Financial Viability Of Tier-II Cooperative Credit Institutions - A Study Of District Central Cooperative Banks In India

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INTRODUCTION

The co-operative banks arrived in India in the beginning of the 20th Century as an official effort to create a new type of institution based on the principles of co-operative organization and management, suitable for problems peculiar to Indian conditions. These banks were conceived as substitutes for money lenders, to provide timely and adequate short-term and long-term institutional credit at reasonable rates of interest. The cooperative banks in India play an important role in both rural and urban areas even today. In rural areas, cooperative banks mainly finance agriculture based activities including farming, cattle, milk, hatchery, personal finance etc. along with some small scale industries and self-employment driven activities. In Urban areas these mainly finance various categories of people for self-employment, industries, small scale units, home finance, consumer finance, personal finance, etc.

Cooperative banks in India have been working at three levels, viz. At State (Tier I), District (Tier II) and Village level (Tier III). The main functions of District Central Cooperative Banks (DCCBs at Tier II) are to provide finance to the primary credit societies, acceptance of deposits, granting of loans/advances, fixed deposit receipts, gold/bullion, goods and documents of title of goods, collection of bills, cheques, safe custody of valuables, agency services and work as balancing center for PACS.

The financial state of cooperative banks in India has been miserable. Many banks became insolvent and others are on the verge of mergers or acquisitions. Various scams surfaced in 2001-02 in the cooperative sector (which had given a big jolt to the banking sector) like-Madhavpura Mercantile Cooperative Bank (MMCB), Krushi Cooperative Urban Bank (KCUB), Charminar Cooperative Urban Bank (CCUB) and Nagpur District Central Cooperative Bank (NDCCB). The Deposit Insurance and Credit Guarantee Corporation (DICGC), a wholly-owned subsidiary and credit insurance arm of the RBI pays a maximum of ₹ 1 lakh per depositor in case a bank goes insolvent.

In 2005-06, the RBI cancelled licenses of 14 Urban Cooperative Banks and DICGC made a payment of ₹ 565 crore towards the settlement of depositor's claims. During 2006-07, as many as 25 cooperative banks closed operations resulting into a payout of ₹ 438 crore by the insurer towards settlement of depositors' claims. In the year 2007-08, failing cooperative banks cost Reserve Bank's credit insurance arm dearly, as it had to shell out over ₹ 123.37 crore towards payment to depositors of 17 insolvent banks. The Reserve Bank's credit insurance arm had paid over ₹ 142 crore to depositors of 19 cooperative banks that had gone bankrupt upto March 2009. As 32 Cooperative Banks failed between January to December 2009, ₹ 482 crore has been paid by DICGC to settle the dues of the depositors.

Keeping in mind this vulnerable state of the cooperative banks, many committees have been formed and these committees have presented their recommendations. As indicated in the annual policy statement of April 2008, the Government approved a package as suggested by A. Vaidyanathan panel and an aggregate amount of ₹ 4,740 crore has been released by the NABARD. NABARD is the implementing agency for the Revival package for the Short Term Cooperative Credit Structure.

Cooperative banks have made a commendable progress in extending its geographical spread and functional reach, but very less work has been done by the Government to improve the actual state of affairs in these banks, which has been dismal with huge decline in productivity and efficiency, erosion of profitability, unrealizable debts and many unviable branches. Today, the cooperative credit institutions are facing a tough challenge to deliver on the high expectations in a fiercely competitive credit environment. Concern and skepticism are expressed on their creditworthiness and

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viability. Considering these facts, probe into the financial and operational aspects of these institutions becomes significant. In the present study, an attempt has been made to investigate into the financial and operational affairs of 372 district central cooperative banks operating at national level with focus on capital adequacy, asset quality, earning efficiency, management efficiency and other financial-operational parameters. The present study has been covering all 372 DCCBs for ten years period (1998-2008) and the study has been divided into four sections. The first section covers the brief review of the relevant literature. Objectives of the study and Research methodology are covered in the second section. Results and discussion are done in the third section and in the fourth section, conclusion and suggestions are made.

