A STUDY ON THE ASSETS AND LIABILITIES MANAGEMENT OF THE COIMBATORE CITY COOPERATIVE BANK LIMITED.

A Project Report
Submitted
By

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Under the guidance of

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(Senior Grade)

In partial fulfillment of the requirements
for the award of the degree
of
MASTER OF BUSINESS ADMIISTRATION

Department of Management Studies
Kumaraguru College of Technology
(An autonomous institution affiliated to Anna University, Chennai)
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May, 2013

BONAFIDE CERTIFICATE

Certified that this project report titled **"A STUDY ON THE ASSETS AND LIABILITIES MANAGEMENT OF THE COIMBATORE CITY COOPERATIVE BANK LIMITED, COIMBATORE"** is the bonafide work of **Mr.S.VENKATESH, 11MBA048** who carried out the project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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KCTBS	

Submitted for the Project Viva-Voce examination held on _____

Internal Examiner External Examiner

DECLARATION

I hereby declare that this project report entitled "**A STUDY ON THE ASSETS AND LIABILITIES MANAGEMENT OF THE COIMBATORE CITY COOPERATIVE BANK LIMITED, COIMBATORE**" as has been undertaken for academic purpose submitted to Anna University in partial fulfilment of the requirements for the award of the degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of **Mr.A.Senthil Kumar, Assistant Professor (Senior Grade)** during the academic year 2011-2012.

I, also declare hereby, that the information given in this report is correct to best of my knowledge and belief.

Date:

Place : Coimbatore VENKATESH.S

ACKNOWLEDGEMENT

It is inevitable that thoughts and ideas of other people tend to drift into subconscious when one feels to acknowledge helping derived from others. I acknowledge to all those who helped me in the preparation of this project work.

I express my sincere gratitude to our beloved chairman Arutchelvar Dr.N.Mahalingam and Management for the prime guiding spirit of Kumaraguru College of Technology.

I wish to express my sincere thanks to Dr. Vijila Kennedy – Director KCT Business School, for her constant encouragement throughout my project.

I wish to express deep sense of obligation to Mr.A.Senthil Kumar, Assistant Professor(Senior Grade), KCT Business School, for his intensive guidance throughout my project.

I like to extend my sincere gratitude to Mr.Rajaram, Manager, The Coimbatore City Cooperative Bank Limited, for his guidance to complete my project successfully. And also to the staffs of The Coimbatore City Cooperative Bank Limited who furnished all the information related to the research work.

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CHAPTER 1

INTRODUCTION

1.1 ABOUT THE STUDY

ALM has gained significance in the financial services sector in recent years due to the dramatic changes that have occurred in the post-liberalization period. There has been a vast shift in the borrowers' profile, the industry profile and the exposure limits for the same, interest rate structure for deposits and advances, and so on. This has been accompanied by increased volatility of markets, diversification of bank product profiles, and intensified competition between banks on a global scale, all adding to the risk exposure of banks. Assets and liabilities management is a systematic approach that attempts to provide a degree of protection to the risk arising out of asset and liabilities mismatch. The assets liabilities management concept evolved from a simple idea of maturity-matching of assets and liabilities. It aims to manage the volume, mix, maturity, rate sensitivity, quality and liquidity of the assets and liabilities as a whole so as to earn an acceptable risk-reward ratio. It is defined as a mechanism to address the risk faced by a bank due to a mismatch between assets and liabilities either due to liquidity or changes in interest rate.

Liquidity risk is the institution's ability to meet its liability either by borrowing or converting assets. A change in the interest rate can significantly alter a bank's Net Interest Income(NII). It also affects the market value of bank's equity.

1.2 ABOUT THE INDUSTRY

Banking in India originated in the last decades of the 18th century. The first banks were The General Bank of India, which started in 1786, and Bank of Hindustan, which started in 1770; both are now defunct. The oldest bank in existence in India is the State Bank of India, which originated in the Bank of Calcutta in June 1806, which almost immediately became the Bank of Bengal. This was one of the three presidency banks, the other two being the Bank of Bombay and the Bank of Madras, all three of which were established under charters from the British East India Company. For many years the Presidency banks acted as quasi-central banks, as did their successors. The three banks merged in 1921 to form the Imperial Bank of India, which, upon India's independence, became the State Bank of India in 1955.

Nationalization

By the 1960s, the Indian banking industry had become an important tool to facilitate the development of the Indian economy. Indira Gandhi, then Prime Minister of India, expressed the intention of the Government of India in the annual conference of the All India Congress Meeting in a paper entitled "Stray thoughts on Bank Nationalization." The Government of India issued an ordinance ('Banking Companies (Acquisition and Transfer of Undertakings) Ordinance, 1969')) and nationalized the 14 largest commercial banks with effect from the midnight of July 19, 1969. These banks contained 85 percent of bank deposits in the country.

