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## CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<b>SUSTAINABILITY IN GREEN RETAILING: ACHIEVEMENTS, CHALLENGES, AND A VISION FOR THE FUTURE</b> <i>DR. GIRISH.K.NAIR, HARISH K NAIR &amp; SWATI PRASAD</i>	1
2.	<b>CAUSES AND EFFECTS OF RURAL-URBAN MIGRATION IN OYO STATE: A CASE STUDY OF IBADAN METROPOLIS</b> <i>OSHATI TITILOLA, ESAN, ADESIJI DAVID &amp; DR. ADU, EMMANUEL OLUSOLA</i>	6
3.	<b>ORGANIZATIONAL TEACHING AS STRATEGIC PLAN</b> <i>DR. NASSER FEGH-HI FARAHMAND</i>	10
4.	<b>CORPORATE GOVERNANCE PRACTICES IN FIS OF BANGLADESH</b> <i>MOZAFFAR ALAM CHOWDHURY</i>	17
5.	<b>MAJOR PROBLEMS AND ISSUES IN SRI LANKAN UNIVERSITY SYSTEM – STUDY FOCUS ON THE STUDENT PERSPECTIVE</b> <i>W.M.R.B.WEERASOORIYA</i>	22
6.	<b>A DIVERSIFIED APPROACH OF FACE DETECTION AND RECOGNITION</b> <i>KALIYAPERUMAL KARTHIKEYAN, DR. MUNGAMURU NIRMALA &amp; SREEDHAR APPALABATLA</i>	27
7.	<b>IMPROVING THE SOCIAL DISABILITIES OF PRIMARY SCHOOL STUDENTS</b> <i>MATEBE TAFERE</i>	32
8.	<b>RELATIONAL SOCIAL CAPITAL AND CUSTOMER LOYALTY IN RETAIL BANKING IN KENYA: THE CASE OF NAKURU COUNTY</b> <i>DR. DANIEL ONWONGA AUKA &amp; JOSEPH BOSIRE</i>	36
9.	<b>JOB INVOLVEMENT AS A MEDIATOR OF THE RELATIONSHIP BETWEEN ORGANIZATIONAL COMMITMENT AND JOB PERFORMANCE IN THE SYSTEMICALLY IMPORTANT BANKS IN SRI LANKA</b> <i>U.W.M.R. SAMPATH KAPPAGODA</i>	44
10.	<b>A STUDY ON EXISTING CAR CUSTOMERS (ALL BRANDS) ON THEIR REPLACEMENT PLANS</b> <i>S. SHRILATHA &amp; DR. A. ARULAPPAN</i>	49
11.	<b>EVALUATION OF RESOURCE MOBILIZED THROUGH MUTUAL FUNDS IN INDIA</b> <i>DR. RAM SINGH, PALLAVI MANIK &amp; ANUBHUTI MODGIL</i>	54
12.	<b>EMOTIONAL LITERACY – TEACHERS AND STUDENTS IN SELF-FINANCING ENGINEERING COLLEGES WITH SPECIAL REFERENCE TO TIRUCHIRAPALLI DISTRICT</b> <i>K. ARUN PRASAD &amp; DR. S.V. DEVANATHAN</i>	59
13.	<b>AN OVERVIEW MODEL ON THE BUSINESS ENVIRONMENT AND GROWTH CHALLENGES OF SMEs IN INDIA</b> <i>VENKATARAMAN.KK</i>	65
14.	<b>MEASUREMENT OF FINANCIAL PERFORMANCE OF KURUKSHETRA CENTRAL CO-OPERATIVE BANK THROUGH RATIO ANALYSIS</b> <i>DR. SUDESH &amp; ARCHANA MAKKAR</i>	68
15.	<b>PERFORMANCE OF DISTRICT CENTRAL CO-OPERATIVE BANKS (DCCBs) IN INDIA - AN EVALUATION</b> <i>S. USHA &amp; C. SIVARAMI REDDY</i>	73
16.	<b>A STUDY ON ECONOMIC RETURNS IN POULTRY FARMING WITH SPECIAL REFERENCE TO SUGUNA BROILER CONTRACT FARMS IN COIMBATORE DISTRICT</b> <i>A. SRIDHARAN &amp; DR. R. SARAVANAN</i>	76
17.	<b>DEVELOPMENT OF KNOWLEDGE BASED FRAMEWORK FOR AGRICULTURE SECTOR: A STEP TOWARDS SUSTAINABLE e-GOVERNANCE IN RURAL INDIA</b> <i>ALPANA UPADHYAY &amp; DR. C. K. KUMBHARANA</i>	80
18.	<b>HEALTH INSURANCE STRUCTURE IN INDIA – CURRENT PRACTICES AND CHALLENGES</b> <i>DR. SHIBU JOHN</i>	86
19.	<b>A STUDY ON THE CUSTOMERS SUCCESS ON THEIR INVESTMENTS IN A RESIDENTIAL FLAT AND THEIR GUARANTEE</b> <i>DR. P. RAMAN</i>	89
20.	<b>THEORETICAL COMPARISON CRITERIA FOR SOFTWARE RELIABILITY MODELS</b> <i>SANJEEV KUMAR &amp; DR. AMIT GUPTA</i>	92
21.	<b>INVESTIGATING SERVICE QUALITY DIMENSIONS THROUGH EXPLORATORY FACTOR ANALYSIS IN A HEALTHCARE SETTING</b> <i>DR. MUSHTAQ AHMAD BHAT &amp; DR. MOHD. YASEEN MALIK</i>	95
22.	<b>WORKING CAPITAL MANAGEMENT OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) IN MANIPUR- AN EMPIRICAL STUDY</b> <i>MOIRANGTHEM BIREN SINGH &amp; DR. TEJMANI SINGH</i>	104
23.	<b>PERFORMANCE ANALYSIS OF AODV PROTOCOL UNDER BLACK HOLE ATTACK</b> <i>MONIKA SINGH &amp; RAKESH KUMAR SINGH</i>	109
24.	<b>21ST CENTURY ADS- ADDS MORE</b> <i>ASHISH RAMI &amp; PRIYANKA SRIVASTAVA</i>	116
25.	<b>CORPORATE RESTRUCTURING THROUGH MERGERS AND ACQUISITIONS-A CASE STUDY ON TATA STEEL AND CORUS</b> <i>NARGIS BEGUM &amp; EVELINA MOHAPATRA</i>	121
26.	<b>CLOUD COMPUTING: SMARTER COMPUTING FOR A SMARTER WORLD</b> <i>DR. IKVINDERPAL SINGH</i>	128
27.	<b>SATISFACTION OF SMALL CAR OWNERS IN SELECT AREAS OF AUNDH, BANER AND PASHAN IN PUNE CITY</b> <i>DR. G. SYAMALA</i>	133
28.	<b>CRM: SERVICE QUALITY &amp; CUSTOMER LOYALTY - A STUDY OF MOBILE TELECOM INDUSTRY AT JAIPUR CITY</b> <i>DR. ANJU PANWAR, SHUCHI MATHUR &amp; NEHA CHAHAL</i>	138
29.	<b>TOUGH TIME FOR INDIAN TEA INDUSTRY</b> <i>KAKALI HAZARIKA</i>	141
30.	<b>IMPACT OF OPEC ON SUPPLY AND PRICE OF PETROLEUM PRODUCTS</b> <i>GAURAV MANOJ JHA</i>	146
	<b>REQUEST FOR FEEDBACK</b>	155