SECTION-I: REVIEW OF LITERATURE

Various committees and analysts have presented their expertise to review the financial performance of the banks and focused on the analysis of financial viability and credit worthiness of money lending institutions with a view to predict corporate failures and incipient incidence of bankruptcy among these institutions. Narsimham Committee (1991) emphasized on capital adequacy and liquidity, Padamanabhan Committee (1995) suggested CAMEL rating (in the form of ratios) to evaluate financial and operational efficiency, Tarapore Committee (1997) talked about Non-performing assets and asset quality, Kannan Committee (1998) opined about working capital and lending methods, Basel committee (1998 and revised in 2001) recommended capital adequacy norms and risk management measures, Kapoor Committee (1998) recommended for credit delivery system and credit guarantee and Verma Committee (1999) recommended seven parameters (ratios) to judge financial performance and several other committees constituted by Reserve Bank of India to bring reforms in the banking sector by emphasizing on the improvement in the financial health of the banks.Similarly, various studies validate the need of better financial performance of these banks. **Urs and Chitambaram (2000)** studied performance of 14 District Central Cooperative Banks (DCCBs) in Kerala on 23 parameters and found inefficiency in their operations with lower capital and poor deployment of funds in the DCCBs. **Bhaskaran and Josh (2000)** concluded that the recovery performance of cooperative credit institutions continues to be unsatisfactory, which contributes to the growth of NPA even after the introduction of prudential regulations. They suggested legislative and policy prescriptions to make cooperative credit institutions more efficient, productive and profitable organization in tune with competitive commercial banking. **Jain (2001)** did a comparative performance analysis of District Central Cooperative Banks (DCCBs) of Western India, namely Maharashtra, Gujarat and Rajasthan and found that DCCBs of Rajasthan have performed better in profitability and liquidity as compared to Gujarat and Maharashtra. **Singh and Singh (2006)** studied the funds management in the District Central Cooperative Banks (DCCBs) of Punjab with specific reference to the analysis of financial margin. It noted that a higher proportion of own funds and the recovery concerns have resulted in the increased margin of the Central Cooperative Banks and thus had a larger provision for non-performing assets. **Mavaluri, Boppana and Nagarjuna (2006)** suggested that performance of banking in terms of profitability, productivity, asset quality and financial management has become important to stabilize the economy. They found that public sector banks have been more efficient than other banks operating in India. **Campbell (2007)** focused on the relationship between non-performing loans (NPLs) and bank failure and argued for an effective bank insolvency law for the prevention and control of NPLs for developing and transitional economies, as these have been suffering severe problems due to NPLs. **Dutta and Basak (2008)** suggested that Cooperative banks should improve their recovery performance, adopt a new system of computerized monitoring of loans, implement proper prudential norms and organize regular workshops to sustain in the competitive banking environment. **Chander and Chandel (2010)** analyzed the financial viability of HARCO Bank and found weak financial position in terms of capital adequacy, liquidity, earning quality and the management efficiency parameters.

Centric to the ratio analysis, these studies have customized and blended different ratios in a model form to examine and predict the financial health. Similarly, comparative performance, recovery performance, cost reduction, productivity and efficiency are vital areas which have been considered by various analysts. With inquisitiveness, the present study has been undertaken with specific objectives as envisaged in the next section.

SECTION-II: OBJECTIVES AND RESEARCH METHODOLOGY

The study under consideration proposes to achieve the following objectives:

i) To study and examine the financial efficiency and viability of the District Central Cooperative Banks operating in

India.

ii) To study and examine the operational efficiency of these banks by considering various financial parameters.

iii) To suggest measures for effective use of funds, maintain optimum level of capital and to sustain in competitive banking environment.

RESEARCH METHODOLOGY

Different committees on cooperative credit (from Mehta Committee, 1960 to Capoor Committee, 1999) have unequivocally emphasized on the viability of cooperative credit institutions for efficient and effective credit delivery. Mehta Committee, 1960 considered a viable institution, which pays the employees, meets maintenance cost in time and also earns reasonable return on share capital and reserves. Being a viable preposition, Natesan Committee, 1961 also emphasized on the volume of business transacted by the cooperatives. Agriculture Review Committee, 1989 defined the minimum level of business transacted by PACS in order to be viable to endorse the viewpoint further. Since 1991, the concept of viability for cooperative banking and credit societies gained additional momentum as Government of India introduced initiatives to improve operational efficiency. These initiatives emphasized on professionalism and upgradation of efficiency parameters in banking operations and thorough control on transactions and management costs. The study under consideration conceptualized the viability of cooperative credit institutions as envisaged in the Altman model, 1968 and the CAMEL model, 1998. It considered working and operational parameters of cooperative credit institutions to define the **viability** as the competence of these institutions to make proper use of financial resources for their sustenance and development.

