

IMPACT OF COVID-19 PANDEMIC ON THE FINANCIAL PERFORMANCE OF SELECTED PRIVATE SECTOR BANKS IN INDIA: AN EMPIRICAL ANALYSIS

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Abstract

The COVID-19 pandemic created an unprecedented economic and financial shock that affected the functioning and performance of banking institutions. Indian private sector banks faced considerable challenges arising from disruptions in economic activities, changes in credit demand, liquidity management, declining business activity and uncertainty regarding borrowers' repayment capacity. At the same time, private sector banks demonstrated considerable adaptability through digital banking, technology-enabled services and changes in risk-management practices. The present study examines the impact of the COVID-19 pandemic on the financial performance of selected private sector banks in India. The study compares financial performance during 2019–20, treated as the pre-COVID period, with 2020–21, representing the COVID-19 period. Eight private sector banks constitute the sample, and twelve financial performance indicators covering capital adequacy, credit deployment, liquidity, income generation, operational efficiency, profitability, asset utilization and financial leverage are examined. A paired sample t-test is employed at the 5% level of significance. The findings indicate that statistically significant changes occurred in Interest Income to Total Fund, Loans Turnover, Return on Assets and Total Debt to Owners' Fund. Capital Adequacy Ratio and Net Profit Margin improved in absolute terms but their changes were statistically insignificant. Credit Deposit Ratio, Current Ratio, Non-Interest Income to Total Fund, Quick Ratio and Total Assets Turnover Ratio declined, but the observed changes were statistically insignificant. Return on Net Worth also improved substantially, although the change was statistically insignificant. Overall, the findings suggest that COVID-19 produced a mixed impact on private sector banks: selected efficiency and income indicators deteriorated, while capital adequacy and profitability indicators showed signs of recovery or improvement.

Keywords: Private Sector Banks, Financial Performance, Banking Sector, Profitability, Liquidity, Capital Adequacy

INTRODUCTION

The banking sector is a critical component of the Indian financial system because it mobilizes savings, provides credit, facilitates investment and supports economic development. The performance and stability of banks therefore have significant implications for the broader economy. Any major disruption in economic activity is likely to influence banking performance through changes in credit demand, repayment behaviour, liquidity, interest income, profitability and asset quality.

The COVID-19 pandemic represented an unusual form of economic shock. Unlike conventional financial crises, the pandemic originated as a public-health emergency and subsequently affected production, consumption, employment, trade, investment and financial transactions. The nationwide lockdown implemented in India during 2020 disrupted economic activities and created uncertainty for businesses and households. These developments inevitably affected the banking industry.

Private sector banks entered the pandemic with different business models, technology capabilities and risk-management structures. Their relatively greater reliance on technology-enabled banking, retail banking and diversified financial services provided certain advantages during lockdown conditions. However, these banks were also exposed to reduced economic activity, lower credit demand and potential deterioration in borrowers' repayment capacity.

The Reserve Bank of India introduced several measures to mitigate the financial consequences of the pandemic, including liquidity-support measures, loan repayment moratoriums, restructuring provisions and other regulatory measures. Such interventions helped maintain confidence and liquidity in the banking system. Nevertheless, the ultimate impact on individual financial indicators could differ substantially.

The present study therefore examines twelve indicators of private sector bank performance rather than relying only on profitability. The indicators cover capital adequacy, credit deployment, liquidity, interest income, lending efficiency, profitability, non-interest income, asset utilization and leverage.

The source study compares the performance of selected public and private sector banks before and during COVID-19 using data for 2019–20 and 2020–21. Eight observations are used for each period in the private sector analysis.

The principal purpose of this paper is to determine whether the changes observed in private sector bank performance during the pandemic were statistically significant.

LITERATURE REVIEW

Mistry examined (2011) that Public sector banks were less profitable as compared to private banks and foreign banks in India, As far as public sector banks were concerned, there was decrease in profitability thereof during the study period due to high interest expended ratio and low other income, ratio.

