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Journal of Indian Accounting Association

EDITORIAL

It is indeed a matter of great pleasure to issue of Indian Journal of Accounting for December 2012 after Rajkot conference. At Rajkot, we have amended our constitution and it is printed in this journal. Further, our website is updated and last three issue of IJA, we have put on website. The members are requested to see the message of website and details of our next conference at Vishakhapatnam. The papers published in the journal are as under:

- Dr. Manas Pandey, has analyzed the optional portfolio formation using real life data subject to two different constraint sets.
- Prof. C.K. Sonara and Mr. Dhaval Sharma have made an empirical study of different groups of selected companies in India on Corporate Environmental Accounting and reporting.
- Prof. Alok Chakrawal has made a comparative study of NSDL and CDSL regarding Depository Services in India.
- Dr. (mrs.) Meena Maheshwari and Dr. Ashokkumar Gupta have presented position of financial inclusion in India and initiatives taken by RBI and Government.
- Dr. Manzoor A. Shah and Mr. Adil A. Shah have discussed the corporate scandals and the importance of forensic accounting.
- Dr. Ravindra J. Bhatt has made a study on Indian Petroleum Industry with profitability ratios.
- Dr. Manisha Dave, Dr. Karuna Gehlot and Dr. Mahima Gupta have highlights about the findings of three research studies and discussed about application of Clause-49 of SEBI with Indian listed companies.

I request all life members to write any complain about the journal with their Life Membership Number and Branch by email to **chiefeditor@gmail.com**.

December, 2012 | **Prof. Harish S. Oza**
Ahmedabad | **Chief Editor**

INDIAN ACCOUNTING ASSOCIATION

PAST PRESIDENTS

PRESIDENT SPEAKS

Dear Colleagues,

The origin of Accounting may be traced to the double entry system as laid down by Luca Pacioli, but the fact is that accounting as a system had its origin long back and can be traced from the origin of human activity and more so economic activity. Limitations of human memory made it inevitable to record transactions and maintain accounts; the objective then was to make known operating results. With the growth in the nature, size and complexity of business, accounting emerged as a business language that conveys, convinces and supports right decisions. It came to be known for summarizing and appropriately reporting facts so as to support decisions of the stakeholders. Initially each nation had its own GAAP and professional Bodies for Accounting subsequently emerged the need for IFRS and it is here that academicians need to interact with professionals and the industry at the national and global level. The concept of stakeholder rather than shareholder and wider issues of transparency and materiality made accounting an integral part of operational finance. It again emerged as a tool for Financial Planning and control-it is today a discipline of research and continuous learning .A professional body accountants, academicians and policy makers in this discipline emerged.

The Indian Accounting Association(IAA) is an association which seeks to build an interface among academicians, professional and practitioners from various universities, business, industry and government. The main function of IAA is to promote and disseminate the knowledge of accounting and the related subjects in India and abroad. Further, it aims to undertake and encourage research in the field of accounting. Ever since its inception, the IAA has served as an important forum for raising the status of accounting both as a branch of knowledge as an important tool for managerial decision making.

The association was founded by academicians and professionals in accounting on March 17, 1969, and was inaugurated on February 14, 1970 by the Accountant General of Uttar Pradesh. It is a member organization of International Association of Accounting Education and Research (IAAER). It is also held in high esteem by American Accounting Association (AAA). At present, IAA has a network of 35 branches in India with more than 3000 life members, and a Research Foundation as an affiliate at Kolkata. It also brings out a biannual research journal 'Indian Journal of Accounting' in the months of June & December to give wider publicity to research findings the field of Accounting and Finance. The Association also gives IAA Young Research Award and IAA fellowship. The Association offers Life Membership and Annual Membership for Individuals and Institutions through its chapters across India.

IAA has grown all the way and has come to stay as a vibrant organization that promotes true learning and policy making in accounting. The validity of this organization is that it believes in quality that promotes value. We continuously strive to create useful knowledge and disseminate the same to the users so as to support valid use of accounting information. I sincerely thank all our well wishers from the academics as well as the profession and the industry for their help and support in the making of IAA. My hearty compliments to all the branches across the country. I earnestly pray and hope that all our members will work as a team towards the cause of IAA. Let me believe that Accounting would promote accountability, transparency and fairness as a discipline and IAA the same as a organized body.

I solicit the support and involvement of all my colleagues and friends in furthering the cause of IAA.

Yours sincerely

(Prof. K. Sasikumar)
President, Indian Accounting Association
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Membership Detail Updation

All the members of Indian Accounting Association are requested to kindly update your membership detail with your branch membership number, latest address, mobile number and email on **www.indianaccounting.org**. For any query kindly contact me.

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APPLICATION OF MARKOWITZ MODEL IN ANALYZING RISK AND RETURN (A CASE STUDY OF BSE STOCK)

****Dr. Manas Pandey***

ABSTRACT

In this paper the optimal portfolio formation using real life data subject to two different constraint sets is attempted. It is a theoretical framework for the analysis of risk return choices. Decisions are based on the concept of efficient portfolios. Markowitz portfolio analysis gives as output an efficient frontier on which each portfolio is the highest return earning portfolio for a specified level of risk. The investors can reduce their risks and can maximize their return from the investment, The Markowitz portfolio selections were obtained by solving the portfolio optimization problems to get maximum total returns, constrained by minimum allowable risk level. Investors can get lot of information knowledge about how to invest when to invest and why to invest in the particular portfolio. It basically calculates the standard deviation and returns for each of the feasible portfolios and identifies the efficient frontier, the boundary of the feasible portfolios of increasing returns.

KEY WORDS

Efficient portfolios, portfolio optimization, efficient frontier, variance, covariance, risk and return

INTRODUCTION

The portfolio selection is really the process of delineating the efficient portfolio and then selecting the best portfolio from the set. The rational investors will obviously prefer to invest in the efficient portfolios i.e the selection of the optimal portfolio thus depend on the investor's risk aversion or conversely on risk tolerance.

Portfolio optimization is a key idea in investing and Markowitz model (1952) developed by Dr. Harry Markowitz is also known as the modern portfolio theory or portfolio selection

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through which the selection of optimal portfolio takes place since the basic elements of modern portfolio theory emanate from a series of propositions concerning rational investor behavior set forth by him and used mathematical programming and statistical analysis in order to arrange for the optimum allocation of assets within portfolio on the basis of a reward risk context. In other words, the optimal portfolio for an investor would be the one at the point of tangency between the efficient frontier and his risk return utility and he considered the variance in the expected return from investments and their relationship to each other in constructing portfolios.

Markowitz model assumed that investors move toward low level of return from high level of return for a given level of the risk , individual estimates the risk on the basis of return, in the analysis of risk and return to select the efficient portfolio the role of the Markowitz model is very significant and the investors decision based on the concept of efficient frontier. For optimal portfolio analysis, first step is that an investor needs to specify the list of securities eligible for selection or inclusion in the portfolio then to generate the risk return expectations for these securities expressed as the expected rate of return (mean) and the variance or standard deviation of the return. The expected return of assets is the weighted average of the return of the individual securities held in the portfolio. The variance and standard deviation of return are alternative statistical measures that are used for measuring risk in investment. This depends on their interactive risk i.e. how the returns of a security move with the returns of other securities in the portfolio and contribute to the overall risk of the portfolio. That is expressed in the following formula-Minimize portfolio risk

$$ó_p = \sqrt{\left[\sum_{x=1}^{N} w^2\sigma^2 X + \sum_{x=1}^{N}\sum_{y=1}^{N} w_x w_y c_{xy}\right]}$$

Where-

Wx = amount invested in asset x

Wy = amount invested in asset y

Cxy = covariance between security x and y

N = number of security

$ó^2x$ =variance or risk

From the above formula selection of optimum portfolio require the return for the period of holding for each of the securities included in the portfolio , the standard deviation of the return for each security and the covariance (or correlation coefficient) between each pair of securities among all securities from which the portfolio have to form.

REVIEW OF LITERATURE

Michael J. Hartley and Gurdip S. Bakshi October 25, 1998 reported that they have developed an econometric methodology associated with the inverse of the portfolio selection problem. In particular, given a time series of actual observed portfolio of risky assets for a sample of investors, a set of socio-economic characteristics for each investor in the sample, and a time series of preceding rates of returns for the set of risky assets, the algorithm determines the parameter values in each investor's utility function and the associated parameters in the returns generating process. It also determines the optimal current portfolios at the same time for all sample members. The proposed econometric framework can, therefore, accommodate both homogeneous or heterogeneous expected returns and covariance matrix however; predictions about individual or panels of portfolio holdings can be provide powerful tests of asset pricing theories. Consequently, a natural question, in the present framework, is how to go from a micro-theory of the individual or institutional investor's asset-portfolio mix to the aggregate behavior of the market for risky and risk-free assets. If the set of 36 panel data represents a strained sample of individual/institutional investors, then by applying suitable sampling weights to the numerical solution values in the sample, one may develop an internally-consistent micro-macro model with no further restrictions on the functional forms of the underlying functional relationships-the investor's returns-generating process and the utility function-than the customary stipulations.

Michael J. Hartley and Gurdip S. Bakshi April 2004 reported that there paper has been devoted to a class of dynamic Markowitz's mean-variance portfolio selection problems. Taking into consideration of market trend and other factors, a discrete-time model that is modulated by a Markowitz chain was introduced. Aiming at complexity reduction, we use nearly completely decomposable transition matrices and weak convergence methods to derive the limit mean-variance portfolio selection problem based probability vector and the transition probability matrices under the weak topology. The associated weak convergence and the limit systems can still be obtained. As far as the limit mean-variance problem is concerned, for the cases discussed on the limit, we can design optimal (efficient) portfolios and derive efficient frontier see also the framework of LQ control with indefinite control weights. Then using the efficient portfolios of the limit problem, we constructed portfolios for the original discrete-time model and show that such portfolios are nearly efficient.

Heinz H Moller September 2005 University of Ziirich, reported that Markowitz model i.e. modern portfolio theory has developed to a highly sophisticated field of research. in addition it become more and more obvious that for a large class of insurance problems a separate analysis of actuarial and financial risks is inappropriate. Of course modern portfolio theory is typically applied to common stocks. However it can also be applied to these facts the increasing importance of new financial instruments and the availability of computer capacity explain the growing interest of actuaries in modern portfolio theory.

Beth Bower, June 2008 College of William and Mary, Williamsburg, VA Pamela Wentz, Millersville University, Millersville, reported that they looked at investment portfolio optimization. They created portfolios consisting of five stocks and a six-month bond by randomly selecting the stocks from th S&P 500. We take the data from July 1, 2004 to December 31, 2004 and use the Markowitz minimum variance model as well as the Mean Absolute Deviation model to determine the allocation of funds to each asset in each of the portfolios. We then compare the returns of the portfolios from January 3, 2005 to June 30, 2005 using a series of parametric and non-parametric tests.

Yansen Ali June 2008 Industrial Engineering Honors Program McCormick School of Engineering Northwestern University reported that after completing the study on the computational method in portfolio analysis, I was able to conclude that the single index model worked well in estimating the inputs to the basic Markowitz optimization model. This is shown by the comparable returns produced by the Markowitz model. Although the comparison is not completely accurate as their portfolio stocks are not wholly identical. There are certainly areas of improvement in this project, especially in the development of more advanced extension to the Markowitz optimization model. The current simplistic model can be the reason why the portfolio selection is small for all cases; the optimal portfolio only selects a maximum of 2 industries in all periods. This paper has also not looked in depth for potential biases in the single index model, which might affect the end results. From this project, I found that computational procedure can get as complicated as formulating a solution method, especially when large-scale data is involved. It is imperative that one plans a robust and systematic method in solving a theoretical model. When the right method is applied, it can lead to a better utility of the model and more efficient implementations.

Objectives of the study

- To know how to select optimal portfolio,
- To examine the relation between risk and return,
- To study the utility of Markowitz model,
- To analyze risk and return of the portfolio

SOURCE OF DATA

The data used in the research is secondary in nature and has been collected from the relevant websites, journals, magazines and some periodicals.

RESEARCH DESIGN

For studies purpose alphabetically arranged top 30 companies listed in Bombay Stock Exchange (BSE) has been selected and one year’s financial information from April 2009 to March 2010 of these companies has been collected. Randomly made six portfolios of the companies by including five companies in each group and selected one company from each portfolio by applying the Markowitz model.

STATISTICAL TOOLS

In the process of selecting the optimal portfolio, many statistical tools have been used for the calculation of the value of the risk and return of the stock. The input data of expected returns and covariance matrix were thus made ready for the next step in the analysis by calculating expected return as the difference between target price and current market price of each security, expressed as a percentage of current market prices. The covariance is calculated with monthly return for each company from the monthly closing prices. The monthly covariance between each pair of securities was converted into annual covariance by multiplying it with 12.

1. VARIANCE

The variance or risk of a portfolio is not simply weighted average of the variances of the individual securities in the portfolio. The relationship between each security in the portfolio with every other security as measured by the covariance of return has also to be considered. The variance of a portfolio with only two securities in it may be calculated with the following formula.

$$ó^2_p = x_1^2\ ó^2_1 + x^2_2\ ó^2_2 + 2x_1x_2(r_{12}\ ó_1\ ó_2)$$

Where –

$ó^2_p$ = Portfolio variance.

x_1^2 = Variance of first security.

$ó^2_1$ = Variance of second security.

x_1 = Proportion of funds invested in the first security.

x_2 = Proportion of funds invested in the second security.

r_{12} =Correlation coefficient between the returns of first and second security.

$ó_1$ = Standard deviation of first security.

$ó_2$ = Standerd deviation of second security.

2. COVARIANCE

Covariance is a measure of how returns of two securities move together. It is the statistical measure that indicates the interactive risk of a security relative to others in a portfolio of securities. The covariance between two securities x and y may be calculated using the following formula:

$$Cov_{xy} = \frac{\sum_{1-1`}^{n}[Rx = \overline{Rx}][Ry = \overline{Ry}]}{N}$$

Where-

Cov_{xy} = Covariance between x and y portfolio.

Rx = Return of security x.

Ry = Return of security y.
Rx = Mean return of security x.
Ry = Mean return of security y.
N = Number of observations

3. RETURN

Return of a portfolio of assets is simply the weighted average of the individual securities held in the portfolio. The weight applied to each return is the fraction of the portfolio invested in that security. The formula for the calculation of expected portfolio return may be expressed as shown below:

Return of the portfolio $\left(\overline{R}_p\right) = \sum_{I=1}^{N} Xi * \overline{Ri}$

Where -

$\overline{R}_p$ = expected return of the portfolio

= proportion of funds invested in security i

= return of security i

ANALYSIS AND INTERPRETATION

Portfolio optimization is a key idea in investing. The selection of the optimal portfolio thus depend on the investor's risk aversion or conversely on risk tolerance. In the process of selecting the company for the portfolios the analysis of the return as well as risk has been taken place which is reflected by the relationship between increasing or decreasing of return and risk. Thus six companies from each month on the basis of their risk and return has been found. Now these six companies of each month considered as a portfolio. In this way now there are twelve portfolios over a year. After this for the further analysis select one company's stock from each portfolio of whole month on the basis of performance of the securities. Now there were only twelve companies' securities. These twelve companies are now separated into the two semester then two companies from these two semester selected on the basis of the performance of securities in term of maximum or minimum risk and returns. After this process compare to these two securities to each other which are well performing in comparison to other companies or in comparison which company is performing well overall year and select that as a efficient portfolio and take decision for investment in that companies security. In this model, the objective function is to maximize total returns, constrained by maximum allowable risk level. Therefore the entire process of analysis and interpretation has been completed in the two parts which are discussed as follows:

RETURN OF A PORTFOLIO

As a first step in portfolio analysis an investor needs to specify the list of securities eligible for selection or inclusion in the portfolio. Next he has to generate the risk return expectations for these securities. These are typically expressed as the expected rate of return (mean) and the variance or standard deviation of the return .The expected return of assets is the weighted average of the return of the individual securities held in the portfolio. Calculation of return, deviation and square of closing price of each security for one year from April 2009 to March 2010 by using the formula-

Return % $= \frac{Value\ of\ current\ month - Value\ previous\ month}{Value\ previous\ month} x\,100$

deviation (ó) = return **% -** $\overline{Rx}$

RISK OF A PORTFOLIO

The variance of return and standard deviation of return are alternative statistical measures that are used for measuring risk in investment. These statistics measure the extent to which returns are expected to vary around an average over time. The calculation of variance of a portfolio is a little more difficult than determining its expected return. The variance per standard deviation of an individual security measures the riskiness' of a security in absolute sense. For calculating the risk of a portfolio of securities the riskiness of each security within the context of the overall portfolio has to be considered. This depends on their interactive risk i.e. how the returns of a security move with the returns of other securities in the portfolio and contribute to the overall risk of the portfolio.

Calculations of risk through Markowitz formula for minimization of risk

The calculation of risk by using Markowitz model in a following ways

Minimize portfolio risk ó $_{p}$ = $\sqrt{\left[\sum_{x=1} w_x^2 \sigma^2 X + \sum_{x=1} \sum_{y=1} W_x W_y C_{xy}\right]}$

Where-

Wx = amount invested in asset x

Wy = amount invested in asset y

Cxy = covariance between security x and y

N = number of security

ó ^{2}x =variance or risk

For performing the portfolio analysis using the Markowitz method, we need the return for the period of holding for each of the securities to be considered for inclusion in the portfolio. We also require the standard deviation of the return for each security. In addition we have to know the covariance (or correlation coefficient) between each pair of securities among all securities from which we have to form the portfolio. In this method risk calculated for each portfolio and compared with the return percentage. In this process of comparison we selected that security from the each portfolio, which has the maximum return at minimum level of risk.

