



Effect of Financial Performance Indicators on Profitability of Khammam DCCB – A Study

¹A. Syamala, ²Dr. S. Ramesh

¹Assistant Professor of Commerce, SR & BGNR Government Arts & Science College(A), Khammam Telangana

²Assistant Professor of Commerce, SR & BGNR Government Arts & Science College(A), Khammam Telangana

ABSTRACT:

The present study attempted to evaluate the financial performance indicator of Khammam DCCBs using the CAMEL model. The study is based on secondary data extracted from Khammam DCCBs' annual report. For evaluation purposes, five-year data (i.e., 2018-19 to 2022-23) are analyzed by calculating various ratios related to the Financial Performance Indicator (CAMEL model). The study found from bivariate correlation that the study estimated from correlation that DCCBs' Capital Adequacy and Earning Capacity are positively correlated with its profitability while financial indicators such as Asset Quality, Management Capacity and Liquidity Ratio are favorably correlated with banks' probability. The study found in Ordinary Least Square that Leverage plots estimated that capital adequacy and liquidity are the ratio that will reduce bank profitability while financial indicators such as Asset quality, Management and Earning Capacity increase the profitability of bank DCCBs.

Key Words: Asset Quality Ratio, Bivariate Correlation, Capital Adequacy Ratio, DCCB, Earnings Ratio, Liquidity Ratio, Management Ratio.

INTRODUCTION

A cooperative bank is a financial institution that at the same time belongs to its owners and customers of its bank. Cooperative banks are often created by individuals who belong to or share a common interest in the same local or professional community. In particular, cooperative banks provide a wide range of banking and financial services to their employees (credits, deposits, bank accounts, etc.). Co-operative banks differ from shareholder banks by organization, goals, values, and governance. Banking authorities are supervised and controlled in most countries and must respect prudential bank regulations that place stockholder banks on an equal footing. This control and supervision may be exercised, in accordance with countries, by State entities directly or delegated to a cooperative federation or central body.

Co-operative banking is cooperative retail and commercial banking. Cooperative banking organisations take deposits and lend money in most regions of the globe. Co-operative banking includes credit unions, mutual savings and lending organizations, building businesses and cooperatives as well as business banking services provided by hands-on organizations (such as cooperative federations) to cooperative businesses.

The structure of commercial banking is of a kind of branch bank, while a three-tier federal banking structure,

1. At the apex point, a State Co-operative Bank operates.
2. The Central Cooperative Bank is intermediate. (District-level Co-operative Banks Ltd.)
3. Basic (at village level) main cooperative lending societies.

REVIEW OF LITERATURE

Thirupathi Kanachu (2012), A cooperative bank is a financial institution owned at the same time by its staff and customers. Cooperative banks are often created in the same local or professional community by people belonging to or sharing common interests. Co-operative banks generally provide their staff with banking and economic services (credits, deposits, bank accounts, etc.). Co-operative banks differ from stockholder banks, goals, values, and governance by organization. In this document, the growth of DCCBs in India is evaluated through selective indicators and the DCCB deposit, loan and C / D ratios are evaluated. This paper also examines asset growth, working capital, and management costs in DCCBs. To achieve the objectives of paper data, countless secondary sources have been collected and analyzed using various statistical tools.

Anil Kumar Soni and Abhay Kapre (2012), The District's Central Cooperative Bank plays a vital role in Rajnandgaon agriculture and rural development. The DCC Bank has reached Rajnandgaon through its comprehensive network in rural regions. DCC Bank Rajnandgaon acts as an intermediary between Apex Bank and Cooperative Primary Agriculture Societies (PACs). The credit union's success in a district depends primarily on its financial strength. DCC Bank is a major district financing organisation that should fulfill the credit demands of multiple types of district co-operatives.

Most of the district's main cooperative banks are currently facing overdue problems, recovery problems, unfinished assets, and other problems. Therefore, DCC Bank Rajnandgaon's financial performance requires to be studied. This paper attempts to assess the financial performance of DCC Bank Rajnandgaon from 2000 to 2010- 2011. The present study is based on an analytical research design (Growth Rate). The empirical results of DCC Bank Rajnandgaon indicate favourable and appropriate growth.

Selvaraj, N (2015), Central cooperative banks played an important role in promoting farming and associated activities by providing credit services through major cooperative banks in the middle order of a three-tier system. They are a strong connection between rural, non-currency- connected cooperative banks and urban-based cooperative banks that have a close relationship with the currency market. The study examines the financial evaluation of Dindigul District Central Co-operative Bank Limited. The regression coefficient was calculated to determine the link between interest distribution and net profit using information collected through the annual reports.

Vishwanath Varesh (2016), A cooperative bank is a financial institution belonging to its employees, who are also the bank's owners and clients. Cooperative banks are often set up by individuals who belong to the same local or professional community or share a common interest. Cooperative banks give their workers a wide range of banking and economic services (loans, deposits, bank accounts, etc.). Co-operative banks differ from stockholder banks in organization, goals, values, and governance. The paper attempts to evaluate the financial performance of DCC Bank of Vijayapur through selective indicators. This paper also examines DCCB's investment proportion and rate of growth, working capital, stocks, credit allocation, and profit. Several secondary sources were collected and analyzed using simple statistical tools to achieve the aims of the paper data.