A second dose of nationalization of 6 more commercial banks followed in 1980. The stated reason for the nationalization was to give the government more control of credit delivery. With the second dose of nationalization, the Government of India controlled around 91% of the banking business of India. Later on, in the year 1993, the government merged New Bank of India with Punjab National Bank. It was the only merger between nationalized banks and resulted in the reduction of the number of nationalized banks from 20 to 19. After this, until the 1990s, the nationalized banks grew at a pace of around 4%, closer to the average growth rate of the Indian economy.

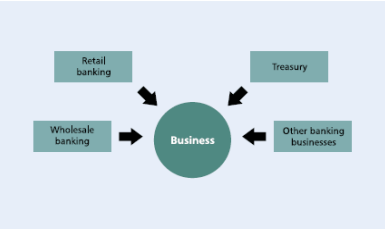
The Banking industry plays a dynamic role in the economic development of a country. The growth story of an economy depends on the robustness of its banking industry. Banks act as the store as well as the power house of the country's wealth. They accept deposits from individuals and corporate and lends to the businesses. They use the deposits collected for productive purposes which help in the capital formation in the country.

Today, the Indian Banking System is known the world over for its robustness. The Reserve Bank of India is the central/apex Bank which regulates the functioning of all banks operating within the country.

Business Segmentation

The entire range of banking operations are segmented into four broad heads- retail banking businesses, wholesale banking businesses, treasury operations and other banking activities. Banks have dedicated business units and branches for retail banking, wholesale banking (divided again into large corporate, mid corporate) etc.

Exhibit 2.3: Business Segmentation



Source: D&B Industry Research Service

Retail banking

It includes exposures to individuals or small businesses. Retail banking activities are identified based on four criteria of orientation, granularity, product criterion and low value of individual exposures. In essence, these qualifiers imply that retail exposures should be to individuals or small businesses (whose annual turnover is limited to Rs. 0.50 billion) and could take any form of credit like cash credit, overdrafts etc. Retail banking exposures to one entity is limited to the extent of 0.2% of the total retail portfolio of the bank or the absolute limit of Rs. 50 million. Retail banking products on the liability side includes all types of deposit accounts and mortgages and loans (personal, housing, educational etc) on the assets side of banks. It also includes other ancillary products and services like credit cards, demat accounts etc.

The retail portfolio of banks accounted for around 21.3% of the total loans and advances of SCBs as at end-March 2009. The major component of the retail portfolio of

banks is housing loans, followed by auto loans. Retail banking segment is a well diversified business segment. Most banks have a significant portion of their business contributed by retail banking activities. The largest players in retail banking in India are ICICI Bank, SBI, PNB, BOI, HDFC and Canara Bank.

Among the large banks, ICICI bank is a major player in the retail banking space which has had definitive strategies in place to boost its retail portfolio. It has a strong focus on movement towards cheaper channels of distribution, which is vital for the transaction intensive retail business. SBI's retail business is also fast growing and a strategic business unit for the bank. Among the smaller banks, many have a visible presence especially in the auto loans business. Among these banks the reliance on their respective retail portfolio is high, as many of these banks have advance portfolios that are concentrated in certain usages, such as auto or consumer durables. Foreign banks have had a somewhat restricted retail portfolio till recently. However, they are fast expanding in this business segment. The retail banking industry is likely to see a high competition scenario in the near future.

Wholesale banking

Wholesale banking includes high ticket exposures primarily to corporates. Internal processes of most banks classify wholesale banking into mid corporates and large corporates according to the size of exposure to the clients. A large portion of wholesale banking clients also account for off balance sheet businesses. Hedging solutions form a significant portion of exposures coming from corporates. Hence, wholesale banking clients are strategic for the banks with the view to gain other business from them. Various forms of financing, like project finance, leasing finance, finance for working capital, term finance etc form part of wholesale banking transactions. Syndication services and merchant banking services are also provided to wholesale clients in addition to the variety of products and services offered.

Wholesale banking is also a well diversified banking vertical. Most banks have a presence in wholesale banking. But this vertical is largely dominated by large Indian banks. While a large portion of the business of foreign banks comes from wholesale banking, their market share is still smaller than that of the larger Indian banks. A number of large private

players among Indian banks are also very active in this segment. Among the players with the largest footprint in the wholesale banking space are SBI, ICICI Bank, IDBI Bank, Canara Bank, Bank of India, Punjab National Bank and Central Bank of India. Bank of Baroda has also been exhibiting quite robust results from its wholesale banking operations.

Treasury Operations

Treasury operations include investments in debt market (sovereign and corporate), equity market, mutual funds, derivatives, and trading and forex operations. These functions can be proprietary activities, or can be undertaken on customer's account. Treasury operations are important for managing the funding of the bank. Apart from core banking activities, which comprises primarily of lending, deposit taking functions and services; treasury income is a significant component of the earnings of banks. Treasury deals with the entire investment portfolio of banks (categories of HTM, AFS and HFT) and provides a range of products and services that deal primarily with foreign exchange, derivatives and securities. Treasury involves the front office (dealing room), mid office (risk management including independent reporting to the asset liability committee) and back office (settlement of deals executed, statutory funds management etc).

