PROFITABILITY OF DISTRICT CO-OPERATIVE BANKS IN NORTHERN KERALA : AN INTERBANK COMPARISON

By
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PROJECT REPORT

Submitted in partial fulfilment of the requirement for the degree of

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Faculty of Agriculture

COLLEGE OF CO-OPERATION, BANKING & MANAGEMENT
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2004

Declaration

DECLARATION

I hereby declare that this project report entitled **"PROFITABILITY OF DISTRICT CO-OPERATIVE BANKS IN NORTHERN KERALA : AN INTER BANK COMPARISON"** is a record of work done by me during the course of project work and that it has not previously formed the basis for the award to me for any degree/diploma, associateship, fellowship or other similar title, of any other university or society.

Vellanikkara,
15-01-2004.

Rakhi .V.C.
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Certificate

Certificate

CERTIFICATE

Certified that this project report entitled **"PROFITABILITY OF DISTRICT CO-OPERATIVE BANKS IN NORTHERN KERALA : AN INTER BANK COMPARISON"** is a record of project work done independently by **Miss Rakhi .V.C**, under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship to her.

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RAKHI .V.C.

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DESIGN OF THE STUDY

1.1 Introduction

Banking occupies a crucial place in undertaking the development effort and acts as a movement for socio-economic transformation as well as a catalyst to economic growth. To quote Bhaba (1956), "Banking is the kinpin of the chariot of economic progress. As such its role in expanding the economy of a country like India can neither be underestimated nor overlooked.

Finance today, holds the key to all human activity. It consists of raising, providing, and managing of all money, capital or fund of any type to be used in connection with the business. Banks being money transacting enterprises require finance as raw material for manufacturing the finished goods i.e. credit. The success of all business enterprises especially the banking organization depends on how finance are planned and effectively utilized so as to maximize utility and profitability.

1.2 Statement of the problem

District Co-operative Banks (DCBs) occupy a vital position in the co-operative credit structure. It acts as the balancing centre of the credit structure of the district and form an important link between the apex co-operative bank and primary agricultural credit

societies. The success of DCBS depend not only on mobilizing the needed resources, but also on utilizing the resources effectively. The main objective of co-operative bank is to work for the social, ethical and economic upliftment of its members and earning of profit is only subsidiary to it. However, an efficiently managed bank must generate reasonable profit, in order to remain viable and to ensure a moderate growth rate. For any business enterprise profitability is a sign of operational efficiency. But in recent years profit earning capacity of DCBs are under severe strain. An evaluation of the performance of banks at the macro and micro level based on the decomposition model will give a true picture about the profitability and productivity of the concerned banks. In this backdrop of the present study attempts to compare and analyse the profitability of district co-operative banks in northern Kerala with the following objectives.

1.3 Objectives of the study

The objective of the study are

1) To evaluate the inter bank variability of profitability of district co-operative banks (DCBs) in Northern Kerala.

2) To determine the factors affecting profitability of the co-operative banks.

1.4 Methodology

Globilisation and Liberalisation have posed challenges to banks and financial institutions. As a result, the conventional banking skills used have become redundant. Moreover banking sector reforms have brought in a plethora of changes in the recent years. Prudential norms of capital adequacy, asset classification, income recognition and provisioning have made banking to get down to the basis of any business, viz., productivity and profitability. In the seventies and eighties, profit was dirty word and it was deposit, the raw material for banks that had piled up thoughtlessly. Fortunately this trend has given way to profit consciousness. It has therefore been felt that the definition of productivity and profitability need to reconceptualised in order to reflect the changing environment.

Chatterjee (1998) remarked that the old measurement of profitability which relied on the ratio of business generated (sum of deposit and advances) to the number of employees was becoming irrelevant because the era of development banks had ended. In this context a new model i.e., decomposition model is necessary for measuring the performance of banks. The focus of this chapter is to explain the concepts and to detail the methodology adopted for analyzing the performance of banks.

1.4.1 Materials and methods

The proposed model is an extension of the model developed by Varde and Singh (1981). Secondary data in the form of annual reports and audit report are collected from the Head office of the selected district co-operative banks. These data are used for further analysis and interpretations. The published data of the period 1993-2002 are considered for the study. The decomposition rules adopted are based on accounting definitions and identities. Each of the variables involved in the identities is estimated for 10 years to study the changing pattern of profitability of district co-operative banks of northern Kerala. The methodology undertaken for study of first objective is ratio analysis. To determine the factors affecting profitability coefficient of correlation is used and for analyzing the level of significance t-test is also employed.

The main items of observations are as follows:

1. Net profit
2. Spread
3. Burden
4. Interest income
5. Interest expenses
6. Manpower expenses
7. Non-interest income
8. Peremployee staff cost
9. Staff productivity

10. Return on advances
11. Return on investments
12. Cost of deposits
13. Ratio of advances to working fund
14. Ratio of investment to working fund
15. Ratio of deposits to working fund

The performance of a bank can be measured by a number of indicators viz. profitability, financial management, liquidity, productivity and growth. Of these indicators profitability is the most important and reliable one as it gives a broad indication of the capability of a bank to increase earnings. Moreover it takes in to account all the other parameters viz., financial management, liquidity, productivity and growth.

The traditional approach to bank profitability comparisons stick on descriptive details and hence neglecting the small components of profitability, which have got significant impacts on the macro variables like spread, burden etc. Profit is the out come of sequential procedures which can be traced back to earnings and expenditure patterns, asset-liability management, staff deployment and technological upgradations etc. These facts made the study of sub-processes of profitability much more relevant and even inevitable.

The viability of banks depends largely on the adequacy of profits and profitability. Profits in banking terms refers to excess of interest spread over burden, where as profitability is a ratio of net earnings to the total fund used. Profitability in the banking parlance denotes the efficiency with which a bank deploys its total resources to optimize its net profits and thus serve as an index to the degree of asset utilization and managerial effectiveness.

Bank profitability can be measured in several ways. They are

1. Ratio of profits earned (net income after tax) to the capital invested.
2. Ratio of profits to bank assets
3. Ratio of profits to income (rate of return on income)
4. Rate of return on deposits
5. Net profit as percentage of working fund and
6. The operating profit to working fund

Profitability De-composition Model (Das, 1999)

The De-composition rules adopted here are based on certain accounting definitions and identities. Besides it is necessary to define some of the variables used for the model. The main variables are:

1. Working Fund (WF): Total liabilities minus bills for collection and acceptance (as per contra items).

2. Spread (net interest margin) interest earned minus interest paid

3. Burden: Non interest expenses minus non interest income

4. Net profit : Total income less total expenditure. Profitability is expressed as a ratio of net profit to working fund. The decomposition is done in three phases.

Phase I

P = Profitability

= (Operating Profit) / (Working Fund)

= OP/WF

= (Total Income – Total Expenditure)/WF

= [(interest income + Non-interest income) – (Interest expenses + Non interest expenses)] / WF

= (Spread – Burden)/WF

= Spread/WF – Burden/WF

= $\alpha - \beta$

Phase II

α = Spread/WF

= (Interest income/WF) – (Interest expense/WF)

= r – k

β = Burden/WF

= (Non interest expense/WF) – (Non interest income/WF)

= (Wage bill + other non interest expenses)/WF – Non interest income/WF

= Wage bill/WF + Other non interest expense/WF – Non interest income/WF

= m + o – c

The spread (α) can further be de-composed as:

α = Spread/WF

= (Interest income/WF) – (Interest expense/WF)

= {Interest income on (Advances + Investment) – Interest paid on (Deposit + Borrowings)}/WF

It can be further de-composed as

= {(Interest income on Advances)/WF + (Interest income on investment)/WF – (Interest paid on deposit)/WF – (interest paid on borrowings)/WF}

= {(Interest income on Advances/Advances} x (Advances/WF) + {(Interest income on investment)/Investment} x (Investment/WF) – {(Interest paid on deposit)/deposit} x (deposit/WF) – {(Interest paid on borrowings)/Borrowings} x (Borrowings/WF)

= $w_1\lambda_1 + w_2\lambda_2 - w_3\delta_1 - w_4\delta_2$ where

δ_1 = (Interest paid on deposits)/Deposit i.e., cost of deposits

λ_1 = Interest income on advances/advances i.e., return on advances

λ_2 = Interest income on investment/Investment i.e., return on investment

δ_2 = Interest paid on Borrowings/Borrowing i.e., cost of borrowings

w_1 = Advances/WF i.e., weight attached to Return on advances

w_2 = Investment/WF i.e., weight attached to Return on investment

w_3 = Deposit/WF i.e., weight attached to cost of deposits

w_4 = Borrowings/WF i.e., weight attached to cost of Borrowings

Phase III

m = (Wage bill)/WF

= (Wage bill/Total manpower)/(WF/Total manpower)

= m_1/m_2

where m_1 = Wage bill/Total manpower

m_2 = WF/ Total manpower

It follows that m_1 is an indicator of per employee establishment expenses and m_2 is an indicator of staff productivity.

The analytical frame work include the followings identities

$p = \alpha - \beta$ .....(1)

$\alpha = r - k$ .....(2)

$\beta = m+o-c$ .....(3)

$m = m_1/m_2$ .....(4)

$\alpha = w_1\lambda_1 + w_2\lambda_2 - w_3\delta_1 - w_4\delta_2$ .....(5)

Taking together "p" can be written as

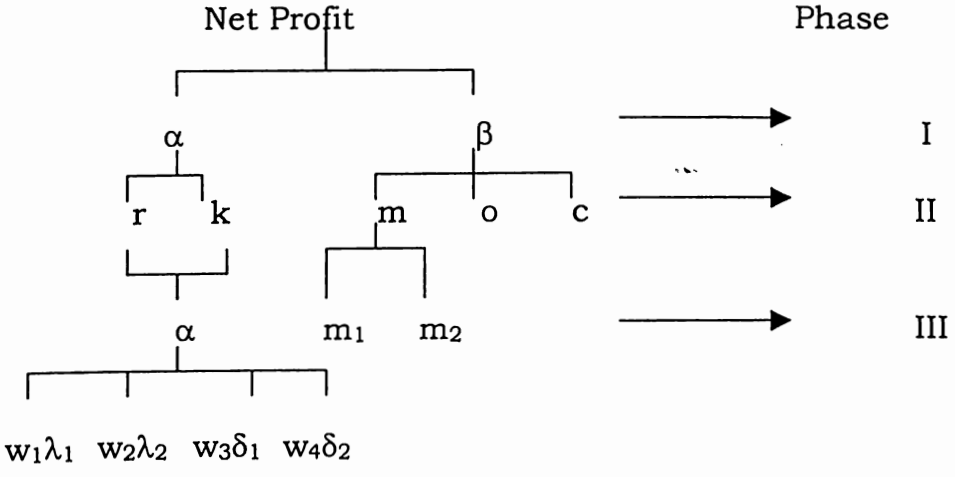
$p = (w_1\lambda_1 + w_2\lambda_2 - w_3\delta_1 - w_4\delta_2) - (m+o-c)$ .....(6)

Note:

1. The variables such as m_1 and m_2 are indicated as the ratio of manpower.

2. The variables namely λ_1, λ_2 , δ_1 and δ_2 are indicated as ratio to Advances, Investments, Deposits and Borrowings respectively.