Table: 1- List of return of 30 stocks for one year time period

	April 2009	May 2009	June 2009	July 2009	Augu 2009	Sept 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	March 2010
ACC	13.24	19.91	-1.80	14.62	-8.24	1.31	-8.75	6.55	9.40	-0.75	5.99	2.98
B.Airtel	19.73	9.39	-2.14	-48.22	3.45	-1.46	-30.06	2.39	9.71	-6.78	-8.89	4.91
BHEL	9.80	31.62	1.35	1.08	3.89	0.45	-4.65	1.24	7.20	0.01	-2.25	2.44
DLF	38.10	74.66	-22.94	27.46	7.08	3.25	-15.52	-4.97	2.71	-7.84	-10.71	3.95
Grasim Indus.	12.79	18.42	9.70	18.60	-2.11	3.22	-21.24	9.20	4.06	4.70	3.99	4.31
HDFC	22.70	26.24	7.30	7.91	-2.22	12.20	-4.32	3.89	-298	-11.03	4.94	8.51
HDFC Bank	13.73	31.04	3.42	0.53	-2.02	11.77	-1.28	9.33	-4.07	-4.09	4.52	13.37
Hero Honda	10.66	13.23	4.25	14.85	-5.86	10.47	-6.22	9.91	-0.26	-9.19	13.69	9.62
Hindalco Ind.	3.76	57.29	2.07	15.91	5.64	21.73	-5.36	13.20	16.44	-8.40	9.51	12.68
Hindu Lever	-1.53	-1.47	15.58	9.02	-10.77	1.15	7.65	0.81	-7.19	-7.80	-3.42	1.25
ICICI Bank	43.64	55.04	-2.52	5.13	-1.26	20.72	-12.73	9.46	1.32	-5.17	4.99	9.27
Infosys	13.84	6.28	10.92	16.15	3.31	8.26	-4.46	8.10	9.28	-4.93	5.04	0.52
ITC Ltd.	2.33	-1.30	3.70	31.29	-47.53	0.30	10.03	10.03	1.04	-2.70	-0.24	-7.27
Jaiprakash asso	64.85	49.50	-1.18	17.46	-5.69	4.45	-11.42	7.38	-34.90	-6.26	-3.96	13.12
L& T	30.76	59.81	11.58	-3.93	4.05	7.37	-6.89	3.00	4.04	-15.15	9.95	3.80
M&M Ltd.	26.89	38.82	2.59	23.73	0.38	2.46	4.62	11.53	5.11	-5.68	-1.18	-45.88
Maruti Suzuki	5.24	25.24	4.30	32.64	1.66	18.25	-17.42	11.31	-0.31	-10.87	5.28	-3.24
NTPC	5.52	13.31	-9.47	10.54	-1.37	0.49	-1.08	-0.78	12.37	-9.10	-5.25	1.97
ONGC	11.00	35.86	-9.25	9.13	1.78	-1.17	-3.30	5.86	-1.79	-6.60	1.57	-1.66
Reliance comm..	23.11	42.27	-5.20	-4.92	-5.50	18.23	-42.87	-2.24	0.55	-1.76	-7.36	8.48
Reliance Inds.	18.35	26.34	-11.16	-3.27	2.40	9.83	-12.26	-44.97	2.50	-3.93	-6.55	9.88
Reliance Infra.	34.97	83.67	-6.21	0.63	-4.9	6.59	-13.36	-0.95	9.41	-9.89	-2.86	-0.56
SBI	19.80	46.29	-6.80	4.13	-3.91	25.97	-0.21	2.15	1.40	-9.32	-3.99	5.22
Sterlite Inds.	15.01	52.23	-2.38	6.10	4.71	14.82	-0.49	11.15	0.47	-12.67	3.79	8.51
Sun Pharma.	14.64	-5.14	-9.82	7.42	1.54	17.59	-1.26	5.45	3.44	-2.50	4.86	16.14
Tata Consult.	15.41	12.28	-44.31	35.08	0.11	17.52	1.11	9.74	9.10	-1.91	3.47	2.60
Tata Moters	34.41	38.93	-13.53	44.79	16.08	20.84	-4.46	16.97	19.93	-12.40	2.41	6.28
Tata Power	16.81	19.73	7.42	13.25	0.52	0.81	1.80	0.43	2.15	-5.24	-7.11	13.16
Tata Steel	15.56	70.68	-3.81	18.40	-8.30	20.28	-7.59	22.01	7.33	-7.87	0.82	10.29
Wipro	34.68	15.45	-1.02	29.92	12.25	9.26	0.98	3.50	8.03	-4.71	4.53	4.45

Table: 2- List of deviation of 30 stocks for one year time period

	April 2009	May 2009	June 2009	July 2009	Augu 2009	Sept 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	March 2010
ACC	7.74	14.41	-730	9.12	-13.74	-4.19	3.25	1.05	3.90	-6.25	-5.44	-2.52
B.Airtel	23.78	13.44	1.91	-44.77	7.5	2.59	-26.01	6.44	13.76	-2.73	-4.84	8.96
BHEL	5.45	27.27	-3.00	-3.27	-0.46	-3.9	-9.00	-3.11	2.85	-4.34	-6.6	-1.91
DLF	30.16	66.72	-30.88	19.52	-0.86	-4.69	-23.46	-12.91	-5.23	-15.78	-18.65	-3.99
Grasim Indus.	7.32	12.95	4.23	13.13	-7.58	-2.25	-26.71	3.73	-1.41	-0.77	-1.48	-1.16
HDFC	16.57	20.11	1.17	1.78	-8.35	6.07	-10.45	-2.24	-9.11	-17.16	-1.19	2.38
HDFC Bank	7.38	24.69	-2.93	-5.82	-8.37	5.42	-7.63	2.98	-10.42	-10.44	-1.83	7.02
Hero Honda	5.23	7.8	-1.18	9.42	-11.29	5.04	-11.65	4.48	-5.69	-14.62	8.26	4.19
Hindalco Ind.	-8.28	45.25	-9.97	3.87	-6.4	9.69	-17.4	1.16	4.4	-20.44	-2.53	0.64
Hindu Lever	-1.79	-1.73	15.32	8.76	-11.03	0.89	7.39	0.55	-7.45	-8.06	-3.68	0.99
ICICI Bank	32.98	44.38	-13.18	-5.53	-11.92	10.06	-23.39	-1.2	-9.34	-15.83	-5.67	-1.39
Infosys	7.81	0.25	4.89	10.12	-2.72	2.23	-10.49	2.07	3.25	-10.96	-0.99	-5.51
ITC Ltd.	2.08	-1.55	3.45	31.04	-47.78	0.05	9.78	0.79	-2.95	-0.49	-7.52	13.15
Jaipraka asso.	57.07	41.72	-8.96	9.68	-13.47	-3.33	-19.2	-0.4	-42.68	-14.04	-11.74	5.34
L& T	21.73	50.78	2.55	-12.96	-4.98	-1.66	-15.92	-6.03	-4.99	-24.18	0.92	-5.23
M&M Ltd.	21.61	33.54	-2.69	18.45	-4.9	-2.82	-0.66	6.25	-0.17	-10.96	-6.46	-51.16
Maruti Suzuki	-0.78	19.22	-1.72	26.62	-4.36	12.23	-23.44	5.29	-6.15	-16.89	-0.74	-0.26
NTPC	4.09	11.88	-10.9	9.11	-2.8	-0.94	-2.51	-2.21	10.94	-10.53	-6.68	0.54
ONGC	7.55	32.41	-12.7	5.68	-1.67	-4.62	-6.75	2.41	-5.24	-10.05	-1.88	-5.11
Reliance comm.	21.21	40.37	-7.1	-6.82	-7.4	16.33	-44.77	-4.14	-1.35	-3.66	-9.26	6.58
Reliance Inds.	19.42	27.41	-10.09	-2.2	3.47	10.9	-11.19	-43.9	3.57	-2.86	-5.48	10.95
Reliance Infra.	26.92	75.62	1.84	-7.42	-12.95	-1.46	-21.41	-9.00	1.36	-17.94	-10.91	-8.61
SBI	13.07	39.56	-13.53	-2.6	-10.64	19.24	-6.94	-4.58	-5.33	-16.05	-10.72	-1.51
Sterlite Inds.	6.57	43.79	-10.82	-2.34	-3.73	6.38	-8.93	2.71	-7.97	-21.11	-4.65	0.07
Sun Pharma.	10.28	-9.5	-14.18	3.36	-2.82	13.23	-5.62	1.09	-0.92	-6.86	0.5	11.78
Tata Consult.	10.39	7.26	-49.33	30.06	-4.91	12.5	-3.91	4.72	4.08	-6.93	-1.55	-2.42
Tata Moters	20.22	24.74	-27.72	30.6	1.89	6.65	-18.65	2.78	5.74	-26.59	-11.78	-7.91
Tata Power	11.5	14.42	2.11	7.94	-4.79	-4.5	-3.51	-4.88	-3.16	-10.55	-12.42	7.85
Tata Steel	4.08	59.2	-15.29	6.92	-19.78	8.8	-19.07	10.53	-4.15	-19.35	-10.66	-1.19
Wipro	24.9	5.67	-10.8	20.14	2.47	-0.52	-8.8	-6.28	-1.75	-14.49	-5.25	-5.33

Table: 3 List of invested amount in form of Rs. $1.0X10^9$ of 30 stocks for one year time period

	April 2009	May 2009	June 2009	July 2009	Augu 2009	Sept 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	March 2010
ACC	2.01	2.11	2.53	3.02	3.19	2.07	1.36	1.6	1.84	2.05	1.4	1.96
B.Airtel	6.29	14.46	13.68	8.31	10.75	9.41	31.00	12.34	11.00	5.35	8.67	6.3
BHEL	9.04	9.59	8.98	9.72	6.49	5.9	64.41	4.82	6.19	4.78	3.2	4.28
DLF	2.13	8.41	36.42	39.23	27.32	29.04	27.94	25.05	20.63	15.08	13.61	12.3
Grasim Indus.	1.90	1.4	2.28	3.32	1.85	1.64	3.74	2.39	1.56	2.42	1.84	1.64
HDFC	7.04	9.76	6.22	9.17	5.81	4.86	4.64	3.89	3.75	4.42	2.96	3.62
HDFC Bank	4.94	2.05	4.26	5.61	3.61	3.01	2.55	8.17	3.15	4.19	3.96	3.28
Hero Honda	2.63	1.6	1.51	2.5	2.66	2.11	1.50	1.96	3.14	3.78	1.35	2.83
Hindalco Ind.	3.08	5.03	9.46	4.82	7.65	8.13	5.59	5.03	6.77	6.6	7.93	1.5
Hindus Lever	2.43	2.82	1.72	4.92	2.63	1.77	1.55	1.56	1.47	2.43	1.58	1.87
ICICI Bank	5.94	6.77	6.41	1.07	6.09	6.15	20.21	17.99	69.78	8.94	10.88	5.86
Infosys	34.8	43.24	32.17	3.76	25.52	18.42	7.88	10.55	17.04	14.27	4.89	12.78
ITC Ltd.	2.22	2.89	5.7	5.68	2.62	2.63	2.92	2.58	1.93	2.52	1.9	3.07
Jaipraka asso.	1.93	19.27	28.97	2.22	16.87	21.5	15.35	12.61	5.8	7.19	7.18	5.51
L& T	1.74	20.6	25.15	2.14	1.4	11.21	13.25	17.23	9.09	13.1	9.58	6.43
M&M Ltd.	1.61	2.14	3.18	4.64	5.28	4.14	4.39	3.99	3.15	4.06	2.63	3.62
Maruti Suzuki	3.68	2.97	1.92	3.9	4.87	5.73	5.24	4.38	3.49	5.35	3.16	3.28
NTPC	6.13	5.9	10.97	5.5	3.76	2.42	2.67	1.94	4.04	4.28	2.88	2.34
ONGC	5.65	9.94	7.88	12.78	7.34	6.4	3.64	3.53	2.25	3.3	2.33	3.46
Reliance comm.	15.87	21.36	28.7	18.98	10.74	13.13	20.21	9.07	6.24	5.71	3.09	2.83
Reliance Inds.	4.43	4.71	5.52	5.61	3.88	6.37	38.91	35.39	18.62	37.1	17.28	17.36
Reliance Infra.	3.19	3.2	2.83	3.2	1.6	1.06	13.77	13.22	8.54	7.35	5.52	5.88
SBI	22.2	2.71	2.42	2.33	1.54	1.9	35.26	31.1	26.17	21.09	18.46	14.98
Sterlite Inds.	6.53	1.08	1.01	1.64	1.24	9.62	87.49	75.15	57.98	6.56	5.95	5.77
Sun Pharma.	5.93	1.05	1.99	1.5	1.01	7.6	9.89	7.08	7.92	0.64	4.38	0.66
Tata Consult.	3.88	4.71	5.26	8.88	6.79	6.84	6.93	4.71	3.85	6.42	2.58	4.69
Tata Moters	8.04	6.64	9.49	10.74	18.45	16.49	13.21	11.99	13.25	10.04	8.45	51.25
Tata Power	1.83	1.89	21.15	2.42	2.22	1.42	2.08	2.15	1.22	1.73	1.52	4.46
Tata Steel	23.38	30.4	43.07	42.75	33.75	29.93	22.43	28.32	28.84	24.66	22.4	14.35
Wipro	2.25	2.64	2.18	2.86	2.42	1.91	2.98	2.22	2.76	4.36	1.38	2.22

Table: 4- List of risk in 30 stocks for one year time period

	April 2009	May 2009	June 2009	July 2009	Augu 2009	Sept 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	March 2010
ACC	20.44	155.89	53.36	51.46	54.08	—	63.78	—	—	36.41	**11.72**	12.98
Bharti Airtel	149.84	379.50	97.87	380.13	92.42	—	818.11	78.71	**141.71**	54.05	42.85	59.12
BHEL	**17.08**	828.55	156.23	172.41	72.08	—	**143.67**	—	—	89.80	23.73	25.87
DLF	64.28	561.69*	1127.32	772.15	**45.06**	**133.44**	663.08	323.21	101.51	245.90	253.96	51.37
Grasim Indus.	15.52	**50.91**	**22.60**	**51.36**	19.22	—	102.33	**8.47**	—	22.10	3.78	**6.36**
HDFC	**118.70**	437.98	44.40	64.35	54.47	33.16	59.05	7.16	26.01	87.83	6.63	14.49
HDFC Bank	38.85	**71.24**	24.95	46.04	34.55	**12.90**	27.31	24.09	25.82	**59.92**	8.18	25.23
Hero Honda	17.37	79.51	32.21	**38.24**	38.69	—	33.32	7.57	—	54.31	**12.37**	19.58
Hindalco Ind.	27.47	250.35	100.37	46.19	**54.64**	80.20	101.45	**4.30**	**21.77**	141.06	20.88	**13.55**
Hindust Lever	16.01	145.23	38.33	72.49	35.89	—	**28.66**	—	—	39.01	6.81	8.99
ICICI Bank	**62.61**	1946.44	426.91	25.17*	302.83	**188.03**	489.55	27.09	164.34	235.73	197.18	50.74
Infosys	195.19	498.54	**61.40**	22.27*	91.13	50.65	224.86	39.64	334.75	160.31	27.55	68.11
ITC Ltd.	86.44	217.49	51.58	**20.73***	134.00	34.45	**114.55**	13.85	24.56	**47.83**	19.78	**49.42**
Jaipraka asso.	112.76	991.64	277.90	30.15*	252.79	100.92	377.76	**3.76**	252.92	148.58	89.83	50.67
L& T	40.12	**1101.20**	79.32	23.15*	**96.30**	42.35	270.49	108.83	**72.76**	339.29	**26.83**	54.23
M&M Ltd.	**47.34**	**102.71**	12.48	95.04	**44.72**	25.18	**79.53**	26.88	23.68	68.71	20.06	186.59
Maruti Suzuki	62.70	134.67	**17.20**	**113.13**	37.38	**72.17**	137.57	**24.20**	34.35	105.11	**11.41**	35.93
NTPC	86.95	233.89	124.36	95.56	39.21	18.17	52.09	7.61	**49.16**	61.75	21.49	19.76
ONGC	131.95	532.96	103.66	167.68	64.99	51.35	144.23	16.04	29.24	58.97	10.85	27.98
Reliance comm.	343.14	884.52	206.78	158.27	96.16	217.06	918.16	40.23	32.76	**57.99**	30.50	**28.96**
Reliance Inds.	100.89	179.66*	73.52*	3.22*	17.21	70.30*	513.04	1547.94	82.24	274.55	122.23	188.16
Reliance Infra.	**93.63**	259.88*	32.06*	13.14*	22.28	6.19*	391.80	—	**58.90**	231.91	100.33	43.98
SBI	33.67	120.52*	37.85*	—	17.41	37.00*	319.80	107.30	147.30	383.49	214.57	—
Sterlite Inds.	51.00	**48.52***	**12.21***	**1.14***	**4.86**	61.48	**85.40**	**146.38**	469.37	142.00	30.47	**2.47**
Sun Pharma.	72.11	22.65*	13.03*	—	26.74	**31.06**	72.93	—	47.22	**74.85**	**6.87**	—
Tata Consult.	88.07	183.19	273.28	257.38	58.06	96.55	**61.57**	—	31.62	**130.82**	37.16	—
Tata Moters	171.23	**199.96**	268.80	326.56	**44.21**	**111.54**	253.91	**11.87**	**77.61**	274.50	103.50	403.08
Tata Power	94.08	245.47	**117.72**	—	38.27	28.29	80.40	—	23.11	101.74	49.88	27.73
Tata Steel	139.43	1822.63	668.96	284.79	668.68	265.31	438.34	294.21	124.49	502.93	242.81	**8.06**
Wipro	69.71	144.47	47.37	**44.56**	18.22	15.30	59.37	12.45	13.42	102.78	**16.60**	8.10

*** The risk value will be in 1.0×10^{10}**

INTERPRETATION

The selection of top six securities from thirty security of BSE index for the month of April has been done on the basis of return and risk analysis by using Markowitz model and selected the ICICI bank, the investment in the ICICI bank is less risky with high return. In the month of May the performance of the HDFC Bank which has given good return with optimal risk among the six best performing securities, hence in the May month the HDFC Bank is the best security for investment. Whereas in the month of June the ratio of risk and return shows that the Hindustan Lever Limited has given best return. From six portfolio of July month ITC Ltd. performance over the year was good. The maximum return of the ITC Ltd. at the low level of the risk, therefore in the July month the investment in the ITC Ltd. is less risky with high return. From above table it is clear that in the month of August the Tata Motors have a very good combination of Risk and Return, hence in the August month the Tata Motors is the best security for investment. In the month of September the Sun Pharmaceutical Industries has best return paying securities for investment. Through the selection of top six securities from thirty security of October month Hindustan Lever Limited which has best return among these six, hence in the October month the Hindustan Lever Limited is the best security for investment. In the month of November Hindalco Industries Ltd. has best for investment among the six companies from the point of view of risk and return. Once again the Hindalco Industries Ltd. has good return among other companies; hence in the month of December the Hindalco Industries Ltd. is the best available security for investment. The Grasim Industries, first textile company which has best return among other companies in the month January. In the month of February the ratio of return and risk of the company Hero Honda shows very good for investors. Above table reflect that the Sterlite Industries has best return among others, hence in the March the Sterlite Industries is the best for investment.

Table: 4- Month wise top most company on the basis of return and risk

Month	Company	Return	Risk
April	ICICI Bank	43.64	62.61
May	HDFC Bank	31.04	71.24
June	Hindustan Lever Limited	15.58	38.33
July	ITC	29.92	44.56
August	Tata Motors	16.08	44.21
September	Sun Pharmaceutical Industries	17.59	31.06
October	Hindustan Lever Limited	10.03	114.55
November	Hindalco Industries Ltd.	13.20	4.3
December	Hindalco Industries Ltd.	16.44	21.77
January	Grasim Industries	4.70	22.10
February	Hero Honda Motors Ltd.	13.69	12.37
March	Sterlite Industries	8.51	2.47

In the above table the top securities of 2009 to 2010, the security of that month which has the top performance in respect of highest return at the level of the optimum risk. After analysis it was found that the ICICI Banks performance is best among the other companies for the first six months and the next six month the Hindalco Industries Ltd. performance was encouraging for the investors.

CONCLUDING OBSERVATION

The study present the results that display the difference between the returns and the risk based on Markowitz model. The Markowitz portfolio selections were obtained by solving the portfolio optimization problems for periods from April, 2009 to March, 2010. The basic solution approach to this problem is to implement the Markowitz model in finding an optimal portfolio selection in each month. The basic objectives behind Markowitz model were to achieve high returns or stable returns with low uncertainty. It helps in the detection of the optimum portfolio for getting the maximum return at the level of the minimum risk for invested fund. It is basically calculates the standard deviation and returns for each of the feasible portfolios and identifies the efficient frontier, the boundary of the feasible portfolios of increasing returns. Although the comparison is not completely accurate because of the large number or data required for calculation of the risk and return of the portfolio and as their portfolio stocks are not wholly identical, the returns data are still useful to reflect economic influence. The financial planners can help the investors/traders to arrive at the risk level that they can assume. If the investor specifies his risk level in terms of standard deviation of the portfolio return, the appropriate portfolio for him can be identified using the efficient frontier. Therefore, process compare to the securities to each month and then from each month to semester which were well performing securities in overall year and select that as a efficient portfolio and take decision for investment in that companies security. In this model, the objective function is to maximize total returns, constrained by maximum allowable risk level. Hence the final portfolio selection for an investor/trader requires the combination of portfolio analysis and financial planning.

