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FINANCIAL RESOURCES MANAGEMENT OF APEX COOPERATIVE BANKS IN INDIA: A CASE STUDY

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Abstract

Co-operative banking, includes retail banking, as carried out by credit unions, mutual savings and loan associations, building societies and co-operatives, as well as commercial banking services provided by manual organizations (such as co-operative federations) to co-operative businesses. The Apex co-operative banks at the state level, Central Co-operative banks at the district level and primary agricultural credit co-operative at the village level, are providing short term and long term finance for the development and growth of the nation. The structure of co-operative credit rests on the three tier system. The Central Co-operative Banks at the district level serving as a link between the Apex co-operative banks and primary agricultural credit co-operative banks. To supplement data contained in the annual reports, personal discussions were also held with the officials of the bank mainly to go deeper in the study and also to clarify certain points which emerged out of the study. In the present study, an effort has been made to review the analysis of financial resource management of central co-operative banks in India viz. The Rajasthan State Co-operative Bank Limited and Gujarat State Co-operative Bank Limited in order to improve their performance and in basic structure in future. In this paper I have discussed about the Financial Resources Management of Apex Cooperative Banks in India.

Keywords: Retail Banking, Commercial Banking, Financial Resources Management.



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Introduction

Business concern needs finance to meet their requirements in the economic world. Any kind of business activity depends on the finance. Hence, it is called as lifeblood of business organization. Whether the business concerns are big or small; they need finance to fulfill their business activities. In the modern world, all the activities are concerned with the economic activities and very particular to earn profit through any venture or activities. The entire business activities are directly related with making profit. According to the economic concept of factors of production, rent given to landlord, wage given to labour, interest given to capital and profit given to shareholders, a business concern needs finance to meet all the requirements. Hence finance may be called as capital, investment, fund etc., but each term is

having different meanings and unique characters. Increasing the profit is the main aim of any kind of economic activity.

RATIONALE OF THE STUDY

Indian Banking system over the years has gone through various phases such as Social Banking, Cooperative Banking, Class Banking, Electronic Banking and mobile banking etc. to uplift the society and better management for financial resources of banks. At this stage, Apex Cooperative Banks can play a better role as most of other banks are facing problems of Non-Performing Assets (NPA) in spite a move towards Class Banking and Electronic Banking as a remedy of it.

CONTRIBUTION OF PROPOSED STUDY

Presently, banks are facing competition in the present area of Liberalization, Privatization and Globalization (LPG). Problem is further aggravated due to entrance of foreign banks which are getting deposit in their countries at a comparative low rate of interest. Recently rate of interest in increased in India during last few years as a result of it savings and capital formation is increased which has increased supply of deposits and at the same time there is a grave need of low rate financial so that businessmen in India can face global competition but rate of interest on loan by banks in increased. In such situation, every bank is bringing its Initial Public Offer (IPO) for shares and getting capital as low cost as burden of dividend will be quite less compared to rate of interest on deposits if dividend is compared to issue price of share. Banks will be in position to issue share at higher price only if profitability is better management of financial resources. Thus, in the present circumstances banks are left with no choice except increasing profitability by better management of financial resources. So, this subject of research is very important not only for central cooperative banks but for public at large and Indian economy which is at thrash root of growth and development.

SCOPE OF THE STUDY

The study will cover a period of five years from 2010-11 to 2014-15 covering all major Apex Co-operative Banks In India viz. one bank from each zone.

RESEARCH METHODOLOGY

The following tools and techniques will be used in collection, analysis and interpretation of data:

(1) Data Collection

- (a) **Primary Data Collection**:- For primary data i.e. questionnaires has been prepared and sent to different banks to collect and review data regarding better management of financial resource to improve profitability. Where ever, some gap is found in the information provided by banks or data and information provided by banks are confusing, personal visit, telephonic talk, e-mail and website has supplement it.
- (b) **Secondary Data Collection**:-For secondary data Annual Reports and Accounts of Apex Co-operative Banks under study will be collected for 5 years.
- (2) **Tabulation:** After collection of data, consolidated financial statements will be prepared in a tabular manner for effective research.
- (3) **Preparation of Comparative Financial Statements:** After tabulation, comparative financial statements and common size statements will be prepared to analyze these statements for better management of financial resources to improve future profitability.
- (4) **Inter-firm and Intra-firm Comparison**:- To interpret these statements, inter-firm and intra-firm comparison has been made with the help of various rations and statistical techniques.
- (5) **Statistical Techniques**:- For this purpose various statistical techniques such as Dispersion, Skewness, Correlation, Regression, Variance and Graphical Presentation has been used wherever it is most suitable and required.