Other Banking Businesses

This is considered as a residual category which includes all those businesses of banks that do not fall under any of the aforesaid categories. This category includes para banking activities like hire purchase activities, leasing business, merchant banking, factoring activities etc.

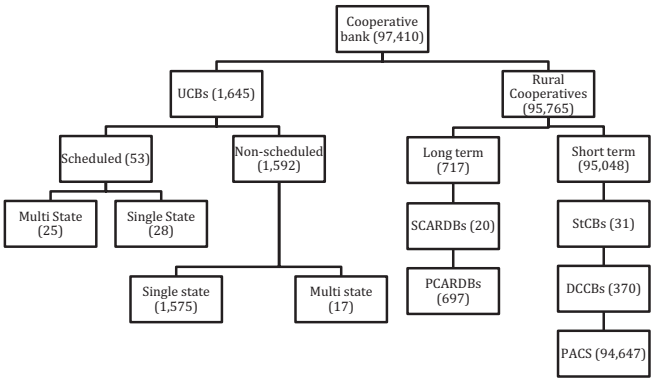
Cooperative Banks

Cooperative banking sector plays an important role by providing financial intermediation services to agricultural and allied activities, small scale industries and self employed workers. Since the network of cooperative banks is widespread across different parts of the country, these institutions are considered as a potential instrument to bring people from far-flung areas under the formal banking network. However, the poor financial health of cooperative banks in general, and grass root level cooperatives in particular

remains as an impediment, which needs to be addressed in order to fully utilise the benefits of wide spread network of these institutions.

UCBs play an important role by providing banking services to the wider sections of the society, especially in rural and semi urban areas. During the period 1991-2004 the UCB sector witnessed substantial growth possibly encouraged by the liberalized policy environment in post reform period. Alongside, a number of entities in the UCB sector became weak and unviable, eroding public confidence and posing systemic risk to the sector. Keeping in view the heterogeneity of this sector, the Reserve Bank proposed a multi-layered regulatory and supervisory approach specifically aimed at revival and strengthening of UCBs in its vision document for UCB sector, 2005. In the vision document the Reserve Bank proposed merger/amalgamation of viable entities within the sector and non-disruptive exit of the unviable ones. In the recent years there has been a decrease in total number of UCBs as an outcome of the ongoing consolidation process in this sector.

STRUCTURE OF COOPERATIVE CREDIT INSTITUTIONS IN INDIA



StCBs: State Cooperative Banks, **DCCBs**: District Central Cooperative Banks, **PACS**: Primary Agricultural Credit Societies, **SCARDBs**: State Cooperative Agricultural and Rural Development Banks, **PCARDBs**: Primary Cooperative Agricultural and Rural Development Banks.

1.3 ABOUT THE ORGANISATION

K.5496 The Coimbatore City co-operative Bank was registered on 15-12-1920, and was established on 8-1-1921. It started with 194 members, at a share price of Rs.304/- per share. It lends jewel loan and home loan to the people residing within the Coimbatore district. More over they also lend small scale loans to the people who reside within 25 km from the bank.

The Coimbatore city co-operative bank accepts deposits and lends loans under the guidance of the Registrar of The Co-operative Societies and Reserve Bank of India..The Coimbatore city co-operative bank was managed by a selected group of members till 24-5 2001 and Deputy Registrar was appointed for this purpose from 25-5-2001.

As on 31-12-2012, there are 24945 'A class' share holders in the Coimbatore City Co-operative Bank and their share capital amount to Rs. 193.21 lakhs. As on 31-12-2012 Rs 18900.35 lakhs has been kept as cash reserve for the deposit accepted from the public.

Investments of The Coimbatore City Cooperative Bank as on 31/03/2012

Particulars	Amount (In Lakhs)
Government securities	Rs. 4721.23
State Co-operative Bank Deposit	Rs 350
Coimbatore Central Co-operative Bank	Rs.1548.75
Total Amount Invested	**Rs.6619.98.**

Source: Bank Records

To ensure best banking services, groups have been setup to collect loans from the public. In order to increase the standard of non-performing assets the loans have been categorized and each category has been handed over to a specific group of people. As the result of this, the Non Performing Assets is nil for the last financial year

Outstanding Loans of The Coimbatore City Cooperative Bank as on 31/03/2012

S.No	**Types of loans**	**Amount (in lakhs)**
1	Jewel Loan	11995.04
2	N.F.S Loan	293.23
3	House Construction Loan	243.74
4	House Mortgage Loan	1587.79
5	Working Women Loan	34.54
6	Women Entrepreneur Loan	39.76
7	TAMCO	37.46
8	TABCEDCO	20.09
9	Petty Traders	40.00
10	Self Help Group	17.82
11	Physically challenged	4.12
12	Educational loan	23.07
Total	**Total**	**14336.66**

Source: Bank Record

The number of shareholders, deposits and lending of loans has increased rapidly. So in order to make things easy for the customers, also with an objective to increase the share capital of the bank seven branches are functioning within the Coimbatore city. Moreover an extra branch has been established in Ondipudur on 03/09/2012 which makes it eight in total.