The above explained De-composition Model is simplified and shown in the chart below:



The derived variables combined with description and effects are shown below:

Variables	Description of variables	Favour profit when	Area of indication
P	Net profit	Increases	Profitability
α	Spread	Increases	Spread
β	Burden	Decreases	Burden
r	Interest income	Increases	Management of interest items
k	Interest expenses	Decreases	
o	Other non-interest expenses	Decreases	Management of Non-interest items
c	Non interest income	Increases	
m	Wage bill	Decreases	Management of human resources
m_1	Per employee staff cost	Decreases	
m_2	Staff productivity	Increases	
λ_1	Return on advances	Increases	Financial management
λ_2	Return on investment	Increases	
δ_1	Cost of deposits	Decreases	
δ_2	Cost of borrowings	Decreases	
w_1	Ratio of advances to WF		Management of liquidity
w_2	Ratio of investment to WF		
w_3	Ratio of deposit to WF		
w_4	Ratio of borrowings to WF		
α			
$w_1\lambda_1$ +	Spread on normal banking business	Increases	Management of spread
$w_2\lambda_2$ −			
$w_3\delta_1$ -			
$w_4\delta_2$			

Details of derived variables along with mean, standard deviation and coefficient of variation during the year from 1993 to 2002 will be computed.

1.5 Scope of the study

The study is confined to three district co-operative banks namely Kasargode District Co-operative Bank, Kannur District Co-operative Bank and Kozhikode District Co-operative Bank. The study is restricted to the profitability comparison and impact of factors determining profitability.

1.6 Practical utility of the study

The study helps the co-operative banks to

1) locate the sub-processes of the pattern of profitability where the weakness exists

2) identify the factors determining profitability

3) know the position of each in any sub-process when compared to others.

1.7 Limitation of the study

The present study formed a part of the graduate programme and hence it has all limitations of time, money and other resources. These constraints, restricted the selection of only three DCBs.

1. The findings of the study are susceptible to the reliability of the secondary data.

2. Accurate manpower cannot be arrived due to the unavailability of monthly figures of employees.

1.8 Plan of the report

1. Design of the study
2. Co-operative Banking in India
3. Organisational profile
4. Analysis
5. Summary of findings and conclusions

1.9 Review of Literature

Financial intermediaries, especially banks, exert a causal influence on economic growth by affecting the pace of productivity growth and technological change. Banks can enhance resource allocation and accelerate growth by reducing the costs of acquiring information, conducting transactions and facilitating savings mobilization.

Productivity/profitability of a bank can be improved by reducing the cost of disintermediation (reducing operating cost by effectively deploying technology. However capital and continually reflecting its works procedures) and by raising the spread. The study has focused on how DCB's can improve productivity and profitability by managing some of the variable in a better way.

In this chapter, an attempt has been made to review the available literature in the area of performance of banks. The objective of the review is to develop and establish a theoretical framework for the study based on the ideas and concept expressed in the existing literature of both theoretical and empirical nature.

Nagarajan *et al.* (1990) conducted a comparative study on cost and profitability of Primary Agricultural Credit Societies and Regional rural banks profitwise, the PACS were in a very disadvantageous position mainly because of increasing costs, poor recovery performance and high borrowings. It was further recommended that curtailing cost of operations, increasing the volume of deposits, reducing the overdues and bringing down the level of borrowings as feasible remedial measures.

Sukumaran and Shaheena (1991) in their study on spread, burden and profitability showed that lack of effective management of spread and burden led to unfavourable trends in profitability. It was found that the increase in burden ratio could be attributed to the increase in non-interest expenditure ratio.

The study conducted by Shanavas (1991) in Malapuram service co-operative bank found that declining profitability of the bank was due to low increase in interest earned ratio, insufficient non interest income and necessity of maintaining increased amount of reserves due to mounting overdues. It was recommended that the management efficiency be enhanced in order to increase the profitability of the bank.

Mishra (1992) analysed the profitability of scheduled commercial banks in India, taking into account the interest and non-interest income, interest expenditure manpower expenses and other expenses. He concluded that the growing pre-emption of funds in the form of Statutory Liquidity Ratio (SLR), Cash Reserve Ratio (CRR), taster increase of expenses as compared to the income, advances and total investment than interest income and few more have contributed to the declining profitability of commercial banks.

According to the study conducted by Robert (1993) covering six private sector banks, SBI and other associates and other nationalized banks, he proved that private sector banks were move efficient than nationalized banks. According to him, the factors responsible were higher interest spread as percentage of total earning and favourable brand mix of private commercial banks. Favourable interest spread was due to proper administration of advances in the form of timely granting of loans, monitoring of advances and low cost deposits in the form of larger share of saving and current deposit.

Swami and Subrahamanyam (1994) utilized 'Taxonomic method' for studying the inter bank differences in the performance of public sector banks in India. The taxonomic method aimed for deriving out a single measure of performance based on several individual indicators of bank's business activity. It was found that many banks show wide disparities in their measure of performance especially with differential weighting of individual indicators of

business activity. None of the banks showed a measure of performance close to the ideal of the respective group of banks.

Garg (1996) stated that productivity and profitability are inter-related. By way of increasing deposits and advances at a pace higher than that of the number of employees and by increasing income and or decreasing expenditure, productivity and profitability can be improved. He suggested to reduce costs, increase the revenue and improve the efficiency so as to optimize the productivity and profitability.

Satyamurthy (1996) clarified the concepts of profit, profitability and productivity applicable to the banking industry. It was observed that overall profitability and productivity performance of a bank is the resultant effect of both 'economic efficiency' and 'operational efficiency'. He opined that attempts should be made to improve the spread performance through better funds and cash management recycling of funds, exploring new awareness for increasing non-fund business income and above all cost effectiveness and control.

Babu (1997) evaluated resource management efficiency of the three Urban co-operative banks in Thrissur district with regard to their liquidity and profitability performance. Using the various ratios related to profitability, liquidity and business efficiency he proved that one of the bank was vastly superior to the other two as it had higher spreads, higher credit deposit ratio and higher owned fund/borrowed fund ratio compared to the other two.

Sharatchandra (1997) analysed the profitability of various commercial banks in West Bengal. He attributed the reasons for low profitability to low credit – deposit ratio, poor recovery, priority sector advances and industrial sickness. It was suggested that in order to improve the profitability, an increase in credit deposit ratio, better recovery position, chancement of viability or rural branches, reduction in industrial sickness and overall development of infrastructure in the state was necessary.

Sinha (1997) pointed the causes low productivity, low efficiency and erosion of profitability of the banking sector as (a) directed investments and directed credit programmes; in both of these areas, the banks were earning much loss than what they could do by alternative deployment of funds (b) administered interest rates for both deposits and advances, which meant banks had little control over their profitability (c) contamination of the loan portfolio, much of which was concealed due to lack of standard yard sticks for identification and provisioning of impaired debts. Inadequate disclosure rules complicated matters further. As result it was not possible to quantify to what extent capital had eroded in commercial banks (d) both commercial banks and development financial institutions had suffered from excessive administrative and political interference in their internal management and credit decisions.

Das (1999) opined that with the use of a sequential decomposition model for profitability analysis, help the banks in

evaluating inter-bank variability of profit. A reduction in the burden of raising working funds in the post reform period due to a gradual shift away from traditional banking, a distinct risk aversion indicated by the preference for investments over advances in bank portfolios and increased competition reflected in convergence in bank-wise performance in the post reform period.

Bhatia and Varma (1999) in their study on factors determining profitability of public sector banks in India revealed that profitability of the banks depends on policy determined variables such as reserve requirements, directed credit programmes and other variables such as composition of deposits, establishment expenses, spread and burden etc. They had used a multiple regression model for their study.

Pathrose (1999) observed that introduction of capital adequacy requirements has caused a paradigm shift in banking priorities. Stringent Non Performing Asset (NPA) norms, provisioning requirements, a volatile interest rate regime, shrinking spreads and thinner margins etc. are causes of drain on the profitability of banks. The success of any bank in its profit maximization efforts in the new millennium lies in adopting proactive strategies in credit administration asset-liability management, risk management, technology upgradation, human resource management, treasury operations, cost control etc.

Dash (2000) while evaluating the financial performance of Navangar Co-operative Bank in Gujarat through ratio analysis

opined about the selected ratios like operational ratio, profitability ratio, productivity radio and solvency ratio. Analysis of the operational ratios revealed that there exists scope for improvement in several areas. Profitability analysis did not depict a rosy picture for the bank and efforts need to be made to improve the scenario. The productivity ratios however denote that the human resources of the bank are highly effective and efficient.

Tiruttani (2000) identified a number of strategies to increase spread in banks. These include timely recovery of interest and instalment on loans and advances, recovery of interest on substandard, doubtful and loss assets, acceleration of the flow of credit to high yielding advances of good quality, cost consciousness while mobilizing high cost certificate of deposits (CDs) and term deposits. According to him, the problem of burden in banks could be tackled by focusing attention on loss making branches to turn than into profit making ones, improving the clientele base in commercial pockets, improving staff productivity.

Das (2000) analysed the technical and allocative efficiency of 27 public sector banks using cross-section data for the year 1998. The data envelopment analysis had been utilized for obtaining efficiency scores. It could be found that public sector banks had the scope of producing 1.23 times as much output from the same inputs. The results further indicate the banks belonging to State Bank of India Group one, in general, more efficient than nationalized banks. Further more, the inefficiency that existed in

public sector banks was more a result of both technical and allocative inefficiency. The study also confirmed the significant negative relations between non-performing assets and efficiency and size.

Parasuraman (2001) attempts to measure the performance of major banks in India in the year 1998-99 under the criteria of Economic Valued Added (EVA). The study found ranking of banks under Return of Assets assumed close resemblance to the ranking under EVA, whereas the ranking under other criteria like total income, interest, as percentage of total assets, spread and net profit did not match with the ranking under EVA.

Kaveri (2001) made an inter-state analysis on banking in North Eastern Region. The study dealt with several aspects like Branch expansion, mobilization of deposits, credit deployment, per capita business, investment in government sponsored schemes, loan to misguided youth, loan granted to state government under taking, recovery of non performing assets etc. A comparison was made in all these aspects and finally the suggestions for improvements and remedial measure for the problem were also arrived.

Shah (2001) made an attempt to know how far credit co-operatives are viable in the new economic environment. The study was made in Kothapur District Central Co-operative Bank and according to him the new economic environment has given immense opportunities to the central level. Institution to increase its

numerical strength of membership, share capital, deposits, investments, working capital loan advancement and profit profile. Various tools and techniques were used to evaluate the economic viability of the district level institution. It include financial viability analysis and financial ratio analysis. The study revealed the performance of the bank, period before the economic reforms (1985-1991) and the period after the economic reforms (1992-1998).

Vijayasree (2002) attempted to measure the profitability of banks in economic downturns. The study focused on analyzing the trends in the profits and profitability of banks during the downturn with a view to identifying the factors contributing to the stability/improvement in profitability. It was found that Banks can manage their profitability by increasing other income and controlling costs. The profitability in economic downturns is depending on these two parameters more than on financial intermediation.

Jain (2002) made an attempt to study of net profit/net loss of all the 26 district central co-operative banks of Rajasthan for 1999-2001. The study revealed that out of 26 banks, 20 banks have shown improvement in 2000-2001 over 1999-2000 either by improving the amount of profit or by reducing the net loss or by converting them from loss making to profit earning banks. Remaining 6 banks have shown declining trend in their performance either by reducing their net profit or by going down in heavy losses.