OBJECTIVES OF THE STUDY

1. To measure the relationship of CAMEL ratios with the profitability ratio of Khammam DCCB.
2. To examine the impact of CAMEL ratios on profitability ratio of Khammam DCCB.

HYPOTHESIS OF THE STUDY

H01: There is no relationship of CAMEL ratios with the profitability ratio of Khammam DCCBs

H02: There is no impact of CAMEL ratios on the profitability ratio of Khammam DCCBs.

SCOPE OF THE STUDY

The present study has been emphasized on the financial performance of the Khammam District credit Co-operative Bank. The study has considered the CAMEL ratios as the financial indicators and attempted to know the impact of CAMEL ratios on profitability ratio. The study has considered the financial statements from the period of 2018-19 to 2022-23.

METHODOLOGY

The study has considered the secondary data of Khammam DCCB. The study calculated the financial ratios with the help of financial statements. The following statistical tools were applied to analyze the framed objectives

Bivariate Correlation: The study applied the bivariate correlation to identify the relationship of CAMEL ratios with the profitability ratio of Khammam DCCB.

Least Square Method: The study applied the robust least square method to know the multiple independent variables impact on one dependent variable. In the study CAMEL ratios (independent variables) impact and the Profitability ratio (dependent variable) of Khammam DCCB has been examined.

TABULATION OF DATA ANALYSIS

Objective 1: This objective focuses on the relationship between Khammam District Cooperative Bank's CAMEL performances ratios with its profitability and applied for this bivariate correlation for the period of 2018-19 to 2022-23.

Hypothesis used for below table as follows

H₀: Relationship does not exist between the CAMEL performance ratios with Profitability of Khammam DCCB.

Table – 1

Relationship of CAMEL Ratio with Profitability ratio of Khammam DCCB

		Profitability	Capital Adequacy	Asset Quality	Management Capability	Earning Capability	Liquidity
Profitability	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	5					
Capital Adequacy	Pearson Correlation	-.949*	1				
	Sig. (2-tailed)	.010					
	N	5	5				
Asset Quality	Pearson Correlation	.862	-.934*	1			
	Sig. (2-tailed)	.041	.009				
	N	5	5	5			
Management Capability	Pearson Correlation	.879*	-.721	.551	1		
	Sig. (2-tailed)	.041	.162	.327			
	N	5	5	5	5		
Earning Capability	Pearson Correlation	-.539	.579	-.356	-.610	1	
	Sig. (2-tailed)	.339	.309	.548	.270		
	N	5	5	5	5	5	
Liquidity	Pearson Correlation	.991**	-.951*	.858	.890*	-.587	1
	Sig. (2-tailed)	.000	.011	.052	.041	.291	
	N	5	5	5	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Secondary Data

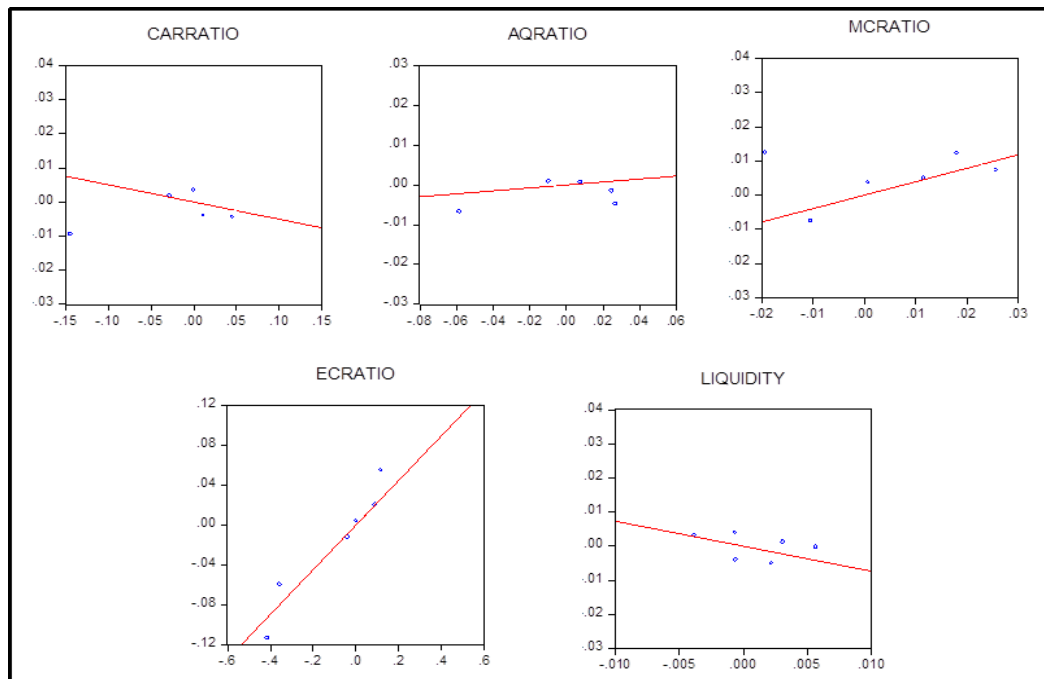
The table above shows the relationship between CAMEL and the profitability of Khammam DCCBs. The result indicates that C-Capital Adequacy and E-Earning Capability ratios appear to be negatively correlated with profitability and stated that Capital Adequacy is strongly correlated (-0.954) while Earning Capability is moderately correlated. It observed that DCCBs ' A-Asset Quality, M-Management Capability, and L-liquidity position were positively correlated with profitability and found that these ratios were strongly correlated with their Pearson value as ($r=0.862$ 0.879 and 0.991 respectively). The further p-value for the CAMEL ratio appears to be less than 0.05, which means rejecting H_0 and accepting H_1 . It is therefore concluded that there is a relationship between the performance ratio of CAMEL and the profitability of Khammam DCCBs.