Safety lockers are also made available for the customers ensuring safety for the valid belongings of the customers which are held by the bank. The account holders of The Coimbatore City Co-operative bank who are pension receiver will get their pension amount at their home itself. The dividend of the bank to its shareholders has been 14% for the past 10 years.

Annual Profits of The Coimbatore City Cooperative Bank:

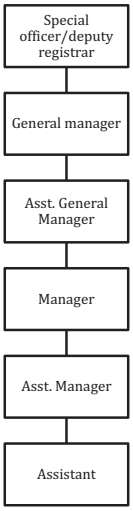
YEAR	PROFIT (IN LAKHS)
2007-08	87.63
2008-09	109.49
2009-10	116.87
2010-11	128.21
2011-12	179.32

MANAGEMENT:

The decision taking responsibility is entrusted to **THIRU. R.SUKUMAR, M.COM., M.D.C,** who has been appointed as the DEPUTY REGISTAR/SPECIAL OFFICER. The other members who help him in his work are

Serial. No	Particulars	No of Employees
1	General manager	-
2	Asst.General manager	1
3	Manager	6
4	Asst manager	5
5	Assistants	28
6	Office assistant	14
	Total	**54**

ORGANIZATION STRUCTURE



PRODUCT PROFILE AND MARKET POTENTIAL

S.No	Types of loan	Interest	Max time limit	Max amount
1	Jewel loan	13%	1yrs	-
2	N.F.S Loan	15%	-	
3	House Construction Loan	13%	15yrs	30 lakhs
4	House Mortgage Loan	15%	5yrs	3 lakhs
5	Working Women Loan	13%	3yrs	1 lakhs
6	Women Entrepreneur Loan	13%	3yrs	1 lakhs
7	TAMCO	6%	3yrs	10000
8	TABCEDCO	6%	3yrs	10000
9	Petty Traders	12%	21 weeks	10000
10	Self Help Group	15%	3yrs	20000(12menbers)
11	Physically challenged	-	3yrs	10000
12	Educational loan	11%	3yrs	Tution fee only

FUTURE PLANS

- The bank has a plan to implement ERP software to increase its administration efficiency.
- There is a plan to design software applications using programming languages for banking activities

DESCRIPTION OF FUNCTIONAL AREAS

- ✓ Deposits Section
- ✓ Loan
- ✓ Accounts
- ✓ Audit
- ✓ Cheque clearing
- ✓ Lockers

1.4 STATEMENT OF PROBLEM

Assets and Liabilities Management of a bank has a bearing on its short-term and long-term performance. Hence an attempt is made to study the structure and relationship of the assets and liabilities of the Coimbatore City Cooperative Bank Limited.

1.5 SCOPE OF THE STUDY

The study is confined with the Assets and Liabilities of the bank. it is also confined to the Assets and Liabilities Management policy framed by the Headquarters and guidelines given by the Reserve Bank of India.

CHAPTER-2

REVIEW OF LITERATURE

Suman chakraborty and subhalaxmi mohapatra[1] states that there is a relationship between the assets and liabilities of the balance sheet. it is concluded that in order to manage the liquidity risk and interest rate risk the bank should manage its assets and liabilities. the private nationalized and SBI are actively managing its assets and liabilities. the research concludes that the structure and the ownership nature of the bank has a major impact on the Assets and liabilities management policy of the bank.

Madhu Vij[2] states that the management of assets and liabilities of the bank will reduce the mismatch between the assets and the liabilities of the and will help the bank to manage liquidity risk and the interest rate risk. Using the GAP analysis the GAP between the Rate sensitive assets and the rate sensitive liabilities is analyzed and it is concluded that since all the shorter duration gaps are negative, a sudden firming up of interest rates will sharply reduce the NII of the bank.

Seema jaiswal[3] states that there is a relationship between the assets and the liabilities of the bank. It also states that by managing the assets of the banks the liabilities of the bank can be managed. There is strong canonical correlation between asset and liability accounts, indicating high asset-liability dependency. The canonical correlation in each sector of banks under study declined from the period 1997-2000 to 2005-2008.