Ramaiah and Ghosh (2002) expressed their views on banks spread in India. According to them bank efficiency is typically characterized by the level of net interest margin, commonly measured as the difference between interest income and interest expense, normalized by total asset. And also find that among the bank specific factors, operating expenses, other income and to a certain extent, provisions to be the key determinants. Among the bank-industry specific factors, the yield on 91 day Treasury Bills remains a significant factor influence spreads. Inflation is an important macroeconomic variable impinging on spreads.

Debasish (2002) viewed that performance of a bank can be measured by a number of indicators. Profitability is the most important and reliable indicator as it gives a broad indication of the capability of a bank to increase its earnings. The study focused on identify the most critical profitability ratios using a multivariate analysis technique called discriminant analysis. Discriminant analysis identified five variables ie priority sector advances to net advances, interest income to total assets, net interest spread to total assets, non-interest income to total assets and wage bills/total expenses among the 13 variables as the significant discriminations of bank profitability.

Kumar and Varma (2003) studied on recent efficiency record of Indian public sector banking industry. This is done by implementing data envelopment analysis on a cross-section of 27 public sector banks taken in year 2001. The overall level of

technical inefficiency in Indian public sector banking industry had been found to be around 17 per cent. The study implied that public sector banks had the scope of producing 1.21 times as much out put from the same inputs. He also made an attempt to explore the relationship between efficiency and profitability and had been observed that 63% of the public sector banks have potentials for profitability increase through efficiency improvements. It was found that technical efficiency is positively related to higher profitability, larger branch network and higher staff productivity.

Report on promoting productivity in Banks of IBM financial services (2004) pointed out that productivity is defined as the ratio of output to input for a specific production system. Rising productivity implies either more output is produced for the same amount of input or that less inputs are required to produce the same amount of output. It further pointed out that foreign banks and new private sector banks have been able to achieved high productivity and woo valuable customers from the public sector banks due to their innovative products and better customer service to suit different segment of customer. Better management of capital, technology, human resource and improved efficiency of operation and delivered high productivity.

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Theoretical Framework

Chapter 2

CO-OPERATIVE BANKING IN INDIA

The Indian Co-operative Movement after traversing the 20th century and after facing many trials and tribulations has now entered the next millennium. In India, formal beginning of co-operatives started with the enactment of the 1904 co-operatives credit societies Act whose objective was to provide relief to the farmers and needy persons from the exploitative money lenders. The Act of 1904 was later on modified by the Act of 1912. Co-operatives became a provincial subject under the Act of 1919. The Co-operative Societies are governed by respective State Co-operative Societies Acts.

In the wake of independence, co-operatives in partnership with the state agencies were assigned the primary role of transforming the rural economy. Under this policy scenario, the government as a matter of state policy had been contributing to the share capital of co-operative banks to make them financially strong. At present, the flow of credit to the agriculture and rural sector is being met through institutional agencies like commercial banks, regional rural banks and co-operative credit institutions.

Through vigorous efforts of co-operative leaders, co-operative societies have established themselves in various segments of Indian economy. In 2001-2002 there are 5,040,000 co-operative societies

with a membership of 210 million. The co-operative sector is operating in both urban and rural areas.

In the urban areas, urban co-operative credit sector constitutes a very important segment of Indian Co-operative movement. This sector comprises of primary societies including salary earners, thrift and credit societies. These urban banks encourage thrift and attract deposits for lending to the members. There are over 2000 urban co-operative banks operating in the country, of which 117 represent exclusive women urban banks. Development of exclusive women urban banks had led to growth of enterpreneurship among women. The potentiality of urban banks in the mobilization of resource is indeed, great. These banks have mobilized deposits over Rs.720 billion at the end of June 2000. The urban co-operative banking sector is more or less a self-reliant sector, as the sector does not depend on any financial support or equity support from the governmental agencies.

2.1 Performance of Primary Agricultural Societies in India

In rural area, there are two separate organizational structure for providing production finance and long term investment finance respectively. Agricultural credit co-operatives providing production finance include all Primary Agriculture Co-operative Societies (PACS) at the village level; District Co-operative Banks (DCB's) at the district level and State Co-operative Banks (SCB's) at the apex level. The co-operative credit institutions are playing a dominant

role in financing short term (ST) seasonal agricultural operations including medium term (MT) loans and consumption loans.

As the co-operative banking institutions are extending critical service to the farming community, serious efforts are being made to strengthen their capital resource base through increase in members in subscription, mobilization of rural savings and strengthening their reserves through diversion of a portion of profits earned by them. Co-operative Banks are playing a crucial role in increasing agricultural production and in sustaining agriculture growth over a period of years. The performance of Primary Agricultural Co-Operative Societies in disbursing production credit during 1999-2001 is shown in below:

Table 2.1. Performance of Primary Agricultural Co-operative Societies in India

(Rs. in Million)

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
1.	Villages covered by PACS		100%			100%	
2.	Rural households covered by Co-ops		67%			85%	
3.	Total No. of PACS	93,816			100,604		
4.	% of viable PACS		65.7%			65.4%	
5.	% of potentially viable PACS		27.0%			27.4%	

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
6.	Total membership (Million)	100.56			109.832		
7.	% of scheduled caste members		15.32%			17.7%	
8.	% of scheduled tribe members		9.54%			8.8%	
9.	% of small farmers to total members		42.4%			36.3%	
10.	% of marginal farmers to total members		28.9%			35.43%	
11.	% of rural artisans to total members		3.85%			4.3%	
12.	Total share capital			29540.00			36194.30
13.	% of Govt. participation		12.9%			13.0%	
14.	Total deposits			72049.70			109,961.60
15.	Total reserves			20845.20			16805.90
16.	Total loan advanced			190237.9			247385.70
	a) % of ST loans advanced to total		87.68%			84.14%	
	b) % of MT loans advanced to total		11.71%			15.45%	

Source: www.ncui.log.net

2.2 Present Scenario of District Co-operative Banks (DCBs) in India

In the present, ever changing economic environment characterized by deregulation and global competition, the crucial role of co-operative institutions in meeting socio-economic necessities of the weaker sections of the society has been increasingly recognized. The co-operative organistion is based on distinctive co-operative principles and values like concern for community, self help, mutual help, etc. As such strengthening and promoting the co-operative form of organization on a sound and healthy line assumes greater significance. As co-operatives operate at grass root level, people shall trust them more than any other type of organization.

District Co-operative Banks (DCBs) were set up to serve as a link between Primary Agricultural Co-operative Credit Societies at the village level and apex bank at the state level to provide stability and facilitate emergence of strong and viable co-operative banking structure at the district level. Gradually, a DCB was conceived as an instrument of development of all economic activities of a district as a whole. For two decades DCBs had the unique distinction of being the exclusive banking institution with this status.

The principal co-operative bank in a district is the District Co-operative Bank (DCB) which finance co-operative societies affiliated to them. It helps in equalizing credit flow, by adjusting

surplus funds of one society to the other. DCBs supervise the work of co-operative societies and also provide them necessary training. They also undertake ordinary commercial banking by accepting deposits from the individual members and lending to them on demand. Its own resources are intended to serve as a cushion to absorb the impact of the defaults and arrears arising at the primary level. Moreover they help the development of the co-operative movement in a district on sound line by all possible means in their areas of operation.

The co-operatives registered an excellent growth in all these functions. However, unstable profits, higher liquid assets, upward trend in overdues and Nonperforming assets (NPA), decelerating trend in owned funds and regional imbalances in their distribution and growth, vulnerable nature are some of the major proboems affecting the performance of co-operatives. The performance of District Co-operative Banks in channalising the production credit to PACS during the period, 1999 to 2001 is as follows

Table 2.2. Performance of District Co-operative Banks in India

(Rs. in Million)

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
1.	No. of Banks	367	-	-	368	-	-
2.	No. of office including HQ	13,029	-	-	12763	-	-

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
3.	Total membership (million)	2.35	-	-	2.31	-	-
4.	Membership of Co-ops (million)	0.56	-	-	0.55	-	-
5.	Total share capital	-	-	26425.6	-	-	28236.3
a)	Govt participation	-	17.49%	-	-	17.09%	-
6.	Total deposits	-	-	491,306.8	-	-	555,239
a)	Deposits of Co-op.	-	37.03%	-	-	38.75%	-
7.	Reserves	-	-	48,029.5	-	-	55,187.6
8.	Total borrowings	-	-	140,217.3	-	-	155,334.10
a)	From Govt.	-	0.66%	-	-	10.82%	-
b)	From Commercial Banks	-	1.52%	-	-	3.35%	-
c)	From SCBS/ (NABARD)	-	92.3%	-	-	87.17%	-
9.	Total working capital	-	-	767,263.5	-	-	829,895.20
10.	Total loans advanced	-	-	443,565.1	-	-	506,381.8
a)	Short-term loans advanced	-	-	282,522	-	-	364,656.7
b)	Medium-term loans advanced	-	-	40,619.6	-	-	44,424.4
c)	Long term loans advanced	-	-	88,276.6	-	-	93816.8
11.	Demand of the year	-	-	269,918.3	-	-	3,55,308.5
12.	% of overdues to Demand	-	28.4%	-	-	30.86%	-
13.	No. of business in profit	7,851	-	-	7,054	-	-

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
14.	No. of branches in loss	3,223	-	-	3,498	-	-
15.	Total No. of employees	113,032	-	-	112,691	-	-
16.	Cost of management (Total)	-	-	21,332.1	-		31,746.3
17.	Cost of salary management cost	-	61.06%	-	-	41.52%	-

Source: www.ncui.log.net

2.3 Performance of State Co-operative Banks in India

State Co-operative Banks are the apex organizations of co-operative credit structure, the main object of the bank is the promotion of economic interests of its members and of the public in accordance with the co-operative principles. To full in line with the above objective, the banks are doing the business of banking and lending to affiliated institutions within the frame work of rules and regulations stipulated by RBI and NABARD. The progress made by the banks during the years (1999-2001) is depicted in table 2.3.