HYPOTHESIS

Main hypotheses of the research work are as follows:-

- Financial resources are not managed properly in banks.
- Management of financial resources and profitability are interrelated and interdependent,
 Banks can increase their profitability by proper management of financial resources which in turn will increase their profitability. Thus, a positive cycle will follow.
- Banks are not earning that much profits as they must earn to provide proper security of deposits and to grant credit for socio-economic development of the country.
- High NPA due to social banking, government interference and competition from foreign bank has reduced profitability in banks.

LITERATURE UNDER REVIEW

While going through some literature related to proposed research work, it came to notice that many researcher has completed their research on different aspects of commercial

banks. But, Financial Resource Management of Apex Co-operative Banks in India was not covered by any researcher. Literature under review is as follows:

- Performance Appraisal of Commercial Banks in Rajasthan by Manish Jain A Ph.D. thesis submitted in the University of Rajasthan, Jaipur (1998): There are many criteria on which performance of commercial banks can be evaluated. But, Profitability and Financial Strength are main criteria on which one can measure performance of a concern and same is followed by the researcher. Banks are managing fund by accepting deposits from public and earns profit by lending it a higher rate of interest. Banks share showing their borrowings and loan as liabilities and assets. So, profitability of a bank depends upon proper management of financial resources. In the proposed research it will be checked how Apex Cooperative Banks in India can improve it.
- ➤ Bank Management with Monetary Theories and Financial Management by Srivastava O.S., (2001) Kalyani Publishers, New Delhi: This book is not directly related with profitability but explain bank management in detail which is helpful to understand the subject. Moreover, a separate chapter is included for problems and prospects of banks which is useful to analyze cause of low profitability in banks if any.
- Publications Pvt. Ltd. Ltd., New Delhi: This book is also covering different bank reforms which took place time to time but main stress is one lead bank scheme. The book has not covered profitability of different banks which is the main theme of the proposed thesis, Thus, it is useful to understand roll of lead bank in banking industry which is an important aspect.
- Non- Performing Assets in the Indian Context:- An Appraisal by Raul R.K., 'Accounting Studies', Vol. 6 No.1, March, 2004, pp. 112-126: This paper covered mainly aspects of NPA such as, what is it? How it is computed? Magnitude of NPAs, sector-wise classification of NPAs and its impact on bank performance. Author suggested a model to measure impact of NPAs which is quite useful for the proposed study. Author has also discussed accounting aspect of NPAs but it is not suggested how it can be reduced to increase profitability of banks and how it is affecting FRM in banks which will be analysed in the proposed study.
- An Appraisal of Indian Banking from NPA perspective by ReddyG. Ramakrishna and Bhargavi T. Sree, 'Journal of Accounting & Finance'. Vol. 18, No.1, Oct, 03-March 04, pp 53-57: The study is based on NPA in SBI from 1997 to 2007 and suggest

guidelines for effective NPA management. The paper also suggested a checklist to increase efficiency in Indian Banking. Apart from other suggestions author suggested EVA as an important parameter to measure bank's performance which will be used in the proposed study however, it is a study of one bank which is not so useful to draw any conclusion.

ROLE OF THE APEX CO-OPERATIVE BANKS IN THE INDIAN BANKING SYSTEM

The performance of the Apex co-operative banking sector as a whole has attracted attention in recent year. Today they have become an important constituent of the Indian financial system and cover a large segment of society because of their prompt and personalized service. They take the responsibility of covering the unmonitored sector neglected by commercial banks and most priority is given by Apex Co-operative Banks to small and medium enterprise. Apex Co-operative Banks provide service with no bars of caste religion etc. and thus spread the feeling of Unity of diversity. Some Apex Co-operative Banks operate beyond their state of registration and are governed by the Multi state Co-operative Act 1984. They are not responsible only to employees and societies.

THE PRESENT STUDY

The Apex co-operative banks play an important role in the development of Indian economy. The present study is confined to the Apex co-operative banks in India for this purpose two Apex co-operative banks viz. Rajasthan Co-operative Bank Limited and Gujarat Co-operative bank Limited have been taken in the present study data relating to the past four years from 2010-11 to 2014-15 have been analyzed. Financial Resource Management of Apex Co-operative Banks in India will help draw meaningful conclusions and will indicate out of line trends. This will help in suggesting improvements in the field of banking in India.