Jeremiah uwaifo[4] states that the assets and the liabilities item in the balance sheet of a bank will make an impact on the profitability of the bank. The results of the analysis on the relationship between profit before taxes and assets-liabilities components of the balance

[1] Suman chakraborty and subhalaxmi mohapatra(2009), An empirical study on the asset liability management approach by the Indian banks, The IUP journal of bank management, vol. VIII, nos. 3&4, 2009 pp:7-13.
[2] Madhu Vij(2005), Managing Gap: A Case Study Approach To Asset-Liability Management Of Banks, The Journal of Business Perspective vol. 9 No. 1 January–March 2005, pp:49-58.
[3]Seema Jaiswal(2010), Relationship between Asset and Liability of commercial Banks in India, 1997-2008, pp:43-59.
[4]Jeremiah Uwaifo(2011), Measuring the relationship between profit and assets liabilities Of nigerian banks: absolute figures approach, Interdisciplinary journal of contemporary research in business, july 2011, vol 3 no: 3.

sheet revealed that there is a relationship between them. The implication of this is that Bank managers need to evolve scientific tools to relate their profit planning with balance sheet planning and monitor same during execution.

Mihir Dash and Ravi Pathak[5] states that the ownership and the structure of the bank affects the assets and the liabilities management policy of the banks. The study was conducted using the linear programming model to analyze the profitability of the bank. It was concluded that there is an impact of the assets and liabilities management in the profitability of the bank.

[5]Mihir Dash and Ravi Pathak(2011), A linear programming model for assessing Assets-Liability management in banks, The IUP journal of bank management, vol. VIII, No.1, 2011, pp:50-68.

CHAPTER-3

RESEARCH METHODOLOGY

3.1 TYPE OF RESEARCH

- Analytical research

3.2 OBJECTIVES OF THE STUDY

- **Primary objective:**
  - To study the relationship between the assets and liabilities of the Coimbatore City Cooperative Bank Limited, Coimbatore.
- **Secondary objective:**
  - To study the asset structure of the city cooperative bank Coimbatore.
  - To study the liability structure of the city cooperative bank Coimbatore.
  - To study the relationship and impact between the profit and assets and liabilities.
  - To conduct a gap analysis between the rate-sensitive assets and liabilities.

3.3 DATA AND ITS SOURCE

Type of data : Secondary data.

Source of data : Balance sheet of the bank from the financial years 2007-08 to 2011-12.

3.4 TIME PERIOD COVERED

Five years from the financial year 2007 - 08 to 2011 - 12

3.5 STATISTICAL TOOLS USED

- GAP analysis,
- Karl Pearson's Correlation analysis,
- Regression analysis, and
- Canonical Correlation analysis.

3.6 LIMITATIONS OF THE STUDY

- The study was conducted based on the historical data provided by the Coimbatore City Cooperative bank.
- The study does not manipulate the stimulation analysis of the bank, it only analyses the existing data.
- The GAP analysis can be done even more in depth if the maturity profile of the bank is provided for the study.

RECLASSIFICATION OF ASSETS AND LIABILITIES

Following Mihir Dash and Ravi Pathak[6], the assets and the liabilities of the banks were regrouped into various sub-heads, guided by the liquidity-return profile of the assets and the maturity-cost profile of the liabilities.

LIQUID ASSETS	A1
INVESTMENTS	A2
SLR SECURITIES	A3
ADVANCES	A4
FIXED ASSETS	A5
NET WORTH	L1
DEPOSITS	L2
BORROWINGS	L3

[6] Op cit.,

CHAPTER-4

ANALYSIS AND INTREPRATATION

4.1 GAP ANALYSIS:

GAP analysis is a tool used to identify the gap between the Rate Sensitive Assets(RSA) and the Rate Sensitive Liabilities(RSL) to know whether there is any mismatch between the balance sheet and to know the profitability situation of the bank. The RSA & RSL are the Rate Sensitive Assets & Rate Sensitive Liabilities which are sensitive to the interest rate fluctuations.

The RSA and the RSL considered for the purpose are as follows:

- RATE SENSITIVE ASSETS
  - Balances with bank
  - Investments
  - Loans and Advances
- RATE SENSITIVE LIABILITIES
  - Deposits
  - Borrowings

Table 4.1 GAP ANALYSIS

PARTICULARS	2008(RS)	2009(RS.)	2010(RS.)	2011(RS.)	2012(RS.)	CAGR(%)
RATE SENSITIVE ASSETS	1,25,68,79,028	1,34,70,52,643	1,63,32,80,395	1,63,32,80,395	1,91,41,23,372	52.29
RATE SENSITIVE LIABILITIES	96,60,96,632	1,08,11,12,038	1,36,91,36,830	1,44,75,37,809	1,63,90,70,968	69.66
GAP	29,07,82,396	26,59,40,605	26,41,43,565	18,57,42,586	27,50,52,404	-5.41
PERCENTAGE GAP	23.14	19.74	16.17	11.37	14.37	

Sources: Secondary Data

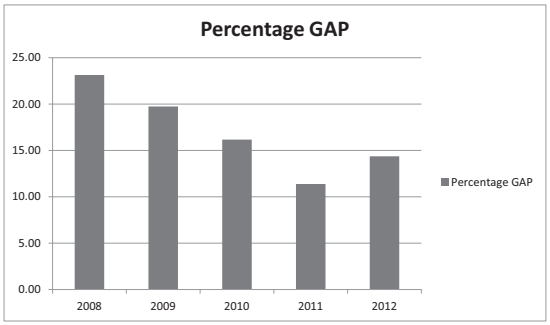
INTERPRETATION:

From the table 4.1 it can be clearly seen that the GAP in the year 2008 was Rs.29,07,82,396.00 which was gradually declining to Rs. 18,57,42,586.00 in the year 2011 and there is a trend reversal situation in the year 2012 with a positive increase in the GAP to Rs. 27,50,52,404.00. The table also shows that the Compounded annual growth rate of the Rate Sensitive asset from the year 2008 to the year 2012 was 52.29% which is less when compared to the Compounded annual growth rate of the Rate Sensitive Liabilities of 69.66%. the CAGR of the GAP is -5.41%.

