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INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

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10.   **FIGURES & TABLES**: These should be simple, crystal clear, centered, separately numbered &self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

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BOOKS

●   Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

●   Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

●   Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

●   Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

●   Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

●   Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

●   Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

●   Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

INVESTMENT POLICY OF COMMERCIAL BANKS IN INDIA

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ABSTRACT

In the study of the financial institutions, the investment and investment problems will revolve around the concept of managing the surplus financial assets in such a way, that will lead to the wealth maximization and providing a significant further source of income. Thus the investment is the management of the surplus recourses in such a way that it works for providing benefits to the supplier of the funds by letting it managed by a third party. However, the investment needs to be a procedural task. It must follow a definite process, to ensure the formulation of proper investment policy. Banks are disbursing their money as investment in trade business and industry. Therefore, banks should be following the principle of investment for profit. An investment policy should ensure maximum profit and minimum Risk. A huge collection and investment policy plays vital role for the economic development of whole economy. The main focus of this study will be towards the investment practices of the banks. The study suggests the way to the policy makers to improve the management of investment policy and recommends suggestions to raise the profit.

KEYWORDS
Wealth Maximization, Investment Policy, Risk.

INTRODUCTION

Investment in financial sense is putting the capital in the hands of an expert individual or expert group to maximize the profit. Investment by individuals, business and government involves a present sacrifice of income to get expected future benefits as a result investment raises economy of nations. According to William F. Shape, Gordon J. Alexander and Jeffery V. Baily "Investment in its broadest sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and its magnitude generally is certain" (Shape Alexander and Baily, 1998) .Banks accept money as a deposit from public and invest it in form of loan and advances. Financial institutions act as an intermediary role between the persons who lend and who borrow. Bank pools the scattered funds and mobilizes them in productive sector. Banks came into existence mainly with the objective of collecting the idle Fund, mobilize them into productive sector and causing an overall economic development. The bankers have the responsibility of safeguarding the interest and deposited amount of depositors.

STATEMENT OF PROBLEM

In 1991 the policy of Liberalization, Privatization and Globalization was adopted by the government of India. Due to this policy, now a day's commercial bank, developments bank and financial companies are operating with high competition. The fast growth of such organizations has made pro-rata increment in collecting deposit and their investment. These institutions collected a huge amount from public but couldn't allocate it in new investment sectors. It impacted the faith of the investors and also impacted the market value of the shares negatively. Though several commercial banks have been established however, they failed to ensure satisfactory returns.

Generally after providing the loan there is no practice by the banks to find out if the debtor has utilized the loan for the same purpose or not. It is one of the unhealthiest practices in banking business and such practices have contributed to the piling of unrecovered bank loans. Thus it is necessary that the banks must formulate a very strong and organized investment policy.

REVIEW OF LITERATURE

Sharma, M.P. & Bhatt, M.P. (2002), in their article "Priority receiver sector" has present "The commercial banks should take care of board national interest & they showed not confine their lending activities only to commercial area providing quick interest if some proportion could be directed to the area conclusive to build economic infrastructures of the country it would create atmosphere conductive to their investment in future. In our society where ignorance & literacy is in wild scale, it is necessary that the banks search entrepreneurs instead of entrepreneurs searching book. So, they have opinioned that the priority sector program is a timely & opportunities there by increasing production & the general living standard or rural poor. **Shrestha (2004)** conducted a study on "Nepal Rastra Bank Guidelines on Investment policy of commercial banks in Nepal (A case study of Nepal Investment Bank)". The main findings of the study are:1.Bank is in good position to meet the daily cash requirement as bank has maintained the average cash & bank balance in respect to total deposit.2.The performance of

NIBL regarding deposit collection granting loan & advance & investment is quite satisfactory but doesn't seem to follow definite policy.3.NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital. **Chen Ping, Yang Hailiang, Yin George (11) (2008)** conducted study on"Markowitz's mean-variance asset-liability management with regime switching: A continuous-time model" This paper analyzed an asset-liability management (ALM) problem under a continuous-time Markov regime-switching model. By adopting the techniques of Zhou, X.Y., Yin, G. Markowitz's mean variance portfolio selection with regime switching: A continuous-time model. SIAM J., they investigated the feasibility, obtain the optimal strategy, delineate the efficient frontier, and establish the associated mutual fund theorem.