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## MEASUREMENT OF FINANCIAL PERFORMANCE OF KURUKSHETRA CENTRAL CO-OPERATIVE BANK THROUGH RATIO ANALYSIS

**DR. SUDESH  
PROFESSOR  
UNIVERSITY SCHOOL OF MANAGEMENT  
KURUKSHETRA UNIVERSITY  
KURUKSHETRA**

**ARCHANA MAKKAR  
RESEARCH SCHOLAR, UNIVERSITY SCHOOL OF MANAGEMENT, KURUKSHETRA UNIVERSITY, KURUKSHETRA  
ASST. PROFESSOR  
DRONACHARYA INSTITUTE OF MANAGEMENT & TECHNOLOGY  
KURUKSHETRA**

### ABSTRACT

*The co-operative banking structure is pyramidal or federal in character. In the deregulated banking environment, the co-operative bank engaged in financing agricultural and non-agricultural activities are also exposed to various types of risks like credit risk, interest rate risk and liquidity risk. Hence an attempt has been made to study the financial performance of kurukshetra central co-operative bank. This paper reflects the financial performance of kurukshetra central co-operative for the period 2006-2007 to 2010-2011. The financial performance was analyzed through the ratio analysis. After a detailed study of the financial statements of the bank, it is clear that although there is increase in deposits an indicator of growth but the profitability of the bank has decreased for the period from 2006-07 to 2010-11. The central cooperative bank should take appropriate steps and means to improve the profitability of the bank.*

### KEYWORDS

Central Co-operative Banks, Deposits, Deployment, operation.

