

Efficiency and Financial Practices of State Co-Operative Banks In India

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Abstract : Credit Co-operatives are one of the players in the rural finance in India. They are the oldest formal financial institutions in rural India. The structure of credit co-operatives in India is three tier. The apex body is the State Co-operative Bank (SCB) at state level, District Central Co-operative Bank (DCCB) at district level and Primary Agriculture Credit Societies (PACS) at village level. This paper measures the technical efficiency of SCBs in India during 2015-2017 and analyses the association of technical efficiency with the financial practices like cost of funds (COFs), Credit Risk (CR), Capital Adequacy Ratio (CAR) Credit Deposit Ratio (CD) and Profit (P). It was found that there is no significant association between efficiency and financial practices of SCBs in India. Though the association was insignificant except CAR other financial practices showed positive association.

Keywords : DEA, Technical Efficiency, SCBs, Financial Practices

1. INTRODUCTION

About 70 per cent of the people in India depend on Agriculture. Agriculture is considered as backbone of the Indian economy. Despite the growth of commerce and developments in communications, the economic conditions of the farmers did not improve. Agriculturalists need to borrow for purchasing the inputs, for the activities like ploughing, bunding and weeding, to purchase implements etc., Thus, it is very clear that they need the institutional finance which is cheap and best source of finance.(Kuddus & Hussain,2010)

Rural finance has evolved in many folds after the nationalization of banks in India in 1969. Rural financial system was developed into multiple agency model in delivering the rural credit. Commercial Banks, Regional Rural Banks and Co-operatives are the main institutional agencies in rural areas.

The credit co-operatives spread across the country. Despite their extensive spread and state support they are financially weak. Their performance is affected because of the number of policy changes in the area of rural credit with special emphasis on profits. Non adherence to the compliance, political influence and lack of professional management are the major factors that are reported for their performance levels. Though credit co-operatives play an important role in rural credit, much focus on them has not been laid in the academic studies. (Bhatt & Bhat,2013)

This paper focuses on measuring the technical efficiency of SCBs using Data Envelopment Analysis (DEA). The relationship between technical efficiency and financial practices was also analyzed in this paper. The different financial practices used in this study are the cost of funds, non-performing assets (credit risk), credit deposit ratio and profitability.

Section I of this paper gives the introduction, section II deals with history on credit co-operatives in India, section III deals with literature review, section IV deals with objectives, hypothesis, scope and limitations of the study, section V deals with methodology. Data analysis and results are presented in section VI and section VII gives the conclusion.

2. History of Credit Co-operatives in India

In order to address the indebtedness of agricultural classes in the country the Government of Madras in the year 1892, deputed one of his officers, Frederick Nicholson to study the theory and practice of agriculture and banks in Europe. While Nicholson report was under examination, Lord Curson's government appointed a committee under the chairmanship of Sir Edward Law to recommend the measures to be taken for introducing co-operative movement in India. On the basis of the recommendations of this committee Co-operative Societies Act, 1904 was enacted.(Dadhich,1977)

The problem of delivering the credit in the rural areas was addressed by the formation of Primary Agricultural Societies (PACS). The PACS that were started under the law of Co-operative Societies Act, 1904 were very small in size in the beginning. During the period of depression in 1930's the non-repayment of loans by the members to the societies made them sick with mounting dues. (Kuddus & Hussain,2010)

Because of the failure of PACS to mobilize the required sources for meeting the demands of the members, District Central Co-operative Banks (DCCBs) were formed. DCCBs were started to tap the resources from the members, higher financing institutions and individuals, in order to meet the credit needs of the affiliated societies. Even DCCBs felt that the resources mobilized by them were not sufficient and there is need for apex body at state level to mobilize the resources. The Central Banking Enquiry Committee,1931 recommended a provincial bank which links co-operative to the general market and commercial banks and managed on the business principles with due respect to the requirement of cooperation. This institution does not deal directly with PACS . (Kuddus & Hussain,2010)

The Madras Central Co-operative Union now called as the Tamilnadu State co-operative Apex Bank is the first apex bank formed in the year 1905. The second co-operative act in 1912 paved way for the formation State Co-operative Banks (SCBs) and thus the other states also started their apex co-operative banks between the periods 1912 to 1920. (Kuddus & Hussain,2010) Thus, the credit co-operatives in India are three tier, PACS at the village level, DCCBs at district level and SCBs at state level.

3. LITERATURE REVIEW

Khankhoje & Sathye,2008 used DEA to measure the efficiencies of regional rural banks for the years 1990 to 2002. The researcher indicated that the efficiencies of regional rural banks improved after restructuring.

In a study conducted on the relationship between risk, capital and efficiency of co-operative banks in Japan during 2003 to 2006, it was found that inefficient banks holds more capital and takes more risk. (Deelchand & Padgett,2009)

Ganesan,2009 used DEA to compute the technical efficiencies of DCCBs and SCBs during the period 2002-2006. In this study it was found

that southern region performed well compared to other regions in India.