MEASUREMENT OF PROFITABILITY OF APEX CO-OPERATIVE BANKS

"Profitability is an important indicator of the efficient management of a cooperative bank. Profitability of a co-operative bank is assessed by the profitability ratios. "A ratio is a relationship to explain in mathematical terms between two individual and groups of figures connected with each other in some logical manner."

Profitability ratios are calculated to know about the overall competence of the business. High profitability ratios are naturally preferred by the owner, creditors & management exhibit big profit on their investments and vice-versa. They are anxious for return on equity shareholder's funds (ROE). However, the present study

endeavors to calculate return on net worth (RONW) to assess the return on shareholder's investment, as most of the selected hotels have not issued preference share to their share holder. Creditors are more interested in return on investment (ROI) as this ratio considers investment in all assets rather in a portion of the assets as in case of ROE.

A high and growing ROI shows financial security and management efficiency. It suggests more safety and low risk to the creditors. For management, all profitability ratios are significant because management has to be gratified both the creditors and shareholders. "The profitability of the selected apex co-operative banks i.e. Rajasthan State Co-operative Bank Ltd. and Gujarat State Co-operative Bank Ltd., have been analyzed on the basis of following ratios:

- 1. Spread Ratio
- 2. Return on Total Assets
- 3. Return on Owner's Equity

SPREAD RATIO

"The profitability of a co-operative bank like other banks depends upon the spread which is available to them between interests paid on deposits and interest earned on loans". The major part of earning of a bank comes from exploitation of funds whereas the major expense is on hiring the funds. The spread between the interest earned and interest paid has a direct and big impact on the profitability of banks." In the words of **Thakur**, "Banks earnings and profitability are largely determined by the spread which represents the divergence between interest and discount earned on assets and interest paid on deposits and borrowings." The spread ratio is calculated by applying the following formula:

$$Spread\ ratio = rac{Interest\ earned\ to\ Working\ fund}{Interest\ paid\ to\ Working\ fund}$$
 $Working\ Fund = rac{Total\ Assets}{Contra\ Items\ of\ Balance\ Sheet}$

The higher spread ratio indicates the better profitability, whereas the lower ratio is an indication of poor performance and efficiency of the Bank. The calculated ratio for Rajasthan State Co-operative Bank Ltd. and Gujarat State Co-operative Bank Ltd., are presented in the following tables as under:

Analysis of Spread Ratio of Rajasthan State Co-operative Bank Ltd:

The analysis of spread ratio of Rajasthan State Co-operative Bank Ltd. of interest earned to working fund, interest paid to working fund and its spread ratio is shown in the following table:

Table – 1 Spread Ratio Of Rajasthan State Co-Operative Bank Ltd.

From 2010-11 to 2014-15

Year	Interest Earned to Working Fund (A)	Interest paid to Working Fund (B)	Spread Ratio (A ÷ B)
2010-11	8.65	5.75	1.50
2009-10	7.55	6.22	1.21
2010-11	9.55	6.12	1.56
2011-12	6.04	4.6	1.31
2014-15	5.08	3.98	1.28

Source: Annual Reports of the Bank, 2010-11 to 2014-15.

Table 1 reveals that the spread ratio has shown a fluctuating trend over the period under study. The spread ratio has decreased and fluctuated between 1.56 in 2010-11 and 1.21 in 2009-10, which indicates satisfactory performance of the bank. Low level of spread ratio approves the low profitability of Rajasthan State Cooperative Bank Ltd.

Analysis of Spread Ratio of Gujarat State Co-operative Bank Ltd:

The analysis of spread ratio of Gujarat State Co-operative Bank Ltd. of interest earned to working fund, interest paid to working fund and its spread ratio is shown in the following table:

Table: 2 Spread Ratio of Gujarat State Co-Operative Bank Ltd.

From 2010-11 to 2014-15

Year	Interest Earned to Working Fund (A)	Interest paid to Working Fund (B)	Spread Ratio $(A \div B)$
2010-11	6.55	3.78	1.73
2009-10	7.55	7.2	1.05
2010-11	8.62	5.89	1.46
2011-12	7.32	5.1	1.44
2014-15	6.01	4.45	1.35

Source: Annual Reports of the Bank, 2010-11 to 2014-15.