### 1. INTRODUCTION

The beginning of cooperative banking in India dates back to about 1904, when official efforts were made to create a new type of institution based on principles of co-operative organization & management, which were considered to be suitable for solving the problems peculiar to Indian conditions. The philosophy of equality, equity and self help gave way to thoughts of self responsibility and self administration which resulted in giving birth of co-operative. The origin on co-operative movement was one such event arising out of a situation of crisis, exploitation and sufferings. Co-operative banks in India came into existence with the enactment of the Agricultural Credit Co-operative Societies Act in 1904. Co-operative bank form an integral part of banking system in India. Under the act of 1904, a number of cooperative credit societies were started. Owing to the increasing demand of co-operative credit, a new act was passed in 1912, which was provided for establishment of co-operative central banks by a union of primary credit societies and individuals. The kurukshetra Central co-operative bank Ltd. came into existence on 1.4.1973 with the primary objective of inculcating banking habits among the rural masses. The bank has its jurisdiction throughout the kurukshetra District. At the time of registration the bank had only 4 branches. Keeping in view the persistence demand from the rural masses the bank has been opening new branches for the facility of its customers. The total branches as on date stands to 38 with 2 Extension counters. Out of these 38 branches 29 are rural & 9 are urban. The bank initially functioned for accepting deposits and advancing loans to agricultural sector. Today with the changing scenario the bank has also diversified its functions and has also entered into the non farm sector to compete with other commercial banks.

### 2. LITERATURE ON REVIEW

To review the financial performance of the banks and the term-lending institutions, various committees and analysts have presented their expertise as it has been a key area of study for financial institutions and the respective governments at the global level. They have suggested various tools and techniques for effective analysis and interpretation of the financial and operational aspects of the financial institutions specifically 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 in Kerala on 23 parameters and found inefficiency in their operations with lower capital and poor deployment of funds in the District Central Cooperative Banks. **Bhaskaran and Josh (2000)** concluded that the recovery performance of cooperative credit institutions continues to be unsatisfactory which contributes to the growth of Non performing assets 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)** has done a comparative performance analysis of District Central Cooperative Banks of Western India, namely Maharashtra, Gujarat and Rajasthan and found that District Central Cooperative Banks 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 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 stable the economy. They found that public sector banks have been more efficient than other banks operating in India.

**Pal and Malik (2007)** investigated the differences in the financial characteristics of 74 (public, private and foreign) banks in India based on factors, such as profitability, liquidity, risk and efficiency. It is suggested that foreign banks were better performers, as compared to other two categories of banks, in general and in terms of utilization of resources in particular.

**Campbell (2007)** focused on the relationship between nonperforming loans and bank failure and argued for an effective bank insolvency law for the prevention and control of nonperforming loans for developing and transitional economies as these have been suffering severe problems due to nonperforming loans.

**Singla (2008)** emphasized on financial management and examined the financial position of sixteen banks by considering profitability, capital adequacy, debt-equity and non performing assets.

**Dutta and Basak (2008)** suggested that Cooperative banks should improve their recovery performance, adopt 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 efficiency and viability of HARCO Bank and found the poor performance of the bank on capital adequacy, liquidity, earning quality and the management efficiency parameters. Centric to the ratio analysis, these studies have customized and blended financial 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

Based on the above literature, it is clear that there are some studies about private and public banks, however, no in depth study has ever been done in cooperative bank in India because of probably lack of sufficient information, and because of their unfamiliarity with the global economy. The main contribution of this study is to make financial comparison based on financial banking activities as credits and deposits to determine the performance and classifications of central cooperative bank in kurukshetra.