Table-2 Impact of CAMEL Ratios on Profitability of Khammam DCCB

Dependent Variable: PROFITABILITY				
Method: Least Squares				
Sample: 2013 2017				
Included observations: 5				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.220880	0.590536	0.374033	0.0012
CARRATIO	-0.350135	0.079160	-0.638392	0.0008
AQRATIO	0.370041	0.189006	0.195976	0.0011
MCRATIO	0.393118	0.541075	0.728397	0.0038
ECRATIO	0.222873	0.024903	9.001703	0.0001
LIQUIDITY	-0.732848	1.277597	-0.574240	0.0017
R-squared	0.997800	Mean dependent var		0.173288
Adjusted R-squared	0.995966	S.D. dependent var		0.386166
S.E. of regression	0.024526	Akaike info criterion		-4.271342
Sum squared resid	0.003609	Schwarz criterion		-4.028889
Log likelihood	31.62805	Hannan-Quinn criter.		-4.361107
F-statistic	544.2186	Durbin-Watson stat		2.604353
Prob(F-statistic)	0.000000			

Source: Secondary Data

The table illustrates the effect of Khammam DCCBs Financial performance on its profitability. Here, bank profitability acts as a dependent variable and independent as a CAMEL ratio. The result means that the bank's capital adequacy ratio and liquidity position appears to have a negative impact on the profitability of DCCBs with their estimate of -0.3501 and -0.7328. The remaining ratio seems to be positively influenced by the bank's asset quality is influenced by 0.3700, management capacity at 0.3931, and earning capacity at 0.2228. Further, adjusted r- square appears to be strong and the probability of the model being observed to be statistically significant. There, by confirming that H0 is rejected and accepting H1 i.e., the effect of Khammam DCCB's financial performance on its profitability.

Figure -1**Leverage Plots of CAMEL ratios Effect on profitability Ratio**

Source: Secondary Data

The leverage plots were constructed to identify the effect of financial performance on the profitability of DCCBs. The table indicates that CAMEL had a significant influence and therefore leverage plots indicate that capital adequacy and liquidity plots are plotted downward, which means that the increase in this ratio will decrease the profitability of the banks. Financial ratios such as plotline Asset Quality, Management, and Earning Capability are observed upward and state that the rise in this ratio will increase bank profitability.

FINDINGS OF THE STUDY

1. The study estimated from correlation that DCCBs ' Capital Adequacy and Earning Capacity are positively correlated with its profitability and indicated that Capital Adequacy (-0.954) is highly correlated with Probability, while Earning Capacity (-0.542) is mildly correlated.
2. Bank financial indicators such as asset quality, management capacity and liquidity ratio are favorably correlated with probability with their corresponding ' r ' value as 0.878, 0.882 and 0.998.
3. The study synchronized OLS that the CAMEL ratio had significantly impacted the profitability of DCCBs and indicated that C-Capital Adequacy, Liquidity are negatively impacted.
4. The study found that the management capacity ratio is superiorly affected by the profitability of 0.3941 followed by the asset quality ratio (0.3701).
5. Leverage plots estimated that capital adequacy and liquidity are the ratio that will reduce bank profitability while financial indicators such as asset quality, management and earning capacity increase bank profitability.

CONCLUSION OF THE STUDY

The research concentrated on the economic results of Khammam DCCB. The research regarded the financial statements from 2018-19 to 2022-23 years. The research framed the two goals to define the effect of chosen financial ratios on the profitability ratio. The CAMEL ratios were calculated and the various statistical tools were applied to examine the objectives. The bivariate correlation was implemented in order to understand the CAMEL proportions with the profitability percentage. The Ordinary Least Square method was applied to know the impact of the CAMEL ratios on profitability and the result indicated that the Management Capability ratio and the asset quality ratio had a higher influence on the dependent variable, i.e. the profitability ratio. The Capital Adequacy and Liquidity ratio are noted to have an adverse impact on Khammam DCCB's profitability. Therefore, further study in this region is needed by considering the external variables that affect the efficiency.

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