OBJECTIVES OF THE STUDY

The main objective of the study is to assess the investment policy and strategy followed by the bank with reference to Corporation Bank and Oriental Bank of Commerce. The main objectives of this study are mentioned below:
1. To analyzes the deposit utilization for five years of Corporation Bank and Oriental Bank of Commerce.
2. To analyzes the financial position of Corporation Bank and Oriental Bank of Commerce in terms of deposit collection and investment procedure.
3. To suggest and recommend on the investment policy of sample banks.

LIMITATION OF THE STUDY

1. This study is mainly concerned to only two banks i.e. Corporation Bank and Oriental Bank of Commerce.
2. The whole study is based on secondary data from the respective banks, internet, article and newspapers.
3. The study is base only on the latest five year data.
4. Lack of sufficient time and resources.
5. In this study only selected tools and techniques have been used.

RESEARCH METHODOLOGY

PERIOD OF STUDY

The Post- reform period of five years (2008-2012) has been taken for analyzing the trend in deposits, investment and loans & advances in banking sector.

SAMPLE SIZE

In context of India, 28 Public Sector Banks are in operation. These twenty eight banks are regarded as population. But, it is not possible to study all data related with these twenty eight banks. Hence two banks have been taken as sample from the whole population i.e. twenty eight banks. The sample banks are as follows:-
- Corporation Bank
- Oriental Bank of Commerce

SAMPLING PROCEDURE

The selection procedure of the sample is purposive it is not random. The banks are selected for study on the basis of business per employee as on March 2011.These banks have the highest business per employees among all other banks.

SOURCES OF DATA

This study mainly depends on the use of secondary data that consists of annual reports of the concerned banks. However besides the annual reports various other sources of data have also been used for the purpose of study i.e. plan documents, newspaper, magazine, economic journals and RBI reports etc.

DATA ANALYSIS PROCEDURE

To achieve the objectives of the study, trend analysis of deposit, loan & advances, and investments has been used.

ANALYSIS AND DISCUSSION

TREND ANALYSIS OF TOTAL DEPOSIT OF SELECTED BANK

The trend value of total deposit of Corporation Bank and Oriental Bank is calculated under this section. An effort has been made to forecast for next three years from 2013 to 2015 on the basis past data of total deposit of Corporation Bank and Oriental Bank of Commerce from March 2008 to March 2012.

TABLE 1: ESTIMATION OF THE DEPOSIT FOR THE YEAR 2013 TO 2015

Years	Deposits (Rs. In crore)	
	Corporation Bank	Oriental Bank of Commerce
2008	55424	77857
2009	73984	98369
2010	92734	120258
2011	116748	139054
2012	136142	155965
2013	156266	177370
2014	176686	197060
2015	197106	216750

(Source: Annual reports)

The above table shows the total deposit of the banks is in increasing trend. If other things remain constant the total deposit of Corporation Bank will be Rs.1,97,106 crore in the FY 2015 and that of Oriental Bank of Commerce will be Rs. 2,16,750 crore.

TREND ANALYSIS OF LOAN AND ADVANCES OF SELECTED BANK

An effort has been made to forecast the amount of loan & advances of Corporation Bank and Oriental Bank of Commerce for the next 3 years from March 2013 to March 2015.

TABLE 2: ESTIMATION OF THE LOAN AND ADVANCES FOR THE YEAR 2013 TO 2015

Years	Loan and Advances (Rs. In crore)	
	Corporation Bank	Oriental Bank of Commerce
2008	39186	54566
2009	48512	68500
2010	63203	83489
2011	86851	95908
2012	100469	111978
2013	115916	125558
2014	132007	139781
2015	148097	154004

(Source: Annual reports)

The above table shows that both the banks have increasing trend of loan and advances. It is forecasted that both of banks will have increasing trend of loans and advances. The possible capacity of granting loan and advances of Oriental Bank of Commerce seems higher than that of Corporation Bank. Oriental Bank of Commerce seems to be more successful in the future to earn more profit than that of Corporation Bank because the expected future value of loan & advances of Oriental Bank of Commerce in the year 2015 is Rs. 1,54,004 crore and the same of Corporation Bank is only Rs. 1,48,097 crore.