Table 2.3. Performance of State Co-operative Banks in India

(Rs. in Million)

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
1.	No. of Banks	29	-	-	29	-	-
2.	No. of Branches	855	-	-	880	-	-
3.	Membership (Total)	1,49,203	-	-	1,25,779	-	-
4.	Membership of Co-ops	19,062	-	-	18,446	-	-
5.	Total share capital	-	-	6226.6	-	-	6,752.7
6.	Govt. participation	-	9.64%	-	-	8.53%	-
7.	Borrowings (Total)	-	-	109,169.80	-	-	118,389.30
8.	Borrowings from NABARD	-	78%	-	-	80.5%	-
9.	Reserves	-	-	31,479.80	-	-	35,992.80
10.	Deposits	-	-	279,453.4	-	-	314,697.2
a)	From Govt.	-	0.66%	-	-	10.82%	-
b)	From Commercial Banks	-	1.52%	-	-	3.35%	-
c)	From SCBS/ (NABARD)	-	92.3%	-	-	87.17%	-
9.	Total working capital	-	-	767,263.5	-	-	829,895.20
10.	Total loans advanced	-	-	443,565.1	-	-	506,381.8
11.	Deposits from co-ops	-	83.09%	-	-	81.6%	-
12.	Working capital	-	-	451,172.70	-	-	504,740.0
13.	Loans advanced (Total)	-	-	395,076.2	-	-	3,66,987.3

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
a)	ST Agrl loans advanced	-	-	106,232.1	-	-	127,197.4
b)	MT Agrl loans advanced	-	-	9,216.9	-	-	5,955.8
c)	ST Loan's Non Agrl	-	-	259,957.9	-	-	1,92,434.1
d)	MT Loan's Non Agrl	-	-	20,501.2	-	-	12,639.4
e)	Other including LT	-	-	1768.8	-	-	19,055.20
14.	Percentage of overdues to demand						
a)	Overall	-	17.78%	-	-	14.5%	-
b)	Short term (ST)	-	11.52%	-	-	9.30%	-
c)	Medium term (MT)	-	25%	-	-	17%	-
d)	Short term Non Agrl	-	-	-	-	8%	-
e)	Medium term Non Agrl	-	-	-	-	13.9%	-
15.	No. of bank branches in profit	408	-	-	426	-	-
16.	No. of bank branches in loss	314	-	-	282	-	-
17.	Cost of management	-	-	5,660.20	-	-	668.7
a)	Salary	-	45%	-	-	40.4%	-
b)	Other expenditure	-	55%	-	-	59.2%	-
18.	% of cost of management to working capital	-	1.26%	-	-	1.32%	-

Sl. No.	Particulars	1999-2000			2000-2001		
		(No.)	(%)	(Rs. in million)	(No.)	(%)	(Rs. in million)
19.	No. of employees	16,178	-	-	16,242	-	-
a)	No. of females	1891	-	-	1,883	-	-
b)	No. of males	14,287	-	-	11,474	-	-

Source: www.ncui.log.net

In the case of investment finance, there are State Co-Operative Agricultural and Rural Development Banks (SCARDB's) at state level and Primary Agricultural and Rural Development Banks (PARDB's) at the District/Sub-division level. The bank provides long term investment finance to agriculture for improving their productivity and income generating capacity and are helping in building up their assets. The aggregate amount of advances extended by ARDB's till 1999-2000 was Rs.300 billion, 90% of which was for the farm sector, 7% for non farm sector and 3% for rural housing.

2.4 Role of Co-operatives in the National Economy

Co-operatives occupy a place of eminence in the economic activity of the country and have been acting as a catalyst for the socio-economic development especially in the rural areas. 'Co-operation' has been accepted as an instrument of planned economic development, particularly to bring all round socio economic upliftment of the weaker sections of the community.

A pattern of mixed economy consisting of public, private and co-operative sectors was visualized by the policy makers in the country where co-operation was to play the role of balancing sector between private and public sectors to curb monopolistic tendencies and exploitation unleashed by the uncontrolled forces in the free market.

In India, Co-operative movement which initially started with a limited spectrum of activities or dispensation of rural credit, has now entered all fields of economic activity, particularly in the fields of credit, marketing, processing of commodities like sugarcanes and dairy products, housing, consumer articles, production and distribution of agricultural inputs. The share of co-operatives in national economy is given in table (2.4).

Table 2.4 Share of Co-operatives in National Economy

Particulars	%
Rural Net work (Villages Covered)	100.00
Agricultural Credit Disbursed by Co-ops	46.31
Fertiliser Disbursed (6.103 million tonnes)	36.60
Fertilizer produced (for Nitogen-N)	14.80
Fertilizer produced (for Phosporous – P)	23.50
Sugar produced (7.062 million tonnes)	54.95
Capacity utilization of Sugar Mills	85.70
Wheat Procurement	27.80
Jute procurement (1997-1998)	21.50
Retail Fair Price Shops (1,25,200)	28.00
Milk Procurement to Total Production*	6.70
Milk Procurement to Marketable Surplus	10.00
Oil Marketed/Procurement	51.00
Spindleadge in Co-op (3.313 Million)	10.00
Cotton Marketed/Procurement	67.50
Cotton Yarn/Fabrics Production	22.00
Handlooms in Co-operatives	55.00
Fishermen in Co-operatives (active)	21.00
Storage facility (village level PACS)	62.50
Soya Been Production*	7.50
Self-Emplt. Generated for Persons (min)*	12.50
Salt Manufactured	7.40

Source: www.ncui.log.net.

Organisational Profile

Chapter – 3

PROFILE OF SELECTED DISTRICT CO-OPERATIVE BANKS

3.1 KOZHIKODE DISTRICT CO-OPERATIVE BANK (KZDCB)

The Kozhikode District Co-operative Bank Ltd., No. E 1635 was registered as a co-operative society under Act of 1912 and started functioning on 3rd December 1917. There were 71 co-operative societies and 125 individuals as members on the date of starting with a paid up share capital of Rs.1,33,399. The first 13 years of its working can be said to be the period of expansion. Till 1930 its affairs were managed by an honorary secretary with a handful of staff.

During the year 1946-47, producer cum-consumers (PCC) societies, 107 in number were organized through out the district, which is the erstwhile Malabar district for the purpose of procurement and distribution of food articles under government control. These societies required large amount of financial assistance and the bank was able to meet their requirements fully, mostly from out of its own resources. These societies were re-organised into Primary Agricultural Credit Societies, viz., Rural banks, Regional banks, Service banks etc.

After the formation of Kerala state in 1956 the entire Malabar province was divided into three viz. Kozhikode, Palghat and Kannur.

Subsequently a separate District Co-operative Bank for the newly formed districts of Kannur and Palghat were organized and started functioning with effect from 1-7-1963. Thus the area of operation of the parent bank (Malabar District) divided into five revenue district conforming the area of KZDCB to Kozhikode revenue district comprising of Kozhikode, Quilandy and Vadakara taluk.

The name of the bank was Malabar Co-operative Central Bank till 30-9-1985 and it was changed as KZDCB as per the instruction from the Registrar of Co-operative Societies. Head office of the bank is situated at off-Kallai Road Calicut 2. It has 37 branches which include 2 evening branches (Kozhikode and Vadagra) and one exclusive ladies branch which functions on Sundays too. The bank is in the process of computerization to meet the changing trends.

The membership of KZDCB is not only open to primary consumer societies but also other types of societies, namely marketing societies, primary agricultural credit societies, housing societies, urban societies, handloom weavers societies, others etc.

The main sources of funds of KZDCB are share capital, reserves and other funds and deposits and borrowings. The bank was initially established with a share capital of Rs.13.33 lakhs consisting 196 members, it increased to Rs.386.2 lakhs consisting of 405 members with deposits Rs.21397.61 lakhs and loans of Rs.2388.5 lakhs share capital of the bank is divided into A-class

shares and B-class shares. A-class shares are subscribed by the affiliated societies and B-class shares are subscribed by the state government. Various deposit schemes such as current, savings, fixed, recurring and other special schemes to meet the varying requirement of the customers. The deposit collection performance of the bank has been increased steadily over the years to record a growth of 196 per cent between 1995-96 and 1999-2000. As the deposit projects positive trends the banks source of funds looks very sound. This is a pointer to the banks image building and the confidence of the customers on the bank.

The bank has different types of reserves and other funds. The important among them are statutory reserves and other funds, agricultural stabilization fund, building funds, reserve for building, dividend equalization fund, special reserve for bad debts, reserves for doubtful debts, investment fluctuation reserves etc. Reserves and other funds amount to Rs.1511.82 lakhs as on 31st March 2002.

Another source of banks fund is borrowings. The borrowings outstanding of KZDCB is 10381.25 lakhs as on 31st March 2002.

The net profit generated during 2001-2002 was Rs.3.17 lakhs against Rs.41.50 lakhs during 2000-2001. The decline in profit is mainly due to high non-interest expenses compared to non interest income.

In order to provide a better service to the customers, the bank increased the business hours. Moreover the Koyilandy branch and the Kozhikode branch are functioning from 8 am to 8 pm in two shifts.

Out of the 36 branches, 4 branches and head office are fully computerized. Now plans are on for the computerization of 5 more branches. So that they can deliver quick and efficient service to the customers. The bank has its own internet facility.

The bank is classified under A-class audit during all the years since 1992-1993.

3.2 KANNUR DISTRICT CO-OPERATIVE BANK (KRDCB)

Kannur has its unique position as a co-operative district. Kerala Dinesh Beedi which providing employment to its 42,000 members, Kannur District Co-operative Bank, Kannur and Thalassery based super speciality hospitals, export oriented Handloom Co-operatives, Indian Coffee house, RAIDCO and RUBCO (multi product industrial unit) are a few examples of co-operative excellence in the district.

Following the formation of the Kannur district, the KRDCB Ltd., came into existence on the 22nd day of May, 1963. The bank started its functioning on the first day of July, 1963. The bank started its functioning with 5 branches and with its excellent customer oriented attitude, presently the bank has a network of 41

branches at convenient spots of the district. This includes 8 evening branches and a women branch. The bank plans to add two more evening branch in the process of expansion with cent per cent computer facility. The society is managed by a management committee comprising 17 dynamic leaders who are all actively participating in the various operations and stand as a role players for the different activities of the bank. The area of operation of the bank shall extent to whole of the Kannur Revenue district.

During the last 40 years of working, the bank contributed for the development of the Kannur district, boosting the growth of agricultural industrial and health care sectors by providing all kinds of agricultural and non agricultural loans industrial loans, consumption loans, loan for construction of building, vehicle loans, gold loans, over drafts, cash credits to individuals and institutions etc. Apart from business of accepting and lending, the bank does activities like issue of demand drafts, let out of lockers, collection of bills etc.

The membership of KRDCB is not only open to primary agricultural credit societies but also Urban Co-operative Banks, Employees Co-operative Societies, Weavers Co-operative societies, Co-operative stores, industrial societies, marketing societies and other societies.

The main source of funds of KRDCB are share capital reserves and other funds, deposits and borrowings. The share

capital of the bank has increased Rs.1063.43 lakhs with a membership of 1180 during 2002-2003 against the membership of Rs.362.84 lakhs with 935 members during 1993-94.

The bank is having owned funds to the tune of Rs.6098.00 lakhs and borrowed funds of Rs.35527.89 lakhs as on 31st March, 2002.

The banks is having working capital of Rs.57950.00 lakhs at the end of March 2002.

The bank has won the confidence of depositors and stand as a dependable institution more than being just as one among many banks. During its 4 decades of functioning, the bank has drastically improved in deposits mobilization and loan disbursement especially in the 4th decade where in the beginning the bank had deposits and loans of Rs.6068.62 lakhs and Rs.8086.57 lakhs as on 31st March 1993 respectively and at the end, the deposits and loans were Rs.35527.89 lakhs and 41148.84 lakhs respectively (31-3-2002).

With its sustained marketing efforts, the bank was able to raise its loans and advances portfolio and registered a growth rate of 11.53 per cent over the previous years. 1-10-2001 onwards, bank is implementing one time settlement programme as per the recommendation of Govt. and NABARD. For the year 2001-2002 the NPA stood at Rs.4434.77 lakhs representing 10.77 per cent to total loan outstanding.

Out of the 41 branches, 6 branches are fully computerized and partially the head office. The bank has plans to computerize all the branches in a phase to phase.

The bank is classified under A-class under audit during all the since 1992-1993. The KRDCB bagged the NABARD's performance award three times continuously.