The above table shows interest earned to working funds and interest paid to working funds in Gujarat State Co-operative Bank Ltd. The table reveals that the spread ratio has shown a fluctuating trend over the period under study. The spread ratio was 1.73 in 2010-11, which decreased to 1.05 in 2009-10, than

increased to 1.46 in 2010-11 and again decreased to 1.44 in 2011-12 and again decreased to 1.35 in 2014-15. Low level of spread ratio approves the low profitability of Gujarat State Co-operative Bank Ltd. Therefore, the ratio shows the good position of working capital. It is suggested that the company should increase some amount in working capital fund for future growth.

Table Showing Spread Ratio In Apex Co-Operative Banks Limited

From 2010-11 to 2014-15

Year	RSCBL	GSCBL	
2010-11	1.5	1.73	
2009-10	1.21	1.049	
2010-11	1.56	1.463	
2011-12	1.31	1.44	
2014-15	1.28	1.35	

Source: Annual Reports of Apex SCBLs from 2010-11 to 2014-15

It is clear from the above diagram that the spread ratio of Gujarat State Co-operative Bank Ltd., Chandigarh State Co-operative Bank Ltd. and Meghalaya State Co-operative Bank Ltd was high in 2010-11 while the ratio of Meghalaya State Co-operative Bank Ltd. was high in 2010-11. On the other hand, the ratio of West Bengal State Co-operative Bank Ltd., was very high in the year 2011-12.

With a view to test the significance of variation of this proportion in various companies, the 'F' test has been applied here. Following table shows analysis of variance of spread ratio in Rajasthan State Co-operative Bank Ltd., Gujarat State Co-operative Bank Ltd., Chandigarh State Co-operative Bank Ltd., Meghalaya State Co-operative Bank Ltd. and West Bengal State Co-operative Bank Ltd.

The F- Ratio has been calculated as follows:

Annova Table

Sources	Sum of Squares	D.F.	Mean Square	F
Between				
Companies(SSC)	0.24	4	0.06	0.086
Within				
Companies(SSR)	9.92	4	2.48	4.41
_				
ERROR (SSE)	8.97	16	0.560625	
F Ratio	0.02419355			

It can be seen from the above table that 'F' ratio is 0.024. The table value of 'F' for V1 = 4 and V2 = 20 at 1 per cent and 5 per cent level of significance are 4.43 and 2.87

respectively. This shows that the difference in the spread ratio among the above two Apex Cooperative Banks were significant at 1 per cent and 5 per cent level of significance.

RETURN ON TOTAL ASSETS

Return on total assets is being used to measure the overall efficiency of the total resources employed in the business. In the words of **Anthony and Reece**, "Return on assets reflects how much the firm has earned on the investment of all the financial resources committed to the firm." He further adds "that it is a useful measure if one wants to evaluate how well an enterprise has used its funds, without regard to the relative magnitudes of the sources of those funds". Return on total assets is being calculated in the form of percentage with the help of net profit divided by total assets.

$$Return on Total Assets = \frac{Net Profit}{Total Assets} x 100$$

The ratio reveals how the assets have been used to generate profits from the business. According to **Singh and Singh**, "this ratio is an index of efficiency of the use of total tangible assets in the business."

According to **National Federation of Cooperative Banks**, "the resources of a cooperative bank consist mainly of owned funds, deposits and borrowings which are, in fact, lovable resources of a cooperative bank."

Wood and Porter states that, "the ratio of operating income to total assets essentially is an indication of management's ability to generate income."

If the ratio is greater, then it reflects significant use of total resources of a concern and also shows its managerial efficiency. If the percentage is less, then it can be assumed that the investment in the concern is not profitable employed. The year wise position of percentage return of profits on total assets of Apex co-operative banks is given in Table 5.11, 5.12, 5.13, 5.14 and 5.15 respectively as under:

Analysis of Return on Total Assets of Rajasthan State Co-operative Bank Ltd:

The analysis of net profit to total assets ratio is shown in the following table:

Table: 3 Ratio of Net Profit To Total Asset Of Rajasthan State Co-Operative Bank Ltd

From 2010-11 to 2014-15 (Rs. in Crores)

Year	Net Profit	Total Assets	Ratio in %
2010-11	16.71	204.27	8.18
2009-10	16.40	353.82	4.63
2010-11	13.17	487.12	2.70
2011-12	24.47	638.93	3.83
2014-15	19.58	460.51	4.25

Source: Annual Reports of the Bank 2010-11 to 2014-15.