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CORPORATE ENVIRONMENTAL ACCOUNTING & REPORTING AN EMPIRICAL STUDY OF DIFFERENT GROUPS OF SELECTED COMPANIES IN INDIA

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ABSTRACT

Private sector and public sector organizations, including private listed companies, government departments, statutory authorities and government business enterprises are under increasing pressure to disclose information about the organization's interaction with the natural and physical environment. In some instances, changes have been demanded by parliamentary committees which signal increasing scrutiny of environmental disclosures in annual reports.

This paper seeks to address this deficiency by providing a synthesis of research on environmental disclosures in annual reports; report on a recent survey of environmental disclosure in India public and private sector entities; and provide the germane of a benchmark reference for the evaluation of environmental disclosures in private public sector annual reports.

This paper has been containing following aspects:

- ***Introduction***
- ***Research methodology***
- ***Environmental Accounting And Reporting Practices In India***
- ***Findings and Suggestions***
- ***Conclusion***

This paper is useful to the researcher, Govt., Students and various institutions for the future improvement of the environment.

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1. INTRODUCTION

Industries and society are much interwoven tightly since society's needs are catered fully by the business enterprises. It is the responsibility of industrial units to fulfill all requirements, in aggregate of the multiple parties of the society. The field of environmental accounting has made great tries in the past two decades, moving from a rather arcane endeavor to one tested in dozens of countries and well established in a few. The industrial activities are directly or indirectly responsible for various environmental problems. Such as soil erosion,

land degradation, over exploitation of natural resources, pollution of water, air, noise, light, marine etc. Now a day, the aim of the business, earning profit is side tracked and the ideology of corporate citizenship has come to lime light. Hence the attitude of corporate units shifted towards the welfare of the people of the nation. Company serves the society in different ways such as health, education, control the pollution in environment and greening the areas, supply of quality goods and serving timely and development of damaged areas by natural activity and so on. Due to various benefits yielded by industrial unit, environmental damages are the burning problem of the country. So, Corporate Environmental Reporting is pivotal for the growth and development of the nation.

The concern for environmental quality among professional accountants and accounting researchers started in early 1970s and they explored the possibilities to integrate the measurement and reporting of private and social environment costs in the accounting system. American Accounting Association, a US body of accounting researchers, constituted a committee in 1973 to suggest the methodology for measurement of environmental effects of organizational behavior. The Committee recommended integrating environmental costs in decision making, as well as their external reporting. At the same time a broader movement was also going on in the area of accounting research under the generic name of 'social audit' or 'corporate social accounting' to find out the ways to measure corporate performance in broader social context. Environmental accounting became a sub-stream of this movement. Many suggested models of corporate social accounting include the suggestions for measurement and reporting of environmental costs and benefits.

This paper consists of 50 industrial units (in five groups) covering conceptual as well as practical aspects on corporate Environmental Reporting. This paper can be useful to various industrial units and segments of society viz. to researchers, teachers, and executives of the companies, law makers and Government, accounting practitioners, management, consultants, financial managers and students preparing for professional and comparative examinations.

WHAT IS CORPORATE SECTOR ?

A Corporate Sector is a section of society consisting of Companies / Industries / Business Houses.

They are the industrial development side of our society. They contribute to National Income Generation, Infrastructural Growth and Development of the Economy.
They represent the Producer side of Economy and we represent the Consumer Side of Economy, We consume what they produce (services included). They generate income; we help them generate the same. They foster regional- national- societal growth, we enable them achieve their goals.

ENVIRONMENT

Environment includes atmosphere, hydrosphere and biosphere; Biological wealth on the land includes vegetation, animals, birds and insects which are interdependent. The environment in all its facts of biological diversity, the air soil, water and the forests constitute the essential life support system on which we depend.

Environment is a very wide term which includes everything in all its manifest forms, on the earth, inside the earth and above the earth. It is meant to serve and support human society, providing essential raw material and inputs and irreplaceable life-support functions such as the ozone layer. Hence, environment is changing from time to time and place to place, sometimes gradually or vigorously. Man as well as entire organism is equally influenced by these changes.

ENVIRONMENTAL ACCOUNTING

There is no standard definition of natural resources and environmental accounting. The term environmental accounting could, in general sense, be used to indicate, taking an account of the environment and changes in it, and integrating the results with the system of SNA so as to provide a valuable information base for planning and laying policies for the integrated sustainable development and growth of the nation.

According to FEE (1995): "*Environmental Accounting concerns the treatment of environmental issues within the financial statements and within environmental evaluations. Environmental reporting goes usually beyond financial reporting and might take place in a separate report or in separate sections of the glossy brochure (out-side the financial statements).*"

Environmental Accounting - the entire domain of accounting for the environment including: financial accounting, reporting and auditing and environmental management accounting.**1**

1 IFAC, New York, 1988, Environmental Management in Organization – The role of Management Accounting, Study – 6, 1988, p. 1.

Thus, Environmental Accounting is a comprise of (i) Accounting Aspect of Environment of concern (ii) Reporting Aspect of Environment of a concern (iii) Auditing Aspect of Environment of a concern and (iv) Environmental Management Accounting.

OBJECTIVES OF ENVIRONMENTAL ACCOUNTING

The main objectives of the environmental accounting are summarized below:

(1) To take the total stock of assets or reserves related to environmental issues and changes therein.

(2) To measure indicators relating to environment adjusted product and income which are disclosed by EDP.

(3) To estimate the total expenditure for protection of environment.

(4) To reduce negative impact of economic growth, through identifying the gross domestic product.

(5) To assess of environmental costs and benefits.

(6) To improve environmental quality resulting from controlling the pollution and damages of natural resources.

2. RESEARCH METHODOLOGY

The research work seeks to provide evidence on corporate disclosure practice and polices of companies operating in India. For the same purpose, the annual reports of 50 companies belonging to various industries such as Cement Industries, Textiles Industries, Chemicals & Fertilizers, Steel & Engineering and Oil Refineries & Petroleum etc. have been selected for the study.

OBJECTIVES OF THE STUDY

The main objectives of the study are stated below:

(1) To study the origin and to review the growth of Environmental Reporting in corporate sectors.

(2) To know the Environmental Reporting and disclosure practices in corporate sectors.

(3) To find out the matters whether awareness regarding environment of the corporate sectors.

(4) To derive conclusion and suggest measures for effective Environmental Accounting and Reporting Practices in corporate sectors.

(5) To suggest for the improvement in quality or environment, resulting from control the pollution and damages of natural resources.

SAMPLE DESIGN

There are various aspects of scientific research process. When we have to determine the problem for research, at that time some of the decided units are selected for the study. The units must be adequate in the term of area, size, production and services. The researcher has selected 50 companies for the study but he has studied only 30 companies from various groups of the companies of India.

SELECTED COMPANIES IN INDIA

GROUP – A	GROUP – B
Cement Industries	**Textile Industries**
(1) Birla Corporation Ltd.,	(1) Mafatlal Industries Ltd.
(2) Gujarat Ambuja Cement Ltd.,	(2) Grasim Industries,
(3) Saurashtra Cement Ltd.,	(3) Arvind Mills Ltd.,
(4) Binani Cement,	(4) Shri Dinesh Mills Ltd.,
(5) Gujarat Sidhee Cement Ltd.,	(5) Ambica Cotton,
(6) India Cement,	(6) Pantaloon Retail,
(7) Vikram Cement,	(7) Abhishek Industries,
(8) Lok Cement,	(8) Mahavir Spinning Mills,
(9) Rashree Cement,	(9) Grasim,
(10) Talawada Cement	(10) Gwalior

GROUP – C	GROUP – D
Chemicals & Fertilizers	**Steel & Engineering**
(1) Asian Paints,	(1) SAIL,
(2) Alembic India Ltd.,	(2) Tata Steel,
(3) Nirma,	(3) BHEL,
(4) GSFC,	(4) L & T,
(5) Gujarat Narmada Valley Fertilizer Ltd.,	(5) Bajaj Auto,
(6) Zuari Industries Ltd.,	(6) Ashok Leyland,
(7) Tata Chemical Ltd.,	(7) GMM Pfaudler Ltd.,
(8) J. B. Chemical,	(8) Maruti Automobiles,
(9) Chambal Fertilizers,	(9) Shanti Gears Ltd.,
(10) ICL India Ltd.	(10) Elecon Engineering Co. Ltd.

GROUP – E
Oil Refineries & Petroleum
(1) Indian Oil Technology Ltd.
(2) IBP Ltd.,
(3) Reliance Industries Ltd.,
(4) Indian Oil Corporation Ltd.,
(5) Chennai Petroleum,
(6) Lank Pvt. Ltd.,
(7) Panipat Refinery,
(8) Indian Oil Blending Ltd.,
(9) Gujarat Refinery,
(10) Guwahati Refinery

Chart: 2.1

SCOPE OF THE STUDY

- Environmental accounting is useful for establishing link between the economic accounting and the environment.
- Environmental reporting also covered, recycling environmental protection activities to account for costs of maintaining the quality of the natural resources.
- This study consists data from company's Annual Reports and literatures available in the subject from various sources.
- This study is also useful to industrial units and various segments of the society viz. to researchers, executives of the company management accountant and Government.

PERIOD OF THE STUDY

A study of Corporate Environmental Accounting and Reporting is for the period from the year of 2006-07 to 2010-11.

HYPOTHESIS : H_1 There is no significant difference between the percentages of environmental reporting for various parameters.

3. ENVIRONMENTAL ACCOUNTING AND REPORTING PRACTICES IN INDIA:

Being a developing country, India faces the common problems of the third world. Moreover, with the introduction of the Panchayat Raj Act by the 73rd Amendment of the Constitution which envisages the decentralization of the administration at the district and village levels by formation of district jilla parishads and village panchayats, the importance of such data and their services have further enhanced.

To raise their gross national product and net national product, local authorities can make use of the natural resources and environment. But the maintenance of environmental accounting will deter them to adopt policies on natural resources and environment such as policies on over-exploitation of minerals, deforestation, construction of annicut (small dam), discharge of refuse and wastes into the river, disordering of the eco-system, and so on. The maintenance of environment according will induce them to use the natural resources and environment in limits and find means to increase efficiency in their use or reduce their waste and deterioration. Preparation of environmental accounts at regional level, district level and village level will disclose the disparity in growth rate between one village and the other villages and cities, and so on.

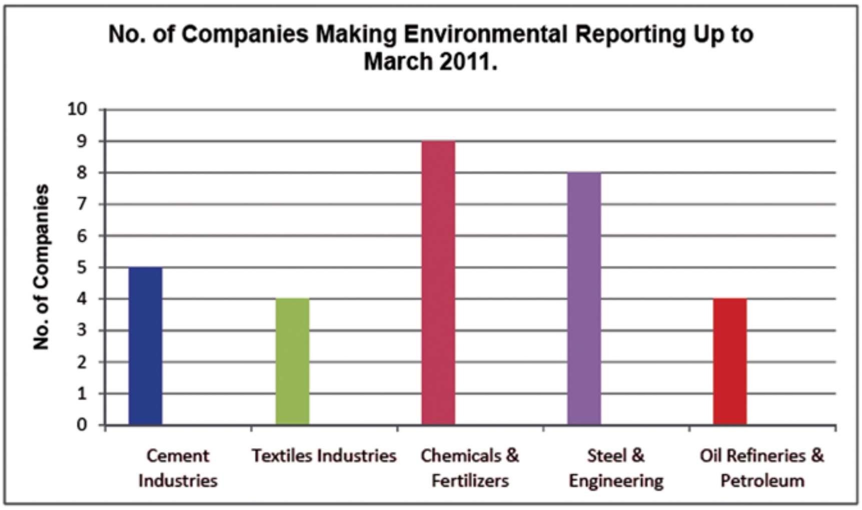
Few states taking advantage of the *Liberalization Policy* have liberalized the rules for extraction of minerals and use of other natural resources without caring for the future. It will be in fitness of the situation if a levy is imposed on extraction and uses to be used, and compensate the loss which the future generation may suffer on account of liberalization policy.

Table – 3.1

GROUP-WISE NUMBER OF COMPANIES MAKING ENVIRONMENTAL REPORTING UP TO MARCH, 2011

Groups of the Industries	**No. of Sample Companies**	**No. of Companies making**	**Environmental Reporting (%)**
Group A Cement Industries	10	05	50%
Group B Textiles Industries	10	04	40%
Group C Chemicals & Fertilizers	10	09	90%
Group D Steel & Engineering	10	08	80%
Group E Oil Refineries & Petroleum	10	04	40%
Total	**50**	**30**	**60%**

(Source: Compiled from Annual Reports of the selected companies.)



Graph – 3.1

The group- wise number of companies making environmental Reporting has been shown in above Table – 3.1

I have selected 50 companies for the study of the environmental reporting in India. It has been decided into five activity based groups.

As we have come to know from the disclosure of the companies, related environmental issues are not mandatory in India. That's why 60% of the selected companies were making Environmental reporting in their Annual Reports.

As far as industry-wise disclosure is concerned. Table – 3.1 shows that Chemicals & Fertilizers (Group C) has highest ranked in Environmental Reporting, i.e. 90%, followed by Steel and engineering companies has ranked second highest i.e.80%, third rank Cement Industries i.e. 50% and textile industries and Oil & Refineries companies has equal Fourth rank i.e. 40% comparatively lower than Chemicals & Fertilizers groups.

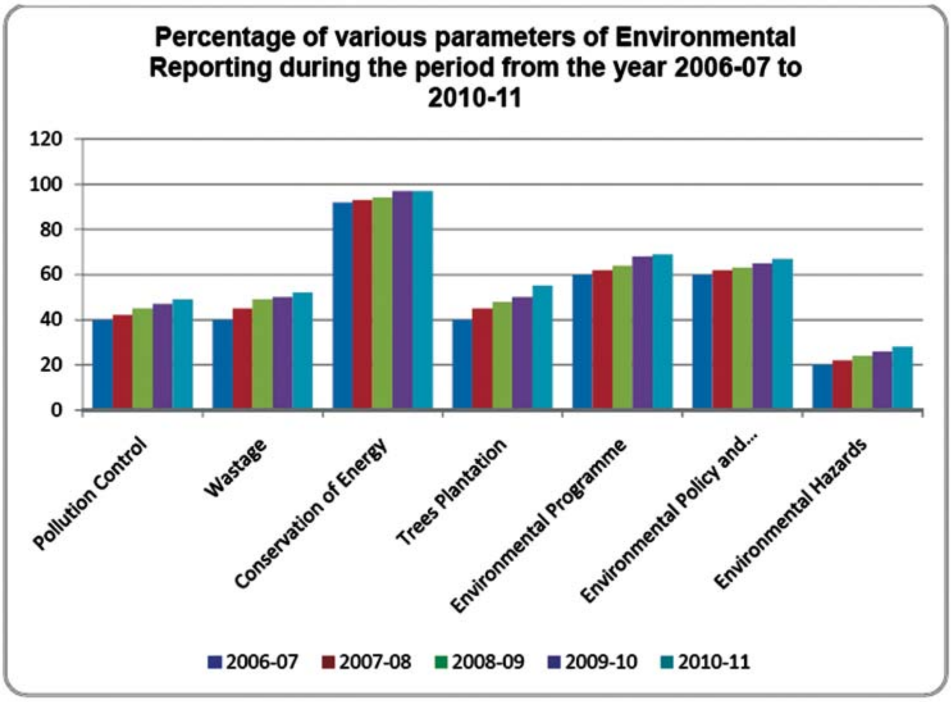
Table – 3.2

Percentages of Various Parameters of Environmental Reporting during the Period from the year 2006-07 to 2010-11

(Figures in percentages)

Sr. No.	Parameters of Environmental Reporting	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Pollution Control	40	42	45	47	49
2.	Wastage	40	45	49	50	52
3.	Conservation of Energy	92	93	94	97	97
4.	Trees Plantation	40	45	48	50	55
5.	Environmental Programme	60	62	64	68	69
6.	Environmental Policy and statement	60	62	63	65	67
7.	Environmental Hazards	20	22	24	26	28

(Source: Compiled from Annual Reports of the selected companies.)



Graph – 3.2

Almost all the selected companies were making disclosure about conservation of energy during the period from the year 2006-07 to 2010-11.

It was 92% in the year 2006-07; it has increased up to 97% in the year of2010-11. It was 93% and 94% in the year of 2007-08 and 2008-09 respectively. It is showing increasing trend in conservation of energy during the period from 2006-07 to 2010-11.

60% of the making Environmental Reporting are disclosing the environmental issues in their environmental policy and statements in the year of 2006-07. It has increased up to 67% in the year of 2010-11 during the period from 2006-07 to 2010-11 of the 30 companies making Environmental Reporting in India.

60% of the companies have disclosed contents such as amount spent on Environmental Programme in the year of 2006-07. It has increased 69% in the year of 2010-11.

It has noted that most of the industrial units have disclosed about the preventive steps which they have taken for the protection of environment rather than the effect of their operations on the environment. That's why disclosures about Environmental Hazards and Pollution Control were low percentage in implementation by selected companies during the period from 2006-07 to 2010- 11under study. The analysis of annual reports of sample companies also shows that old and reputed companies are more conscious about the disclosure of environmental issues as compared to the new companies.

Table – 3.3

GROUP-WISE NUMBER OF COMPANIES RECEIVED ENVIRONMENTAL AWARDS UP TO MARCH, 2011

Groups of the Industries	No. of Companies No. of Companies Environmental Reporting	ISO 14001	Energy Conversion Award	Environment Management Award
(A) Cement Industries	05	2	2	1
(B) Textiles Industries	04	1	1	-
(C) Chemicals & Fertilizers	09	4	4	2
(D) Steel & Engineering	08	4	3	3
(E) Oil Refineries & Petroleum	04	1	2	-
Total	**30(60%)**	**12(40%)**	**12(40%)**	**6(20%)**

(Source: Compiled from Annual Reports of the selected companies.)

Above complied Table – 3.3 shows industry–wise Environmental Awards given by the Government of India for the motivation of the companies.

The Energy conservation award was received by 40% of the companies. It implies that industries are requires to fulfill all the norms laid down under the energy conservation rules to achieve this awards. ISO – 14001 Award which came in 1998 was achieved by 40% of the companies and environment management awards was received by 20% of the selected companies.

Table – 3.4

GROUP-WISE MODE OF ENVIRONMENTAL REPORTING

Groups of the Industries	No. of Companies making Environmental Reporting	Director's Report			
		Fin.	Qtv.	Dctv.	Grp.
A Cement Industries	05	1	2	3	-
B Textiles Industries	04	-	3	2	-
C Chemicals & Fertilizers	09	2	3	4	-
D Steel & Engineering	08	-	3	4	1
E Oil Refineries & Petroleum	04	1	2	2	-
Total	**30(60%)**	**4(13%)**	**13(43%)**	**15(50%)**	**1(3%)**

(Source: Compiled from Annual Reports of the selected companies.)
(Fin. – Financial; Qtv. – Quantitative; Dctv. – Descriptive; Grp. – Graphical)

It is clear from the Table- 3.4 that industries are reporting environmentalissues in the director's report in the descriptive statement. It is also observed that 50% companies are presenting environmental disclosure through descriptive statement and 43% of the companies are making environmental disclosurethrough quantitative and 13% and 3% of the companies were making financial and graphical presentation respectively.

HYPOTHESIS TESTING:

H1 There is no significant difference between the percentages of environmental reporting for various parameters.