The financial performance of banks has been widely examined through indicators relating to profitability, capital adequacy, liquidity, asset utilisation, credit deployment and soundness. Mistry (2015) examined the financial performance of Indian private sector banks and reported that operational efficiency, asset management and bank size have an important relationship with financial performance. The study also indicated relationships involving return on assets, interest income, asset utilisation and bank size, highlighting the importance of internal financial characteristics in determining private-bank performance. Mistry (2012), while examining profitability performance in the Indian banking sector, demonstrated the importance of profitability-related indicators in assessing the financial condition of banks. Although the study focused on public sector banks, its findings are relevant to the present research because profitability indicators provide an important basis for evaluating changes in bank performance across different economic conditions. Banerjee and Velamuri (2015) investigated profitability and soundness across different ownership categories in the Indian banking sector using panel data from 75 banks over 2000–2013. Their findings revealed substantial heterogeneity across ownership types and showed that profitability and soundness need to be considered simultaneously when assessing banking performance. The study is particularly relevant to the present research because it establishes that ownership characteristics can be associated with differences in financial outcomes. Shukla (2016) compared public and private sector banks using eleven financial performance indicators grouped under size, growth, profitability and soundness. The study found that public and private sector banks were not substantially different in terms of size and growth, but significant differences existed in profitability and soundness, with private sector banks showing stronger growth prospects. This provides a useful pre-pandemic benchmark for analysing the performance of private sector banks during COVID-19. The COVID-19 pandemic introduced a major external shock to the banking system. Gulati et al. (2023) examined the efficiency of Indian banks during the pandemic by comparing the pre-pandemic and pandemic periods. Their findings suggested that the Indian banking system as a whole was resilient, although some large and medium-sized banks experienced efficiency losses. Importantly, the study examined whether the impact varied across ownership types, supporting the need for ownership-specific analysis. The technological response to the pandemic also became relevant to banking performance. Vyas and Mistry (2021) examined the impact of COVID-19 on digital payments with special reference to UPI and highlighted the increased relevance of digital payment systems during the pandemic period. Saroy et al. (2023) further found that adoption of digital payment technologies enhanced the cost efficiency of Indian banks. These studies suggest that technological adaptation may have supported banking operations during an environment of restricted physical interaction. Chavda et al. (2022) directly compared the financial performance of selected public and private sector banks using indicators including capital adequacy, credit-deposit ratio, current ratio, interest income to total funds, loans turnover and net profit margin. They reported significant differences in performance between the selected public and private sector banks. This study provides an important methodological and conceptual foundation for examining the present sector-specific COVID-19 analysis. Mistry and Vyas (2021) found that as far as investment safety is concerned, both types of banks are at par, while as far as return on investment is concerned, the private banks are ahead of the public banks in India. Vyas and Mistry (2021) found that there was statistically significant difference in profitability and efficiency of the selected Indian public sector banks. Due to significantly higher NP margin as well as higher RONW, BOB was at the first position followed by SBI, SYN, UCO and IOB. Due to significantly higher NII and NNII as well as efficiently controlled IE; SBI occupied first position closely followed by BOB, IOB, SYN and UCO.

Despite the growing literature on Indian banking performance and COVID-19, relatively limited attention has been given to examining the before-and-during COVID-19 changes within a selected group of private sector banks across a broad set of financial ratios. The present study addresses this gap by examining twelve indicators covering capital adequacy, liquidity, credit utilisation, income generation, profitability, asset utilisation and leverage.

RESEARCH METHODOLOGY

Research Design

The study follows a descriptive and analytical research design. It evaluates the change in financial performance of selected private sector banks between the pre-pandemic and pandemic periods.

Period of Study

Two financial years are examined:

- 2019–20: Pre-COVID period
- 2020–21: COVID-19 period

The source describes this period as covering the first two major waves of COVID-19 in India.

Sample

The analysis is based on eight selected private sector banks. Eight observations are available for each period for each financial indicator.

Variables

Twelve financial indicators are examined:

1. Capital Adequacy Ratio
2. Credit Deposit Ratio
3. Current Ratio
4. Interest Income/Total Fund
5. Loans Turnover
6. Net Profit Margin
7. Non-Interest Income/Total Fund
8. Quick Ratio
9. Return on Assets
10. Return on Net Worth
11. Total Assets Turnover Ratio
12. Total Debt to Owners' Fund

Statistical Technique

A Paired Sample t-Test is employed to determine whether the difference between the mean values before and during COVID-19 is statistically significant.

The hypotheses are:

H_0 : There is no significant difference in the mean values of the selected financial indicators of private sector banks before and during COVID-19.

H_1 : There is a significant difference in the mean values of the selected financial indicators of private sector banks before and during COVID-19.

The significance level is 5%. Therefore:

- $p < 0.05 \rightarrow$ Reject H_0
- $p > 0.05 \rightarrow$ Do not reject H_0

The analysis uses the two-tailed p-value because the hypothesis tests whether a difference exists in either direction.