The Table 3 shows that the ratio of net profit to total assets shows fluctuating trend between 2.70 in the year 2010-11 to 8.18 in the year 2010-11 indicating a decreasing tendency, which is not a good sign. However, it is concluded, that the Rajasthan State Co-operative Bank Ltd. has not taken effective steps to get a steady growth rate of profit.

Analysis of Return on Total Assets of Gujarat State Co-operative Bank Ltd.:

The analysis of net profit to total assets ratio is shown in the following table:

Table: 4 Ratio of Net Profit To Total Assets Of Gujarat State Co-Operative Bank Ltd.

From 2010-11 to 2014-15 (Rs. in Crores)

Year	Net Profit	Total Assets	Ratio in %
2010-11	0.13	838.2	0.02
2009-10	0.24	353.82	0.07
2010-11	1.52	487.12	0. 31
2011-12	2.35	638.93	0.37
2014-15	4.06	460.51	0.88

Source: Annual Reports of the Bank 2010-11 to 2014-15.

The Table 4 show that the ratio of net profit to total asset shows fluctuating trend between 0.02 in the year 2010-11 and 0.88 in the year 2014-15 indicating a increasing tendency, which is a good sign. However, it is concluded, that the Gujarat State Co-operative Bank Ltd. has taken effective steps to get a steady growth rate of profit.

RETURN ON ONWER'S EQUITY

The percentage return of profits on owner's equity is intended to represent the rate of return earned for ordinary shareholders, and this measure does fully affect the impact of gearing. In the words of **Anthony and Reece**, "Return on Owners" equity reflects how much the firm has earned on the funds invested by the

shareholders." A high rate of return may be the result of efficient management, favorable general business conditions and trading on equity, while a low rate of return may indicate the inefficient and ineffective production of services. According to **Wood and Porter**, "this ratio is the most important measure of profitability because it relates net income to the book value of their claims. In the opinion of **Van Horne**, this ratio is frequently being used in comparing two or more firms in an industry.

Owned Funds constitutes a very important segment of the total investment in the co-operative sector. This serves as internal cushion for absorbing over dues and bad debts. The ratio is computed with the help of the following formula:

Ratio of Net profit to Proprietor's Funds =
$$\frac{\text{Net profit}}{\text{Owned Funds}} \times 100$$

The calculated Ratio of net profit to proprietor's funds of RSCBL, GSCBL, CSCBL, MSCBL and WBSCBL in various years is presented in Table 5.16, 5.17, 5.18, 5.19 and 5.20 respectively as under:

Analysis of Return on Owners Equity of Rajasthan State Co-operative Bank Ltd.

The analysis of return on owner's equity of RSCBL is shown in the following table:

Table: 5 Ratio of Net Profit To Proprietor's Fund Of Rajasthan State Co-Operative Bank Ltd.

From 2010-11 to 2014-15 (Rs. in Crores)

Year	Net Profit	Owned Fund	Ratio in %
2010-11	16.71	358.61	4.65
2009-10	16.40	393.08	4.17
2010-11	13.17	409.38	3.21
2011-12	24.47	445.31	5.49
2014-15	19.58	469.83	4.16

Source: Annual Reports of the Bank 2010-11 to 2014-15.

The table shows net profit and owned funds of apex co-operative banks in Rajasthan. The above table reveals that the ratio of net profit to owned funds was marked fluctuating trend during the period of study. It was 4.65% in 2010-11 which decreased to 4.17% in 2009-10. After this year it highly decreased to 3.21% in 2010-11. But, after this year it increased to 5.49% which was the highest ratio during the period of study. While, in 2014-15 the ratio was decreased to 4.16%, which indicates

that the poor performance of the Rajasthan State Co-operative Bank Ltd. in its working operating.

Analysis of Return on Owners Equity of Gujarat State Co-operative Bank Ltd.:

The analysis of return on owner's equity of Gujarat State Co-operative Bank Ltd. is shown in the following table:

Table: 6 Ratio of Net Profit To Proprietor's Fund Of Gujarat State Co-Operative Bank Ltd.

