A COMPARATIVE STUDY OF PRE AND POST COVID PRODUCTIVE EFFICIENCY OF PUBLIC SECTOR BANK

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ABSTRACT

This evaluates the financial records of 10 different public sector banks over afive-year period. It can be shown that there are only slight variations between before and after covid in terms of efficiency ratio, return on equity ratio, debt to asset ratio, and loan to deposit ratio from all of the aforementioned research using ratio analysis.The net interest margin, however, is negative both before and after covid. Additionally, we foundthat loans with deposits When a certain ratio is used, it demonstrates that all banks have sufficient liquidity to meet their needs and demonstrates the banks' liquidity status. By calculating how much money a firm produces from the equity of its shareholders, return on equity may be used to gauge a company's profitability. In comparison to pre-covid analysis, public sector banks' productive efficiency is more effective.

INTRODUCTION: The financial sector, and individuals with income had all been hit by the epidemic's tidal waves. Impact All sectors, but mainly those related to the economy, appear to be affected by Covid-19. Due to the steady development of Covid-19 distribution both domestically and internationally, economic growth stalled. This was characterized by deteriorating external environmental circumstances, diminishing domestic needs, and a decline in consumer andcorporate confidence. It is possible to draw the conclusion that the decline in banking financial performance as coincide with the widespread use of Covid. Whether or not all operational activities in the banking sector have proceeded as planned, banking financial performance can be utilized to examine such actions. In order to evaluate a company's recent or short-term performance, analysts use efficiency ratios, which are more commonly referred to as activity ratios. Using information from a company's current assets or liabilities, these ratios are all used to measure business activity. An efficiency ratio is very important in the banking sector. The efficiency of a bank is calculated as non-interest costs divided by income.

OBJECTIVES OF THE STUDY:

1 To know about the key performance financial indicators for public sector banks.

2 To study the bank performance using key financial metrics and KPI's of the banks.

3 To know the Comparison of selected banks performance in pre and post covid timeusing identified financial metrics.

REVIEW OF LITERATURE:

Dirgahayu Lantara Junaidi Junaidin Nurhayati Rauf A Pawennari Ratu Noorita Achmad (2022)

"Indonesian Islamic banks: A review of the financial state before and after the COVID-19 pandemic" This study uses non-parametric production efficiency analysis to compare Indonesia's Islamic banking performance between 2010 and 2021, before and after the COVID-19 outbreak. This study made distinctions between various financial and non- financial aspectsof Indonesia's Islamic banks as well as looked into the connections between these financial aspects, Financial factors include things like properties, deposits, equities, financing, and revenue, as well as non-financial factors like staff and locations. Non- parametric analysis, the input-oriented variable constant return to scale (CRS) and returns to scale (VRS) models, and returns to scale (Scale) models are used as a platform to compute the IIB of overall, pure, and scale efficiency. It also used an intermediary approach to analyze the effectiveness of Islamic banks from 2010 and 2021 and found that specific Islamic banking operations are strongly correlated with economic development.

Hari Sutra Disemadi1 Ali Ismail Shaleh (2020)

Banking credit restructuring policy on the impact of COVID-19 spread in Indonesia According to the study's findings, the Financial Services Authority Regulation should be used to issue policies that will give a national economic stimulus in order to combat the economic instability brought on by the COVID-19 outbreak.

These varied plans are totally up to the bank, and they heavily rely on the findings of the bank's evaluation of the debtor's financial performance or on the potential of the company and its ability to pay COVID-19- affected debtors. With a maximum term of one year, the length of this restructuring varies significantly depending on how the bank evaluates its debtors.

The quality of restructured loans may be easily assessed if they are offered to debtors who have been identified as being impacted by the spread of COVID-19. This policy regulates the existence of credit restructuring. Depending on how each bank's policies evaluate the debtor's profile and financial capabilities, several restructuring plans may be put into effect.