Table – 3.5

Descriptive Summary of Environmental Reporting for Various Parameters

Parameters	N	Mean	Std. Deviation	Std. Error
Pollution Control	5	44.60	3.647	1.631
Wastage	5	47.20	4.764	2.131
Conservation of Energy	5	94.60	2.302	1.030
Tree Plantation	5	47.60	5.595	2.502
Environmental Programming	5	64.60	3.847	1.720
Environmental Policy	5	63.40	2.702	1.208
Environmental Hazards	5	24.00	3.162	1.414
Total	35	55.14	21.002	3.550

Table – 3.6

ANOVA

	Sum of Squares	df	Mean Square	F	(p-value) Sig.
Between Groups	14577.486	6	2429.581	162.436	.000
Within Groups	418.800	28	14.957		
Total	14996.286	34			

As p-value is less than 0.05, there is a significant difference between the environmental reporting values of various parameters.

Next table gives the Tukey's Homogeneous Significant Difference between various environmental parameter values.

Table – 3.7

Tukey's Homogeneous Significant Difference

Means for groups in homogeneous subsets

Environmental Reporting		Subset for alpha = 0.05			
PARAMETERS	N	1	2	3	4
Environmental Hazards	5	24.00			
Pollution Control	5		44.60		
Wastage	5		47.20		
Tree Plantation	5		47.60		
Environmental Policy	5			63.40	
Environmental	5			64.60	
Programming					
Conservation of Energy	5				94.60
Sig.		1.000	.878	.999	1.000

(The mean values of the parameters which are homogeneous are displayed in the same column)

There is no significant difference between Environmental reporting values of Pollution control, Wastage and tree plantation.

There is no significant difference between Environmental reporting values of Environmental policy and environmental programming. In other cases there is significant difference.

4. FINDINGS AND SUGGESTIONS:

MAJOR FINDINGS

The present study was undertaken on the topic of Corporate Environmental Reporting for the type of investigation. The various aspects of the reporting relating to the Environment, Received Environment Award, Environmental Accounting in India, Mode of Environmental Reporting and Parameters of Environmental Reporting etc. were studied in detail during the period from the year of 2006-07 to 2010-11.

(1) Up to March, 2010-11 this study is consisted of 30 units of the corporate having 05 groups of sector working in India in different discipline and groups during the period from the year of 2006-07 to 2010-11.

(2) There are 05 various groups have been selected for the study up to March, 2010-11. i.e.

(A) Cement Industries

(B) Textiles Industries

(C) Chemicals & Fertilizers

(D) Steel & Engineering Companies

(E) Oil & refineries Companies

(3) As we have come to know from the disclosure of the selected companies, related environmental issues are not mandatory in India that's why 60% of the selected companies were making Environmental Reporting in their Annual Reports.

(4) As for our industry wise disclosure is concerned, Chemicals & Fertilizers (Group – C) has ranked highest in Environmental Reporting i.e. 90% because they are aware about dangerous effect of them to environment.

(5) We found by analysis and interpretation of the data available from the Annual Reports of the companies, that 97% of them were disclosing about energy conservation in the year of 2010-11. That's why 40% of the selected corporate units receive Energy Conservation Award up to March, 2011.

(6) As far as industry wise mode of environmental disclosure is concerned. It is observed that Chemicals & Fertilizers have better mode of disclosure than the Cement Industries, Textiles Industries and Steel & Engineering companies because the mode of the environmental disclosure depends upon the reputation and status of the company.

(7) Almost all the companies were making disclosure about conservation of energy during the period from the year 2006-07 to 2010-11. It was 92% in the year of 2006-07, increased up to 97% in the year of 2010-11. It was 93% and 94% in the year of 2007-08 and 2008-09, respectively. So, we can say that it was increasing trend of conservation of energy during the period from 2006-07 to 2010-11of the study.

(8) 60% of the making Environmental Reporting was disclosing the environmental issues in their Environmental Policy and Statements in the year of 2006-07, increased up to 67% in the year of 2010-11 of the selected companies in India.

(9) 60% of the selected companies were disclosed contents such as amount spent on environment programme in the year of 2006-07, increased 69% in the year of 2010-11.

(10) Discloses about trees plantation, wastage and pollution control were low percentage compared to conservation of the energy disclosure of the selected companies.

(11) Under study, the analysis and interpretation of the Annual Reports of the selected corporate units also shows that old and reputed companies are more conscious about the disclosures of environmental issues as compared to the new companies.

(12) There is increasing trend in percentages of various parameters of Environmental Reporting during the period from 2006-07 to 2010-11. It is in positive sign for the industrial and national environment.

(13) There is significant difference between the percentages of environmental reporting for various parameters.

SUGGESTIONS

(1) For the Environmental Accounting and Reporting company should use leading international reporting guidelines.

(2) There is a need to promote adequate research, training and guidance. Guidelines and rules are needed to provide help to companies in disclosing information in annual reports.

(3) Company should know about the environmental legislations for protection of environment.

(4) Government should frame environmental policy at organization level.

(5) The company should disclose all relevant information regarding environmental efforts in separate section of annual report which will help users of annual reports to understand easily.

(6) Company should have a separate environmental accounting department for the awareness about environmental protection.

(7) To conduct environmental audit at regular intervals.

(8) Company should take action for protection of environment adoption of nonpolluting technology, green belt, waste management and to save ecological balance in nature.

(9) Company should create awareness about the benefits of conserving the natural resources and their effective utilization by conducting workshop, conference and seminar.

(10) Full disclosure of accounting policies, procedures, methods adopted are disclosed as a matter of external reporting to serve all and sundry need.

5. CONCLUSION

Environmental accounting in physical terms is vital particularly when it embraces collecting data that indicate the direction and speed with which the quantity or quality of a resource are exploited. In the environmental field many valuation issues are very difficult and more

work is required before standard valuation techniques can be applied. Bridging the communication gap between environmental economists and natural resources accountant will be forebidden in this direction and some sort of approximation is essentially needed in environmental accounting to overcome the discrepancies in the current arbitrary estimation techniques. Extensive study on environmental accounting has been undertaken by a number of countries (e.g., Japan, America, Canada, France and U. K.). The experience gained by them can be best utilized to proceed on these lines to draw internationally standardized accounting methodologies in future for developing nations.

For the successful environmental accounting system should have a method for accounting for full environmental costs and benefits into cost allocation. Ultimately the business and the society both will be benefited by complete integration of environmental cost and benefits in corporate decision making system.

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DEPOSITORY SERVICES IN INDIA : A COMPARATIVE VIEW TO NSDL AND CDSL

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KEY WORDS

Depositories, Financial Performance, Profitability, BO, Demat, SEBI, Dematerialized, Intermediaries, DP, CDSL, NSDL, NSE, BSE, ISE, etc.

INTRODUCTION

The Capital Market transactions in India are having more than two centuries' old evidences. The capital market paper-based settlement of trades caused substantial problems like bad deliveries, odd lots trouble, loss of securities in transit, fraudulent transfers, delayed transfers of title, etc. till recently. In the depository system, securities are held in the electronic form in depository accounts, which is more or less similar to holding funds in bank accounts. Transfer of ownership of securities is done through simple account transfers. This method does away with all the risks and hassles normally associated with paperwork. Consequently, the cost of transacting in a depository environment is considerably lower as compared to transacting in certificates. A Depository facilitates holding of securities in the electronic form and enables securities transactions to be processed by book entry by a Depository Participant (DP), who as an agent of the depository, offers depository services to investors. According to Securities and Exchange Board of India (SEBI) guidelines, financial institutions, banks, custodians, stockbrokers, etc. are eligible to act as DPs.

The enactment of Depositories Act in August 1996 paved the way for establishment of NSDL, the first depository in India. This depository promoted by institutions of national stature responsible for economic development of the country has since established a national infrastructure of international standards that handles most of the securities held and settled in dematerialised form in the Indian capital market. Using innovative and flexible technology systems, NSDL works to support the investors and brokers in the capital market of the country. NSDL aims at ensuring the safety and soundness of Indian marketplaces by developing settlement solutions that increase efficiency, minimise risks and reduce costs. NSDL play a quiet but central role in developing products and services that will continue to nurture the growing needs of the financial services industry in India and abroad.

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As at the end of Nov. 2011, over 10,500 companies have admitted their securities (equities, bonds, debentures, and commercial papers), units of mutual funds, certificate of deposits, etc. into the CDSL system. The NSDL had 13,767 DP service centers thorough out the country till Nov. 2011. The balances in the investors account recorded and maintained with the CDSL can be obtained through the DP. The DP is required to provide the investor, at regular intervals, a statement of account which gives the details of the securities holdings and transactions. The depository system has effectively eliminated paper-based certificates which were prone to be fake, forged, counterfeit resulting in bad deliveries. The CDSL offers an efficient and instantaneous transfer of securities. The CDSL was promoted by Bombay Stock Exchange Limited (BSE) jointly with leading banks such as the State Bank of India, the Bank of India, the Bank of Baroda, the HDFC Bank, the Standard Chartered Bank, the Union Bank of India and the Centurion Bank.

REVIEW OF LITERATURE

This section covers the review of literature of some of the important studies, research papers, projects, books, articles, etc. on the various aspects of depository system.

Shah (1996) *highlighted that resolution of the single vs. multiple depositories, immobilization vs. dematerialization and role of capital adequacy norms for the custodians which is helpful in quick implementation of depository system in India.*

Aggarwal and Dixit (1996) *expressed their views about the legal framework for depository system in India. They also explained the benefits of the paperless trading, responsibilities of depository or participants and eligibility criteria, etc.*

Sarkar (1996) *analyzed the implications of the scripless trading and share transfer based on book entry merely due to the existence of the depository ordinance 1995.*

George (1996) *explained the role of the NSDL in revolutionizing the paperless stock settlement system of the country. He also examined the steps taken by the depository to* ensure *that the scripless trading system is a success and stressed on the importance of the role of the regulator in making the depository system successful.*

Gurusamy (1996) *explained that the introduction of depository system would help in transfer of securities in the capital market by a mere book entry. He also pointed out the advantages of depository system such as delay in transfer, registration, fake certificates, soaring cost of transactions, more paper work, non availability of depositories in when the transfer of securities take place by physical delivery.*

Hurkat and Ved (1999) *discussed the role of depository system in many advanced countries in the stock and capital markets the world over. They also analyzed the services offered by NSDL, dematerialization, re-materialization, trading and fee or charges, comparison of a bank and a depository for the benefits of the depository.*

Ravi Shah (2002) *highlighted that NSDL and CDSL have changed the face of the Indian capital market. The move from an account period settlement in „paper form only to a T+3 settlement in pure electronic form has been achieved in a record span of few years, whereas it took anywhere between 10-20 years in most of the developed countries.*

Schmiedel et. al. (2006) *analyzed the existence and extent of economies of scale in depository and settlement systems. The study indicated the existence of significant economies of scale but degree of such economies differs by settlement, institution and region.*

Kanan (2008) *highlighted that dematerialization has certainly brought about lot of improvement in the investment habits in our country and is bane for the companies and has created havoc in maintaining the members register and in conducting the members meeting.*

Sultan Sing (2011) *tried to study the factors affecting the decision making of the investors in depository system. Most of the investors are of the view that shorter settlement period, safety of securities with the depositories, attitude of the staff available with the DPs, timely services provided by the DPs to the investors, reduction in transaction cost, repatriation of sales proceeds of shares/debentures by NRIs are some of the factors which affects the decision making of the investors in depository system.*

The earlier studies covered the depository system and environment, which mainly pertain to depository legislation, how a viable alternative of depository, implications of depositories ordinance, internal audit of depository participants, an overview of the Depositories Act, responsibilities of auditing profession, role of depository in stock and capital market, SEBI guidelines in the depository system, services provided by different depositories or accessibility of depositories to retail investors. But it is very important to study the financial performance of depositories itself. Therefore, the present study is an attempt to fill this gap.

RESEARCH METHODOLOGY

RATIONALE FOR THE STUDY

This research is based on the performance evaluation of Depositories in India. The research emphasizes on the comparative study of NSDL and CDSL. Here, four criteria are taken for the study. This research, basically, is helpful to the Depositories to enhance their profitability and productivity, and use the tools which raise their Income and reduce the expenses. The present study has undertaken five years' financial performance for the purpose of analysis *i.e.* from year 2006-2007 to the year 2010-11. For the purpose of analysis, the present study has used various ratios as the tool *namely* Operating Income to Total Income Ratio, Other Income to Total Income Ratio, Total Expenses to Total Income Ratio, and

Overall Profitability Ratio (Return on Investment Ratio). The ratios are calculated for both the depositories for the years under the study and the same is further tested by applying F-test at 5% level of significance. The study has opted for all ratios/years the null hypothesis.

STATEMENT OF PROBLEM

A depository can be compared to a bank. A depository holds securities (like shares, debentures, bonds, Government Securities, units etc. of investors in electronic form. Besides holding securities, a depository also provides services related to transactions in securities. NSDL and CDSL have a wide network of DPs, operating from over 6000 sites, across the country, offering convenience for an investor to select a DP based on his location. The equity shares of almost all A, B1 & B2 group companies are available in dematerialized form on Depositories, consisting of Public (listed & unlisted) Limited and Private Limited companies. These securities include equities, bonds, units of mutual funds, Govt. securities, Commercial papers, Certificate of deposits; etc. Thus, an investor can hold almost all his securities in one account with CDSL or NSDL. The transformation of physical securities into the electronic form has given a great boost to the depository business in India. As per the new norms all IPOs in India must have their scrips in the demat form to offer to their investors. Due to stringent control and norms only two depositories have come up for the operations in India. Of course they are having good competition and being there a good surveillance system for their activities, they can not form a cartel (cant do syndication of the business) but, they need to be evaluated for their performance from time to time. It must be watched effectively whether NSDL and CDSL is effectively justifying their performances on various criteria. Keeping the need to have comparative and analytical appraisal of the depositories in India, the present study has been undertaken and the statement of the problem is coined as, "**Depository Services in India: A Comparative View to NSDL and CDSL".**

OBJECTIVES OF THE STUDY

➢ **Primary Objective**

The primary objective of the study is to check the financial stability and profitability of the selected Depositories (NSDL and CDSL) in India.

➢ **Secondary Objectives**

1. To study the Financial Stability of NSDL and CDSL;
2. To evaluate the Operating Income of selected Depositories;
3. To check the expense pattern of the selected Depositories;
4. To compare Overall profitability of NSDL and CDSL;
5. To assess the soundness of the selected Depositories; and
6. To check the ROI of selected Depositories.

DATA COLLECTION AND PERIOD OF THE STUDY

The researcher has analyzed the Performance and Financial Stability of NSDL and CDSL during the study period. The main source of data used for the study is secondary data derived from the published Annual Reports of selected units.

Present study covers the financial analysis of selected Depositories for five consecutive financial years. The period of the study start from 1st April, 2006 to 31st March, 2011. Researcher has selected the base year 2005- 06. This year is normal for the purpose of analysis and evaluation.

HYPOTHESIS OF THE STUDY

1. There is no significant difference in Operating Income to Total Income Ratio of selected units.

2. There is no significant difference in Other Income to Total Income Ratio of selected units.

3. There is no significant difference in Total Expenses to Total Income Ratio of Selected units.

4. There is no significant difference Return on Investment Ratio of selected units.

TOOLS AND TECHNIQUES OF ANALYSIS

(A) Accounting Ratios: Various accounting ratios for five financial years have been calculated for the purpose of analysis and evaluation.

(B) Statistical Tools and Techniques: Some of the statistical techniques such as Mean, Standard Deviation, Coefficient of Variation and One Way ANOVA have been used.Limitations of the Study

1. Present study is based on secondary data and secondary data has its own limitations which might affect the study.
2. Present study is done considering Accounting Ratio analysis only and there are certain ratios which won't be calculated so it will be one of the major limitations of the study.
3. Statistical tools have its own limitations and it will affect to present study.
4. The economic condition varies at different point of time and that will affect the findings of the present study.

ANALYSIS OF DEPOSITORIES

1. Operating Income to Total Income Ratio

This ratio shows the Operating Income to Total Income Ratio of selected depositories during the study period. This ratio helps to assess the operational efficiency of the unit compared to total income of the depositories. The higher the ratio the better will be the profitability; and affects positively to operational efficiency of the organization. The formula of the ratio is as under:

$$\text{Operating Income to Total Income Ratio} = \frac{\textit{Operating Income}}{\textit{Total Income}} x\,100$$

Table 1

Operating Income to Total Income Ratio

(Figures in %)

Year	CDSL	NSDL
2006-07	77.89256	92.74984
2007-08	82.90816	91.90141
2008-09	77.68924	92.24299
2009-10	80.15795	91.65091
2010-11	82.45098	92.78713
Average	**80.21978**	**92.26646**
Standard Deviation	**2.450971**	**0.504347**
Co-efficient of Variance	**3.055321**	**0.54662**

Sources: Annual reports of NSDL and CDSL

The above table shows Operating Income to Total Income ratio of CDSL and NSDL during the period under review. This ratio shows the operational efficiency of the depositories. It ravels from the above table that CDSL ratio represents increasing trend except financial year 2008-09. It has reached at its highest level in the financial year 2007-08. The average ratio was 80.22%. The NSDL registered fluctuating trend during the study period however, the Operating Income to Total Income ratio was greater than 90% during the period under review. Comparing the Co-efficient of Variance (CV) of CDSL and NSDL, the CDSL has registered with higher CV than NSDL which shows high fluctuations in the ratio whereas NSDL has low ratio which reveals that it has better stability as compared to CDSL.

Testing Hypothesis # 1

H_0: There is no significant difference in the Operating Income to Total Income ratio of Depositories during the period under review.

Table – 2

One way ANOVA of Operating Income to Total Income Ratio

Source of Variation	SS	Df	MS	F Cal	F crit
Between Depositories	362.806	1	362.806	115.882	5.31766
Within Depositories	25.0465	8	3.13081		
Total	387.853	9			

(At 5% Significance Level)

$\mathbf{H_0}$ = Rejected $\mathbf{H_1}$ = Accepted

The above table shows the one way analysis (F – test) of Operating Income to Total Income Ratio. Here, the hypothesis is tested at 5% significance level. The calculated value is much higher than tabulated value so, the null hypothesis ($\mathbf{H_0}$) gets rejected and the alternative hypothesis ($\mathbf{H_1}$) is accepted. So, it can be concluded that there is significance difference in NSDL's and CDSL's Operating Income to Total Income ratio during the study period as shown in the table number 1.

2. OTHER INCOME TO TOTAL INCOME RATIO:

This ratio shows the Other Income to Total Income Ratio of selected depositories during the study period. This ratio helps to assess depository's way of working. The higher the ratio the better will be the profitability but it can be said that the depository is unable to work operationally well. The Other Income here includes miscellaneous income, interest or dividend income, profit on sale of assets, etc. The formula of the ratio is as under.

$$\text{Other Income to Total Income Ratio} = \frac{\textit{Other Income}}{\textit{Total Income}} \, x\, 100$$

Table 3 Other Income to Total Income Ratio

(Figures in %)

Year	CDSL	NSDL
2006-07	21.90083	7.250163
2007-08	16.96429	8.098592
2008-09	22.17795	7.757009
2009-10	19.84205	8.349086
2010-11	17.54902	7.212868
Average	**19.68683**	**7.733544**
Standard Deviation	**2.403854**	**0.504347**
Co-efficient of Variance	**12.21047**	**6.521551**

Source: Annual reports of NSDL and CDSL

The table - 3 shows Other Income to Total Income ratio of CDSL and NSDL during the period under review. This ratio shows income earned by depositories other than operational one. Other Income includes miscellaneous income, interest or dividend income, profit on sale of assets, etc. It ravels from the above table that CDSL ratio represents decreasing trend except financial year 2008-09 during the study period. It has reached at its highest level in the financial year 2008-09. The average ratio was 19.68%. The NSDL registered fluctuating trend during the study period however the Other Income to Total Income ratio was lower than 9% during the period under review which affects positively to company's operational efficiency. Comparing the CV of CDSL and NSDL, the CDSL has registered with higher CV than NSDL which shows high fluctuations in the ratio whereas NSDL has low ratio which shows stability in company's earning.