RESULTS AND DISCUSSION

Financial Indicator	Before COVID	During COVID	Change	p-value	Result
Capital Adequacy Ratio	16.7913	19.1538	+2.3625	0.1102	Insignificant
Credit Deposit Ratio	92.6713	90.1613	-2.5100	0.1180	Insignificant
Current Ratio	0.1150	0.0913	-0.0238	0.0615	Insignificant
Interest Income / Total Fund	8.8013	7.9013	-0.9000	0.0117	Significant
Loans Turnover	0.1413	0.1288	-0.0125	0.0053	Significant
Net Profit Margin	-2.9525	12.4275	+15.3800	0.1556	Insignificant
Non-Interest Income/Total Fund	2.0425	1.6288	-0.4138	0.2058	Insignificant
Quick Ratio	20.3988	18.4388	-1.9600	0.4670	Insignificant
Return on Assets	208.2263	241.9188	+33.6925	0.0129	Significant
Return on Net Worth	-6.7025	7.1475	+13.8500	0.2040	Insignificant
Total Assets Turnover	0.0875	0.0800	-0.0075	0.0796	Insignificant
Total Debt / Owners' Fund	7.9275	6.8725	-1.0550	0.0307	Significant

Capital Adequacy Ratio - The mean Capital Adequacy Ratio increased from 16.7913 to 19.1538, representing an improvement of approximately 2.36 percentage points. However, the two-tailed p-value of 0.1102 exceeds 0.05. Therefore, the change is statistically insignificant. The improvement nevertheless indicates that the sampled private sector banks maintained or strengthened their capital buffers during the pandemic. This suggests that the pandemic did not result in an immediate erosion of capital adequacy within the sample. It can be concluded that the private-sector change was statistically insignificant despite the increase in the mean ratio.

Credit Deposit Ratio - The mean Credit Deposit Ratio declined from 92.6713 to 90.1613. The reduction indicates a relatively lower deployment of deposits into credit during the pandemic. However, the p-value of 0.1180 indicates that the change was statistically insignificant. The decline may reflect cautious lending

behaviour, weaker credit demand and uncertainty surrounding economic conditions. Thus, while the direction of change suggests an adverse movement, the evidence does not establish a statistically significant pandemic effect. It can be concluded that the decline is statistically insignificant.

Current Ratio - The Current Ratio decreased from 0.1150 to 0.0913. The p-value of 0.0615 is slightly above the 5% significance threshold. Consequently, the difference is statistically insignificant. The relatively small p-value compared with several other indicators may nevertheless suggest that liquidity conditions deserve managerial attention. The decline indicates some weakening in the current-asset position relative to current liabilities, although the evidence is insufficient to attribute a statistically significant change to COVID-19. It can be concluded that the mean declined while the statistical effect remained insignificant.

Interest Income/Total Fund - Interest Income to Total Fund declined from 8.8013 to 7.9013, a reduction of 0.90 percentage points. The two-tailed p-value of 0.0117 is below 0.05, indicating a statistically significant difference. This is one of the clearest adverse effects observed among private sector banks. The decline may reflect reduced lending activity, changes in interest rates, weaker credit demand and pandemic-related disruptions in economic activity. It can be concluded that the reduction in Interest Income/Total Fund was statistically significant for private sector banks.

Loans Turnover - Loans Turnover declined from 0.1413 to 0.1288. The p-value of 0.0053 demonstrates a statistically significant difference. The reduction indicates deterioration in the efficiency or intensity of loan utilization during the pandemic. Lockdowns, reduced economic activity and cautious borrower behaviour could have constrained the effective utilization of credit. It can be concluded that the same statistically significant decline in the Loans Turnover Ratio.

Net Profit Margin - Net Profit Margin increased markedly from -2.9525 to 12.4275. Despite the large numerical improvement, the p-value of 0.1556 exceeds 0.05. Hence, the difference is statistically insignificant. The result is noteworthy because the direction of change is positive but statistical significance is absent. Therefore, it would be inappropriate to conclude that COVID-19 itself significantly improved private-sector profitability. The result instead suggests substantial improvement in the sampled mean without sufficient statistical evidence to establish a systematic pandemic effect. It can be concluded that this improvement is statistically insignificant.

Non-Interest Income/Total Fund - The mean declined from 2.0425 to 1.6288, but the p-value of 0.2058 indicates that the change was statistically insignificant. The decline suggests some pressure on fee-based and other non-interest income sources during the pandemic. Nevertheless, the statistical evidence does not support the conclusion that COVID-19 significantly changed this ratio. It can be concluded that the same direction and insignificant result.

Quick Ratio - The Quick Ratio declined from 20.3988 to 18.4388. However, the p-value of 0.4670 is substantially above 0.05. Consequently, although the ratio moved downward, the change was not statistically significant. This indicates that the sampled private sector banks did not experience a statistically established deterioration in quick liquidity during the study period. It can be concluded that this insignificant decline.

Return on Assets - Return on Assets increased from 208.2263 to 241.9188, with a difference of approximately 33.69. The p-value of 0.0129 is below 0.05, indicating a statistically significant improvement. This result is particularly important because ROA represents the effectiveness with which banks generate returns from their assets. The improvement suggests that the sampled private sector banks were able to maintain or improve asset-based earning performance despite the economic disruption. It can be concluded that the improvement is statistically significant.