### 3 STATEMENT OF THE PROBLEM

Banks play significant role in the economic development of a country broadly by promoting mobilization of resources and allocating these resources in the form of loans and advances. Central cooperative bank has to take banking facilities to the rural areas and unbanked centers. The Central cooperative banks have to mobilize the available resources and utilize them in the most efficient and profitable manner. A significant problem observed recently in kurukshetra is the low deployment of funds mobilized by Central cooperative banks compared to the volume of deposits. Hence, an attempt has been made to study the financial performance of Kurukshetra central Co-operative Bank.

### 4. OBJECTIVE OF THE STUDY

The objective of the study is to evaluate the financial performance of Kurukshetra Central Co-operative Bank through ratio analysis.

### 5. METHODOLOGY

The study was based on data generated from the annual reports of the bank. Moreover journal articles, banking regulations and directives and relevant reports were also used. Period selected for the study was 5yars i.e., from 2006-2007 to 2010-2011. For the purpose of financial performance analysis the study included the variables viz., Share capital, Deposits, Borrowed funds, Loans outstanding, Interest expenses, Net profits or loss and overdue.

#### THE STUDY USED THE FOLLOWING RATIOS

##### (A). Efficiency in Mobilization

- Owned funds to working capital Ratio
- Borrowed Funds to Working capital Ratio
- Deposit to working capital Ratio
- Deposit to borrowed funds Ratio
- Owned funds to Borrowed Funds Ratio

##### (B). Efficiency in Deployment

- Credit to Deposits Ratio
- Credit to working Capital Ratio
- Credit to Borrowed Funds Ratio
- Credit to Total Funds Ratio

##### (c) Efficiency In operation

- Spread Ratio
- Burden Ratio
- Profitability Ratio

### 6. RESULT AND DISCUSSION

#### 6.1 Financial performance of Kurukshetra Central Co-operative Bank

**TABLE 1: SELECTED PERFORMANCE INDICATORS OF KURUKSHETRA CENTRAL COOPERATIVE BANK FROM 2006-07 TO 2010-11**

year	owned fund	deposits	borrowed fund	working capital	credit	total funds	interest received	interest paid	non interest expenses	non interest income
2006-07	11.83	136.1	125.91	10.01	250.56	137.74	19.53	12.88	6.62	0.007
2007-08	11.79	143.75	207.41	17.08	324.21	219.2	20.48	18.21	8.48	0.006
2008-09	11.84	152.04	148.91	3.3	288.67	160.75	28.49	18.17	8.05	0.04
2009-10	12.01	172.14	141.94	11.32	288.4	153.95	25.82	15.45	9.92	0.01
2010-11	12.9	223.66	209.49	14.69	381.66	222.39	27.91	18.91	12.19	0.02
CAGR	0.017	0.1	0.11	0.07	0.08	0.1	0.07	0.07	0.12	0.12

*Source: Compiled From Annual Reports of Kurukshetra Central Co-operative Bank.*

As stated in the methodology the following paragraphs present the brief analysis of Kurukshetra Central Co-operative Bank's performance in three domain areas viz., the efficiency in Mobilization, Efficiency in deployment and Efficiency in operation.

**TABLE 2: EFFICIENCY IN MOBILIZATION**

year	owned funds to working capital ratio	borrowed funds to working capital ratio	deposits to working capital ratio	deposits to borrowed funds ratio	owned funds to borrowed fund ratio
2006-07	118.06	1257.84	1359.64	108.09	9.38
2007-08	69.02	1214.34	841.62	69.3	5.68
2008-09	358.4	4512.42	4607.27	102.1	7.94
2009-10	106.09	1253.88	1520.67	121.27	8.45
2010-11	87.81	1426.07	1522.53	106.76	6.15

*Source: Compiled From Annual Reports of Kurukshetra Central Co-operative Bank.*

#### 6.2. Efficiency in mobilization

The analysis related to efficiency in mobilization facilitates the bankers to identify the right mix of funds and its sources. The banker can reduce the cost of fund significantly if a continuous assessment takes place in this line. For the purpose of working capital analysis the study adopted the definition as the one which includes share capital, reserves, deposits and borrowings less investment on fixed assets and cumulative losses.