TREND ANALYSIS OF TOTAL INVESTMENT OF SELECTED BANKS

Under This topic, the trend values of total investment for five years from March 2008 to March 2012 is calculated and forecasted for next three years from March 2013 to March 2015.

TABLE 3: ESTIMATION OF INVESTMENT FOR THE YEAR 2013 TO 2015

Years	Investments (Rs. In crore)	
	Corporation Bank	Oriental Bank of Commerce
2008	16512	23951
2009	24938	28489
2010	34523	35785
2011	43453	49545
2012	47475	52101
2013	80035.4	61181.9
2014	88079.4	68917.8
2015	96123.4	76653.7

(Source: Annual reports)

The above table shows that investment capacities of both the bank have increasing trend. It is also clear from the table that both the banks will have increasing trend of investment in the future. The investment of Corporation Bank during the years 2015 would be up to Rs.9,61,23.4 crore which is higher in comparison than Oriental Bank of Commerce i.e. up to Rs.7,66,53.7 crore in the year of 2015.

SUGGESTION FOR SOUND INVESTMENT POLICY

A sound lending & investment policy is not only prerequisite for a bank's profitability but also crucially significant for the promotion of commercial savings of a developing country like India. Therefore, the following principles or features of investment policy must be abided by the commercial banks in order to achieve the goals.

- **SAFETY AND SECURITY**

Commercial banks must pay a special attention to the principle of safety and security. In a developing country like India in case there is any kind of loss than it will lead to decrease in public faith towards banks and impacts the overall deposits of the banks. So, the banks must ensure investing the amount in safe and secure sectors. Investment in unsafe and insecure sectors with the hope of getting more returns is to compromise with the security of capital.

- **PROFITABILITY**

The profit of commercial bank mainly depends on the interest rate, volume of loan, its time period and nature of investment in different securities. It is a fact that a commercial bank can maximize its volume of wealth through maximization of return on their investment and lending so, they must invest their funds to gain maximum profit. Ambition of profit to commercial bank seems reasonable as the bank has to cover all the expenses and make payment in the forms dividend to the shareholders who contribute to building up of bank's capital and interest to the depositors. For this the bank calculates the cost of fund and likely return.

- **PURPOSE OF LOAN**

A very important question for every banker is that, why a customer is in need for loan. If borrower misused the loan granted by the bank, he can never repay. Therefore, in order to avoid this situation each and every bank should demand all the essential detailed information about the scheme of the project and all the activities should be examined before lending.

- **DIVERSIFICATION**

"A bank should not lay all its eggs in the same basket." This saying is very important to the bank and it should be always careful not to grant loan in only one sector. To minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the law of average; if the security of a company is divided off there may be an appreciation in the securities of other companies.

CONCLUSION

In the present research, study different financial and statistical tools have been used to measure the Investment policy of the selected banks. It is found that both selected banks have strong financial performance but comparatively Oriental Bank of Commerce is in better position. It is concluded that Oriental Bank of Commerce has adopted better investment policy than that of Corporation Bank. In conclusion, it can be said that RBI is required to direct the commercial banks. Commercial Bank should move as per the direction given by the central bank. Banks should have optimum policy to collect the deposit in various accounts. Higher the deposit higher will be the chances of mobilization of working fund and profit thereto. Banks should not invest their' fund haphazardly. It should be careful while advancing loan because loan is the life blood of the commercial bank for survival. If commercial banks do not apply sound investment policy they will face the challenges of recovery. Banks should invest their fund in various portfolios after a deep study of the project to be safe. Commercial Banks should not cross the boundary level set by RBI to make their investment policy.