Reza Nurul Ichsan, Sudirman Suparmin, Mohammad Yusuf, Rifki Ismal and Saleh Sitompul (2021)

"Determinant of Sharia Bank's Financial Performance during the Covid-19 Pandemic" Due to the large number of individuals who have lost their jobs and their incapacity to finance payments, poor financing has emerged from debtors' disbursements in this article explaining the impacts of the Covid-19 epidemic on the banking industry. The financial results of Islamic banks during the Covid-19 epidemic is evaluated in this study using yearly financial information from 2011 to 2020. To verify the model's linearity, several regression analysis tests and the Ramsey testing are performed. Financial performance (ROA) is favorably and considerably impacted by the Capital Adequacy Ratio(CAR), Operating Costs to Operating Income (BOPO), and Financing to Deposit Ratio (FDR), whereas the Not Performing Financing (NPF) has a negative and minor effect on financial performance (ROA). The capital adequacy ratio (CAR), operating costs to operating income (BOPO), funding to deposit ratio (FDR), and not performing financing all had a significant influence on the financial performance (ROA) of Indonesian Sharia banks (NPF).

Dr. Asif Perwej (2020) in their article "THE IMPACT OF PANDEMIC COVID- 19 ON THE INDIAN BANKING SYSTEM

" They are meant to demonstrate how the banking and financial sectors have been impacted by the COVID-19 outbreak. The coronavirus epidemic in India, in accordance with the Indian bank, threatens a protracted clean-up of its financial system. Banks, the financial backbone of the economy, provide loans to both individuals and companies. Their stability is crucial for the system to keep running. A significant drop in demand, lower earnings, and production halts are only a few of the COVID-19's detrimental repercussions on banks. As firms scramble to handle COVID-19's implications on financial services, staffing concerns, a lack of digital maturity, and demand on the present infrastructure are making the situation worse. With the current COVID-19 new coronavirus pandemic, banks surely have a lot on their plates. Businesses and borrowers are coping with job losses, slow sales, and declining revenues as the virus spreads around the world. Bank clients could start searching for financial aid. One apparent way that pandemics might harm financial institutions is via the enormous economic expenses they cause.

RESEARCH METHODOLOGY

STUDY TYPE: Research methodology used in this study is descriptive research as it basedon the secondary data.

PERIOD OF STUDY: The time considered in this study is from 2018 to 2022. The study isconducted by taking the data of financial statements of different banks.

(Pre covid: 2018-2019 and Post covid: 2020-2022)

SOURCE OF DATA: Secondary data comes from a variety of published sources, like websites and articles.

TOOLS AND TECHNIQUE: Anova, ratios, percentages

DATA ANALYSIS AND INTERPRETATION

4.1 HYPOTHESIS:

Ho: There is no significant difference of banks performance in pre and post covid era. H1: There is a significant difference of banks performance in pre and post covid era.

ANOVA NET INTEREST MARGIN

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	0.001008	4	0.000252	11.01466	6.16E-06	2.633532
Columns	0.000832	9	9.24E-05	4.038405	0.001214	2.152607
Error	0.000824	36	2.29E-05			
Total	0.002664	49				

P value is less than 0.05.

Interpretation:

In the above table, as p value is 0.05 we h0 is rejected and h1 is accepted where there is significant difference of bank performance in pre covid and post covid era.

NET INTEREST MARIGN:

The difference between a bank's income from loans and its interest payments on deposits is called the net interest margin. It is one sign of bank development and profitability. It explainsthe distinction between the bank's interest on loans and its interest on deposits. The financial net interest margin is significantly affected by the interest rates in the economy. A bank's net interest margin will be positive for an efficient bank and negative for an inefficient bank.

Net Interest Margin = (Investment Income – Interest Expenses) / Average Earning Assets.