##### **Owned fund to working capital ratio**

This ratio shows the share of owned funds in the working capital of bank. It was calculated with the following formula;

*Owned funds to working capital ratio = owned fund/working capital x 100*

Owned fund to working capital ratio reflect the sufficiency of owned funds in bank and hence a higher ratio is preferable. The results will portrait the bank's capacity to mobilize owned funds. From the table 2 it is clear that owned funds to working capital ratio have shown decreasing trend from 118.06 percent in

2006-07 to 87.81 by 2010-11. Higher owned fund to working capital ratio is better, but here it is less, it could be concluded that central cooperative bank has weak capital base.

#### **Borrowed funds to working capital Ratio**

This ratio shows the share of borrowed funds in the working capital of bank. It could be calculated by the following formula;

$$\text{Borrowed funds to working capital ratio} = \frac{\text{borrowed fund}}{\text{working capital}} \times 100$$

A lower ratio is advisable for banks to show good performance. This is because this ratio measures the proportion of borrowings and deposits in working capital of bank. If the ratio is high it means that bank's average cost of funds is high. Table 2 depicts that the borrowed funds to working capital ratio was 1257.84 percent during 2006-07 and it increased to 1426.07 percent in the year 2010-11. This means that the ratio has increased and hence the bank's average cost of funds has also increased.

#### **Deposits to working capital ratio**

Deposits constitute a major portion of total working capital. This ratio could be calculated by using the following formula;

$$\text{Deposits to working capital ratio} = \frac{\text{Deposit}}{\text{working capital}} \times 100$$

Deposits to working capital ratio show the amount of deposit in total working capital of the bank. Deposits are the total deposits of all types received by the bank. From the table 2 it is clear that the deposit to working capital ratio has increased from 1359.64 percent in 2006-07 to 1522.53 percent in 2010-11. The highest ratio was recorded during the year 2008-09 and the lowest in the year 2007-08. This shows the Bank's ability to mobilize more deposits from the investors and also indicates the faith bestowed upon by the customers on the bank.

#### **Deposits to borrowed funds ratio**

This ratio indicates the share of deposits in the borrowed fund. It measures the efficiency of the organization in mobilizing funds. It could be calculated as;

$$\text{Deposits to borrowed funds ratio} = \frac{\text{deposits}}{\text{borrowed fund}} \times 100$$

Deposits serve as a form of borrowings of bank. A higher ratio indicates more amounts of deposits in borrowed fund and lower ratio shows the dominance of borrowings in the borrowed fund. Higher proportions of deposits are deemed as a symbol of self finance. From the table 2 it is clear that the deposits to borrowed funds ratio have decreased 108.09 in 2006-07 to 69.30 in 2007-08 after that it was increasing 69.30 in 2007-08 to 121.27 in 2009-10 and in year 2010-11 it has again decreased to 106.76. Thus there is a dominance of deposits in borrowed fund of central cooperative bank.

#### **Owned funds to borrowed funds ratio**

This is the ratio of owned funds to borrowed funds. It could be calculated by using the following formula;

$$\text{Owned funds to borrowed funds ratio} = \frac{\text{owned funds}}{\text{borrowed funds}} \times 100$$

This ratio shows whether the bank depends on owned funds or borrowed funds. Owned funds include share capital and reserves and borrowed funds include deposits and borrowings. Higher ratio is preferable; hence it indicates the increased share of owned funds in the functioning of the bank. From the table 2 it is clear that the owned funds to borrowed fund ratio has decreased from 9.38 percent in 2006-07 to 6.15 percent in 2010-11. This means bank has not satisfactory level of owned fund in the borrowed funds.

**TABLE 3: EFFICIENCY IN DEPLOYMENT**

year	credit to deposit ratio	credit to working capital ratio	Credit to borrowed funds ratio	credit to total funds ratio
2006-07	184.09	2503.09	198.99	181.9
2007-08	225.53	1898.18	156.31	147.9
2008-09	189.86	8747.57	193.85	179.57
2009-10	167.53	2547.7	203.18	187.33
2010-11	170.64	2598.09	182.18	171.61

Source: Compiled From Annual Reports of Kurukshetra Central Co-operative Bank.