REFERENCES

1. American Institute of Banking. (1972). *Principal of Bank Operation.* USA:AIB.
2. Bexley, J.B.(1987). *Banking Management.* New Delhi: Sujeet publication.
3. Chen Ping, Yang Hailiang ,Yin George (2008) "Markowitz's meanvariance asset-liability management with regime switching: A continuous209 time model" Insurance, Mathematics & Economics. Amsterdam: (Dec 2008.Vol. 43, Issue. 3);(Pg. 456-461)
4. Chipalkatti Niranjan , Rishi Meenakshi (2007) "Do Indian banks understate their bad loans?" The Journal of Developing Areas. Nashville: (Spring 2007. Vol. 40, Issue. 2) ;(Pg. 75-91)
5. Kothari, C.R. (1994).*Quantitative Techniques.* New Delhi: Vikash publishing Pvt. Ltd.Radhaswamy, M. and Vasudevan, S.V. (1979). *A text book of Banking.* New Delhi: S. Chand Company Ltd.
6. Sharpe, W.F., Alexander, G.J. and Bailey, J.V. (1998). *Investments.* New Delhi: Pentice Hall of India Pvt. Ltd.
7. Singh, P. (1986). *Investment Management.* Bombay: Himalaya Publishing, House.

TREND ANALYSIS OF TOTAL DEPOSIT

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ANNEXURE 1.1: ESTIMATION OF DEPOSIT OF CORPORATION BANK FOR THE YEAR 2013 TO 2015 (Rs. in crore)

</div>

Year	Deposit(Y)	Year (X)	XY	X^2
2008	55424	1	55424	1
2009	73984	2	147968	4
2010	92734	3	278202	9
2011	116748	4	466992	16
2012	136142	5	680710	25
sum	475032	15	1629296	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

475032= 5a+15b .... (I)

1629296= 15a + 55b .... (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

1629296= 15a + 55b

1425096= 15a + 45b

-     -   -

204200 =10b b

b=204200/10

b=20420

Substituting the value of 'b' in equation (I), we get

475032 =5a +15x20420

5a =475032-306300

a = 168732/5

a = 33746.4

Thus, the required trend is

Y = 33746.4 +20420 X

Forecasting the deposit for the upcoming next 5 years

Y2013 = 33746.4+ 20420x6 = 156266

Y2014 = 33746.4+ 20420x7 = 176686

Y2015 = 33746.4+ 20420x8 = 197106

<div align="center">

ANNEXURE 1.2: ESTIMATION OF DEPOSIT OF ORIENTAL BANK OF COMMERCE FOR THE YEAR 2013 TO 2015 (Rs. In crore)

</div>

Year	Deposit(Y)	Year- (X)	XY	X^2
2008	77857	1	77857	1
2009	98369	2	196738	4
2010	120258	3	360774	9
2011	139054	4	556216	16
2012	155965	5	779825	25
sum	591503	15	1971410	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

591503= 5a+15b...(I)

1971410= 15a +55b...(II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

1971410= 15a + 55b

1774509 = 15a + 45b

-     -   -

196901 = 10b

b =196901/10

b=19690

Substituting the value of 'b' in equation (I), we get

591503=5a+15x19690

5a=591503-295350

a= 296153/5

a = 59230

Thus, the required trend is

Y= 59230+19690 X

Forecasting the deposit for the upcoming next 5 years

Y2013 = 59230+19690 x 6 = 177370

Y2014 = 59230+19690 x 7 = 197060

Y2015 = 59230+19690 x 8 = 216750

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TREND ANALYSIS OF LOAN AND ADVANCES

ANNEXURE 1.3: ESTIMATION OF *LOAN &* ADVANCES OF CORPORATION BANK FOR THE YEAR 2013 TO 2015 (Rs. In crore)

Years	Loan and Advances(Y)	Year(X)	XY	x2
2008	39186	1	39186	1
2009	48512	2	97024	4
2010	63203	3	189609	9
2011	86851	4	347404	16
2012	100469	5	502345	25
sum	338221	15	1175568	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

338221= 5a+15b.......(I)

1175568=15a + 55b......(II).