Testing Hypothesis # 2

H_0: There is no significant difference in the Other Income to Total Income Ratio of Depositories during the period under review.

Table – 4

One way ANOVA of Operating Income to Total Income Ratio

Source of Variation	SS	Df	MS	F Cal	F crit
Between Depositories	357.2025	1	357.2025	118.4186	5.31766
Within Depositories	24.13152	8	3.01644		
Total	381.334	9			

(At 5% Significance Level)

H_0 = Rejected **H_1** = Accepted

The above table reflects One Way Analysis (F-test) of Other Income to Total Income ratio. Here, the hypothesis is tested at 5% significance level. The calculated value is higher than tabulated value so, the null hypothesis gets rejected and alternative hypothesis is accepted. So, it can be concluded that there is significant difference in NSDL's and CDSL's Other Income to Total Income ratio during the study period.

3. TOTAL EXPENSES TO TOTAL INCOME RATIO:

This ratio shows the Total Expenses to Total Income Ratio of selected depositories during the study period. This ratio helps to assess depositories' Profitability from the view point of expenses. Higher ratio affects negatively to the profitability of depositories' income earning capacity. Total expenses include administration and other expenses of the organization. The formula of the ratio is as under:

$$\text{Total Expenses to Total Income Ratio} = \frac{Total\ Xepenses}{Total\ Income} x\,100$$

Table 5

Total Expenses to Total Income Ratio

(Figures in %)

Year	CDSL	NSDL
2006-07	45.45455	73.1548
2007-08	33.80102	60.96579
2008-09	38.11421	80.51402
2009-10	33.46496	66.35161
2010-11	32.84314	71.07313
Average	**36.73557**	**70.41187**
Standard Deviation	**5.300489**	**7.343848**
Co-efficient of Variance	**0.144288**	**10.42984**

Source: Annual reports of NSDL and CDSL

The table - 5 shows Total Expenses to Total Income ratio of CDSL and NSDL during the period under review. This ratio shows expenses accrued by depositories during the study period. Total expenses include administration and other expenses of the organization. It reveals from the above table that CDSL ratio represents fluctuating trend during the study period which shows that its profitability was not stable. It has reached at its highest level in the financial year 2006-07. The average ratio was 36.735%. The NSDL registered continuous decreasing trend except financial year 2008-09 and 2010-11 during the study period which affects positively to its profitability. The Total expenses to Total Income ratio was lower than 73% during the period under review which affects positively to company's operational efficiency. Comparison of the Co-efficient of Variance(CV) of CDSL and NSDL reveals that the CDSL has registered lower CV than NSDL, which shows that NSDL has less stability in term of Total Expenses to Total Income ratio during the study period.

Testing Hypothesis # 3

H_0: There is no significant difference in the Total Expenses to Total Income Ratio of Depositories during the period under review.

Table – 6

One way ANOVA of Total Expenses to Total Income Ratio

Source of Variation	SS	Df	MS	F Cal	F crit
Between Depositories	2835.232	1	2835.232	69.12901	5.317655
Within Depositories	328.1091	8	41.01364		
Total	3163.342	9			

(At 5% Significance Level)

H_0 = Rejected H_1 = Accepted

The above table reflects One Way Analysis (F-test) of Total Expenses to Total Income ratio. Here, the hypothesis is tested at 5% significance level. The calculated value is considerably higher than the tabulated value so, the null hypothesis gets rejected and alternative hypothesis is accepted. So, it can be concluded that there is significant difference in NSDL's and CDSL's Total Expenses to Total Income ratio during the study period.

4. RETURN ON INVESTMENT RATIO

This ratio shows the percentage return received by depositories on their total share holder's fund during the study period. This ratio helps to assess depositories' Profitability from the view point of share holder's fund. Higher ratio affects positively to the profitability of depositories' income earning capacity. Total share holder fund includes share capital and reserve and surplus during one financial year. The formula of the ratio is as under:

$$\text{Overall Profitability Ratio} = \frac{\text{Pr}\,ofit\ After\ Tax}{Total\ ShareHolder's Fund} \, x\, 100$$

Table 7

Return on Investment Ratio

(Figures in %)

Year	CDSL	NSDL
2006-07	12.31979	12.86232
2007-08	20.8286	2036474
2008-09	17.17172	9.544313
2009-10	20.58059	22.00900
2010-11	18.16118	19.50713
Average	**17.81238**	**16.85750**
Standard Deviation	**3.444606**	**5.368971**
Co-efficient of Variance	**0.193383**	**31.84915**

Sources: Annual Reports of NSDL and CDSL

The table - 7 shows Return on Investment ratio of CDSL and NSDL during the period under review. This ratio shows Profit earned by depositories during study period. The profit which is taken as post tax. It reveals from the above table that CDSL ratio represents fluctuating trend during the study period which shows that its profitability was not stable. It has reached at its highest level in the financial year 2007-08. The average ratio was 17.81%. The NSDL also registered fluctuating trend during the study period which also affects negatively to its profitability. The Return on Investment ratio recorded 9.54% which was the lowest during the period under review which affects negatively to company's operational efficiency. Comparing the CV of CDSL and NSDL, the CDSL has registered with lower CV than NSDL which shows that NSDL has less stability in term of Return on Investment ratio during the study period.

Testing Hypothesis # 4

H_0: There is no significant difference in the Return on Investments Ratio of Depositories during the period under review.

Table – 8

One way ANOVA of Return on Investment Ratio

Source of Variation	**SS**	**Df**	**MS**	**F Cal**	**F crit**
Between Depositories	133.7747	4	33.44368	5.3476	5.1921
Within Depositories	31.26937	5	6.25387		
Total	165.0441	9			

(At 5% Significance Level)

H_0 = Rejected **H_1** = Accepted

The above table reflects one way analysis of Return on Investment ratio. Here, the hypothesis is tested at 5% significance level. Here, calculated value is marginally higher than tabulated value so, the null hypothesis gets rejected and alternative hypothesis is accepted. So, it can be concluded that there is significant difference in NSDL's and CDSL's Return on Investment ratio during the study period.

FINDINGS OF THE STUDY

- Average Operating Income to Total Income ratio of NSDL is much higher than CDSL, which shows that NSDL earning higher operational income compare to CDSL.
- NSDL's Operating Income is almost 90%; the NSDL is more concentrating on its operational income of the depository.

- The CDSL's other income is around 20% of its total income which reveals that the CDSL has good opportunities to generate income other than the main business activities. In case of depository business recession the CDSL would be a suitable company to survive the gloomy days due to its non conventional sources of income.
- The NSDL's income is almost 1.5 times higher than that of the CDSL
- Total Expenses to Total Income Ratio of the NSDL was higher than the CDSL.
- It was found that there was a significant difference in Operating Income to Total Income ratio of both the depositories during study period.
- CDSL was promoted by the Bombay Stock Exchange whereas NSDL was promoted by the National Stock Exchange.
- The study reveals that there was significant difference in Other Income to Total Income Ratio of the CDSL and the NSDL during the period under review.
- The financial performance of the NSDL is quite better than the CDSL during the study period.
- The study proves that there was a considerable difference in ROI of both the depositories during the study period.

CONCLUSION:

The trend of automation, especially Dematerialization, has enabled the Indian Capital Market to take the world's center stage and scale unprecedented heights. Securities market in India has grown exponentially as measured in terms of amount raised from the market, number of stock exchanges and intermediaries, the number of listed stocks, market capitalization, trading volumes, turnover on stock exchanges and investors' population. The services offered by the Depositories like Pledge and Hypothecation, Account Transfer, Stock Lending and Borrowing, Nomination, Tax Information Network (TIN), Speed-E, Internet – based Demat Account Statement (Ideas), Securities Trading Information Easy Access and Delivery (STEADY), etc. bear testimony to the fact that it is perpetually progressing by leaps and bounds, and thereby elevating its status to internationally acceptable standards. The analysis of the progress of the National Securities Depository Limited (NSDL) and the Central Depository Services (India) Limited (CDSL) in economic terms clearly reveals that both the depositories have shown a remarkable progress in terms of Demat Accounts, Demat value and quantity, Settlement value and quantity and the number of Depository Participants. In spite of its late emergence, the growth at the CDSL is almost at par with that of the NSDL. The exponential spurt in demat Accounts, both at the NSDL and the CDSL reaffirms the increased reliance of the investors on the depository System. This study reveals that both the depositories have been working financially smoothly over a period of last six financial years.

List of Abbreviations

ANOVA	Analysis of Variances
BO	Beneficial Owner
BSE	Bombay Stock Exchange Limited
CDSL	Central Depository Services (India) Limited
Df	Degree of Freedom
DP	Depository Participant
DPs	Depository Participant
F cal	F-Calculation
F cri	F-critical value
Ho	Null Hypothesis
ISE	Interconnected Stock Exchange of India Limited
Ideas	Internet – based Demat Account Statement
NRI	Non Resident Indian
NSDL	National Securities Depository Limited
NSE	National Stock Exchange Limited
ROI	Return on Investment
SEBI	Securities and Exchange Board of India
STEADY	Securities Trading Information Easy Access and Delivery
TIN	Tax Information Network

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FINANCIAL INCLUSION: AN EGALITARIAN APPROACH

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ABSTRACT

The picture of real development will be assumed incomplete until a single person remains financially excluded. Financial inclusion denotes the ease of access, availability and usage of formal financial services at affordable cost to the disadvantaged and low income group. Acces to financial services will help in poverty reduction and will elevate the growth rate. Lack of legal identity, limited literacy, complicated procedure, cumbersome documentation, place of living, poverty, cultural and psychological barriers are some responsible factors for financial exclusion. The paper presents position of financial inclusion in india and initiatives taken by RBI and government. It has been suggested that some measures should be taken to enhance the financial inclusion to accelerate the path of sustainable growth in a welfare state.

INTRODUCTION

Being a welfare state, it is the first and foremost duty of the government to focus on the development of each and every section of the society. Simultaneously the government should also make efforts to use and seek contribution of everyone towards the development of the country. Growth on the basis of a few millaniors is not indicative of real development, therefore efforts of the government and contribution of every one is imperative to reflect the real development. Access to financial services will help in poverty reduction and will elevate the growth rate. In most developing countries, the majority of low income group people, has very limited access to financial services. But governments are making efforts to promote access through various facilities e.g., direct lending, interest rate ceiling and set up of new bank branches in rural areas.

Infact, providing access to finance is a form of empowerment of the vulnerable soci-

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ety. Financial inclusion denotes the ease of access, availability and usage of the formal financial services at an affordable cost to the disadvantaged and low income groups.The objective of financial inclusion is to extend the outreach of the formalized banking system to reach the unreached poor population and unbanked areas.As the essence of financial inclusion it can be said that it will help the excluded people to improve their standard of living at the community level and uplift the process of economic development at national level.C. Rangarajan, chairman of committee on financial inclusion states that, "financial inclusion is the process of ensuring access to financial services timely and adequate credit where needed by vulnerable groups and such as weaker sections and low income groups at an affordable cost."Raghuram Committee on Financial Sector Reforms (CFSR)presentsviews -"financial inclusion is expanding access to financial services, saving products, insurance products and inflation-protected pensions."

According to chattopadhyay, A. (2012) "The term financial inclusion was first used by United Nations in 2003 when we realized that india had taken such steps way ahead of the world but could not succeed due to proper coining of the word and also propagating in better way. Perhaps this became the hot talk of the world after the success of Garmin Bank Project at Bangladesh where Micro finance shownthe way how the credit facility can be extended to group of people for their benefit with the inclusion of the group member of the community for the benefit of the poor, needy and socially underprivileged people." Raman, Atul Presents financial inclusion in short as under:

NAF+Banks+OFIs+MFI+IT= Financial Inclusion

Where, NFA= No Frill bank account

OFIs= Other Financial Institutions

MFI= Micro Financial Institutions

IT= Information Technology

FINANCIAL INCLUSION AND ECONOMIC GROWTH

Active participation and welfare of every section is necessary for economic development of a country. If only higher income group of the society are benefited by the development, it can not be recognized as sustainable growth. In words of Mandira Sharma, "An inclusive financial system facilitates allocation of productive resources and thus can potentially reduce the cost of capital. In addition, access to appropriate financial services can significantly improve the day to day management of finances. As inclusive financial system can help reducing the growth of informal sources of credit (such as money lenders) which are often found to be exploitative. Thus, an all inclusive financial system enhances efficiency and welfare by providing avenues for secure and safe saving practices and by facilitating a whole range of efficient financial services."

According to the World Bank (World Development Report, 1991) "The challenger of development is to improve the quality of life. Especially in the world's poor countries, a better quality of life calls for higher incomes but it involves much more. It encompasses as ends in themselves better education, higher standards of health and nutrition, less poverty, a cleaner environment, more equality of opportunity, greater individual freedoms and a richer cultural life. Thus, the role of financial inclusion in extending the process of growth and development is very significant.

Dr. D. subbarao illustrated the following points while discussing the role of financial inclusion in economic growth.

(I) MOBILIZATION OF SAVINGS:

A significant benefit of FI is mobilization of their savings and thus by doing that their savings are channelized through a formal financial system and converted to investments. Apart from increasing the chance of exploringnew investment and thus, the chance of generating more surpluses, it has two additional benefit. One is increasing the domestic savings rate and ensuring the country's economic growth more sustainable and inclusive. The second benefit is that the banks will get some low cost deposits.

(II) POVERTY ERADICATION:

FI provides some economic opportunity to vulnerable. Access to financial services provides them the motivation and platform to build their savings, make investments, and avail various credit facilities provided to them by various authorities. Thus, in this way, they can reduce the dependency on private money lenders and can generate more surpluses by way of mobilizing their savings through proper channel.

(III) INCREASING EFFECTIVENESS OF GOVERNMENT SOCIAL PROGRAMS

Government makes various payments under various flagship programs such as National Rural Employment Guarantee Programme, Social Security Programme etc. The major distributional problem under these scheme are procedural complexity of each payments, unnecessary delay leakage of money before reaching the hands of the beneficiaries, high transaction costs etc. All these problems can permanently be solved through FI by transferring the funds directly to the accounts of the beneficiaries."

The Financial inclusion thus meant for vulnerable clients for the purpose of following benefits:

(a) Saving facility

(b) Easier credit facility

(c) Overdraft facility

(d) Pension for old age and investment scheme

(e) Cheque facility
(f) Low cost financial services
(g) No frill accounts
(h) Medical insurance
(i) Electronic fund transfer
(j) Simple KYC norms
(k) Financial advice
(l) Access to financial markets
(m) Investment awareness
(n) Micro credit during emergency
(o) Entrepreneurial credit

REASONS FOR FINANCIAL EXCLUSION

- **Legal identity**: lack of legal identity like driving license, voter ID, birth certificate etc. are very significant barriers in opening a bank account.
- **Limited literacy**: lack of basic education and financial illiteracy act as barrier to access from financial services.
- **Complicated procedure**: As the name suggests, commercial banks uses complicated procedure related to account filling forms. So, it is very difficult for uneducated persons to read terms and conditions.
- **Terms and conditions**: cumbersome documentation and procedure acts as barrier, so the uneducated poor people find it very difficult to access financial services
- **Place of living**: Generally commercial banks operate only in profitable areas, people who live in remote, hilly areas, find it very difficult to go to areas in which banks generally set up.
- **Level of income**: low income people generally have the attitude of thinking that banks are only for the rich people on the other hand, the ease of availability of informal credit sources makes these popular even if costlier.
- **Poverty**: Being on a low income, especially out of work and on benefits.
- **Cultural and psychological barriers**, such as language, perceived/ actual racism and suspicion or fear of financial institutions.

FINANCIAL INCLUSION IN INDIA:

In India, the majority of the population lives in rural areas and hence, their overall development is the need of the hour. More than 65% of the Indian population is still unbanked and does not have access to banking facilities. For the sustainable economic development it is necessary to bring these people under the net of the banking facility.

Table I

No. of scheduled Commercial Bank offices across India

	2003		2005		2007		2009		2010		2011	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Rural	32283	47	30790	44	30409	41	31598	38	32529	37	33602	36
Semi-Urban	15135	22	15325	22	16770	22	19337	23	21022	24	23048	25
Urban	11566	17	12419	18	14202	19	16726	20	18288	21	19156	21
Metropolitan	9516	14	11839	17	13272	18	15236	18	16364	19	17274	19
Total	68500	100	70373	100	74653	100	82897	100	88203	100	93080	100

Source: The Management Accountant Jan. 2012. Vol.47. No.-1 Page 39

As it can be observed from Table 1, the presence of branch banking has reduced over the period. This is an alarming situation, where 47% of the total branches in rural areas in 2003 and came down to 36% in year 2011.

<u>Initiatives taken by RBI and Government:</u>

The RBI and Government of india have been continuously trying to implement financial inclusion over the last few decades. RBI's approach towards financial inclusion aims at 'connecting people' with banking system and not just opening accounts.

Some of the recent developments taken by RBI to eliminate financial exclusion and bring more and more people under the financial services network are:-

(1) No-frills accounts with overdraft facility
(2) Simplification of know-your-customer (KYC) norms
(3) Liberalized ATM expansion
(4) Entrepreneurial credit like Kisan Credit Card and General Credit Card etc.
(5) New branches in unbanked rural areas
(6) Use of Regional language
(7) Banking services in unbanked villages with a population to more than 2000.
(8) Extensive use of information technology by banks

MEASURES TO ENHANCE FINANCIAL INCLUSION

Expanding the financial system and spreading its reach is very important for both accelerating growth and for equitable distribution. In view of the real need of financial inclusion, especially in developing countries like India, the following measures need to be addressed:-

(1) Government should promote to introduce basic banking education in school level.
(2) Banks should reach to the end customers and catch micro deposits.
(3) Banks should start small extension counters at public utility services as primary health care centre, railway station, bus stop, village mandies etc.
(4) Banks should enhance the use of technology.
(5) All banks should open no frill accounts with nominal amount or zero balance.
(6) Banks should provide free financial councelling services to small entrepreneurs.
(7) Encourage small entrepreneurs.

CONCLUSION:-

It can be concluded that financial inclusion is a strategy to eliminate poverty and for inclusive growth. The picture can be painted if banks and financial institutes really attach each and every section of the society. Now, It is proper time to implement government schemes and policies to elevate the standard to living of rural India and to bring them within real developed and shining India.

The importance of working together for overall development of whole world has been aptly described in the following stanza of Upnishad which may be the main theme of financial inclusion:-

"Om sahanavavatusahanauBhunaktu,
Sahavirayamkarawavahai,
Tejasvinavaditamastu, Ma vidvishavahai,
Om shanty hi shanty hi shanty hi."