Altman (1968) coined a multivariate Z-score analysis to assess financial health and to predict bankruptcy. It has been considered a powerful diagnostic tool that forecasts the bankruptcy with significantly higher model reliability percentages across the studies. The model is defined as:

$$\mathbf{Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5}$$

Wherein, the variables X_1 to X_4 are computed as percentage values, while X_5 variable is obtained in number of times and signify as: $\mathbf{X_1}$ is the ratio of working capital to total assets, $\mathbf{X_2}$ is the ratio of retained earnings to total assets, $\mathbf{X_3}$ is the ratio of earnings before interest and tax to total assets, $\mathbf{X_4}$ is the ratio of market value of equity to book value of debt, $\mathbf{X_5}$ is the ratio of sales to total assets. The model discriminates the sampled unit(s) in the three categories in terms of Z-score output in relation to the financial performance as given below:

Category	Z-score value	Inference/Implications
I	Below 1.8	Weak Performance/Bankruptcy zone
II	1.8 - 3.0	Healthy Performance
III	Above 3.0	Very Healthy/Sound performance

In 1995, RBI had set up a working group under the chairmanship of Shri S. Padmanabhan to review the banking supervision system. The committee made certain recommendations and based on such suggestions, a rating system for domestic and foreign banks based on the international CAMELS model combining financial management and systems & control elements were introduced for the inspection cycle commencing from July 1998. It recommended that the banks should be rated on a five point scale (1 to 5) based on the lines of international CAMELS rating model. The operational efficiency of the cooperative credit institutions is examined through the CAMEL (Capital adequacy,

Table 1 : CAMEL Model - Efficiency Parameters

Sr. No.	Efficiency Parameters	Measurement Ratios	Rating (on a five point scale)
1	Capital Adequacy	Capital Adequacy	less than 5 **(5)**, 6-10 **(4)**, 11-15 **(3)**, 16-20 **(2)**, more than 20 **(1)**
2	Asset Quality	NPA to Advances	more than 11**(5)**, 8-10 **(4)**, 5-7 **(3)**, 2 - 4 **(2)**, less than 1 **(1)**
3	Management	Net Profit per Employee	less than 1 **(5)**, 1 - 2 **(4)**, 2 - 3 **(3)**, 3 - 4 **(2)**, more than 4 **(1)**
4	Earning Quality	Return on Assets	0-0.5 **(5)**, 0.6-1.0 **(4)**, 1.1-1.5 **(3)**, 1.6-2.0 **(2)**, more than 2.0 **(1)**
5	Liquidity Position	Cash to Deposit	less than 5 **(5)**, 6 - 9 **(4)**, 10-12 **(3)**, 13-15 **(2)**, more than 15 **(1)**

Asset quality, Management efficiency, Earnings quality, and Liquidity) model. That evaluates five key ingredients of operating performance. The efficiency parameters in the model are well defined and embedded in a composite frame to rate the operating performance as described below:

The numerics in the braces are CAMEL ratings. The number **(1)** indicates the highest rating, strongest performance, least degree of supervision concern, and sound health, while **(5)** indicates lowest rating, inadequate performance and weak health of bank and ,therefore, receiving the highest degree of supervisory concern. The efficiency parameters identified in the (CAMEL) model are defined as below:

a) Capital Adequacy (Risk Weighted Capital to Assets) : It reflects the financial condition of the bank and specifies the quality and level of capital required to meet additional requirement of funds for a bank. Rating (1) indicates strong capital level which adequately supports the risk profile while Rating (5) indicates inadequate capital signifying an urgent need for external capital to sustain the operations.

