return on Assets	Security	Net furniture and other fixed assets	No. of branches	No. of employees	Number of ATMs
Return on Assets	“Pearson Correlation”	“1”					
	“Sig. (2-tailed)”						
	“N”	5					
Security	“Pearson Correlation”	.204	“1”				
	“Sig. (2-tailed)”	.045					
	“N”	5	5				
Net furniture and other fixed assets	“Pearson Correlation”	-.532	.582*	“1”			
	“Sig. (2-tailed)”	.026	.037				
	“N”	5	5	5			
No. of branches	“Pearson Correlation”	-.482	.627*	.980**	“1”		
	“Sig. (2-tailed)”	.045	.022	.000			
	“N”	5	5	5	5		
No. of employee	“Pearson Correlation”	-.567*	.358	.720**	.805**	“1”	
	“Sig. (2-tailed)”	.043	.230	.006	.001		
	“N”	5	5	5	5	5	
Number of ATMs	“Pearson Correlation”	-.440	.611*	.963**	.925**	.560*	“1”
	“Sig. (2-tailed)”	.032	.027	.000	.000	.047	
	“N”	5	5	5	5	5	5

Source: Secondary Data, CMIE Prowess

The correlation analysis reveals the relationship between Return on Assets and independent variables namely-security, net furniture and other fixed asset, no. of branches, no. of employees, and no. of ATMs. The results indicate that Security has a weak positive correlation (0.204) with Return on Assets, while Net furniture and other fixed assets (-0.532), No. of branches (-0.482), No. of employees (-0.567), and the number of ATMs (-0.440) exhibit moderate negative correlations. These indicate that these correlations are statistically significant for Security (0.045), Net furniture, and other fixed assets (0.026), No. of branches (0.045), No. of employees (0.043), and Number of ATMs (0.032). The study highlights that Security has a weak positive correlation with Return on Assets, indicating a

slight positive relationship. The study suggests that as the level of security increases, there is a tendency for Return on Assets to slightly increase as well. While the Net furniture and other fixed assets, No. of branches, No. of employees, and the number of ATMs exhibits a moderate negative correlation with Return on Assets indicating that as the levels of these variables increase, there is a tendency for Return on Assets to decrease. The statistically significant correlations suggest that these variables may have an impact on the financial performance represented by Return on Assets. Therefore, organizations should carefully evaluate and manage their levels of security, fixed assets, branches, employees, and ATMs to optimize their Return on Assets and improve overall financial performance. The study

rejects the null hypothesis and accepts the alternate, indicating a significant long-run association among the physical assets of the SBI and its financial performance.

Objective - 2. To know the physical asset's impact on the financial performance of SBI.

The study has framed the following hypothesis keeping in view of Physical assets Impact on the financial performance of the SBI.

H0: "There is no significant impact between the physical assets with the financial performance of SBI."

H1: "There is a significant impact between the physical assets with the financial performance of SBI."

Table 3: "Model Summary"

"Model"	"R"	"R Square"	"Adjusted R Square"	"Std. Error of the Estimate"
"1"	.881 ^a	.776 ^a	.615	.20048

Source: Secondary Data, CMIE Prowess

Table 5. Impact of Physical Assets on Financial Performance of SBI

"Model"		Unstandardized Coefficients		Standardized Coefficients	"T"	"Sig "
		"B"	"Std. Error"	"Beta"		
"1"	"(Constant)"	2.677	1.246		2.149	.023
	Security	.490	.096	.540	6.924	.026
	Net furniture and other fixed assets	-.639	.109	-.786	-8.262	.011
	No. of branches	.436	.088	.590	7.307	.032
	No. of employees	-.539	.113	-.900	-5.566	.027
	Number of ATMs	-.595	.093	-.475	-6.472	.031

Source: Secondary Data, CMIE Prowess

The regression analysis results highlight the impact between the physical assets of the State Bank of India and its financial performance, measured by Return on Assets. Security shows a positive coefficient of 0.49, indicating a positive influence on financial performance. Net furniture and other fixed assets, on the other hand, exhibit a negative coefficient of -0.639, suggesting a negative impact on financial performance. The coefficient for No. of branches is 0.436, indicating a positive impact on financial performance, and the significance value of 0.032 suggests statistical significance. No. of employees has a negative coefficient of -0.539, indicating a negative influence on financial performance. Similarly, the coefficient for the Number of ATMs is -0.595, indicating a negative impact which implies that Security, No. of branches, No. of employees, and the Number of ATMs significantly affects the financial performance of the SBI. Net furniture and other fixed assets also play a significant role, albeit in a negative manner. The study rejects the null hypothesis and accepts the alternate, indicating a significant long-run association among the physical assets of the SBI and its financial performance.

Findings of The Study

1. The study reveals a weak positive correlation (0.204) between security and Return on Assets. Which indicates an increase in security measures is associated with an improvement in financial performance.
2. It identifies moderate negative correlations between Net furniture and other fixed assets (-0.532), No. of

The Model Summary table presents the statistics related to the "goodness of fit" model's. The Adjusted-R-Square value, which stays 0.615, suggests that the physical assets approximately 61.5% of the variation in the financial performance of SBI.

Table 4: Anova

"Model"	"Sum of Squares"	"df"	"Mean Square"	"F"	"Sig. "
1 Regression	.973	1	.195	4.839	.031 ^b
Residual	.281	4	.040		
Total	1.254	5			

Source: Secondary Data, CMIE Prowess

The ANOVA table reveals that the regression model affects result variable substantially. The F-ratio, which compares these mean square values, is 4.839. The significance value of 0.031 suggests that the observed ratios related to physical assets are statistically significant. The findings show a strong correlation between SBI's physical assets and financial success.

branches (-0.482), No. of employees (-0.567), and the number of ATMs (-0.440) with Return on Assets which implies that as these physical assets increase, there is a tendency for Return on Assets to decrease.

3. The regression analysis reveals that Security has a positive coefficient (0.49), indicating a significant positive influence on the bank's financial performance.
4. It reveals negative coefficients for both No. of employees (-0.539) and the number of ATMs (-0.595), indicating a significant negative influence on financial performance, and states that the efficient management of human resources and ATMs is crucial to minimize their potential adverse effects on the bank's financial performance.

Conclusion of the study

The study focused to know the role of Physical Assets on the growth of Financial Performance. The study considered the India's Largest bank SBI. The study considered the various Physical Assets from the CMIE Prowess from the period of 2018-19 to 2022-23. The study concludes that significant variations in security measures among the entities, indicating some entities have substantially higher or lower levels of security. A weak positive correlation between security and Return on Assets suggests that increased security measures are associated with a slight improvement in financial performance. Moreover, the study reveals moderate negative correlations between various physical assets (net furniture, branches, employees, and ATMs) and Return on Assets, indicating that an increase in

these assets tends to decrease financial performance. Additionally, the regression analysis demonstrates that security has a positive influence on the bank's financial performance, while the number of employees and ATMs have significant negative impacts. Efficient management of human resources and ATMs is crucial for minimizing their adverse effects on financial performance.

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