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CORPORATE SCANDALS AND FORENSIC ACCOUNTING

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ABSTRACT

Over the past few years, the corporate world has witnessed many ups and downs. The stock markets have crashed, and the corporate sector has been plagued by huge business scandals. In most of these corporate/business scandals and failures, accounting fraud has been the main culprit. The way accounting is practiced or the interpretations that may give different prescriptions in similar situations are some dark areas that may open some scope for the corrupted accountants. A company's quarterly profit and other financial indicators are key information for investors, when deciding whether to buy or sell a company's stock. Lying about those numbers can be an appealing way to keep a company riding high, when they are actually not performing well. As we can imagine, this fraudulent book-keeping and stuffing of the books is tempting. There is widespread concern that corporate governance mechanisms have failed to prevent these fraudulent practices. As a consequence, improvements in corporate governance are being sought by resorting to refined accounting techniques. The purpose of this paper therefore, is to suggest a broadening of our understanding of a new system of accounting called "Forensic Accounting" and to analyse the impact of this accounting system involving a major shift from prescriptive norms to the system involving greater judgment. The paper is essentially a conceptual one the basic foundation of which comes from various secondary sources and websites. The paper also discusses various aspects of forensic accounting and its comparison with the existing IAS with its effects on the financial statement of corporations and financial institutions, the need and the role it can play in solving the vexed problems of the corporate world. It is argued that forensic accounting could be a way out, an antidote which would definitely combat and immunize the corporate scandals and business failures.

KEY WORDS :

Accounting Fraud; Corporate Governance; Corporate Scandals; Forensic Accounting; Fraudulent Book-keeping; Global Economy.

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INTRODUCTION :

Successful and sustained businesses, at their cores, share a universal trait-they are focused on providing value to and sharing values with the societies they operate in. In many cases, the members of these societies are directly involved with the companies as customers, employees, suppliers, and shareholders. Fundamentally, business is about creating value for stakeholders. But, unfortunately, corporate scandals in the recent past shook the confidence of stakeholders and the wave of these scandals has had long-lasting and far-reaching impacts on the global economy. The impacts of corporate scandals are not limited to the investors and employees of those companies involved. The externalities of this misbehavior spill over to the entire world, affecting both publicly traded companies and privately held ones as well. Surprisingly, in most of the corporate/business scandals and failures, accounting fraud has been the main culprit and accounting as a discipline is held liable. Accounting fraud can come in a variety of ways. Accountants may simply record fake income the company never received, or backdate revenues so that they appear in an earlier financial period. Shifting current and future expenses and income is another way to make the books look more favorable than the company's actual situation. Thus, the way accounting is practiced or the interpretations that may give different prescriptions in similar situations are some dark areas that may open some scope for the corrupted accountants. There is widespread concern that corporate governance mechanisms have failed to prevent these corporate scandals and business failures. As a consequence, improvements in corporate governance are being sought. There has been a growing recognition that corporate and business scandals threatening the global economy cannot be overcome and accomplished by regulatory measures alone but need to be complimented by advocacy, awareness and refined accounting techniques and initiatives. Failure of giant corporate groups, like Enron, WorldCom, Tyco, etc. in last two-three decades as well as other accounting scandals and corporate crimes as also the latest economic downturn strengthens the demand further. An important accounting technique that is being strongly advocated and much talked about now-a-days, particularly in the US and Western Europe is what is popularly known as Forensic Accounting which, if implemented in its totality, can certainly go a long way in combating and uncovering the frauds, arresting the corporate collapses and increasing their transparency. As such, it is very important to have a complete understanding of this new subject.

MEANING OF FORENSIC ACCOUNTING

Stated simply, the integration of accounting, auditing and investigative skills yields the specialty known as Forensic Accounting. It is a comparatively new specialty within the old and distinguished world of accounting. Defined as "the application of the accounting concepts, principles and procedures in solving legal problems", forensic accounting is a combination of two words viz; "Forensic" means "Relating to, used in, or appropriate for courts of law or for public discussion or argumentation" and "Accounting" means "A system that provides quantitative information about finances. Used in this sense, Forensic Accounting can be thus defined as "the application of accounting skills to provide quantitative financial information about matters before the courts. Therefore, "Forensic Accounting" is actually litigation support involving accounting. It is financial transaction analysis that is suitable for presentation in court which can uncover the possible fraud in a company. Such analysis will form the basis for discussion, debate and dispute resolution". According to the Association of Certified Fraud Examiners, Vancouver, (www.acfe.com), "Forensic accounting is the use of professional accounting skills in matters involving potential or actual civil or criminal litigation, including, but not limited to, generally acceptable accounting and audit principles; the determination of lost profits, income, assets, or damages; evaluation of internal controls; fraud; and any other matter involving accounting expertise in the legal system". Bologna and Lindquist (quoted by Bhasin, 2007) define forensic accounting as "the application of financial skills, and an investigative mentality to unresolved issues, conducted within the context of rules of evidence. As an emerging discipline, it encompasses financial expertise, fraud knowledge, and a sound knowledge and understanding of business reality and the working of the legal system". This implies that the forensic accountant should be skilled not only in financial accounting, but also in internal control systems, the law, other institutional requirements, investigative proficiency, and interpersonal skills. It is pertinent to note that forensic accounting is a broadly mixture of Accounting, Finance, Auditing, Law, Computerization, Ethics and Criminology with focus on the prevention and detection of financial frauds. The key components of forensic accounting or otherwise called Financial Forensics/Investigative Accounting, are accounting skills, auditing techniques and investigative procedures that aim to analyse relevant financial information in order to detect fraud. The objective is to come up with timely and accurately documented evidence that can be suitable for use in court.

COMPOSITION OF FORENSIC ACCOUNTING

Forensic accounting analysis consists of analyzing financial documents to search for illegal activity within an organization, specifically white-collar crime, therefore the main aim of forensic accounting is to help the corporations and others to conduct an investigation into frauds and scandals and assist in litigation thus supporting to book the wrongdoers. Accordingly, forensic accounting is divided into two primary components/ areas: (1) Litigation Services, and (2) Investigative Services. (Zysman, 2004)

1. Litigation Services, deal primary with issues related to quantification of economic damages. These services which are provided in connection with actual or potential legal actions include expert witness and consulting services. Under litigation support, forensic accounting assists in:
   - Obtaining document necessary to support or refute a claim;
   - Reviewing of the relevant documentation to form an initial assessment of the case in an identified area of loss;

- Examination for discovering, including the formulation of the act regarding the financial residence;
- Attendance at the examination for discovery to review the testimony, assist with understanding the financial issues and to formulate additional questions to be asked; and

2. Investigative Services are essentially associated with the investigation of criminal matters. These services generally do not involve litigation, but include fraud investigation, fraud detection, fraud deterrence and fraud mitigation. Under investigative accounting, the accountant:
   - Reviews factual situation and provides suggestions regarding possible courses of action;
   - Assists in the protection and recovery of assets; and
   - Co-ordinates with other experts.

It will be in place to mention here that the components of forensic accounting include an attempt to piece together or reconstruct a past event or events using financial information where that reconstruction is likely to be used in some judicial proceeding (e.g., criminal court, civil court, deposition, mediation, arbitration, settlement negotiation, plea bargaining). This is shown below:-

Table-I

Construction Claims	Environmental Claims	Estate/ Family Valuation	Fraud Investigation	Financial Contract Disputes	Government Contract Claims	Intellectual Property Infringement Damages

As can be seen from Table-I, fraud investigation is an important element of forensic accounting. Forensic accounting is a specialized branch of accounting that essentially requires training in fraud detection and fraud examination.

MEANING OF FRAUD EXAMINATION

Fraud means "any act, expression, omission, or concealment calculated to deceive another to his or her disadvantage; *specifically*: a misrepresentation or concealment with reference to some fact material to a transaction that is made with knowledge of its falsity or in reckless disregard of its truth or falsity and with the intent to deceive another and that is reasonably relied on by the other who is injured thereby." Examination, on the other hand, means "the act or art of examining" i.e., "to observe carefully or critically; inspect" or "to study or analyze" an issue. Thus, Fraud Examination is the thorough study, inspection or analysis of an issue relating to fraud. The essential components of Fraud examination may include:-

Table-II

Fraud Prevention	Fraud Deterrence	Fraud Detection	Fraud Investigation	Fraud Loss & Costs Recovery	Anti-fraud Controls Remediation	Anti-Fraud Education & Training

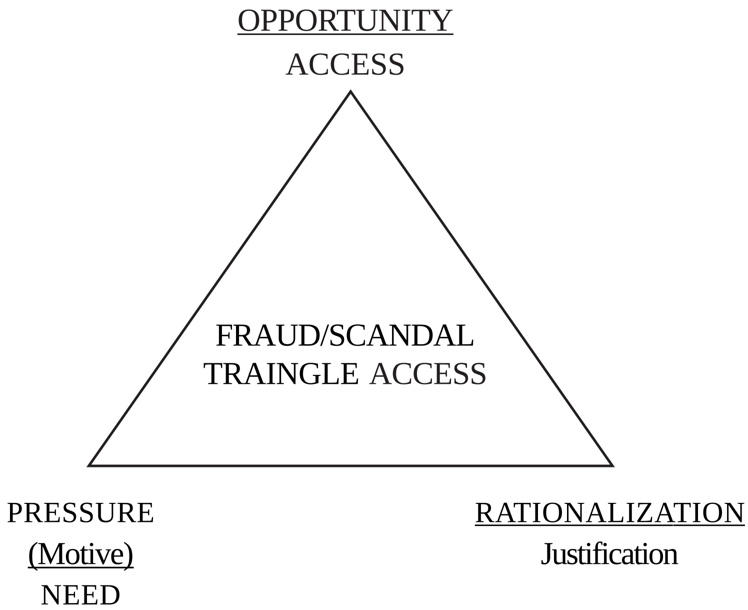
DIFFERENCE BETWEEN FORENSIC ACCOUNTING AND FRAUD EXAMINATION

It may be indicated here that most fraud examinations are forensic accounting but not all forensic accounting is fraud examination. For example, the valuation of a property in a minority shareholder derivative suit would be included under forensic accounting but may not necessarily involve fraud. Fraud examinations will generally fall under the category of forensic accounting because the majority of examinations, investigations, and reports involving fraud are all done with "an eye towards litigation." In other words, fraud examiners are taught to conduct their examination with the assumption that the case may end in litigation. However, according to Association of Certified Fraud Examiners(www.acfe.com), the main points of differences between Forensic Accounting and Fraud Examination are given hereunder:-

Table-III

Forensic Accounting	Fraud Examination
1. A broad discipline applying accounting skills to legal matters in a wide range of issues;	1. A focused discipline relating entirely to the issue of fraud;
2. Addresses a past event;	2. Addresses past, present and future events;
3. Uses financial information;	3. Uses financial and nonfinancial information;
4. Produces information about finances;	4. Produces information about finances, people and their actions;
5. For use in judicial proceedings; and	5. For use in business and government internal proceedings and private and judicial proceedings; and
6. A relatively small group of practitioners.	6. A large force fighting fraud in business and government.

A common element in the above tables is the "Fraud and its Investigation" and therefore it is the Fraud/Scandal which is the pivot around which the whole Forensic accounting revolves. The question is why people commit frauds or steal. This is explained with the help of this Fraud/Scandal Triangle which is the most important part of Forensic Accounting:-



Source: Forensic accounting and Investigative services, People, Principles, Possibilities, Eide Bailly, (DCash@eidebailly.com)

Opportunity or access-To access the company's records. As an important official you have access to corporate records and you have ability to maneuver things and commit frauds. Motive, pressure, the need why do the frauds take place? You need money. You feel that you never get a head and you take a little bit right now but you promise to pay back later and you will be ok. Rationalization is justification and it means that you have the right in your mind just steal from where you work in and you feel you deserve it. This is the basics of Forensic Accounting.

FORENSIC ACCOUNTING DISTINGUISHED FROM TRADITIONAL ACCOUNTING

Forensic Accounting is different from the old debit or credit accounting as it provides an accounting analysis that is suitable to the organization which will help in resolving the disputes that arise in the organization. Until recently, detecting fraud or white collar crime was thought to be part of the conventional accounting function. Fraud was something the internal or external auditors were supposed to guard against through their periodic audits. Now, we know that auditors can only check for the compliance of a company's books to generally accepted accounting principles, auditing standards, and company policies. Thus, a new category of accounting was needed to detect the fraud in companies that suspected fraudulent transactions. This area of accounting is known as 'forensic accounting'. Following are the main points of differences between the two:-

1. Forensic accounting looks at the accounting in wider perspective rather than in different segments such as data entry, record keeping, preparation and record keeping;

2. As we know auditor can only check for compliances of (in companies' books) GAAP, AS and company policies. But forensic accountants detect the fraud in the suspected fraudulent transaction of the company;

3. The primary orientation of forensic accounting is explanatory analysis (cause and effect) of phenomenon; and

4. Forensic accounting focuses on detection of financial frauds by linking data knowledge and insight together for prevention and detection of fraud by establishing and placing the accounting system on right track, it also creates difference (as it promote fears in the mind of wrongdoers that there is likelihood of they being caught and punished).

FORENSIC ACCOUNTING DISTINGUISHED FROM TRADITIONAL AUDITING

The field of accounting operates with many specializations, and auditing and forensic accounting are two of the most common. Although forensic accounting analysis and auditing seem like similar specialties, significant differences exist within the two job functions. Companies in need of accounting assistance should understand the difference between the two specialties. This is shown as under:-

DIFFERENCE BETWEEN TRADITIONAL EXTERNAL AUDITOR AND FORENSIC AUDITOR

Forensic Auditor/Accountant	Traditional External Auditor
1. Forensic accountants search specifically for fraudulent activity within organizations;	1. Auditors verify that companies are compliant with regulations and organizational policies;
2. A forensic accountant burrow much deeper into the facts and issues;	2. A tradition auditor normally does not go deeper into the facts and issues;
3. The forensic accountant employs a much higher degree of professional skepticism when conducting his work. He is not apt to accept explanations and documents at face value;	3. The auditor does not employ much higher degree of professionalism and accepts mostly explanations and documents at face value;
4. The forensic accountant is more adept	4. But a traditional auditor is not that

at interviewing and eliciting information from company personnel, witnesses and subjects.	much adept at interviewing and eliciting information from company people, witness and subjects;
5. The forensic accountant is a bloodhound of Bookkeeping. These bloodhounds sniff out fraud and criminal transactions in bank, corporate entity or from any other organization's financial records. They hound for the conclusive evidences;	5. Traditional External Audit is an examination of books of accounts and other records such as documents, vouchers etc. which confirms or support the correctness of the entries in the books of a business or concern to enable an auditor to satisfy himself as to whether the P & L A/c and Balance Sheet exhibit a true and fair view of state of affairs of the concerns;
6. The Forensic Accountants find out the misstatements deliberately;	6. Traditional External Auditors find out the deliberate misstatements only;
7. In gathering facts and evidence, a forensic accountant is more experienced in where to look, what types of evidence to look for, how to extract it and what constitutes relevant and valid support. For instance, in an auditor malpractice suit, a forensic accountant would be used to explain what audit procedures, or lack thereof, may have contributed to the company's misstatements;	7. But an auditor is not usually that much experienced in gathering facts and evidences and does not bother what types of evidence to look for, how to extract it and what constitutes relevant and valid support;
8. Forensic Accountants are trained to look beyond the numbers and deal with the business reality of the situation; and	8. Traditional External auditors look at the numbers only and are not trained to look beyond the numbers and deal with the business reality of the situation; and
9. A forensic accountant is more familiar with how employees can abuse and misuse controls and processes and with the various types of fraud, schemes and methods used to circumvent internal controls.	9. A traditional external auditor is not usually familiar with how employees can abuse and misuse controls and processes and with the various types of fraud, schemes and methods used to circumvent internal controls.

Source: various papers and websites.

It is noteworthy that Forensic Accountant Investigations include identification of fraud. This is different from Auditors Investigations that are not responsible for identifying fraud. Forensic accounting investigations include litigation services related to a variety of situations. This is evident from this table:-

Table I

Differences between Auditors and Forensic Accountants Regarding Error Identification, Error Prevention and Fraud Identification

	Error Identification	Error Prevention	Fraud Identification
Auditor	X	X	-
Forensic Accountants	-	-	X

Source : Gray, Dahli "Forensic Accounting And Auditing: Compared And Contrasted To Traditional Accounting And Auditing" American Journal of Business Education – Fourth Quarter 2008 Volume 1, Number 2

MEANING OF A FORENSIC ACCOUNTANT

A forensic accountant is an accountant who assists with the financial elements of cases being prepared for or heard in, court. Sometimes he may be referred to as a litigation support accountant. He may act as an expert witness at trial. Forensic accountants, basically, investigate and document financial frauds. Also, they help lawyers, courts, regulative bodies and other institutions in investigations of financial frauds.

The Opportunities for the Forensic Accountants are growing at the rapid speed. Collapse of Enron and WTC twin towers have blessed the American Forensic Accountants with the opportunity. As fraud and other white-collar crimes cost companies billions of the dollars a year, therefore in an effort to uncover and prevent fraudulent activity and theft, companies employ forensic accountants. Some of the criminal activities that forensic accountants look for include fraud, money laundering and embezzlement. If a person within an organization is convicted of a crime, the forensic accountant responsible for finding the illegal may need to testify in court. Today, Forensic Accountants have redeemed the accountancy profession through their feats and accomplishments in court litigations, where they have been instrumental in bringing several white-collar criminal offenders to court. In some cases, they were able to identify fraudsters and even tracked the whereabouts of terrorists through their fund transfers. A forensic accountant is able to provide a professional, objective and independent opinion on matters within his field. The history of forensic accounting includes bringing back the pride and integrity of an otherwise-tainted profession.

NEED OF FORENSIC ACCOUNTING/FORENSIC ACCOUNTANTS

Growing cybercrimes, failure of regulators to track the security scams, series of co-operative banks bursting and recent corporate scandals- all are pinpointing the need of forensic accounting. The following factors are responsible for the need of Forensic Accounting;-.

- Forensic accounting originally stemmed from the need to curtail and suppress the rising numbers of corporate crimes. The effects of fraudulent acts through accounting manipulations affect the financial welfare of investors and the capital market as a whole;
- The "white-collar crimes" in the economic well-being of a nation also bring financial despair to other countries;
- In recent years, wealth became unjustly diverted and unevenly distributed to a point at which there was no economic balance and growth, because it benefited only the unscrupulous few. Such deceitful acts became detrimental to a business environment that largely encourages companies to trade their stocks to the public.
- The sophistication of cleverly schemed white-collar crimes is executed with such skill and professional expertise that it erodes the security of vital business sectors, particularly the banking systems and financial institutions. The need to specialize in investigative accounting as an aid to the prosecuting team became evident as cases against financial manipulators did not flourish in courts;
- Moreover, the integrity of the supposedly independent external auditors who issue certifications that attest to the fairness of financial reports becomes questionable. These certifications are being made even if the figures are untrue and misleading. These practices are perceived either as a matter of incompetence in investigating fraud or as an act of abetting the fraudulent corporations in misleading the public investors and lenders;
- As a matter of fact, the forensic accountant as an independent investigator is also tasked to determine the degree of the CPA's/CA's participation in submitting financial statements that tend to mislead;
- Inasmuch as every sector or industry is supported by an accounting system, whether manual or computer based, the analytical skills of a separate and independent set of expertly trained investigative accountants have become necessary in every fact-finding team. Their role as a new breed of accounting professionals is to provide litigation support by expertly explaining the accounting manipulations and gather relevant evidence that the courts of law will uphold; and
- Forensic accountants play important roles in showing proof of financial motives and methods employed in order to perpetrate white-collar crimes in different levels. Their

opinions are held in court as free from bias since they have gained additional training as investigative examiners to support litigations.