### **6.3. Efficiency in Deployment**

A series of ratios were being calculated in order to understand the efficiency in deploying funds. The funds collected by the bank through owned fund and borrowed funds should be deployed in profitable avenues. The ratios used for analyzing the efficiency in deployment of funds were:

#### **credit to deposits ratio**

Credit to deposits ratio indicates the ability of bank in deploying credit to customers out of the deposits mobilized. It is computed for knowing the performance of bank in converting the cost incurring funds into maximum interest earning assets. The ratio was calculated by using the following formula;

$$\text{Credit to deposits ratio} = \frac{\text{credit}}{\text{deposits}} \times 100$$

Table 3 reveals that the credit to deposit ratio has decreased from 184.09 percent in 2006-07 to 170.64 percent in 2010-11. It could be observed that the ratio has increased to 225.53 percent during 2007-08, which was the highest record. However, credit disbursement has not increased in tune with the significant increase in deposits. It is high time that the bank should take appropriate measure and to find new ways and means to lend ore to creditworthy.

#### **credit to working capital ratio**

Credit to working capital ratio is quantitative measure of the loaning operation of the bank. It could be calculated by the formula;

$$\text{Credit to working capital ratio} = \frac{\text{credit}}{\text{working capital}} \times 100$$

This ratio shows the share of credit in working capital. This credit to working capital ratio is necessary to study the efficiency of bank in managing the funds. Higher the Ratio, higher will be the efficiency in managing funds. From table 3 it could be observed that the ratio was 2503.09 percent during 2006-07 and it has increased 2598.09 percent during 2010-11. This means that credit has increased and money mobilized was deployed satisfactory.

#### **credit to borrowed funds ratio**

Credit to borrowed funds ratio reveals the measure of the efficiency of the bank in converting the borrowed funds to loans and advances. It could be calculated by the following formula;

$$\text{Credit to borrowed funds ratio} = \frac{\text{credit}}{\text{borrowed funds}} \times 100$$

The cost of the borrowed funds is the major expenditure of the bank. A higher the ratio indicates the efficiency on the deployment of funds. Hence, bank should generate more income by deploying the borrowed funds into loans and advances. From the table 3, it is clear that the credit to deposits ratio has a fluctuating trend. The highest ratio was during 2009-10 i.e. 203.18 percent. The higher ratio implies the efficiency in deploying the funds, so a high ratio is preferred. Even though the ratio has increased from 198.99 percent, during 2006-07 to 203.18 percent by 2009-10, it has again decreased to 182.18 percent during 2010-11.

#### **credit to total funds ratio**

Credit includes loans and advances. Bank takes and gives credit. It can be important source of funds. This ratio implies the amount of credit in total funds of bank, where total funds includes owned funds and borrowed funds. From this ratio we can get an idea of quantum of credit that is included in the total funds of bank. The ratio could be calculated by the following formula;

$$\text{Credit to total funds ratio} = \frac{\text{credit}}{\text{total funds}} \times 100$$

Table 3 shows the credit to total funds ratio for 5 years from 2006-07 to 2010-11. From the table it is clear that the ratio was 181.90 percent during 2006-07 and it got decreased to 171.61 percent by 2010-11. Highest ratio was during 2009-10 i.e. 187.33 percent.

TABLE 4: EFFICIENCY IN OPERATION

year	spread ratio	burden ratio	profitability ratio
2006-07	4.82	4.79	0.03
2007-08	1.03	3.86	-2.83
2008-09	6.41	4.98	1.43
2009-10	6.73	6.43	0.3
2010-11	4.04	5.47	-1.43

Source: Compiled From Annual Reports of Kurukshetra Central Co-operative Bank.

#### 6.4 . Efficiency in operation

Efficiency in operation indicates the result of all banking transactions. The spread and the burden ratio calculated advocates the way a head of a bank.

##### Spread ratio

Spread ratio explains the interest margin in total funds owned by bank. In other words spread means difference between interest received and interest paid. Spread plays an important role in profitability of the bank, because it is directly related to profit. Higher ratio is preferable and it is possible only when the interest received on loans are more than the interest paid on deposit and borrowings. The ratio could be calculated by the following formula;

$\text{Spread ratio} = \frac{\text{interest received} - \text{interest paid}}{\text{total funds}} \times 100$

Table 4 shows the spread ratio of bank for 5 years i.e. from 2006-07 to 2010-11. It was 4.82 percent during 2006-07. After that there were great fluctuations mostly positive in nature in the ratio. The bank recorded the highest ratio 6.73 percent during 2009-10. It got decreased to 4.04 percent during 2010-11. However, this is a phenomenal growth and the management deserves a special mention.