In a study conducted on co-operative banks in Sri Lanka the author opined that efficient small financial institutes have sound financial practices that contribute to high efficiencies. The efficiency in this study was measured using DEA. (Jayamaha & Mula,2010)

A study conducted on urban co-operative banks in India during 2006-2010 showed that non-performing assets declined during this period and most of banks had capital adequacy ratio at 9 per cent. (Goyal & Kaur, 2011)

In a study conducted on the five co-operatives in Jammu and Kashmir during 2001-2006, it was found that the technical efficiency was 90 per cent under constant return to scale and 97 per cent under variable returns to scale. The author expressed that non-performing assets and lack of skilled labor were the reasons for this performance.(Bhatt & Bhat,2013)

A study conducted on Non-Performing Assets of Latur District Co-operative Bank during 2006-2013 showed that Non-Performing Assets declined during this period.(Puspalatha & Pandhari,2014)

Attri and Paul,2015 used compounded growth rate to analyze the performance of State Co-operative Banks in India during 2002-2012. This paper focused on number of branches, membership, capital, advances, deposits and recovery performance. The author indicated that all the above parameters were on increasing trend.

In a study conducted on the DCCBs in Telangana, the researcher used compounded growth rate to analyze the performance during 2006-2015. The growth rate of deposits and share capital increased whereas the loans decreased.(Moinoddin and Babu,2016)

4. OBJECTIVES, SCOPE AND LIMITATIONS OF THE STUDY

4.1 Objectives of the Study

To measure the Technical Efficiencies of SCBs in India

To analyse the relation between the Technical Efficiencies and financial practices of SCBs in India

4.2. Hypothesis

H10: There is no significant association between Technical Efficiency and Financial Practices of SCBs in India

4.3. Scope of Study

Study was conducted on state co-operative banks (31 SCBs) during the period 2015-2017.

4.4. Limitations of the Study

Telangana state co-operatives indicators were added to Andhra Pradesh to have uniformity in the study in the year 2016 and 2017.The study was conducted for only for three years as the data for CAR was not available for before years.

5. METHODOLOGY

Secondary data is used in this paper. The data was collected from NAFSCOB. Data Envelopment Analysis using Constant Returns to Scale (CRS) and output orientation was used to calculate the technical efficiencies. The selection of inputs and outputs has been identified from prior studies. The inputs used for this study are Deposits, Borrowing and Cost to Management. The outputs used are Loans and Investments. The financial practices studied in this study are cost of funds, credit risk, capital adequacy ratio, credit-deposit ratio and profit. Pearsons Correlation was used to assess the association between technical efficiencies and financial practices.

6. DATA ANALYSIS AND RESULTS

Table 1: Description of Technical Efficiency

	Minimum	Maximum	Mean	Std. Deviation
Technical Efficiency	.75	1.00	.9421	.06314

The mean technical efficiency of the 31 state co-operative banks is 0.9421. The minimum technical efficiency is 0.75. Kerala State Co-operative Bank had minimum technical efficiency.

Table 2: Description of Financial Practices

Financial Practices	Mean	Std. Deviation
Cost of Funds(%)	21.10	84.89
Credit Risk (NPA/Gross Loans)(%)	12.27	22.32
Capital Adequacy Ratio (%)	10.46	7.98
Credit Deposit Ratio	0.96	0.61
Profit (Rs.Millions)	329.7	6356.65

The average cost of funds is 21.10 per cent and credit risk is 12.27 per cent. Capital adequacy ratio is 10.46 per cent. Reserve Bank of India indicated that the state co-operative banks need to achieve capital adequacy of 9 per cent. The mean capital adequacy ratio is more than 9 per cent. The mean credit deposit ratio is 0.96. That is 96 per cent of the deposits are used to deliver the credit. The mean profit of the state co-operative banks is around 329.7 millions

Table 3: Association between Technical Efficiency and Financial Practices

Financial Practices	Correlations	Technical Efficiency
Cost of Funds	Pearson Correlation	.173
	Sig. (2-tailed)	.351
Credit Risk	Pearson Correlation	.061
	Sig. (2-tailed)	.745
Capital Adequacy Ratio	Pearson Correlation	-.176
	Sig. (2-tailed)	.345
Credit Deposit Ratio	Pearson Correlation	.203
	Sig. (2-tailed)	.272
Profit	Pearson Correlation	.076
	Sig. (2-tailed)	.685

The association between technical efficiency and financial practices was tested using Pearsons Correlation. It is found that there is no significant association between technical efficiency and cost of funds ($r(31)=.0173$, $p=.351$), credit risk ($r(31)=0.061$, $p=.745$), capital adequacy ratio ($r(31)=-.176$, $p=.345$), credit deposit ratio ($r(31)=.203$, $p=.272$) and profit ($r(31)=.076$, $p=.685$).

Thus null hypothesis is not rejected, that there is no significant association between technical efficiency and financial practices.

7. CONCLUSION

The main objective of the co-operative banks is to ensure that loans are delivered to the rural people. The State Co-operative banks which are the apex institutes of the credit co-operatives in India aims at collecting the funds to deliver the loans to DCCBs and thereby from DCCBs to PACS. So the technical efficiency in this study was measured using intermediary model of collecting the funds and delivering the loans. It was found that financial practices like cost of funds, credit risk, capital adequacy ratio, credit deposit ratio and profit has no significant association with technical efficiency of the state co-operative banks in India during 2015-2017. Though the association was insignificant the direction of the association indicates that increase in cost of funds, credit risk, credit deposit ratio and profit will increase the technical efficiency. With increase in cost of funds more funds are available and thereby will increase in delivery of loans. Issue of loans without proper credibility will increase the credit risk. Similarly credit deposit ratio is the amount deposits that are catered to loans, thus increase in this ratio will increase the technical efficiency. But, increase in capital adequacy ratio will decrease the efficiency as the funds are blocked in the form of share capital.

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