3.3 KASARGODE DISTRICT CO-OPERATIVE BANK (KGDCB)

Kasargode District Co-operative Bank Ltd. No.4367 came in to existence on 8th July 1986. The bank started its functioning on 1st October 1986. The area of operation of the bank shall extend to the whole of Kasargode Revenue District. The membership of the bank during 2001-2002 consisted of 451 societies and state government. The paid up share capital is Rs.522.24 lakhs.

- The working capital of the bank is Rs.14484.06 lakhs at the end of 31st March, 2002.

- Mobilisation of deposit is one of the main function of banking business and so an important source of fund of the bank. The total amount outstanding under various kinds of deposits at the end of March 31st 2002 was Rs.10668.65 lakhs.

- Borrowings is another source of funds for the bank when the deposits are inadequate to meet the demand for the loan. Since this is seen as a costlier source of fund, the borrowings

are resorted only as a last option. The borrowings from the Kerala State Co-operative Bank under loans, cash credits and over drafts amounted Rs.3172.34 lakhs at the end of March 31st 2002.

- The amount of Reserve fund at the end of the year 2002 was Rs.53.84 lakhs. The amount has been invested in the Kerala State Co-operative Bank Ltd.

- The bank is having owned funds to the tune of Rs.1164 lakhs and outsider's tunes of Rs.11311.85 lakhs as on March 2002. With it sustained marketing efforts, the bank was able to raise it loans and advances. At the end of the year 2002 the sum of Rs.10336.29 lakhs was outstanding.

- The banks are housed in its own building with required infrastructure facilities like the modern deposit counters, safe deposit vaults and the like presently the bank has 21 branches including 2 evening branches. The bank has plans to open 5 more new branches shortly.

- The bank has earned a net profit of Rs.61.58 lakhs as on 31st March 2002. During the year under audit out of this 25 per cent shall be credited over to the Reserve fund 15 per cent to the Agricultural credit stabilization fund and Co-operative Education fund as per Rules.

- The people of Kasargode district have built up a good image on their human relation side. People developed a sense of love and affection towards one another. To understand this relationship it is enough that they visit bank and understand the employers relationship with the customers and visitors.

- The bank is classified under A-class under audit during all the year since 1992-1993.

Table 3.1 Performance of banks for the year 2001-2002

Rs. in lakhs

	Particulars	KZDCB	KRDCB	KGDCB
1.	Year of starting	3rd Dec. 1917	1st July 1963	1st October 1986
2.	Area of operation	Kozhikode Revenue District	Kannur Revenue District	Kasargode Revenue District
3.	Membership	405	1095	400
4.	Share capital (Rs.)	386	1055	520
5.	Reserve fund and other reserves	1281	5043	644
6.	Owned funds	1667	6098	1164
7.	Working funds	40049	60750	16725
8.	Deposits	21398	35528	11312
9.	Borrowings	10381	13084	2942
10.	Advances	23885	41149	10674
11.	Net profit	3	356	34
12.	No. of branches	37	40	21
13.	Classification of societies	A Class	A Class	A Class
14.	No. of staff	292	377	292

Analysis

Chapter – 4

ANALYSIS ON INTER-BANK VARIABILITY OF PROFIT

Financial statement reflects the state of affairs of an organization at a given point of time as well as its financial performance over a period. However the accounting figures disclosed in the financial statement cannot be claimed as a true financial indicator of a firm's performance. Sometimes, it is alluring to picture the illusion figures in Balance-Sheet or Income Statement, but after a detailed analysis we may end up with dismal performance. Thus there is a need to analyse the financial statement by determining the relationship between two variables. This is ascertained by a technique called Ratio Analysis which expresses the numerical relationship between accounting figures. It is a powerful device to analyse and interpret the financial structure of a firm.

The variables arrived from the decomposition of net profit was made easier for analysis by computing the mean and coefficient of variation. The former explains the average ratio value of each variables to working fund of post reform period, ie. 1993-2002. The latter indicates the relative variability of variation of each variable from their mean value.

4.1 Coefficient of variation

Coefficient of variation (C.V.) is a relative measure of dispersion. This measure has great practical utility. A series in which C.V. is higher would have greater dispersion than the one in which it is lower and vice versa. This measure is most commonly used for a comparative study of the variability or consistency of two or more series. The series for which the coefficient of variation is less is considered to be more stable or consistent.

The analysis regarding the inter-bank variability of profitability among selected district co-operative bank was done on the basis of the areas of profitability management indicated by the resultant.

The areas taken into consideration are as under

1. Management of Interest items
2. Management of Non Interest items
3. Management of Human Resources
4. Management of Finance
5. Management of Liquidity
6. Management of Spread
7. Management of Burden
8. Management of Profitability (Net Profit)

Table 4.1 Mean and coefficient of variation of selected variables

Description	Variable	Banks	Mean	Coefficient of variation (%)
Net profit	p	KR	0.0064	38.96
		KZ	0.0040	209.78
		KG	0.0026	168.73
Interest income	r	KR	0.0882	11.94
		KZ	0.1049	11.83
		KG	0.0943	8.21
Interest expenses	k	KR	0.0585	16.20
		KZ	0.0674	11.29
		KG	0.0691	10.47
Non Interest Expenses	o	KR	0.0333	26.48
		KZ	0.0412	24.00
		KG	0.0115	30.72
Non interest Income	c	KR	0.0198	41.59
		KZ	0.0250	42.64
		KG	0.0024	22.93
Per employee Staff cost	m_1	KR	1.0328	54.84
		KZ	1.1503	37.13
		KG	0.5544	42.29
Staff productivity	m_2	KR	104.0549	47.33
		KZ	73.1245	57.68
		KG	41.6597	38.32
Wage bill	m	KR	0.0100	28.50
		KZ	0.0175	21.63
		KG	0.0131	15.30
Return on advances	λ_1	KR	0.1100	11.19
		KZ	0.1377	12.06
		KG	0.1066	10.97

Description	Variable	Banks	Mean	Coefficient of variation (%)
Return on Investments	λ_2	KR	0.6266	14.14
		KZ	2.6408	77.27
		KG	1.2801	66.82
Cost of deposits	δ_1	KR	0.0799	11.27
		KZ	0.0794	7.35
		KG	0.0788	11.75
Cost of borrowings	δ_2	KR	0.0800	17.49
		KZ	0.1007	28.33
		KG	0.0863	17.93
Advances	W_1	KR	0.6306	22.72
		KZ	0.5854	12.85
		KG	0.6924	11.60
Investments	W_2	KR	0.0324	28.24
		KZ	0.0134	43.14
		KG	0.0204	31.74
Deposits	W_3	KR	0.5004	14.99
		KZ	0.6070	13.50
		KG	0.5255	24.35
Borrowings	W_4	KR	0.2338	27.36
		KZ	0.2114	41.47
		KG	0.3454	38.63
Spread	α	KR	0.0299	10.48
		KZ	0.0378	21.38
		KG	0.0248	21.17
Burden	β	KR	0.0235	13.89
		KZ	0.0338	10.61
		KG	0.0222	12.10

4.1.1 Management of interest items

The items (variables) which point to the area of profitability management of banks are (1) Interest income (r) and (2) Interest expenses (k). The Banks will be able to contribute to their net profit either by increasing the interest income or decreasing the interest expenses of this area.

1) Interest Income (r)

The major sources of interest income of the district co-operative banks were interest earned on loans and advances, interest on investments.

The KZDCB has got the highest average of interest income (r) of 0.1049. The KGDCB has an average of interest income of 0.0942 and KRDCB with the least of these i.e., 0.0882. The KGDCB recorded the least variability of 8.21 per cent and have secured to be more consistent. KZDCB was ranked next to KGDCB with a coefficient of variation of 11.83 per cent. Highest variability in interest income was found for KRDCB with 11.94 per cent.

2) Interest Expenses (k)

The major elements of interest expenses were interest on deposit and borrowings. The KGDCB has got higher average expenditure on interest (k) of 0.0691 followed by KZDCB with 0.0674. The KRDCB recorded the least average expense of 0.0585.

The KGDCB showed the least variability with 10.47 per cent, followed by KZDCB has shown the highest variability of 16.20.

Inference

1. In the case of interest income, KZDCB has shown highest average income and in the case of interest expenditure, KRDCB has shown lowest interest expenditure.

2. Data indicate that the KRDCB has got high variability in this area of profitability.

4.1.2 Management of non-interest items

The variables which give indication to this area of profitability management of banks are (1) Non-interest expenses [excluding wage bill (o)], (2) Non interest income (c). The banks can increase their profitability by reducing non-interest expenses or increasing the non-interest income.

1) Non interest expenses (o)

The major non interest expenses are rent, taxes, insurance charges, legal and other professional charges, postage, telegrams and telephone charges, auditors fees, stationery, printing and advertisement expenses, depreciation on and repairing of property, allowances paid to Directors and local committee members etc.

The KGDCB has got least average of non interest expenses towards non interest items i.e., 0.0115 per cent followed by

KRDCB with 0.0333. KZDCB showed the highest expenditure average of 0.0412. The KZDCB was found most consistent in restricting the expenditure (24 per cent), followed by KRDCB with 26.48 per cent. The KGDCB was seemed to be least consistent with 30.7 per cent.

2) Non interest income (c)

The major sources of non interest income of the District Co-operative Banks were commission on services provided to customers, exchange and brokerage, subsidies and donations, income from non banking assets and profit from sale of or dealing with such assets, other miscellaneous sources of income such as share transfer fee, dividend recovered and other receipts.

The average ratio was found higher for KZDCB 0.0249 and the KRDCB was placed next to former with a value of 0.0198. But the KGDCB showed the least average figure of 0.0024. The KGDCB was found least varied (0.2292) followed by KRDCB (0.4158). The KZDCB showed the least consistency with the value of 0.4263.

Inference

The KGDCB was found to have least average expenditure and least average non interest income. But KZDCB was found to have highest average income and highest average non interest expenditure. This showed weakness of KGDCB in managing non-

interest income when compared to other banks. THE KGDCB showed highest consistency in non interest income and least consistent in non interest expenses.

4.1.3 Management of human resources

The variables which are included in this area of profitability of banks are (1) per employee staff cost (m_1), staff productivity (m_2), (3) wage bill ($m = m_1/m_2$). Among the above given variables, m_1 and m_2 are expressed as the ratio to manpower. For getting favourable changes in profit the banks have to reduce their wage bill. This can be achieved by increasing the staff productivity.

1) Per employee staff cost (m_1)

The KGDCB can be noted with significantly least average ratio in per employee staff cost of 0.5544 followed by KRDCB with 1.0328. The KZDCB had found highest value with 1.1503. The KZDCB has shown the least variability value of 37.13 per cent. The consistency was least for KRDCB.

2) Staff productivity (m_2)

The KRDCB was attracted highest average in staff productivity (104.0549). The KZDCB came next to the former with 73.1245. Staff productivity in KGDCB disclosed the least figure of 41.6597 which is due to lower staff number. The KGDCB was noted by its highest consistency in staff productivity with least variability figure of 38.32 per cent. The KRDCB was found in the

second position with 47.33 per cent. The KZDCB revealed a higher variability of 57.68 per cent.

3) Wage bill (m)

The KRDCB was placed in the safest position by the lowest average of 0.0100 followed by 0.0131 of KGDCB. The KZDCB showed the highest average ratio of wage bill (0.0175). The KGDCB has shown least variability of 15.30 per cent, the KZDCB came next with 21.63 per cent and the KRDCB revealed least consistency with 28.50 per cent.