INFERENCE:

The table 4.1 shows the there is a positive gap between Rate Sensitive Assets and Rate Sensitive Liabilities therefore the bank is found to be in a profitable situation. But there is a decline in the percentage of gap due to the increase in the Rate Sensitive Liabilities even at when there is an increase in the Rate Sensitive Liabilities due to the increasing deposits in the bank. In the year 2012 there is an improvement in the percentage of gap from 11.37% in the year 2011 to 14.37 in the year 2012 and it was due to the increase in the loans and advances provided to the customers. The CAGR shows that the Rate sensitive Liabilities of the Coimbatore City Cooperative Bank is growing faster than that of the Rate Sensitive Assets of the bank. This made a negative impact on the GAP between the RSA and RSL to an extent of -5.41% which alerts the bank that they should manage their Assets and Liabilities in order to improve the GAP and which will lead to the profitability of the Bank.

Chart 4.1 Showing Percentage Gap Analysis



Source: Secondary Data

4.2 REGRESSION ANALYSIS

The Regression analysis is used to identify the causal impact of the independent variable on the dependent variable. Here the analysis is used to identify the causal impact of the Balance Sheet items on the Net Operating Profit After Tax(NOPAT).

The variables used in the analysis are mentioned as follows:

NATURE OF THE VARIABLE	VARIABLE CODE	VARIABLE TYPE
LIQUID ASSETS	A1	INDEPENDENT
INVESTMENTS	A2	INDEPENDENT
SLR SECURITIES	A3	INDEPENDENT
ADVANCES	A4	INDEPENDENT
FIXED ASSETS	A5	INDEPENDENT
NET WORTH	L1	INDEPENDENT
DEPOSITS	L2	INDEPENDENT
BORROWINGS	L3	INDEPENDENT
NET OPERATING PROFIT AFTER TAX	P	DEPENDENT

Table 4.2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990[a]	.979	.972	568000.523

a. Predictors: (Constant), A4

Table 4.3: COEFFICIENTS[A]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.344E6	1.433E6		-3.032	.056
	A4	.018	.001	.990	11.894	.001

a. Dependent Variable: P

Table 4.4: Excluded Variables[b]

Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	A1	-.057[a]	-.604	.607	-.393	.971
	A2	-.146[a]	-.761	.526	-.474	.219
	A3	.072[a]	.410	.721	.279	.311
	A5	-.262[a]	-1.002	.422	-.578	.101
	L1	.029[a]	.101	.929	.071	.127
	L2	-.100[a]	-.356	.756	-.244	.125
	L3	.076[a]	.287	.801	.199	.143

a. Predictors in the Model: (Constant), A4

b. Dependent Variable: P

INTERPRETATION:

The table 4.2 and 4.3 shows that Advances(A4) provided by the bank to their customers have a statistically significant causal impact on the NOPAT(P) of the bank than other balance sheet items. It also shows that there is a 97.9% variation on the NOPAT of the Coimbatore City Cooperative explained by to the Advances and Loans provided to their customers. The table 4.4 shows that the Asset items- Liquid assets(A1), Investments(A2), SLR securities(A3) and Fixed assets(A5) do not have any statistically significant impact on the NOPAT(P) of the Bank. In the case of Liabilities item- Net worth(L1), Deposits(L2) and Borrowings(L3) do not have any statistically significant impact on the NOPAT(P) of the Bank.

The Regression Equation is formed as follows:

$$y= a+bx+e$$

NOPAT= -000004.344+0.018 advances +e

4.3 CORRELATION ANALYSIS:

A correlation analysis is a tool used to find the association between the variables. The current study used correlation to find out whether there is a strong relationship between the balance sheet items(assets and liabilities).

The following are the components of the Balance Sheet used in the study:

NATURE OF THE VARIABLE	VARIABLE CODE
LIQUID ASSETS	A1
INVESTMENTS	A2
SLR SECURITIES	A3
ADVANCES	A4
FIXED ASSETS	A5
NET WORTH	L1
DEPOSITS	L2
BORROWINGS	L3

When these variables are correlated we can find out whether there is a relationship existing between the Balance Sheet items(assets and liabilities).