ROLE OF FORENSIC ACCOUNTING AND FORENSIC ACCOUNTANTS

A Forensic Accountant is often retained to analyze, interpret, summarize and present complex financial and business related issues in a manner which is both understandable and properly supported. Forensic Accountants can be engaged in public practice or employed by insurance companies, banks, police forces, government agencies and other organizations with advantage. Forensic accountants are increasingly playing more 'proactive' risk reduction roles by designing and performing extended procedures as part of the statutory audit, acting as advisors to audit committees, and assisting in investment analyst research:

1. Forensic accounting involves a financial detective (Forensic accountant) with a suspicious mind, who acts as a financial bloodhound, someone with "sixth sense" that enables reconstruction of past accounting transactions and an individual who looks beyond the numbers;
2. Investigation and analysis of financial evidence;
3. Developing computerized applications to assists in the analysis and presentation of financial evidence;
4. Assisting in legal proceedings, and acts as an experts in evidence findings; and
5. Forensic accountant now a days are needed to attack on:
   - Growing cybercrime, security scams;
   - Cooperative banks bursting;
   - Embezzlement, negligence and Frauds.
   - Malpractices and employees theft etc.

In a nutshell, following services can be provided by Forensic accountant:-

- Quantifying the impact of lost earning
- Construction delay, stolen trade secrete
- Insurances disputes, damage/loss estimate
- Disturbance damages, loss of goodwill
- Assessment of potential business compensation cost
- Consultation on business defalcation minimization
- Breach of contracts, partnership dispute resolution
- Investigations and misappropriation
- Provides evidences as an expert , investigate professional negligence

- Tax matters and tax advocacy
- Reconstruction of accounting records. Etc.

Forensic Accounting Engagements

Coenen (2005) and others have identified the following as areas/categories of specialty in forensic accounting. For examples:

- Corporate scandals;
- Litigation services;
- Business valuation;
- Computer forensic/e-discovery;
- Securities fraud;
- Bankruptcy, insolvency, and reorganization;
- Post-acquisition disputes such as earn outs or breaches of warranties; and
- Economic damages calculations, whether suffered through tort or breach of contract.

However, Zysman(2004) in a more elaborate form captured the assignment performed by forensic accountant as including:

- **Criminal investigation**, which are usually on behalf of the police with the aim of presenting evidence in a professional and concise manner.
- **Shareholders and partnership dispute** that involve analysis of numerous year financial record for valuation and qualification of the issue in dispute;
- **Personal injury claim**, where for example economic losses from motor accident or wrongful dismissal may need to be quantified.
- **Business interruption and other type of insurance claim**. These assignments involve a detailed review of the policy to investigate coverage issues and the appropriate methods of calculating the loss.
- **Business/employee fraud investigations** which can involve fraud tracing, asset identification and recovery, forensic intelligence gathering and due diligence review.
- **Matrimonial dispute** involving the tracing, locating and evaluation of asset.
- **Business economic losses**, where contract disputed, construction claims, expropriation, product liability claim and trade mark are the issues.
- **Professional negligence**, to ascertain the breach and quantify the loss involved, and
- **Mediation and arbitration**, as a form of alternative dispute resolution.

SKILLS NEEDED BY A FORENSIC ACCOUNTANT

In order to perform efficiently tasks and activities that have been assigned to them, forensic accountants must possess core knowledge and skills in accounting and auditing. Additionally, they should possess developed capabilities of verbal and written communication, capability of perceiving details, capability of efficient application of investigative techniques, experience in investigations as well as independence and high degree of knowledge about the use of information technology in the accounting and auditing procedures. In general, a capable Forensic Accountant should have the following characteristics:

- Curiosity;
- Persistence;
- Creativity;
- Discretion;
- Organization;
- Confidence; and
- Sound professional judgement.

It is estimated that in the following years, in developed market economies, a forensic accounting investigator will be one of the 20 most wanted professions (www.indiaforensic.com). Here are some of the broad areas of useful expertise for a forensic accountant:

- An in-depth knowledge of financial statements and the ability to critically analyse them. These skills help forensic accountants to uncover abnormal patterns in accounting information and recognize their source;
- A thorough understanding of fraud schemes, including but not limited to asset misappropriations, money laundering, bribery, and corruption;
- The ability to comprehend the internal control systems of corporations, and to set up a control system that assesses risks, achieves management objectives, informs employees of their control responsibilities, and monitors the quality of the programme so that corrections and changes can be made;
- Proficiency in computer and knowledge of network systems. These skills help forensic accountants to conduct investigations in the area of e-banking and computerized accounting systems;
- Knowledge of psychology in order to understand the impulses behind criminal behaviour and to set up fraud prevention programmes that motivate and encourage employees;

- Interpersonal and communication skills, which aid in disseminating information about the company's ethical policies and help forensic accountants to conduct interviews and obtain crucially needed information;
- Thorough knowledge of company's governance policies and the laws that regulate these policies; and
- Command of criminal and civil law, as well as, of the legal system and court procedures.

APPROACHES TO FORENSIC ACCOUNTING ASSIGNMENT

Zysman (2004) outlined the following steps in executing Forensic Accounting engagement; each forensic accounting assignment is unique and has a peculiar approach. In general, many forensic accounting assignments will include the steps detailed below:-

- **Meet with the Client**

  It is very important to meet the client in order to have a clear understanding of the important facts, players and issues at hand;

- **Perform Conflict Check**

  A conflict check should be carried out as soon as the relevant parties are established;

- **Perform Initial Investigation**

  Preliminary investigation should be carried out prior to the development of a detailed plan of action. This will allow subsequent plans to be based upon a more complete understanding of the issue;

- **Develop an Action Plan**

  This plan will take into account the knowledge gained by meeting with the client in carrying out the initial investigation and will set out the objectives to be achieved and the methodology to be utilized to accomplish them;

- **Obtain the Relevant Evidence**

  Depending on the nature of the case this may involve locating documents, economic information, asset, a person of company, another expert or proof of the occurrence of an event;

- **Perform the Analysis**

  The actual analysis performed will be dependent upon the nature of the assignment and may involve:-

1. Calculating economic damages;
2. Summarizing a large number of transaction Performing a tracing of assets;
3. Performing a present value calculations by utilizing appropriate discount rates;
4. Performing a regression or sensitivity analysis Utilizing a computerized application such as a spread sheet, data base or computer model and Utilizing charts and graphics to explain the analysis; and

✢ **Prepare the Report**.

Often a report will be prepared which may include sections on the nature of the assignment, scope of the investigation, approach utilized, and limitations of scope and findings and' / or opinions. The report will include schedules and graphics necessary to properly support and explain the findings.

THE INDIAN SCENARIO

Forensic accounting in India has come to limelight only recently due to rapid increase in white-collar crimes and the belief that our law enforcement agencies do not have sufficient expertise or the time needed to uncover frauds. As stated earlier, the failure of regulators to track security scams, increasing cyber-crimes, chain of cooperative banks bursting, etc have led to the ever increasing need for forensic accountants. It may be indicated here that the formation of "Forensic Research Foundation" is a landmark creation so far as Forensic accounting is concerned. It provides support for investigation of fraud. It publishes one bi-monthly journal named as "White Crimes", pertaining to forensic and economic crimes. Another international organization named as KPNG has set up Investigation Detection Centre in India. Networks Limited, a Delhi-based organization, working in the similar field, is also trying to innovate ways and means to detect financial irregularities and corporate crimes in India. Serious Investigation Fraud Offices (SIFO) has also been established in India for the same reason, i.e. detection and prevention of economic irregularities and crimes. Similarly, Indiaforensic is a cluster of people possessing the technical excellence in forensic accounting and are working together as national enterprise for forensic accounting leadership (www.indiaforensic.com). The need for such bodies and the importance of Forensic Accountants has been highlighted by LN Roy Committee. Lenin Parekh Committee has also expressed the view that one "Fraud Detection Committee" needs to be established. The main aim of such boards/committees is to prevent frauds and protect the interest of the stakeholders. As such, due to the growing number of frauds the need for forensic accountants is likely to increase in the years to come. In view of the changing nature of Indian and International accounting, the regulatory and administrative agencies are expected to put pressure for greater demand of forensic practices.

Unfortunately forensic accounting is largely an unexplored area as far as India is concerned. It is reported (www.acfe.com) that nearly 40 percent of the top 100 American accounting firms are expanding their forensics and fraud services. If this data is of some sense to Indian scenario then the day is not far away when forensic practice will contribute maximum to the total revenue of the Indian CA firms as also the national economy. As such, Forensic Accounting has a lot of scope in India and the services of forensic accountants could be increasingly and gainfully utilized by the Lawyers, police, insurance companies, government and regulatory bodies, banks, courts and business communities. Though some initiatives have already been taken but a change in the curriculum is badly needed which would certainly go a long way in producing the professional forensic accountant in our country. It is therefore recommended that:-

1. The ICAI (Institute of Chartered Accountants of India) should encourage formalization and specialization in the field forensic accounting;
2. Forensic accounting be introduced as a paper in the various professional examinations conducted by the various accounting bodies, like ICAI, as also by some universities imparting education in Commerce and Finance;
3. Professional accountants/CPAs/CAs both in practice, private or public sectors should be imparted training on the relevance of forensic accounting as they might be summoned by court one day to defend any opinion given in their reports;
4. Finance Officers/Accounts Officers and others should also be imparted training in this new field so as to obtain maximum benefits. Their assistance and forensic accounting know-how can be significant in combating financial crimes and reducing the overall cost and maximization of benefits;
5. There is dearth of literature and texts on forensic accounting in India. Therefore, the ICAI and the IAA (Indian Accounting Association) should put their heads together to produce quality literature, books and design course curriculum in this area of accounting with the help of relevant Professional Bodies in this field; and
6. Lastly, the academia should emphasis skill development in the field of forensic accounting.

CONCLUSION

Scandals, Fraud and corrupt practices are common in modern corporate world and have negative impact on global economy. And hence, the services of forensic accountants are required and badly needed in both public and private sector. Forensic Accounting is that branch of accounting which utilizes accounting, auditing, and investigative skills to conduct an examination into a company's financial statements. It provides an accounting analysis that is suitable for court. A forensic accountant uses his knowledge of accounting, law, investigative auditing and criminology to uncover fraud, find evidence and present such evidence in court if required to. They are frequently used in fraud cases. Forensic accounting has come into limelight due to rapid increase in financial frauds and white-collar crimes and corporate scandals. The opportunities for the Forensic Accountants are growing fast; they are being engaged in public practice and are being employed by insurance companies, banks, police forces, government agencies, etc. The importance of forensic accountant's role in the detection of fraud is continuously growing. Armed with combination of skills, these financial detectives are today important assets to modern legal teams as also to business corporates. In the backdrop of increasing levels of frauds, the demand for forensic accountants is bound to substantially increase in future and the regulating and administrative agencies are likely to demand the services in the nature of forensic practice. Maurice E. Peloubet who coined the term Forensic Accountant in 1946 said that the preparation of financial statements has some but not all of the characteristics of forensic accounting. This statement is enough for the chartered accountants in India to foray in this field. Therefore, Chartered Accountants are likely to find themselves more involved in what is essentially a type of forensic practice. Until recently, there was no separate community in India. But now movement of India forensic community is gathering the pace.

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PROFITABILITY RATIO ANALYSIS WITH SPECIFIC REFERENCE TO INDIAN PETROLEUM INDUSTRY – AN EMPIRICAL STUDY

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ABSTRACT

Profitability ratios are widely used for modeling purposes both by practitioners and researchers. The firm involves many interested parties, like the owners, management, personnel, customers, suppliers, competitors, regulatory agencies, and academics, each having their views in applying financial statement analysis in their evaluations. Practitioners use profitability ratios, for instance, to forecast the future success of companies. it is concluded that ONGC's (Oil and Natural Gas Company) profitability is highest among the other petroleum companies of India. It is followed by RIL (Reliance Industries Limited) and again almost equal for BPCL (Bharat Petroleum Corporation Limited) and HPCL (Hindustan Petroleum Corporation Limited).

KEY WORDS

Net worth Ratio, Return on Capital Employed, Earnings Per Share, Market to Book Value Ratio.

INTRODUCTION

Profitability ratios are used to measure the performance and operating efficiency of a concern. The concept profitability is the profit earning capacity of a firm. It is shown in terms of percentage or rate profit ability has certain dements also we as a performance measure it can be misleading, it cannot be applied to nonprofit making organization which nevertheless need to improve their performance.

Many distinct areas of research involving Profitability ratios can be discerned. Historically one can observe several major themes in the financial analysis literature. There is overlapping in the observable themes, and they do not necessarily coincide with what theoretically might be the best founded areas, ex post. The traditionally stated major purpose of using financial data in the ratio form is making the results comparable across firms and over time by control-

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ling for size. This basic assertion gives rise to one of the fundamental trends in financial ratio analysis (or FRA for short, in this paper). The usually stated requirement in controlling for size is that the numerator and the denominator of a financial ratio are proportional.

LITERATURE REVIEW

It is obvious that the existing main research areas in financial ratio analysis are fairly separate from each other sometimes with traditions of their own. Historically, these trends have developed to a degree on their own without a distinct theoretical framework to encompass the entire field of financial statement analysis. Of the four areas reviewed in this paper only the first and the second are closely interrelated.

Barnes (1982) shows how the non-normality of financial ratios can result from the underlying relationships of the constituents of the financial ratios. He is thus able to tie in the ratio format aspects with the distributional properties of financial ratios. In the discussion on Barnes's paper (Horrigan, 1983, Barnes, 1983), Horrigan puts forward that financial ratio research should be more interested in the role of the financial ratios themselves than in "the nature of the ratios' components or to the ratios' incidental role as data size deflators".

The fundamental task of accounting is income determination and the evaluation of the firm's assets. The measurement of profitability is intimately linked with both. There is a significant body of literature which considers profitability assessment. In terms of economic theory the profitability of a firm could be defined as the internal rate of return of the capital investments constituting the firm, although Salamon (1973) casts doubt of this view. There is a strong tradition in literature that seeks to estimate the internal rate of return, either from a time series of the financial statements of the firm, or, more narrowly, by considering the relationship between the familiar accounting rate of return (the firm's annual profit in relation to its assets) and the internal rate of return. They will be called IRR and ARR below since there is some variance in the full terms in literature, especially for the latter. The ARR vs IRR discussion can also be deemed as seeking reconciliation between accounting based measurement and the economic theory of income. The relationship has been considered both as a purely mathematical relationship and from the empirical estimation point of view.

Ijiri (1979, 1980) shows that under certain general conditions the recovery rate converges to the "discounted cash flow rate" which is similar to economist's measure of the firm's profitability. The conceptual difference is that the economist's valuation is based on the future cash flows while in the profitability estimation only the historical data is used

Steele (1986) criticizes Ruuhela's model for its strong steady-state assumptions. Based on Kay's model and Peasnell's results he presents an iterative process for estimating the IRR from published financial statements without the steady-state assumption. On the other hand his approach requires market-based values and thus limits the range of firms that can be the target of the profitability evaluation. Brief and Lawson (1991a, 1991b) derive a simplified error term for the IRR estimation. Using simulation they cast doubt especially on the accuracy of IRR estimation for a small number of observations.

Harcourt (1965) put forward his position that the accountant's rate of return is "extremely misleading". Further numerical examples to illustrate the disparity of accounting and economic profitability measurement are provided in Solomon and Laya (1967). Vatter (1966) ponders the content of Solomon's paper at great length. He questions both the realism of Solomon's assumptions and the validity of IRR as a practical measure of profitability.

Review of literature studied in depth indicates that very few studies have been conducted in India to study profitability ratios of Petroleum Sector. It is very clear from the above literature in India no industry specific study has been conducted to examine the trend of profitability Ratio analysis. Also IRR (Internal Rate of Return), ARR (Average Rate of Return), and CRR (Cash Recovery Rate) approaches to study profitability of the companies has certain inherent limitations. Therefore Net worth Ratio, Return on Capital Employed, and Earnings per Share and Market to Book Value Ratio as profitability ratios has been selected to study the profitability of the selected petroleum companies.

Because of the development of our economy is become dependent on petroleum industry. Indian petroleum product consumption has increased day by day and we are dependent on imported petroleum product. So, researcher has conducted present research on petroleum industry of India and tried to study profitability ratios to predict trend of Petroleum Industry of India.

RESEARCH METHODOLOGY :

OBJECTIVES OF THE STUDY :

To analyze the profitability Ratio of Indian Petroleum Industry (including BPCL, HPCL, ONGC and RIL)

SOURCES OF DATA :

This study is based on the secondary data. To analyze the trend and growth of value addition in terms of EVA in Indian Petroleum Industry, Required financial data of sample companies were collected from ***"Prowess"*** *Database of Centre for Monitoring Indian Economy (C.M.I.E.),* and from published annual reports of companies. The Published annual reports of companies have been collected from the corporate offices of respective companies. The information related to petroleum industry have been collected form websites, magazines and from the government of India publication.

SAMPLE DESIGN :

The sample size of the present study is '04' petroleum companies from Indian Petroleum Industry. Out of 4 companies 3 companies are from public sector and 1 company from the private sector. These companies were selected as sample companies by considering the availability of financial data for computing EVA, components of EVA (NOPAT, WACC), for the study period from 2005-06 to 2009-10. The sample companies of the study are as under:

1. Bharat Petroleum Corporation Ltd.
2. Hindustan Petroleum Corporation Ltd.
3. Oil and Natural Gas Corporation Ltd.
4. Reliance Industry Ltd.

DATA ANALYSIS AND INTERPRETATION:

(a) Net worth Ratio:

$$\textbf{Net worth Ratio} = \frac{Net\ Profit\ (after\ interest\ and\ tax)}{NetWorth}\ x\ 100$$

TABLE 1.1 Net worth Ratio

(2005-06 to 2009-10)

(Ratio in Percentage)

Company Name	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**Average**
BPCL	3.14	19.86	13.27	6.13	12.63	11.01
HPCL	2.1	13.76	7.37	3.45	12.14	7.76
ONGC	27.54	26.04	24.04	20.33	19.91	23.57
RIL	20.11	21.01	27.08	15.18	12.32	19.14

ONGC's Average Net worth ratio is highest among them followed by RIL, BPCL and at last HPCL. It indicates high profitability of ONGC among the studied petroleum companies.

(b) Return on Capital Employed:

Return on capital Employed = $\frac{Net\ Profit}{Capital\ Employed}\ x\ 100$

TABLE 1.2 Returns on Capital Employed

(2005-06 to 2009-10)

(Ratio in Percentage)

Company Name	2005-06	2006-07	2007-08	2008-09	2009-10	Average
BPCL	2.23	13.2	8.26	3.9	7.38	6.99
HPCL	1.85	10.85	4.95	2.13	6.98	5.35
ONGC	27.72	26.2	24.24	20.5	20.08	23.75
RIL	15.32	16.51	20.51	10.78	8.81	14.39

Return on capital employed ratio compliments net worth ratio and found that this ratio is highest in case of ONGC (Average 23.75%) , followed by RIL (Average14.39%), BPCL (Average 6.99%) and HPCL (Average 5.35%). Here it can be concluded that profitability of BPCL and HPCL are almost similar.

(c) Earnings per Share (Rs.):

Earnings per Share = (Earnings / Equity Shares) * 100

TABLE 1.3 Earnings Per Share (Rs.)

(2005-06 to 2009-10)

Company Name	2005-06	2006-07	2007-08	2008-09	2009-10	Average
BPCL	9.69	77.98	43.72	20.35	42.53	38.85
HPCL	7.78	76.34	21.45	13.68	40.02	31.85
ONGC	97.36	72.03	76.28	72.6	78.3	79.31
RIL	65.08	79.87	101.3	99.63	49.65	79.11

Above both ratios's interpretation well supported by EPS as one of the indicator of profitability. It is also highest in case of ONGC (Average 79.31%) followed by RIL (Average 79.11%), BPCL (Average 38.85%) and HPCL (Average 31.85%).