Inference

1. KRDCB was seemed to be well performing with their least per employee staff cost, highest staff productivity and least wage bill. KRDCB was consistent in maintaining their staff productivity compared to KZDCB but least consistent in the case of other two.

2. KGDCB was seemed to be well performing with their least per employee staff cost and wage bill but failed to maintain highest average in staff productivity. Besides, they were consistent in maintaining their wage bill.

3. KZDCB was just opposite to KGDCB. Their position was the lowest in all averages except in the case of staff productivity. They had shown high consistency in maintaining per employee staff cost.

4.1.4 Management of finance

The variables, which are pointing towards this area of profitability of banks are (1) return on advances (λ_1), (2) return on investment (λ_2), (3) cost of deposits (δ_1) and cost of borrowings (δ_2). For bringing favourable changes in profit, the banks can

1) Increase the return on advances
2) Increase the return on investments
3) Reduce the cost of deposits
4) Reduce the cost of borrowings

1) Return on Advances (λ_1)

KZDCB has got the highest average of 0.1377, followed by KRDCB 0.1100. The KGDCB has least average of return on advances (0.1066) as compared to other two. But KGDCB has got highest consistency in maintaining their return on advances with 10.97 per cent followed by KRDCB with 11.19 per cent and the least consistency was found in KZDCB with 12.06 per cent.

2) Return on investments (λ_2)

In this case also KZDCB showed highest average value i.e., 2.6408 and followed by KGDCB with 1.2801. KRDCB got least value, 0.6266. But KRDCB has got highest consistency in return on investment with the least variability of 14.14 per cent followed

by KGDCB with 66.82 per cent. The bank, which had the least consistency, was KZDCB with 77.27 per cent.

3) Cost of deposits (δ_1)

KGDCB recorded the lowest ratio of 0.0788, followed by KZDCB with 0.0794. The KRDCB showed the highest average cost of deposit 0.0799. The KZDCB showed the highest consistency with a lowest variability 7.35 per cent, followed by KRDCB 11.27 per cent and KGDCB with 11.75 per cent.

4) Cost of borrowings (δ_2).

KRDCB recorded the lowest ratio of 0.0800, followed by KGDCB with 0.0863. KZDCB showed the highest average in cost of borrowings of 0.1007. The KRDCB was found most consistent in restricting the cost of borrowing at 17.49 per cent, followed by KGDCB (17.93 per cent). The KZDCB recorded the least consistency with 28.33 pr cent.

Inference

1. KZDCB has got highest average in return on advances and return on investments.

2. The KGDCB has got least average in return on advances and return on investments. But they recorded lowest ratio of cost of deposits and cost of borrowings.

3. The KRDCB recorded the lowest cost of borrowings and KZDCB recorded highest, in the case of favouring profitability.

4.1.5 Management of liquidity

The variables, which were considered in this area of profitability of banks, are (1) advances (w_1), (2) investments (w_2), (3) deposits (w_3) and (4) borrowing (w_4). This area of profitability gives thrust on the asset-liability composition of the bank.

(1) Advances (w_1)

The KGDCB achieved the highest average advance to working fund ratio of 0.6924 and was followed by KRDCB (0.6306). The KZDCB shows the lowest average of (0.5854). The. KGDCB itself shows highest consistency in their advance to working fund with 11.60 per cent followed by KZDCB with 12.85 per cent. The KRDCB has shown the least consistency with highest variability of 22.72 per cent.

(2). Investments (w_2)

The KRDCB has shown highest average investment to working fund ratio of 0.0324, followed by KGDCB with 0.0204. The KZDCB shows the lowest average of 0.0134. The KRDCB was highly consistent in their investment to working fund with 28.24 per cent. The KGDCB and KZDCB have shown high variability with 31.74 per cent and 43.14 per cent respectively.

(3). Deposits (w_3)

The KZDCB has got highest average in this variable of 0.6070 followed by KGDCB with 0.5255 and the KRDCB showed the least of 0.5004. The KZDCB itself showed the highest consistency with lowest variability of 13.50 per cent, followed by KRDCB and least gone to KGDCB.

(4). Borrowings (w_4)

The highest average in borrowings to working fund ratio was obtained by KGDCB (0.3454). The KRDCB came next with 0.2338. The KZDCB showed the least average ratio of 0.2114. The borrowings to working fund ratio of KRDCB showed highest consistency with low variability of 27.36 per cent followed by KGDCB with 38.63 per cent. The KZDCB has shown high variability with 41.47 per cent.

Inference

1. All the three banks were found to be more interested towards advances than the investment.

2. The main sources of funds of the three banks were deposits than borrowings.

3. The KZDCB had showed consistency in deposits but they were least consistent in borrowings.

4. The KGDCB had showed highest average in advances and they were also consistent in maintaining their advances.

4.1.6 Management of Spread

Bank efficiency is typically characterized by the level of net interest margin (or spread), commonly measured as the difference between interest income and interest expense, normalized by total assets.

The KZDCB shows the highest average ratio of spread i.e., 0.0378, followed by KRDCB with a value of 0.0299. The KGDCB has recorded the lowest value of average i.e., 0.0248. The KRDCB showed the highest consistency in managing the spread with a least variability of 10.48 percentage, followed by KGDCB with 21.17 per cent. The KZDCB showed the least consistency with 21.38 per cent.

Inference

1. The KRDCB shows erratic variations in their spread and they also shows lowest average ratio of spread 0.0299 compared to KZDCB.

2. The spread of the KZDCB also shows erratic variations but it shows highest average ratio of spread ie 0.0378.

3. The KGDCB shows increasing trend in their spread and they shows least average ratio of spread compared to other two.

4. The KRDCB was seemed to be highest consistent in maintaining spread with least variability of 10.47 per cent.

4.1.7 Management of Burden

Burden is essentially the operating expenses net of non interest income.

The KGDCB has got lowest burden of 0.0248, followed by KRDCB with 0.0235. The burden was highest for KZDCB i.e., 0.0338. KZDCB showed highest consistency inspite of high burden. The variability was highest for KRDCB.

Inference

1. It is interesting to note that the burden of KRDCB on every Rs.100 of working fund recorded a reduction in the post liberalization years. Besides they showed low average ratio of burden ie. 0.0235 compared to KZDCB 0.0337.

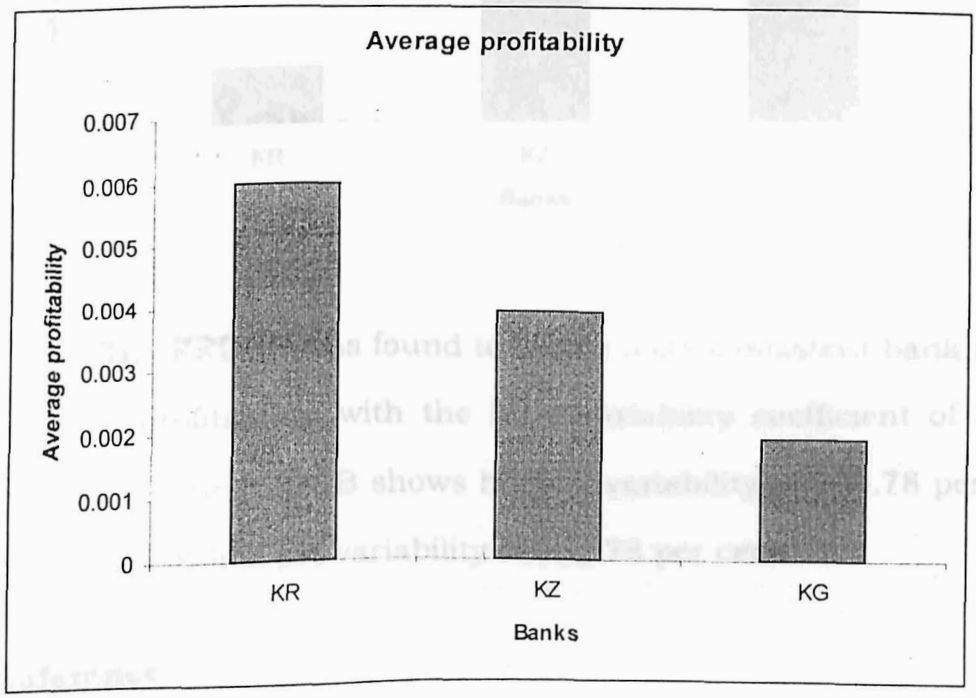
2. The KZDCB shows increasing trend in their burden and it also shows highest average ratio of burden i.e 0.0338 compared to other two. Besides they maintained highest consistency in their burden.

3. KGDCB also shows increasing trend in their burden but they shows lowest average ratio of burden ie. 0.0222 compared to other two banks.

4.1.8 Management of profitability

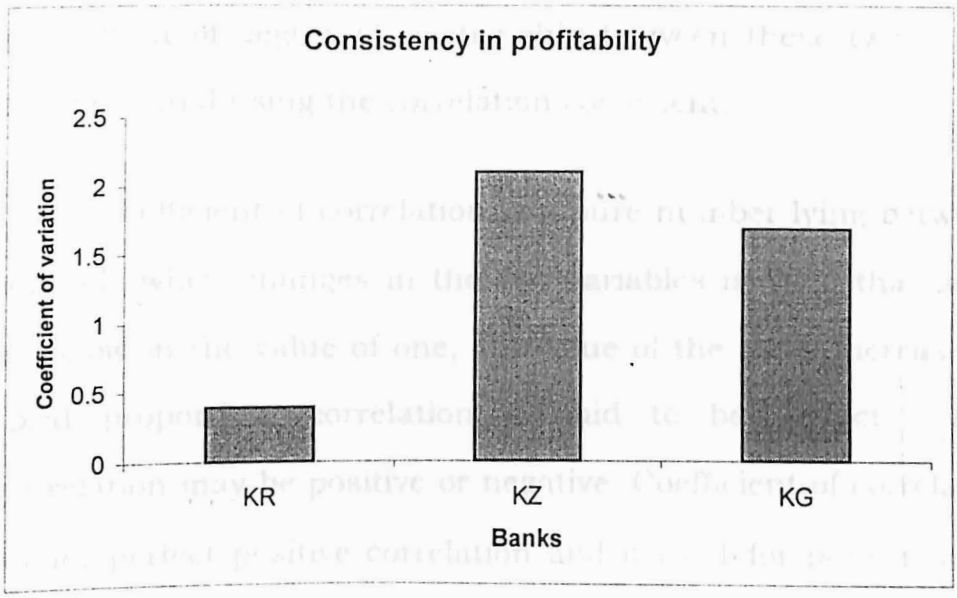
After the decomposition of net profit and the analysis of the sub-processes, the final position of the average profitability and consistency are as under.

1) Average profitability



The KRDCB has shown the highest average profitability of 0.0064. The Kozhikode District Co-operative Bank comes next to the former with the value of 0.0040. The Kasargode District Co-operative Bank was with an average of 0.0026.

2) Consistency in profitability



The KRDCB was found to be the most consistent bank in the case of profitability with the least variability coefficient of 38.96 per cent. The KZDCB shows highest variability of 209.78 per cent and KGDCB has got variability of 168.78 per cent.

Inference

1. The net profit of KRDCB shows steady increasing trend for the study period. They also show highest average in net profit and maintaining highest consistency in profitability.