b) Asset Quality (NPA to Advances) : One of the indicators for asset quality is the ratio of non-performing loans to total loans. It is judged in terms of potential credit risk associated with the lending. It acts as testing instrument to reflect the ability of management in discovering and controlling risk. Higher NPA is an indicative of poor credit decision making. Rating (1) indicates strong asset quality and very good credit monitoring and administration while Rating (5) indicates critically deficient asset quality severely affecting bank viability.

c) Management Efficiency (Net Profit to Employees) : It is a measured evaluation of management and is subjective in nature. But, the paper tries to give a parameter that reflects the quality of management based on the information available from the balance-sheet of the bank. The paper uses net profit to employee ratio to suggest on efficiency of the manpower in the bank. Rating (1) indicates higher efficiency of the employees of the bank, while Rating (5) indicates a critically deficient management efficiency of the employees. The bank is not earning enough. This may be due to the failure of the bank to utilize its employee force effectively.

d) Earnings Quality (Net Profit after Tax to Average Assets) : The earnings of a bank reflects its growth capacity and financial health. In the present study, earnings quality of a bank is measured as return on assets. It measures the efficiency in utilization of assets by the banks. A higher value of ROA denotes higher profitability and high CAMEL rating for the bank. The Rating (1) indicates that the bank has a strong earning quality. The rating (2) indicates satisfactory level, (3) indicates less than satisfactory, (4) indicates poor level and (5) indicates critically deficient level of earnings quality.

e) Liquidity Management (Cash to Deposit) : Liquidity for a bank implies the cash position of a bank. In other words, the ability of the bank to meet its customer's day to day cash needs. However, sometimes due to various reasons, a bank may suddenly face huge amount of withdrawals. In such times, the bank is answerable to its customers. In this study, the liquidity of a bank is measured by using cash to deposit ratio. The Rating (1) indicates strong liquidity level of the bank. Rating (2) indicates satisfactory liquidity, (3) indicates less than satisfactory, (4) indicates poor level and rating (5) indicates critically deficient liquidity position of the bank.

The scope of the study covers a period of ten years and the requisite data was compiled from the database of the NAFSCOB from the financial year 1998-99 to 2007-08.

SECTION-III: RESULTS AND DISCUSSION

The NABARD, an apex financial institution, has been regulating the affairs of the cooperative credit institutions by providing guidelines and emphasizing on Development Action Plan (DAP) to be implemented by the weak cooperative institutions for financial strengthening, operational efficiency, sustained viability, improved profitability and to ensure remedial action in the weak areas. DAP was intended to emphasize on tackling the problems of the cooperative credit institutions in a holistic manner to improve financial performance and the credit viability in a systematic and scientific manner. In spite of the these dedicated efforts, the management efficiency, earning quality and the liquidity position of these banks has deteriorated over the years during the course of the study as evident from the information reported in the Table 2 and Table 3. In order to examine the financial and operational efficiency, the CAMEL model is applied and the results interpreted through this model are showing vulnerable condition of the District Central Cooperative Banks in India.

The following results are interpreted from the table no. 2 and can be narrated as follows-

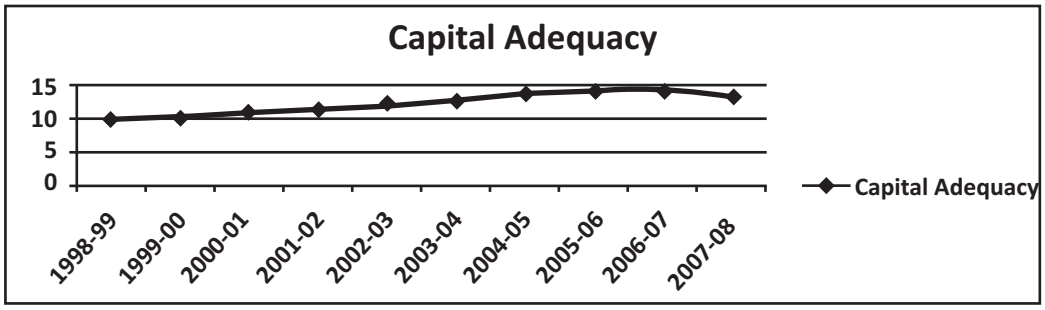
Table 2 : Financial Parameter Ratings and CAMEL Model Specifications For District Central Cooperative Banks In India, 1998-2008