NET INTEREST MARGIN										
Years	**Bank of Baroda**	**Bank of Maharashtra**	**Central bank of India**	**Canara Bank**	**Bank of India**	**Indian bank**	**Indian overseas bank**	**Punjab & Sind bank**	**Punjab national bank**	**State bank of India**
2022	-0.0152	-0.01211	-0.0108	-0.0204	-0.02	-0.017	-0.0165	-0.0203	-0.0170	-0.012
2021	-0.036	-0.0154	-0.0124	-0.0284	-0.021	-0.026	-0.0200	-0.0269	-0.0238	-0.015
2020	-0.0305	-0.01806	-0.0176	-0.0325	-0.025	-0.046	-0.027	-0.0370	-0.0254	-0.021
2019	-0.0234	-0.02133	-0.0226	-0.0317	-0.027	-0.026	-0.0298	-0.0357	-0.0255	-0.020
2018	-0.024	-0.03003	-0.0316	-0.0303	-0.029	-0.024	-0.0309	-0.0310	-0.0258	-0.020

ANOVA LOAN TO DEPOSIT RATIO

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	0.005168	4	0.001292	7.471471	0.000173	2.633532
Columns	0.047402	9	0.005267	30.45746	3.12E-14	2.152607
Error	0.006225	36	0.000173			
Total	0.058795	49				

P value is less than 0.05.

Interpretation:

In the above table, as p value is less than 0.05. h1 is accepted . where there is significantdifference of bank performance of pre and post covid era.

LOAN TO DEPOSITE RATIO:

The loan-deposit ratio is the proportion of a bank's total debt to its total deposits. Typically,the ratio is stated as a percentage. If the ratio is under 1, the bank as not borrow money from external sources to fund loans to its customers.

A bank's liquidity is assessed using its loan-to-deposit ratio, which compares all of its loans to all of its deposits during the same time period. The LDR is given in percentage form. The bank might not have enough liquidity to meet any unanticipated funding requirement if the ratio is too high.

Loan-to-deposit ratio= Bank's total amount of loans / The total amount of deposits for the same period.

Debt-to-Assets Ratio = Total Debt / Total Assets.

LOAN TO DEPOSITE RATIO										
Years	**Bank of Baroda**	**Bank of Maharashtra**	**Central bank of India**	**Canara Bank**	**Bank of India**	**Indian bank**	**Indian overseas bank**	**Punjab& Sind bank**	**Punjab national bank**	**State bank of India**
2022	0.1018	0.038298	0.0223	0.0426	0.04257	0.02889	0.01171	0.02392	0.05143	0.10988
2021	0.0715	0.024362	0.0174	0.0494	0.05160	0.04870	0.01527	0.027506	0.046958	0.116758
2020	0.0983	0.024459	0.0193	0.0683	0.07131	0.08006	0.024309	0.035833	0.088014	0.101675
2019	0.1034	0.072166	0.0187	0.0685	0.08470	0.05014	0.027618	0.027537	0.068675	0.140705
2018	0.1067	0.029242	0.0204	0.0741	0.08336	0.09488	0.042559	0.036205	0.100749	0.135582

FINDINGS:

- Return on Equity evaluates a company's profitability by figuring out the profit it makes from its shareholders' equity.
- Return on equity is increasing for the State bank of India during and post covid periodas compared to any other banks.
- Efficiency ratio is used to know the current performance, State bank of India andBank of Baroda higher value of efficiency performance in post covid period.
- Loan to deposit ration shows the liquidity position of the banks, by identified ratio itshows that all the banks are have adequate liquidity for their requirements.
- Debt-to-asset ratio to evaluate a company's capacity to service its existing debt as wellas its capacity to borrow capital through further debt.

CONCLUSION

This research was created to evaluate the pre-covid and post-covid productivity effectiveness of various public sector banks. This considers the financial accounts of ten distinct public sector banks throughout a five-year period of time. From all of the aforementioned study utilizing ratio analysis, it can be shown that there are only minor differences between before and post covid in terms of efficiency ratio, return on equity ratio, debt to asset ratio, and loan to deposit ratio. But net interest margin is negative irrespective of pre and post covid. Further, we discovered that loans with deposits When a certain ratio is employed, it shows that all banks have enough liquidity to satisfy their demands, showing the banks' liquidity position. Return on equity measures a company's profitability by figuring out how much money it makes from the equity of its shareholders. The productive efficiency of publicsector banks is more efficient as compared to pre-covid analysis.

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