4.2 Identification of significant factors that affecting profitability

Correlation Analysis is also undertaken for determining the factors that are influencing the pattern of profitability of banks. The term correlation refers to the relationship between two

variables. The two variables are correlated if the change in one variable results in a corresponding change in the other variable. The extent of degree of relationship between these two variables are measured using the correlation coefficient.

Coefficient of correlation is a pure number lying between –1 and +1, when changes in the two variables is such that with an increase in the value of one, the value of the other increases in a fixed proportion, correlation is said to be perfect. Perfect correlation may be positive or negative. Coefficient of correlation is +1 for perfect positive correlation and it is –1 for perfect negative correlation. If changes in the values of one variable are not associated with changes in the value of the other variable, there will be no correlation. When there is no correlation the coefficient of correlation is zero.

In between perfect correlation and no correlation there may be limited degree of correlation. Limited degree of correlation may also be positive or negative. Limited degree of correlation may be termed as high, moderate or low. For limited degree of correlation the coefficient of correlation lies between 0 and 1 numerically.

r → 0 to ± 0.3 → weak correlation

r → ± 0.3 to ± 0.7 → moderate correlation

r → 0.7 to + ± 1 → Strong correlation

Correlation analysis contributes to the understanding of economic behaviour, aids in locating the critically important variables on which others depend, may reveal to the economist the connection by which disturbances spread and suggest to him the paths through which stabilizing forces may be come effective.

Here, correlation coefficient of each variable with the net profit to working fund was computed for the detailed analysis of identifying the factors affecting the profitability of banks. T-test is also employed for the analysis of the level of significance. It is computed as

$$t_{n-2} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where,

r = Coefficient of correlation

n = sample size

If the calculated value of 't' is higher than the table value at (n - 2) degree of freedom it can be inferred that there is significant correlation between the two variables.

Table 4.2 Correlation of variables with net profit

Description	Variable	Banks	Correlation
Net profit	p	KR	1.00
		KZ	1.00
		KG	1.00
Interest Income	r	KR	-0.2616
		KZ	-0.1655
		KG	0.0915
Interest expense	k	KR	-0.3971
		KZ	-0.1054
		KG	-0.3107
Non Interest Expense	o	KR	0.3683
		KZ	0.0708
		KG	0.2088
Non interest Income	c	KR	0.4657
		KZ	0.0781
		KG	-0.3632
Per employee staff cost	m_1	KR	0.4560
		KZ	0.4195
		KG	-0.3300
Staff productivity	m_2	KR	0.6096
		KZ	0.3304
		KG	-0.2458
Wage bill	m	KR	-0.2852
		KZ	-0.3206
		KG	-0.3300
Return on Advances	λ_1	KR	0.2945
		KZ	0.9371**
		KG	-0.2608

** Significant at 1% level

Description	Variable	Banks	Correlation
Return on Investments	λ_2	KR	-0.4375
		KZ	0.4808
		KG	-0.2249
Cost of deposits	δ_1	KR	-0.5152
		KZ	-0.1963
		KG	-0.3506
Cost of borrowings	δ_2	KR	0.2506
		KZ	0.1076
		KG	-0.5296
Advances	W_1	KR	-0.3515
		KZ	-0.5692
		KG	0.5326
Investments	w_2	KR	0.1497
		KZ	-0.3877
		KG	0.1867
Deposits	w_3	KR	0.1429
		KZ	0.3103
		KG	-0.3039
Borrowings	w_4	KR	-0.6870*
		KZ	-0.3783
		KG	0.2791
Spread	α	KR	0.3454
		KZ	0.9075**
		KG	0.8596**
Burden	β	KR	-0.4335
		KZ	-0.3206
		KG	0.0365

* Significant at 5% level

** Significant at 1% level

4.2.1 Interest items

1) Interest Income

Except KGDCB all others showed negative correlation but these were not significant.

2) Interest Expenses

All the Banks are having negative interest expenses and the level of significance is moderate for KRDCB and KGDCB. The interest expenses of KZDCB is having not significant correlation with net profit.

Indication

1. The moderate and the insignificant level of correlation of the interest expense implies that the interest income is the major factor which attributes to the profit.

4.2.2 Non interest items

1) Non Interest Expenses

Non interest expense is a variable of burden which have negative correlation with the operating profit. The non interest expense is moderately affecting the KRDCB and it is not significant for KZDCB and KGDCB.

2) Non interest Income

This is another important factor which affects the profit favourably. The non interest income is moderately affecting the profit of KRDCB and KGDCB and it is not significant for KZDCB.

Indication

1. Both non interest expense and income are not significant for KZDCB shows that its operating profit is constituted by spread.

2. For KRDCB both non interest items are moderately affecting the profit.

4.2.3 Financial management items

1) Return on Advances

This is an item of interest income which increases the profit. The KZDCB is having high positive correlation which is very strong also. It is this item which increases the interest income which increases the profit of the KZDCB. Return on advances is not significantly affecting the profit of the KRDCB and KGDCB.

2) Return on Investment

It is also positively affecting the KZDCB. The level of significance is moderate for KRDCB and KZDCB and not significant for KGDCB.

3) Cost of Deposits

Deposits are the liabilities of the bank for which they want to pay interest otherwise known as cost of deposits. Thus it is an expense which adversely affect the profit. Hence it is negatively correlated with profit for all the DCBS. It is moderately affecting the profit of KRDCB and KGDCB because of increased share of fixed deposits. Cost of deposits is insignificant to KZDCB because of higher level of low cost deposits like saving bank and current accounts.

4) Cost of Borrowings

Borrowings is a component of the working capital of the bank. This is an external fund and hence the bank want to pay interest. KGDCB is having high cost borrowings and it is moderately affecting the profit whereas it is not significantly affecting the profit of the other two banks.

Indication

1. Return on advances and return on investments are the items of interest income. The strong and moderate level of significance of the both items of KZDCB is indicating that the loaning operation and its financial investment is very sound and it is increasing its profit.

2. Cost of deposits and cost of borrowings are the major items of interest expense of the banks. The moderate level of

significance of both cost of deposits and borrowings of KZDCB is indicating that these two items increases the interest expenses which reduces the spread which inturn reduces the profit of the bank.

4.2.4 Asset liability composition

1) Advances

This is an asset to the bank for which they can earn interest which increase interest income and thereby profit. All the banks are having moderate level of significance on the operating profit except KRDCB.

2) Investments

Investment in financial assets will also helps the banks in earning income which favourably affect the spread and thereby the profit. The KZDCB is having moderate level of significance and it is not significant for other two DCBs.

3) Deposits

This is an item which incurs cost and by decreases the spread and profit. The KZDCB and KGDCB are having moderate level of significance and for KRDCB it is not significant.

4) Borrowings

This is a component of working capital which increases the cost of funds and thereby adversely affecting the profit of the bank. Borrowings of KRDCB and KZDCB were moderately affect its profit and it is not significant for KGDCB.

Indication

Deposits and Borrowings are the liabilities of the bank, advances and investments are the assets of the bank. KZDCB and KGDCB.

1. Advances are moderately affecting the profit of all the banks.

2. Investment has moderate effect on profit of KZDCB and not significant both KRDCB and KGDCB.

3. Except KZDCB, the deposits of other two banks are having not significant effect on profitability.

4. The KRDCB is having heavy dependence on borrowings as compared to KZDCB and KGDCB. Borrowings of KGDCB has not significant effect on its profitability.

4.2.5 Items of Human Resource Management

1) Per Employee staff cost

This is an expense item which reduces the profit. The level of significance is moderate for all the banks.

2) Staff productivity

This variable is having a positive correlation with the overall performance of the bank. KRDCB is having high positive correlation which indicate strongest level of significance. It is only moderately affecting the profit of KZDCB. The staff productivity of KGDCB is poor and it is negatively affecting its profit in an insignificant manner.

3) Wage bill

It is an expense which is having negative correlation with profit. Because as expense increases the profit decreases. All banks are having negative wage bill and it is moderately affecting the profit.

Indication

1. Significant level of staff productivity of KRDCB is indicating the efficiency of their employees in improving the overall performance of the bank.

2. Per employee staff cost is moderately affecting the profitability of all banks.

3. In the case of wage bill except KRDCB all the banks are having moderate negative correlation. The indication of this variable that as it is an item of non interest expense it increases the burden and thereby reduces the profitability.

4.2.6 Main variables

1) Spread

Spread which is a function of interest items has great influence on the profit of the bank. Spread is positively correlated to profit which implies that as spread increases the profit is also increasing. The KGDCB and KZDCB have high positive correlation as compared to KRDCB. It is very significant and strong also.

2) Burden

Burden is a function of non interest items. It is having negative correlation with profit which means as burden increases the profit decreases. Except KGDCB other two banks have negative correlation which is moderate also. Even though the KGDCB have positive correlation it is very not significant and weak which implies that it is not having much role in affecting the profit.

Indication

1. Both spread and Burden have great influence on the operating profit. The significant spread and the moderate burden of the KZDCB implies that the interest income of the spread component constitute the major share of operating profit.

2. The KRDCB having the moderate level of spread and burden and KGDCB is having significant spread and weak burden.

Summary of Findings & Conclusion

Chapter 5

SUMMARY OF FINDINGS AND CONCLUSIONS

The banking sector reforms introduced in the early 1990s with the objective of stimulating competition and strengthening banking operations have changed the banking environment. It has introduced competition in their protected environment and has in turn made them aware of the need of improving their profitability and their overall efficiency.

In recent years, especially after the deregulation of financial sector initiated in1991-92, the profitability of the banking system has been critically assessed. Balance sheet information has become more transparent and thus the inter-bank and industry level comparison may truly highlight the asset-liability management of one bank across banks operating in the industry. Such analysis can help the banks for comparison and indicate the areas which need immediate attention. Hence, a study about the profitability of District Co-operative Banks in Northern Kerala was taken up with the following objectives.

1. To evaluate the inter bank variability of profitability of district co-operative banks (DCBs) in northern Kerala.

2. To determine the factors affecting profitability of the district co-operative banks.

The study was conducted in three District Co-operative Banks in Northern Kerala, viz., Kannur District Co-operative Bank (KRDCB), Kozhikode District Co-operative Bank (KZDCB), Kasargode District Co-operative Bank (KGDCB), for a decade from 1992-93 to 2001-02. The methodology used for the analysis of the present study is the decomposition model proposed by Das (1999).

5.1 Findings

The important findings emerging from the application of the decomposition model are as follows:

5.1.1 Management of interest items

Interest income and interest expenses are the major items which affect the profit of the banks. It is advisable to have highest interest income of lowest interest expenses for the banks. Here the KZDCB has got the highest average income and KGDCB with the lowest average expenses. But KRDCB exhibited highest variability in both items with lowest averages.

5.1.2 Management of Non Interest items

Profit of the banks are also greatly affected by the non interest items. The banks can increase their profit by reducing non interest expenses or increasing the non interest income. Both non interest expenses and non interest income are highest for KZDCB and lowest for KGDCB. Eventhough, KZDCB is earning the highest

non interest income, it has got least consistency in managing its non interest income as compared to other two banks. This is not a good trend.