Return on Net Worth - Return on Net Worth improved from -6.7025 to 7.1475. Although the direction of movement is strongly positive, the p-value of 0.2040 indicates that the difference was statistically insignificant. Thus, the evidence points toward an improvement in shareholder-return performance, but the statistical test does not establish a significant pandemic effect.

Total Assets Turnover Ratio - The Total Assets Turnover Ratio decreased from 0.0875 to 0.0800. The p-value of 0.0796 exceeds 0.05, so the difference is statistically insignificant. The decline suggests a reduction in asset utilization efficiency, but the evidence does not establish that the pandemic caused a statistically significant change. It can be concluded that an insignificant reduction.

Total Debt to Owners' Fund - The ratio declined from 7.9275 to 6.8725. The p-value of 0.0307 is below 0.05, indicating a statistically significant change. From a leverage perspective, the decline represents a reduction in debt relative to owners' funds. This can be interpreted as a potentially favourable movement in financial-risk exposure, indicating a relatively stronger equity position compared with debt during the pandemic. It can be concluded that this reduction was statistically significant.

FINDINGS

The major findings of the study are:

1. Capital adequacy improved, although the improvement was statistically insignificant.
2. Credit Deposit Ratio declined, indicating reduced credit deployment, but the change was statistically insignificant.
3. Current Ratio declined, but the change was statistically insignificant.

4. Interest Income/Total Fund declined significantly, indicating a major pandemic-related effect on interest-generating capacity.
5. Loans Turnover declined significantly, indicating deterioration in lending efficiency.
6. Net Profit Margin improved substantially, changing from a negative mean to a positive mean, but the change was statistically insignificant.
7. Non-Interest Income/Total Fund declined, but the change was statistically insignificant.
8. Quick Ratio declined, but the change was statistically insignificant.
9. Return on Assets improved significantly, indicating stronger asset-based profitability in the sampled banks.
10. Return on Net Worth improved, but the change was statistically insignificant.
11. Total Assets Turnover declined, although the change was statistically insignificant.
12. Total Debt to Owners' Fund declined significantly, indicating a statistically significant reduction in leverage.

Overall, only four of the twelve indicators—Interest Income/Total Fund, Loans Turnover, Return on Assets and Total Debt to Owners' Fund—showed statistically significant changes.

CONCLUSION

The study concludes that the COVID-19 pandemic had a mixed rather than uniformly adverse impact on the financial performance of selected private sector banks in India. The pandemic significantly affected interest income and loan turnover, reflecting disruption in lending and income-generating activities. At the same time, private sector banks recorded statistically significant improvement in Return on Assets, suggesting their ability to maintain asset-based profitability despite the severe economic disruption. The significant reduction in Total Debt to Owners' Fund indicates a movement toward lower financial leverage, which may have strengthened the financial-risk position of the sampled institutions. Most importantly, the study demonstrates that a decline in the mean value of an indicator does not necessarily imply a statistically significant pandemic effect. Seven of the indicators moved adversely or showed changes in the direction of deterioration, but these changes were statistically insignificant. Thus, private sector banks displayed considerable resilience during the pandemic, although selected income and operational-efficiency indicators experienced statistically significant pressure.

RECOMMENDATIONS

1. Private sector banks should maintain higher capital buffers to absorb future systemic shocks.
2. Banks should diversify revenue sources to reduce excessive dependence on interest income.
3. Advanced credit-risk assessment should be strengthened during periods of economic uncertainty.
4. Banks should improve loan monitoring and recovery mechanisms to protect lending efficiency.
5. Greater emphasis should be placed on digital lending and contactless banking.
6. Liquidity-risk management frameworks should be periodically stress-tested.
7. Banks should develop comprehensive crisis-management and business-continuity plans.
8. Diversification of fee-based and non-interest income should be encouraged.
9. Banks should maintain prudent leverage and avoid excessive dependence on debt.
10. Regular stress testing should be conducted for profitability, liquidity and capital adequacy.

POLICY IMPLICATIONS

The findings have several implications for banking regulators and policymakers. First, regulatory authorities should encourage banks to maintain adequate capital and liquidity buffers before the occurrence of systemic shocks. Second, crisis-period regulatory support should be designed to preserve credit flows without encouraging excessive risk-taking. Third, policy frameworks should encourage digital banking infrastructure because technology-enabled banking can maintain financial-service continuity during mobility restrictions. The significant reduction in private-sector interest income and loan turnover indicates that policymakers should ensure mechanisms that preserve productive credit flows during economic disruptions. At the same time, regulatory interventions should be accompanied by effective credit-risk monitoring. The findings also suggest that banking resilience should not be assessed solely through profitability. Capital adequacy, liquidity, lending efficiency, asset utilization and leverage should all be incorporated into regulatory surveillance.

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