##### Burden Ratio

Burden ratio explains the margin of non interest expenses and non interest income to the total funds owned by bank. It is also a measure of profitability. A low value of this ratio is preferred.

$\text{Burden Ratio} = \frac{\text{Non interest expense} - \text{non interest income}}{\text{total fund}} \times 100$

Where non interest expense = contingency expenses and establishment expenses

Non interest income = miscellaneous income of bank.

Table 4 shows the burden ratio of bank for 5 years i.e. 2006-07 to 2010-11. Here from the table it is clear that the burden ratio has increased 4.79 percent in 2006-07 to 5.47 percent by 2010-11. Highest ratio was during the year 2009-10 i.e. 6.43 percent. It shows the bank was not significantly reduced non-interest expenses and it is not best operational efficiency indicator.

##### Profitability Ratio

Profitability ratio explains difference between spread and burden of bank. Spread explains the margin of interest received and interest paid and the burden explains the margin of non interest income and non interest expense. This ratio indicates the ability of bank to generate profit. Hence a higher value of this ratio is Preferred.

The overall profitability is expressed in terms of spread and burden ratio;

$\text{Profitability Ratio} = \text{Spread Ratio} - \text{Burden Ratio}$

Table 4 shows the profitability ratio of bank for 5 years i.e. 2006-07 to 2010-11. Here from the table it is clear that the profitability ratio has decreased 0.03 percent in 2006-07 to -1.43 percent by 2010-11. It shows the bank was not good profitability position.

## 7. FINDINGS OF THE STUDY

Major findings of the study are given below on the basis of analysis and interpretation:

### 7.1 EFFICIENCY IN MOBILIZATION

1. The Result of the study shows that owned funds to working capital ratio have shown decreasing trend. But the Higher owned fund to working capital ratio is better, but here it is less, so that it could be concluded that central cooperative bank has weak capital base.
2. The Result of the study depicts that the borrowed funds to working capital ratio was increased. So that if the ratio has increased and hence the bank's average cost of funds has also increased.
3. The Result of the study shows that the deposit to working capital ratio has increased. So that it shows the Bank's ability to mobilize more deposits from the investors and also indicates the faith bestowed upon by the customers on the bank.
4. The Result of the study indicates that the deposits to borrowed funds ratio have decreased. Thus there is a dominance of deposits in borrowed fund of central cooperative bank.
5. The Result of the study shows that the owned funds to borrowed funds ratio has decreased. This means bank has not satisfactory level of owned fund in the borrowed funds.

### 7.2 EFFICIENCY IN DEPLOYMENT

1. The result of the study found that the credit to deposit ratio has decreased. However, credit disbursement has not increased in tune with the significant increase in deposits. It is high time that the bank should take appropriate measure and to find new ways and means to lend ore to creditworthy.
2. The result of the study found that the credit to working capital ratio has increased. This means that credit has increased and money mobilized was deployed satisfactory.
3. The result of the study found that the credit to borrowed fund ratio has decreased throughout the period of the study.
4. The result of the study found that the credit to total fund ratio has decreased throughout the period of the study.

### 7.3 EFFICIENCY IN OPERATION

1. The result of the study indicates that the spread ratio has decreased. However, this is a phenomenal growth and the management deserving a special mention.
2. The result of the study indicates that the burden ratio has increased. It shows the bank was not significantly reduced non-interest expenses and it is not best operational efficiency indicator.
3. The result of the study indicates that is clear that the profitability ratio has decreased. It shows the bank was not good profitability position.

## CONCLUSION

The present study has been an attempt to identify the financial performance and efficiency of Central Cooperative Banks (CCB) operating in kurukshetra division in Haryana. The results found that the CCB are in weak performance throughout the study period which evident the danger to the banks. The banks should emphasize on proper utilization of the available resources in order to increase the profitability, liquidity, and efficiency. As the banks have been suffering from financial mismanagement and underutilization of resources, so this bank should change their vision besides bringing transparency in their working to sustain in the competition and become dynamic financial institutions.

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