Years	Capital Adequacy	Asset Quality	Liquidity Position	Management Efficiency	Earning Quality
1998-99	9.91 (4)	2.08 (2)	2.6 (5)	0.9164 (5)	0.0128 (5)
1999-00	10.16 (4)	2.33 (2)	2.9 (5)	0.9209 (5)	0.0133 (5)
2000-01	10.90 (4)	2.87 (2)	3.1 (5)	1.1946 (4)	0.0150 (5)
2001-02	11.09 (3)	2.85 (2)	3.5 (5)	1.4024 (4)	0.0155 (5)
2002-03	12.12 (3)	2.88 (2)	3.4 (5)	1.7478 (4)	0.0177 (5)
2003-04	12.60 (3)	3.21 (2)	3.6 (5)	2.0288 (3)	0.0188 (5)
2004-05	13.68 (3)	2.75 (2)	3.8 (5)	2.3226 (3)	0.0206 (5)
2005-06	14.16 (3)	2.66 (2)	3.7 (5)	1.3300 (4)	0.0214 (5)
2006-07	14.10 (3)	2.78 (2)	4.0 (5)	1.6895 (4)	0.0212 (5)
2007-08	13.24 (3)	3.15 (2)	3.9 (5)	3.6509 (2)	0.0195 (5)

(Source: NAFSCOB Database, 2009, The figures in brackets are CAMEL Ratings, 1=Best, 5=Worst)

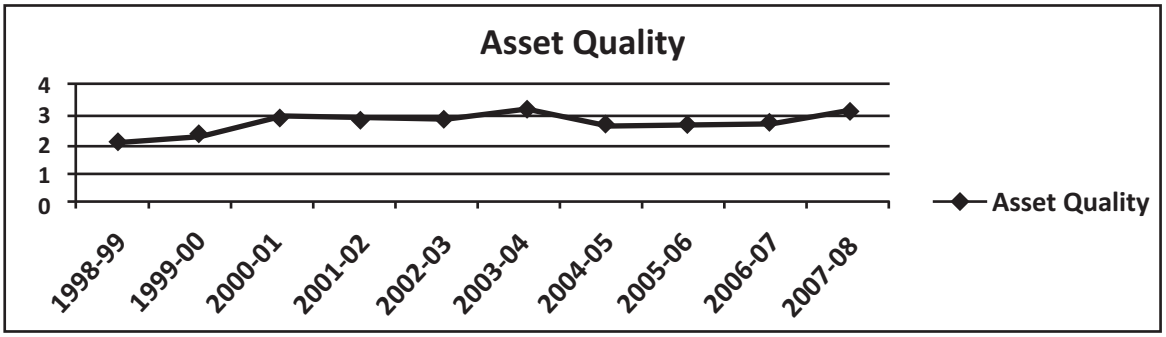
1. Capital Adequacy : The results in Table 2 and Figure 1 have shown that the level of capital in these banks has not been satisfactory. These banks have been rated 3 and 4 under the study period, which signifies that there is an urgent need for additional funds to fill the deficiency and to fully support the bank's risk profile. A weak capital base weakens the confidence of the depositors. Up to 2006, it has been increasing at a very low pace, but in the year 2007 and 2008, it has shown the decreasing trend.

Figure 1 : Capital Adequacy of District Central Cooperative Banks in India, 1998-2008