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

1175568= 15a + 55b

1014663= 15a + 45b

‑   ‑   ‑

160905 = l0b

b =160905/10

b = 16090.5

Substituting the value of 'b' in equation (I), we get

338221 = 5a + 15 x 16090.5

 5a =338221 -241357.5

a = 96863.5/5

 a = 19373

Thus, the required trend is Y=19373+16090.5X

Forecasting the loan & advances for the upcoming next 5 years

Y2013 =19373+16090.5 x6= 115916

Y2014= 19373+16090.5 x7=132007

Y2015= 19373+16090.5 x8=148097

ANNEXURE 1.4: ESTIMATION OF LOAN & ADVANCE OF ORIENTAL BANK OF COMMERCE FOR THE YEAR 2013 TO 2015 (Rs. In crore)

Years	Loan & Advances(Y)	Year(X)	XY	x2
2008	54566	1	54566	1
2009	68500	2	137000	4
2010	83489	3	250467	9
2011	95908	4	383632	16
2012	111978	5	559890	25
sum	414441	15	1385555	55

Here, the actual equation of lineal trend is Y = a + bx

Two normal equations are

 $\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

414441= 5a+15 b   (I)

1385555=15a + 55   (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (IT) we get,

1243323= 15a + 55b

1385555= 15a + 45b

‑   ‑   ‑

142232 = l0b

b =142232/10

b=14223

Substituting the value of 'b' in equation (I), we get

414441=5a+15x14223

5a=414441-213345

a=201096/5

a=40220

Thus, the required trend is

Y = 40220+14223X

Forecasting the deposit for the upcoming next 5 years

Y2013 = 40220+14223x6 = 125558

Y2014= 40220+14223x7=139781

Y2015 =40220+14223 x8= 154004

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TREND ANALYSIS OF INVESTMENTS

ANNEXURE 1.5: ESTIMATION OF TOTAL INVESTMENTS OF CORPORATION BANK FOR THE YEAR 2013 TO 2015 (Rs. In crore)

Years	Investment	Years (x)	XY	X^2
2008	16512	1	16512	1
2009	24938	2	49876	4
2010	34523	3	103569	9
2011	43453	4	173812	16
2012	47475	5	237375	25
sum	166901	15	581144	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

166901= 5a+15b… (I)

581144= 15a +55… (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

581144= 15a + 55b

500703= 15a + 45b

‾‾‾‾ ‾ ‾

80441 = l0b

b=80441/10

b=8044

Substituting the value of 'b' in equation (I), we get

166901=5a+15x8044

5a=166901-8044

a = 158857/5

a=31771.4

Thus, the required trend is Y= 31771.4+8044X

Forecasting the deposit for the upcoming next 3 years

Y2013 =31771.4+8044x6 = 80035.4

Y2014 = 31771.4+8044x7 =88079.4

Y2015 = 31771.4+8044x8 =96123.4

ANNEXURE 1.6: ESTIMATION OF INVESTMENTS OF ORIENTAL BANK OF COMMERCE FOR THE YEAR 2013 TO 2015 (Rs. In crore)

Years	Investments (Y)	Year(X)	XY	x2
2008	23951	1	23954	1
2009	28489	2	56978	4
2010	35785	3	107355	9
2011	49545	4	198180	16
2012	52101	5	260505	25
sum	189871	15	646972	55

Here, the actual equation of linear trend is Y = a + bx Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

189871= 5a+15b… (I)

646972=15a+55… (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

646972= 15a + 55b

569613= 15a + 45b

‾‾‾‾ ‾ ‾

77359 = 10b

b =77359/10

b=7735.9

Substituting the value of 'b' in equation (I), we get

189871= 5a+15x7735.9

5a =189871-116038.5

a= 73832.5/5

a = 14766.5

Thus, the required trend is

Y= 14766.5+7735.9X

Forecasting the deposit for the upcoming next 5 years

Y2013 = 14766.5+7735.9 x 6 = 61181.9

Y2014 = 14766.5+7735.9 x 7 = 68917.8

Y2015 =14766.5+7735.9 x 8 = 76653.7

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With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

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