5.1.3 Management of Human Resources

KRDCB seemed to be well performing with their least per-employee staff cost, highest staff productivity and least wage bill. KRDCB consistent in maintaining their staff productivity compared to KZDCB but least in the case of other two. KGDCB seemed to be well performing with their least per-employee staff cost by wage bill but failed to maintain highest average in staff productivity. Besides they were consistent in maintaining, their wage bill. The performance in this category of KZDCB was just opposite to KGDCB. Their position was the lowest in all averages except in the case of staff productivity. They had shown high consistency in maintaining per employee staff cost.

5.1.4 Management of Finance

Management of finance include the management of return on advances and investment and the cost of deposit and borrowings. For getting favourable change in the profit the banks have to increase the return on advances and investment and to decrease the cost of deposit and borrowings. The KZDCB has got the highest return on advances and investment but with highest variability whereas the KRDCB exhibit highest consistency. Expenses on deposits and borrowings were lowest for KGDCB and KRDCB

respectively. The KZDCB has got highest cost of borrowings with high variability.

5.1.5 Management of liquidity

Deposits constitute a major portion of the borrowed funds and it is highest for KZDCB with high consistency. Among the three banks, KGDCB had heavy borrowings. All the three banks are found to be more interested towards advances than investment. The KGDCB has showed highest average advances with least variability.

5.1.6 Management of Spread

The spread ratio of KRDCB showed lowest average with highest consistency and the KZDCB showed highest average with least consistency. Among the three banks KGDCB showed increasing trend in their spread.

5.1.7 Management of Burden

It is interesting to note that the burden of KRDCB on every Rs.100 of working fund recorded a reduction in the post liberalisation years whereas the other two banks showed increasing trend.

5.1.8 Management of Profitability

The KRDCB has got the highest average of operating profit with least variability which is followed by KZDCB with highest variability.

5.2 Indication of study on factor affecting profitability

5.2.1 Interest items

The moderate and the not significant level of correlation of the interest expense implies that the interest income is the major factor which attributes to the profit.

5.2.2 Non-interest items

The non interest items have not significant for KZDCB whereas in KRDCB the non interest items were moderately affecting the profit.

5.2.3 Financial Management items

The strong and the moderate level of significance of both return on advances and investments of KZDCB was indicating that the loaning operation and its financial investments were sound. But cost of deposit and cost of borrowings are highest for KRDCB and KGDCB. The moderate level of significance of both cost deposits and borrowings of KZDCB is indicating that these two items

increases the interest expenses which reduces the spread which in turn reduces the profit of the bank.

5.2.4 Asset Liability composition

Deposits and borrowings are the liabilities of the bank, advances and investments are the assets of the bank. Advances are moderately affecting the profit of all the banks. Investment has moderate effect on profit of KZDCB and significant both KRDCB and KGDCB. The KRDCB is having heavy depends on borrowings as compared to KZDCB and KGDCB. In the case of deposits except KZDCB, the other two banks are having not significant effect on profitability.

5.2.5 Items of Human Resource Management

Per-employee staff cost is an expense item which reduces the profit. The level of significance is moderate for all the banks. Significant level of staff productivity of KRDCB is indicating the efficiency of their employees in improving the overall performance of the bank. In the case of wage bill except KRDCB all the banks are having moderate negative correlation. The indication of this variable is that as it is an item of non interest expense it increase the burden and thereby reduces the profitability.

5.2.6 Main Variables

Both spread and burden have great influence on the operating profit. The significant spread and the moderate burden of the KZDCB implies that the interest income of the spread component constitute the major share of net profit. The KRDCB having the moderate level of spread and burden and KGDCB is having significant spread and weak burden.

5.3 Conclusion

Based on the decomposition model, the study has attempted to assess the inter bank variability of profit of district co-operative banks in northern Kerala. The analysis has revealed that Kannur District Co-operative Bank (KRDCB) is a well performing bank with comparative higher consistency in profit, average profitability and higher staff productivity inspite of below par performance in certain indicators. The bank realizes human resources as a vital factor and gives utmost significance for its development. The analysis revealed that the banks with lowest burden could achieve highest profitability and banks with high burden recorded lowest profitability. Banks are suffering from high burden levels which is the root cause of their low profitability. The Kozhikode District Co-operative Bank (KZDCB) has got highest burden which retard its profit to a great extent.

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Appendix

Appendix – 1

Data of Variables of Decomposition

Amounts in lakh

Variables	Banks	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Interest income	KR	1085.45	1409.65	1705.52	2190.14	2595.49	2885.37	3658.52	4827.49	5518.22	5912.69
	KZ	793.07	845.27	1000.66	1255.69	1350.69	1940.29	1940.31	2855.56	3718.5	4264.97
	KG	525.53	621.29	675.71	826.67	895.36	955.81	1012.62	1239.84	1631.06	1674.48
Interest expenses	KR	775.3	917	1014.14	1544.82	1669.75	1829.96	2308.92	3151.81	3634.53	4248.27
	KZ	508.22	548.86	596.33	852.48	977.04	1065.18	1156.26	1920.38	2433.51	2930.76
	KG	390.99	432.12	441.75	640.56	699.92	716.26	782.01	922.04	1149.40	1182.09
Non interest expenses excluding wage bill	KR	344.83	487.65	588.16	678.41	1107.77	1683.31	1625.41	1943.88	2316.24	1207.26
	KZ	269.53	303.73	413.07	401.58	595.65	751.03	1008.91	1193.65	1732.59	930.00
	KG	74.42	84.76	83.05	58.53	95.91	134.14	66.91	139.31	256.36	267.33
Non Interest income	KR	195.06	236.71	313.125	358.513	567.22	1152.01	1302.66	1179.58	1567.89	457.84
	KZ	147.92	205.27	238.18	292.34	486.93	533.15	587.83	731.62	954.80	48.18
	KG	17.24	11.45	16.54	18.19	25.91	29.78	27.38	25.32	48.21	38.73
Man power expenses	KR	143.21	174.00	214.63	204.39	228.88	252.51	724.28	494.63	549.06	559.45
	KZ	157.53	190.78	220.19	220.62	249.26	279.21	300.32	425.80	465.71	449.21
	KG	63.11	65.80	92.15	142.06	109.26	124.61	185.05	199.85	211.90	229.41
Total manpower	KR	256	253	366	375	368	360	346	345	340	377
	KZ	272	269	261	255	245	240	236	259	249	292
	KG	272	270	263	250	245	241	235	258	245	292
Working fund	KR	11105.21	14027.24	25195.16	25393.87	29889.41	3375.76	44886.76	60611.71	55633.11	60750.24
	KZ	9438.27	8183.90	10229.61	11464.89	12668.67	14577.51	18717.99	29536.29	34614.36	40048.63
	KG	5601.354	6518.68	7631.53	8521.43	8774.58	9474.17	11340.06	16070.68	16334.05	16724.84

Variables	Banks	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Interest income on advances	KR	819.73	1077.65	1394.36	1804.24	2132.67	2443.72	2666.91	3063.74	4104.79	4662.22
	KZ	611.92	663.74	805.33	1031.83	1057.13	1300.368	1386.50	1703.58	2483.54	3259.64
	KG	416.95	504.81	579.21	657.54	745.51	822.54	737.59	874.79	1084.19	1245.90
Interest income on investments	KR	265.73	332.00	311.17	385.90	462.82	441.65	991.59	1763.75	1413.43	1250.47
	KZ	181.14	181.54	195.32	223.85	293.55	313.94	553.78	1151.97	1234.97	1005.32
	KG	108.58	116.47	96.50	169.12	149.84	133.27	275.02	486.34	546.87	428.57
Interest expenditure on deposits	KR	516.02	602.05	673.76	999.43	1021.17	1141.44	1723.62	2505.22	2683.49	2928.24
	KZ	364.95	385.68	419.91	560.13	682.37	785.63	972.49	1493.58	1697.90	1764.16
	KG	194.95	181.06	238.60	314.36	357.49	330.99	527.25	794.67	858.27	943.27
Interest expenditure on borrowings	KR	258.73	314.42	339.51	543.04	646.25	674.63	579.46	637.34	936.56	1301.12
	KZ	143.10	163.61	176.41	292.34	294.66	287.06	183.77	426.80	735.60	1166.60
	KG	227.27	229.07	206.92	326.20	342.42	385.25	254.76	268.27	291.14	239.04
Advances	KR	8086.57	13446.12	12816.53	15419.80	17356.12	21094	21960.38	28369.44	36844.91	41148.84
	KZ	4545.75	5014.89	6644.93	7578.13	8453.04	9346.46	9723.52	13712.03	19415.74	23885.15
	KG	4286.21	5170.37	5832.24	6079.50	6308.26	6354.23	6904.65	8680.23	11793.16	10673.87
Investments	KR	380.58	491.11	608.57	608.57	618.57	693.57	1913.57	2410.38	2409.78	2383.94
	KZ	160.55	177.6	187.47	197.47	207.97	207.47	208.97	207.97	207.97	199.97
	KG	150.9	163.21	193.87	193.87	193.87	217.78	198.87	198.87	198.88	198.88
Deposits	KR	6068.62	7091.25	9996.20	10528.79	11643.96	16704.61	23961.05	33532.55	32505.78	35527.89
	KZ	4289.77	5190.62	5825.14	6447.26	8051.11	10050.33	13839.64	19394.79	20559.25	21897.61
	KG	2150.22	2540.77	3229.50	3735.44	3789.79	4882.50	7626.59	10964.53	10668.65	11311.85
Borrowings	KR	3702.12	4493.98	6254.56	6728.32	7712.55	6705.23	7879.76	7742.30	10903.55	13083.91
	KZ	3788.27	1426.39	2362.13	3072.28	2383.12	2020.1	1716.38	4059.95	7755.69	10381.25
	KG	2879.11	3168.63	3502.49	3359.93	3900.71	3407.61	2507.85	3353.53	3172.34	2941.53

PROFITABILITY OF DISTRICT CO-OPERATIVE BANKS IN NORTHERN KERALA: AN INTERBANK COMPARISON

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ABSTRACT OF THE PROJECT REPORT

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ABSTRACT

The study entitled "Profitability of District Co-operative Banks in Northern Kerala – An Inter Bank Comparison" was undertaken with the objectives of evaluating the inter bank variability of profitability of district co-operative banks (DCBs) in northern Kerala and determining the factors affecting profitability of the district co-operative banks. The study was conducted in three District Co-operative Banks in Northern Kerala, viz. Kannur District Co-operative Bank (KRDCB), Kozhikode District Co-operative Bank (KZDCB), Kasargode District Co-operative Bank (KGDCB), for a decade from 1992-1993 to 2001-2002. The study was based on the secondary data collected from the annual reports and audit reports. maintained by the banks. The methodology used for the analysis of the present study is the decomposition model proposed by Das (1999). For finding the inter bank variability of profitability of banks, coefficient of variation is used and correlation coefficient is computed for the detailed analysis of identifying the factors affecting the profitability of banks.

The analysis has revealed that Kannur District Co-operative Bank (KRDCB) is a well performing bank with comparative higher consistency in profit, average profitability and higher staff productivity and lowest interest expenses inspite of below par performance in certain indicators. The bank realizes human resources as a vital factor and gives utmost significance for its

development. The analysis revealed that the banks with lowest burden could achieve highest profitability and banks with high burden recorded lowest profitability. Banks are suffering from high burden levels which is the root cause of their low profitability. The Kozhikode District Co-operative Bank (KZDCB) has got highest burden which retard its profit to a great extent.