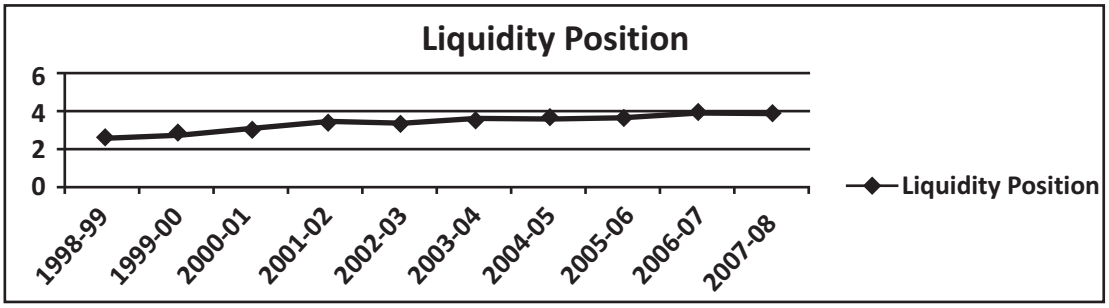
2. Asset Quality : It is clear from the Table 2 and Figure 2 that these banks have been Rated 2 throughout the study period, which demonstrates that the asset quality of these banks has been satisfactory during the study period due to the effective recovery system. These banks have good credit monitoring and administration system, thus reflecting the ability of the management in discovering and controlling risk by adopting probably effective NPA management policy.

Figure 2 : Asset Quality Of District Central Cooperative Banks In India, 1998-2008



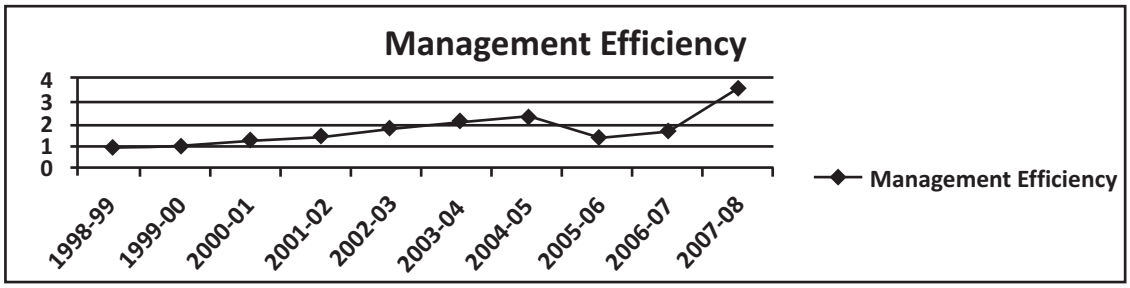
3. Liquidity Position : As evident from the Table 2 and Figure 3, the liquidity position of these banks has been critical and these banks may suddenly face cash shortage in case of huge withdrawals. Rating 5 throughout the study period illuminates that these banks may not be in a position to meet their customers' day to day cash needs and in such times, the banks might be answerable to their customers. There has been a lesser volume of liquid assets and that cannot be perceived as a safe situation, since these banks will not be in a position to meet unexpected withdrawals.

Figure 3 : Liquidity Position of District Central Cooperative Banks in India, 1998-2008



4. Management Efficiency : It can be noted from Table 2 and Figure 4 that these banks have not been utilizing their manpower efficiently and there has been a critical deficiency in the management. Ratings 4 and 5 have been awarded throughout the study period (except 2007-08), which clarify that profit per employee has been very less and the administration should emphasize on employee development program to boost the morale and increase efficiency/effectiveness.

Figure 4 : Management Efficiency of District Central Cooperative Banks in India, 1998-2008



5. Earning Quality : It is reflected by Table 2 and Figure 5 that these banks have been awarded with Rating 5 throughout the study period and there has been critically deficient level of earning quality and poor financial health of these banks. The return on assets employed or the efficiency in utilization of assets by the banks has not been satisfactory. The profit to assets ratio has been decreasing after 2006, which characterize further deteriorations in the earning quality of the banks.

Figure 5 : Earning Quality of District Central Cooperative Banks in India, 1998-2008