Table 4.5: Correlations

		A1	A2	A3	A4	A5	L1	L2	L3
A1	Pearson Correlation	1	.307	-.654	-.171	.067	.130	.175	.145
	Sig. (2-tailed)		.615	.231	.784	.914	.835	.778	.816
	N	5	5	5	5	5	5	5	5
A2	Pearson Correlation	.307	1	.500	.884*	.956*	.960**	.985**	.951*
	Sig. (2-tailed)	.615		.391	.047	.011	.010	.002	.013
	N	5	5	5	5	5	5	5	5
A3	Pearson Correlation	-.654	.500	1	.830	.709	.641	.614	.587
	Sig. (2-tailed)	.231	.391		.082	.180	.244	.271	.298
	N	5	5	5	5	5	5	5	5
A4	Pearson Correlation	-.171	.884*	.830	1	.948*	.934*	.935*	.926*
	Sig. (2-tailed)	.784	.047	.082		.014	.020	.020	.024
	N	5	5	5	5	5	5	5	5
A5	Pearson Correlation	.067	.956*	.709	.948*	1	.964**	.977**	.917*
	Sig. (2-tailed)	.914	.011	.180	.014		.008	.004	.028
	N	5	5	5	5	5	5	5	5
L1	Pearson Correlation	.130	.960**	.641	.934*	.964**	1	.993**	.980**
	Sig. (2-tailed)	.835	.010	.244	.020	.008		.001	.003
	N	5	5	5	5	5	5	5	5
L2	Pearson Correlation	.175	.985**	.614	.935*	.977**	.993**	1	.977**
	Sig. (2-tailed)	.778	.002	.271	.020	.004	.001		.004
	N	5	5	5	5	5	5	5	5
L3	Pearson Correlation	.145	.951*	.587	.926*	.917*	.980**	.977**	1
	Sig. (2-tailed)	.816	.013	.298	.024	.028	.003	.004	
	N	5	5	5	5	5	5	5	5

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

**. Correlation is significant at the 0.01 level (2-tailed).

INTERPRETATION:

The table 4.5 shows that the correlation value above 0.700 is highly correlated, when the correlation value is between 0.300 to 0.699 it is moderately correlated and when the correlation value is between 0.001 to 0.299 it is low correlation with the significance level of *5% and **1%. Where the table 4.5 shows that the Liquid assets are highly correlated with deposits at the level of 0.175 but it is not significant. The investment is highly correlated with the deposits at 0.985 and is significant at 1%. The SLR Securities has high

correlation value with advances and fixed assets but they are not significant. The advances have high correlation value of 0.948 with the fixed assets and is significant at 5%. The fixed assets has high correlation value of 0.977 with the deposits and is significant at 1%. The net worth has high correlation value of 0.993 with the deposits and is significant at 1%. The deposits has high correlation value of 0.993 with the net worth and is significant at 1%. The borrowings has high correlation value of 0.980 with net worth and is significant at 1%.

INFERENCE:

From the table 4.5 it is evident that there is a significantly high correlation existing between the Investments(A2), the Advances(A4), the Fixed Assets(A5), the Net Worth(L1), the Deposits(L2) and Borrowings(L3). The Liquid Assets(A1) and the SLR Securities(A3) are not correlated with any of the balance sheet items(assets and liabilities) of the Coimbatore City Cooperative Bank Limited.

4.4 CANONICAL CORRELATION ANALYSIS:

Canonical correlation is a multivariate statistical technique that has been used to assess the nature and strength of relationship between the assets and liabilities. The correlation between each set of assets and each set of liabilities indicates the relationship between assets and liabilities. Canonical correlation provides a means to explore all of the correlations concurrently. The technique reduces the relationship into a few significant relationships. The essence of canonical correlation measures the strength of relationship between two sets of variables (assets & liabilities in this case) by establishing linear combination of variables in one set and linear combination of variables in other set.

Since the asset variables liquid assets(A1) and SLR Securities(A3) do not have any significant relationship with the other balance sheet items, they are eliminated from the canonical correlation analysis to eliminate the singularity problem in analyzing the canonical correlation between the Assets and the Liabilities of The Coimbatore City Cooperative bank.

The following are the components used in the canonical correlation analysis:

NATURE OF THE VARIABLE	VARIABLE CODE
INVESTMENTS	A2
ADVANCES	A4
FIXED ASSETS	A5
NET WORTH	L1
DEPOSITS	L2
BORROWINGS	L3

TABLE 4.6: RELATIONSHIP BETWEEN ASSETS AND LIABILITIES:

INDEPENDENT VARIABLE	DEPENDENT VARIABLE	CANONICAL LOADING	SQUARED CORRELATION
INVESTMENTS(A2)	NET WORTH(L1), DEPOSITS(L2), BORROWINGS(L3).	0.99610	0.99221
ADVANCES(A4)	NET WORTH(L1), DEPOSITS(L2), BORROWINGS(L3).	0.93739	0.87870
FIXED ASSETS(A5)	NET WORTH(L1), DEPOSITS(L2), BORROWINGS(L3).	0.99225	0.98456
NET WORTH(L1)	INVESTMENTS(A2), ADVANCES(A4) & FIXED ASSETS(A5).	0.97749	0.95549
DEPOSITS(L2)	INVESTMENTS(A2), ADVANCES(A4) & FIXED ASSETS(A5).	0.99491	0.98985
BORROWINGS(L3)	INVESTMENTS(A2), ADVANCES(A4) & FIXED ASSETS(A5).	0.98174	0.96382