From 2010-11 to 2014-15 (Rs. in Crores)

Year	Net Profit	Owned Fund	Ratio in %
2010-11	0.13	25.44	0.51
2009-10	0.24	32.75	0.73
2010-11	1.52	41.78	3.63
2011-12	2.35	45.75	5.13
2014-15	4.06	59.39	6.83

Source: Annual Reports of the Bank 2010-11 to 2014-15.

Table 6 reveals that the ratio of net profit to proprietor's funds has increasing gradually from 0.51% (2010-11) to 6.83% (2014-15), which indicates the good performance of the Gujarat State Co-operative Bank Ltd. in its working operating.

CONCLUSION

Apex co-operative banks provide all mandatory information but it does not provide detailed information regarding N.P.A., Cash Flow Statement, Human Resource Accounting, Inflation Accounting etc. However, banks should also provide financial information. During the last decades, the Apex co-operative movement has gathered momentum and registered a satisfactory progress in both areas i.e. financial as well as customer's information. It is suggested that the Apex co-operative structure should be free from Government interference, deposit mobilization should be effectively undertaken and secretaries of central co-operative banks should be paid better salaries (including incentive) with higher qualification and administrative competence. It is also suggested that National Apex co-operative Bank of India should be constituted which would be owned and managed by the Apex co-operative banking system. It is observed that government participation in the share capital of Apex cooperative banks has only enfeebled these institutions. Thus, the efficiency of a business concern is generally measured by the amount of profits earned. The larger the profits, the more efficient and profitable the business becomes. Profitability has been considered, one the main criteria to judge the extent to which management has been successful in efficiently utilizing has been successful in maximizing its profits or minimizing its losses, if any. Therefore, it is suggested that the Apex Co-operative banks must develop some new techniques for the development in product sales and development of human resources.

REFERENCES

- Alexander W. and Duning R.W.: Ratio Analysis of Financial Statements. Harper and Brothers, New York, Edition 1928.
- Baranek William: Working Capital Management, Belmont California Workshop Publishing Company, 1998.
- Chandra Prasanna: Financial Management Theory and Practice, New Delhi, Tata McGraw Hill Publication Co., 2001.
- Dabler Donald W. and Lee Lomer: Purchasing and Materials Management, New York: MacMillan, 2002
- Ernest W. Walker, "Towards a Theory of Working Capital," The Engineering Economist, Winter 2012
- Firth Michel: Management of Working Capital, New York, The McMillan Press, 2001.
- Foulke Roy A.: Practical Financial Statements Analysis, New York: McGraw Hill Co. Inc. 1994.
- Hilton, "Inventory Investment" in Applied Macro Economics, ed. By David Hathfield, 1976.
- J.F. Weston and E.F. Brigham, Managerial Finance, Holt, Rinehart and Winston, 4th Editon, 1972.
- Kamta Prasad Singh, Anil Kumar Sinha and Subhas Chandra Singh, Management of Working Capital in India, Janaki Prakashan, New Delhi, 1986.
- Loyd Metzler, "The Nature and Stability of Inventory Cycles," Review of Economics and Statistics, Vol. III, August 1941, pp. 113-129.
- Mason Perry: Cash Flow Analysis and Funds Settlement, New York: American Institute of Certified Public Accounts.
- N.K. Agarwal, Management of Working Capital, Sterling Publication Pvt. Ltd. New Delhi, 1983.
- Orgler, Yair E.: Cash Management Methods and Models, Belmont : Wordsworth Publishing Company.
- P.G. Darling and McLovell, "Factors Influencing Investments in Inventories," in the Brookings Quarterly Econometric N Model of the U.S., J.S. Dusenberry et al., eds. Chicago, 1965.
- R.N. Agarwal, Analysis of Profits, Investment and Financing Behaviour of Indian Automobile Manufacturing Industry, Ph.D. Thesis, Delhi University, 2000.
- S.K. Chakraborty, "Cash Working Capital Vs Balance Sheet Working Capital," The Economic and Political Weekly, March 1974, p. M11-22.
- V.K. Sastry, Dividends, Investment and External Financial Behaviour of the Corporate Sector in India, Unpublished doctoral dissertation, University of Pennsylvania, 2012.

Annual Reports of the various selected State Co-operative Banks

Tandon Committee Reports

The Indian Accounting Journal

Inspira-Journal of Modern Management & Entrepreneurship

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