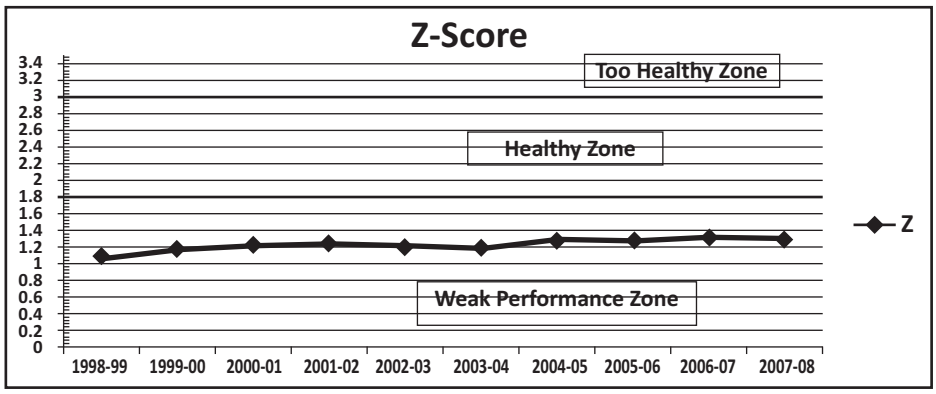
The results drawn from CAMEL model are also validated by the Z-score analysis. The analytical presentations in this study clearly highlighted the poor performance of District Central Cooperative Banks on various financial

Table 3 : Viability Parameter And Z-score Values Of District Central Cooperative Banks In India, 1998-2008

Years	DCCBs	X1	X2	X3	X4	X5	Z
1998-99	369	0.312	0.0900	0.0422	0.0594	0.5856	**1.0893**
1999-00	369	0.348	0.0931	0.0438	0.0609	0.6267	**1.1727**
2000-01	370	0.372	0.1054	0.0495	0.0654	0.6222	**1.2145**
2001-02	371	0.42	0.1087	0.0511	0.0665	0.6001	**1.2466**
2002-03	365	0.408	0.1240	0.0584	0.0727	0.5431	**1.2063**
2003-04	367	0.432	0.1317	0.0620	0.0756	0.4843	**1.1856**
2004-05	368	0.456	0.1446	0.0679	0.0820	0.5323	**1.2830**
2005-06	370	0.444	0.1502	0.0706	0.0849	0.5275	**1.2773**
2006-07	371	0.48	0.1485	0.0699	0.0846	0.5244	**1.3075**
2007-08	372	0.468	0.1367	0.0643	0.0794	0.5181	**1.2667**

parameters. The financial position of these banks has been lackadaisical in capital adequacy, liquidity, earning quality, and management efficiency parameters. The information inputs obtained in the study, reported in the Table 3 and Figure 6, reveals z-score values over the study period. The performance outcomes of these banks in this regard indicates the weak performance of the bank. This weak performance has persisted throughout the study period, 1998-08.

Figure 6 : Viability Parameter and Z-Score values of District Central Cooperative Banks in India, 1998-2008



The performance outcomes thus emanating are so weak to classify the DCCBs in the bankruptcy zone all along these years. The performance of these banks could not even touch the healthy zone. The results however are aggregates of all 372 DCCBs. Yet, there might be a large number of banks which are unviable at the present and are going to be fail very shortly. The RBI and NABARD should take necessary steps to look into the financial affairs of these banks and preventive measure should be taken to avoid further failure of these banks. Besides, differentiating the poor performing banks from good performing ones will help the apex institutions to adopt effective measures for optimum utilization of scarce resources and cater to the needs of people of rural India.

SECTION-IV: CONCLUSION AND SUGGESTIONS

Despite the continuous aid by the Government in the form of financial packages (like- the package of ₹ 14,839 crore announced by government in 2007 and an aggregate amount of ₹ 4,740 crore released by the NABARD in 2008) for the revival of short term cooperative credit institutions and timely provision of capital by NABARD and State Cooperative Banks, the DCCBs have not performed as expected. However, the results interpreted above are aggregate for all the DCCBs operating at national level, yet maximum of these are on the verge of becoming bankrupt in the near future. The asset quality of these banks has been sound as the recovery percentage is high, but the performance of these

banks deteriorated on other financial parameters, like- capital adequacy, liquidity, earning quality, and the management efficiency. These banks are in the weak performance zone throughout the study period as interpreted from Altman's Z-score model. The Banks should emphasize on generating more profits by efficient utilization of its capital, assets and improving the productive efficiency of their employees. Profitability of the investments and deployment of liquid assets (cash) should be duly cared for improved efficiency. The employees should be motivated to promote more efficiency, prudence and transparency in banking operations. Some operational flexibility should also be ensured to these banks and the beneficiary 94950 PACS in terms of diversification of lending, moderation of transaction costs, and management of funds on the sound banking principles.

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