INTERPRETATION:

The table 4.6 shows the correlation and strength of the canonical correlation between independent variable and the dependent variable. the strength of the canonical correlation is considered good when the strength of canonical correlation measured by squared correlation is above 0.40 or 40% of significance level. The Investments(A2) is highly canonically correlated to the extent of 0.99610 with the strength of 99.2% with its dependant variables namely net worth(L1), Deposits(L2), and borrowings(L3).

INFERENCE:

From the table 4.6 it is inferred that there is a significant relationship between the assets and the liabilities of the Coimbatore city cooperative bank. It is found that the investments(A2) is highly canonically correlated with its dependant variables namely net worth(L1), Deposits(L2), and borrowings(L3) to the extent of 0.99610 which shows that in order to manage the Assets and Liabilities of the bank it is essential for the bank to manage its asset items of the balance sheet.

TABLE 4.7: RELATIONSHIP BETWEEN INVESTMENT, ADVANCES AND FIXED ASSETS:

INDEPENDENT VARIABLE	DEPENDENT VARIABLE	CANONICAL LOADING	SQUARED CORRELATION
INVESTMENTS(A2)	ADVANCES(A4) & FIXED ASSETS(A5).	0.95847	0.91867
ADVANCES(A4)	INVESTMENTS(A2) & FIXED ASSETS(A5).	0.95115	0.90469
FIXED ASSETS(A5)	INVESTMENTS(A2) & ADVANCES(A5).	0.98101	0.96238

INTERPRETATION:

The table 4.7 shows that all the variables have significant relationship with its dependant variables and it also shows that Fixed assets(A5) have high correlation with its dependant variables Investments(A2) and Advances(A4) to the extent of 0.98101 with the strength of 96.24%.

INFERENCE:

From the table 4.7 it is clear that the investments(A2) and Advances(A4) is highly dependent on the Fixed assets(A5) to an extent of 0.98101 with the strength of 96.24%, therefore by managing the fixed assets of the bank all the other assets can be managed.

CHAPTER-5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS:

- There is a positive gap between Rate Sensitive Assets and Rate Sensitive Liabilities therefore the bank is found to be in a profitable situation. But there is a decline in the percentage of gap due to the increase in the Rate Sensitive Liabilities even at when there is an increase in the Rate Sensitive Liabilities due to the increasing deposits in the bank. In the year 2012 there is an improvement in the percentage of gap from 11.37% in the year 2011 to 14.37 in the year 2012 and it was due to the increase in the loans and advances provided to the customers.
- The CAGR shows that the Rate sensitive Liabilities of the Coimbatore City Cooperative Bank is growing faster than that of the Rate Sensitive Assets of the bank. This made a negative impact on the GAP between the RSA and RSL to an extent of -5.41%.
- Advances(A4) provided by the bank to their customers have a statistically significant impact on the NOPAT(P) of the bank than other balance sheet items to the extent of 97.9% variation on the NOPAT of the Coimbatore City Cooperative.
- The asset variables liquid assets(A1) and SLR securities(A3) do not have any significant relationship with the other balance sheet items.
- The investments(A2) is highly canonically correlated with its dependant variables namely net worth(L1), Deposits(L2), and borrowings(L3) to the extent of 0.99610.
- The investments(A2) and Advances(A4) are highly dependent on the Fixed assets(A5) to an extent of 0.98101 with the strength of 96.24%.

5.2 SUGGESTIONS:

- The negative CAGR alerts the bank that they should manage their Assets and Liabilities in order to improve the GAP and which will lead to the profitability of the Bank.
- The bank should concentrate on providing more advances and loans to its customers which will lead to the positive variations in the profitability of the bank.
- In order to manage the Assets and Liabilities of the bank it is essential for the bank to manage its asset items of the balance sheet.
- It is also suggested that by managing the fixed assets of the bank all the other assets can be managed since the fixed assets have high canonical correlation loading when compared.

5.3 CONCLUSION:

The GAP analysis shows that the Coimbatore City Cooperative Bank has a positive GAP between the rate sensitive assets and rate sensitive liabilities which shows the profitability situation of the bank is positive but still there is a decline in the GAP which should be managed by the bank. It is evident that the bank's NOPAT is depending upon the Advances and loans provided by the bank to its customers and the study also helped to find that there is a positive relationship between the assets and the liabilities and the bank can manage its balance sheet by managing the assets particularly Advances, Investments and Fixed Assets of the Coimbatore City Cooperative Bank Limited.

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