(d) Market to Book Value Ratio:

Market to Book Value Ratio = (Market Value/Book Value) * 100

TABLE 1.4

Market to Book Value Ratio
(2005-06 to 2009-10)

Company Name	2005-06	2006-07	2007-08	2008-09	2009-10	Average
BPCL	1.41	1.06	1.27	1.12	1.43	1.26
HPCL	1.25	0.86	0.82	0.85	0.93	0.94
ONGC	3.46	2.81	2.97	2.12	2.69	2.81
RIL	2.46	3.55	4.17	2.09	2.74	3.00

Also, from Market to Book value ratio analysis, it can be interpreted that ONGC and RIL both almost comparable in terms of profitability followed by BPCL (average 1.26%) and HPCL (Average 0.94%).

CONCLUSION:

Analyzing profitability ratios namely; Net worth Ratio, Return on Capital Employed, Earnings per Share and Market to Book Value Ratio from the year 2005-06 to 2009-10, it is concluded that ONGC's (Oil and Natural Gas Company) profitability is highest among the other petroleum companies of India. It is followed by RIL (Reliance Industries Limited) and again almost equal for BPCL (Bharat Petroleum Corporation Limited) and HPCL (Hindustan Petroleum Corporation Limited).

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APPLICATION OF CLAUSE 49 BY INDIAN LISTED COMPANIES

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ABSTRACT

This paper highlights about the findings of three research stydies and discusses about application of clause-49 of SEBI with Indian listed companies. The paper attempts to see that whether various provision enacted by SEBI is strictly followed by selected Indian public listed companies or not. Their observance about this clause-49 is further examined by taking standard corporate governance criteria and marks are assigned to every company under study & finally their ranking is done.

OBJECTIVES OF THE STUDY

1. The objective of the study was to know to what extent the selected companies under study are following the provision or clause-49 of SEBI.
2. Whether these companies are reporting in their Annual report about corporate governance.
3. Whether their reporting about corporate governance is fair, good excellent or poor.

SCOPE OF THE STUDY : The scope of the study is limited to 80 companies from listed Indian public limited companies and ten companies are of public enterprises. The scope of the study is limited for one year i.e. 2008-09.

LIMITATIONS OF THE STUDY

The study is based on published annual reports of these companies for the year 2008-09. The limitation is that we have not done the study of what has happened actually in board room meeting in these companies. What is the role of independent directors in board meeting? We have also not corrected how many times independent directors have protected the interest of minority shareholders and how many times they have raised questions against the faulty policies of the companies.

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CAUSE 49

According to Clause 49 of listing agreement with SEBI, every company comes under the agreement will have to implement the requirements laid down by SEBI under Clause 49. These requirements are as follows:

(1) Composition & size of Board

(2) Board meeting and attendance

(3) Chairman & CEO duality

(4) Audit Committee

(5) Shareholder/Investors Grievance Committee

(6) Remuneration Committee

(7) Disclosures (mandatory)

(8) Non-Mandatory requirements

(9) CEO and CFO Certificate

(10) Corporate Governance Report

FINDINGS OF THE STUDY-I

Miss Karuna Gehlot has done research study on the topic "Corporate Governance in India" (A case study of listed companies) In her study, she has taken the forty listed companies Selected on random basis.

Out of the 40 companies selected for study, we found that all most all the companies are giving Corporate Governance report in their annual reports, which cover all the points required under clause 49 of SEBI. We have also observed that certain companies are not including certain important points. We have used criterion for Evaluation of Governance Standards. Accordingly we have assigned the points/scores and the column for total marks obtained by each company. This criterion for evaluation of Governance standards includes seventeen points. On the basis of the Corporate Governance Standard criterion, we found that some selected companies are not disclosing all the facts, which is required under SEBI Clause 49. Accordingly these companies less points/scores and those companies which are following the entire criterion lay down by SEBI, they are getting high marks. Accordingly out of 40 companies selected for study, there are 10 companies who got the first ten ranks on the basis of criterion for evaluation of Governance Standards. These companies can be considered as the best companies & the first 10 ranking companies are:

1. Infosys Technologies Limited (Rank1) (92, marks obtained out of 100)
2. Wipro Limited (Rank2) (87, marks obtained out of 100)
3. Reliance Infrastructure (Rank3) (86, marks obtained out of 100)
4. Bharti Airtel Limited (Rank4) (85, marks obtained out of 100)

5. Reliance Industry (Rank5) (84, marks obtained out of 100)
6. Grasim Industries Limited (Rank6) (83, marks obtained out of 100)
7. Hindustan Unilever Limited (Rank7) (82, marks obtained out of 100)
8. Sesa Goa Limited (Rank8) (81, marks obtained out of 100)
9. The Great Eastern Shipping Co. Limited (Rank9) (80, marks obtained out of 100)
10. Tata Power (Rank10) (79, marks obtained out of 100)

These companies have also received Corporate Governance implementation award from time to time. These are our blue chips companies.

COMPOSITION & SIZE OF BOARD

If we analyse the main points of Corporate Governance under Clause 49 regarding composition & size of Board of Directors, we observe that there is a balanced board i.e. the balance between executive and non-executive directors. The minimum number as required under Clause 49 is observed strictly i.e. 50% are Non Executive Director, in case of Chairman is Executive Director, and if Chairman is Non Executive Director that 1/3 of the board must consists of non-Executive Directors. Even in some Companies the number of Non Executive Director are more than the prescribed limit of SEBI Clause 49.

BOARD MEETINGS & ATTENDANCE

Regarding Board meetings & their attendance, it was observed that all the companies are regularly conducting the meetings of the Board and the attendance in the Board meeting in sufficiently high. SEBI Clause 49 says that the Board of Directors should meet at least 4 times a year. A Director can be a member of 10 committees or act as a Chairman of 5 committees. Analysis of 40 companies shows that every company has observed this requirement. It was also observed that more than 70% Directors were present in all the meetings and in some cases it was 80% to 100% attendance. It shows that Board meetings are regularly held and attendance was more than satisfactory.

CHAIRMAN & CEO DUALITY

Analysis of 40 companies reveals that 20 companies are having separate Chairman & Separate Managing Director/CEO. But in another twenty Companies Chairman is also managing Director i.e. CMD.

AUDIT COMMITTEE

Analysis shows that every company is having audit committee. The Audit Committee shall have minimum three Directors as members. Two third of the members of the audit committee shall be independent directors. All these Companies have kept transparency in compositing audit committee. It is observed that all the companies under study have compliance with the minimum requirement of the number of Independent Director in the committee. In all the companies the Chairman of committee is independent Director. All the companies under study have compliance with minimum requirement of the members of meeting of the committee (at least four meetings). All the members of audit committee are literate & one member should be expert in finance & accounts i.e. he has expertise in financial management & accounts. It was also observed that members of audit committee are regularly attending the meeting. It has also been seen that in the meeting of audit committee there is participation of head of finance, statutory auditor & chief internal auditor. In the meeting of audit committee, there is disclosure of audit committee chapter & terms of reference, it is observed that all the companies are publishing audit committee reports.

SHAREHOLDERS/INVESTORS GRIEVANCE COMMITTEE

Analysis of 40 companies reveals that there is complete transparency in composition of shareholder/Investor Grievance Committee. That means minimum number as required by Clause 49 of SEBI is followed by all the companies. Even in some companies members are more than the required number. Chairman of this Grievance committee, in all the companies under study is independent Director. The study reveals that all the companies under study has published in format or about the nature of complaints & queries received & disposed item wise. Companies give in detail about complaint pending on particular year & date; Complaints identify and reported under Clause 41 of the listing agreement, complaints disposed off during the particular year, complaints unresolved to the satisfaction of shareholders. In addition to this under the heading of this committee companies tells number of pending share transfer at the end of any financial year. Some companies give more details about nature of complaints like letter/complaints received from statutory bodies, SEBI, Directorate of Company Affairs (DOCA) stock exchange, complaints may also be relating to legal matters, court/consumer forum matters, another type of complaints may be dividend e.g. non receipt of dividend/interest warrants, fraudulent encashment of dividend/interest/redemption of warrants. Another type of complaints company receives are relating to allotment refund orders, equity share/ CCPS , non receipt of refund orders, non receipt of allotment (CCPS), letters in nature of reminders, complaints etc.

REMUNERATION COMMITTEE/ COMPENSATION COMMITTEE

Formation of remuneration committee is a non mandatory requirement. But our analysis of forty companies' annual reports shows that every company has formed a remuneration committee. There is provision that there should be minimum three NED in the committee. It was found that all most all the companies are having minimum three NED in their remuneration/compensation committee. In some companies we found that NED is more than three. In all the companies in the remuneration committee its chairman is independent director. These companies are conducting meeting of remuneration committee once in a year. It was also observed that all the members of remuneration committee are participating in the meeting of such committee. The companies under study are also disclosing pay packages of all the directors i.e. salary, benefits bonuses stock options, pensions etc. The companies are also disclosing details of fixed component and performance linked incentives along with performance criteria, service contract , notice period, severance fee, stock option details etc.

DISCLOSURE (MANDATORY) REQUIREMENTS

Analysis of forty companies reveals that all the companies have shown significant related party transactions having potential conflicts with the interest of the company. They have also reported Non Compliance related to capital market matters during last three years. The companies have also disclosed Accounting treatment policy, Board disclosure risk management which includes information to the board on risk management publishing, risk management report publishing management disclosure & analysis. The companies are also disclosing information to shareholders regarding appointment of new directors, reappointment of existing directors, Quarterly results and presentation, share transfers, Director Responsibility statement in their annual reports. In addition to this companies are also disclosing shareholder rights, audit qualification training of board members evaluation of non-executive directors & whistle blower policy in their annual reports.

NON MANDATORY REQUIREMENTS

Analysis of 40 companies revealed that the companies are also disclosing the non-mandatory requirements like activities done on social responsibility, Initiative taken for human resource development (HRD). Efforts done to improve Industrial relations (IR), Measures taken to improve environment, health and safety at the plant & outside company premises, Companies also disclose the policies on ETTS, HRD, CSR and IR.

CEO AND CFO CERTIFICATE

The companies under study have compliance to give in their annual report auditor's certificate on Corporate Governance. This is a clean certificate from auditor on behalf of Director, Managing Director. The C.E.O. and C.F.O. certificate is also disclosed in Corporate Governance reports.

CORPORATE GOVERNANCE REPORT

Analysis of 40 companies under study has revealed that each and every company has given Corporate Governance Report in their Annual Reports.

FINDINGS OF THE STUDY-II

Another study has been conducted by Mahima Gupta on the topic "Corporate Governance in Indian Corporate Sector (A case study of listed companies of India). She has taken 40 public companies and 10 companies from public enterprises. Thus, she has analyzed Corporate Governance Reports of 50 companies. The reports are of the year 2008-09. These companies are selected on convenience sampling method. These companies are listed companies at BSE and

NSE. In Corporate Governance Report she has analyzed the following points:

1. Philosophy of Corporate Governance.
2. Composition and size of the Board of Directors.
3. Their attendance in the Board meeting.
4. Chairman and CEO Duality
5. Composition and size of audit committee.
6. Meeting and attendance of audit committee.
7. Composition and size of Remuneration Committee.
8. Meeting and attendance of remuneration committee.
9. Composition and size of Shareholders' Grievance Committee.
10. Meeting and attendance of Shareholders' Grievance Committee.
11. CEO and CFO Certificate and report.

In the second part of analysis we have assigned marks out of 100 and marks of these companies on the basis of criterion for evaluating of Corporate Governance Standard. The standard corporate governance criteria are same as we have taken in the Karuna Gehlot's study.

1. PHILOSOPHY ON CODE OF GOVERNANCE

Analysis of 50 companies revealed that, in their Corporate Governance Reports the first point is philosophy of Corporate Governance. Every company under study has given statement of company's philosophy on code of governance. Every company is committed to the highest standards of good Corporate Governance practices and predates SEBI and Clause 49 of listing agreement. Transparency, fairness, disclosure and accountability are central to the working of every company under study.

2. COMPOSITION AND SIZE OF THE BOARD

We have analyzed that in the composition of Board of Directors, all companies are having a balance board of directors that means if Chairman is executive director, 50% and more are independent directors and if Chairman is non-executive director then 1/3 or more are independent directors. Our analysis show that most of the companies are having more than statutory required independent directors and in this way they are fulfilling the clause 49 of the listing agreement with SEBI.

3. ATTENDANCE ON THE BOARD MEETING

We have analyzed the Corporate Governance report of 50 companies & we observe that all the companies both in private & public sector have had four board meetings and the gap between two board meetings did not exceed four months. The study revealed that more than 50% directors were present in the board meetings. Even in some cases 80% directors were attending all the board meetings. All the companies are fulfilling the clause 49 of the listing agreement. This is a healthy sign that directors are attending the board meetings. The study relates to the year 2008-09.

4. CHAIRMAN & MANAGING DIRECTORS DUALITY

Analysis of 40 private sector companies shows that in 30 companies Chairman & Managing Directors are separate & they are executive directors, but in remaining ten companies Chairman & Managing Director is same person. In central public sector enterprises we have analyzed the Corporate Governance report of 10 companies & we found that in all the companies under study Chairman & Managing Director is same person i.e. executive director. Chairman & Managing Director should be separate person. If two different directors are on these posts it helps in called good governance.

5. COMPOSITION AND SIZE OF AUDIT COMMITTEE

Analysis of audit committee fifty companies' reveals that the numbers of members of this committee range from 3 to 6. In some companies, the number of director is three only. In twenty companies the number of member of audit committee are four. In some companies the numbers of members are five. In five companies the number of member is six. It has also been observed that members of audit committee are mostly Non-Executive/Independent directors. Majority of them are Non-Executive/Independent directors and they are also leaded by Non-Executive/Independent directors. The Non-Executive directors are in minority in all the audit committees of then companies. The number of Non-Executive directors is one only in all the audit committees of different companies. We found that in Bharat Heavy Electricals the Non-Executive directors were two. In nutshell, we can say that in all the companies, as far as Audit committee is concerned the numbers of Independent directors are more & they are fully in accordance with clause 49 of the SEBI.

So far as meetings of such audit committee are concerned the analysis reveals that the number of meetings held by these companies ranged from 4 to 8 in a year by public limited companies and in public enterprises it ranges from 2 to 11.Out of 40 companies four meetings were held by twenty four companies, five meetings were held by six companies, six meetings were held by four companies, seven meetings were held by two companies and eight meetings were held by four companies. In case of public enterprises only one company has organized only three meetings in a year which is BHEL. ONGC has conducted 11 meetings of audit committee in a year. Hindustan Petroleum Corporation Limited has held seven meetings in a year. Mahanagar Telephone Nigam Limited has also organized seven meetings in a year. Other public enterprises under study have organized the minimum number of meetings of audit committee as required by law.

6. MEETING AND ATTENDANCE OF AUDIT COMMITTEE

We have also analyzed that how many members of these committees are regularly attending the meetings of audit committee. It is observed that all the Independent Directors are attending all the meetings of audit committees. Their absence in such meetings is negligible. Of course sometimes executive directors may not attend the meeting.

In this way, our analysis reveals that Clause 49 of SEBI is strictly observed by all the companies under study so far as formation and conducting meetings of audit committee are concerned.

7. COMPOSITION AND SIZE OF REMUNERATION COMMITTEE

To constitute the remuneration committee is not mandatory but companies are free to give information about remuneration of Directors in Corporate Governance Report.

Though it is not mandatory to show the remuneration of Non-Executive /Independent Directors, out study shows that except ten companies every company has shown the remuneration of independent directors in their corporate governance report. Fees paid to independent director is shown in CG Report.

8. MEETING AND ATTENDANCE OF REMUNERATION COMMITTEE

In most of the companies Remuneration Committee is formed. In almost all the companies' remuneration committee consists of three directors and all are non executive independent directors. Chairman of the committee is NED / ID. Of course in some companies remuneration committee consists of 4 or even 5 directors. Companies meetings are held regularly. In some cases it is conducted four times in a year but on meeting in a year is normally conducted. It was also observed that no information is given regarding meetings attended by the ID. Companies are not publishing committees' report in their CGR.

9. COMPOSITION AND SIZE OF SHAREHOLDERS GRIEVANCE COMMITTEE

To form an investors / shareholders grievance committee is a mandatory requirement under Clause 49 of listing agreement. The minimum number of directors I this committee is not fixed and chairman of this committee should be Non-Executive / Independent Director (NED/ID).

Our analysis shows that all the companies have formed the shareholders grievance committee. Majority of the companies are having three directors but in some companies this number has gone to four and in one or two companies it is even five. Chairman of this committee in all the companies under study is Non- Executive Independent Director. It shows that all companies are fulfilling the mandatory requirement of forming a shareholders grievance committee under listing agreement with SEBI under Clause 49.

10. MEETING AND ATTENDANCE OF SHAREHOLDERS GRIEVANCE COMMITTEE

To conduct a meeting of shareholders grievance committee clause 49 of SEBI says that it should be held once in a year but our analysis has shown that in most of the companies this meeting was organized four times in a year. In one or two companies these meetings are held once in a month to falling to twelve meetings in a year. In two companies-Financial Technologies (India) Limited and Jubilant Organization Limited this meeting was conducted twice a month. It is also observed that all the members have attended all the meetings of this committee in all the companies under study. Of course in exceptional cases in one or two companies executive directors have not attended the meetings. We have also analyzed how many complaints received and how many redressed. The complaints received were of different nature like (i) relating to transfer and transmission of shares, non receipt of dividend, interest, redemption etc., non-receipting annual report, Dematerialization of shares. Complaints received from SEBI, Stock Exchanges and from Registrar of companies, Department of company affairs. Complaints may also relate to non receipt of Electronic Credit, Complaints are also relating to non receipt of share certificate after transfer / merger / spelt / consolidation. Our analysis has shown that companies have also given the number of complaints received and the number of complaints redressed / resolved. Ashok Leyland has received total complaints of different natures (mentioned above) 2457 and all have been resolved. Similarly Hindustan Zinc has received 1100 complaints and all have been resolved. For other companies also number of complaints received is ranging from 14 to 119 and all are redressed.

11. CEO AND CFO CERTIFICATE

Our analysis has shown that each company has given CEO & CFO Certificate in their annual reports. This certificate will make them responsible if any fraud or manipulative practices are found in the company data.

FINDINGS OF THE STUDY-III

Another study was conducted by Jayati Sarkar, Subrata Sarkar and Kaustav Sen on the topic “Analysis of Corporate Governance Index for Large Listed Companies in India.”

They have outlined the construction of a corporate governance index for the large listed companies in India. The index is based on four major Corporate Governance mechanisms namely the Board of Directors, the ownership structure, the audit committee and the external auditor. For each of the four governance mechanism several important attributes were identified and were used to construct an overall Corporate Governance Index as well as Four sub indices. In Board of Directors following attributes were identified:

(1) Board Size

(2) Percentage of outside directors.

(3) Percentage of independent directors.

(4) Presence of Nominee directors.

(5) Presence of non-executive or promoter chairman.

(6) Presence of promoter on board.

(7) Total number of directorship held by independent directors.

(8) Number of board meetings held.

(9) Percentage of board meetings attended by independent directors.

(10) Percentage of independent directors who attended AGM.

In the ownership structure they identified the four attributes:

(i) Percentage of Promoter ownership.

(ii) Percentage of foreign institutional ownership.

(iii) Percentage of domestic financial institutional ownership.

(iv) Percentage of appeared ownership.

They have taken into account the four important attributes of the audit committee to construct the audit committee index:

(i) Size of the audit committee.

(ii) Percentage of independent directors in audit committee.

(iii) Presence of executive directors in audit committee.

(iv) Number of meetings held during the fiscal year.

They have considered the four attributes of the external auditor to construct the auditor index:

(i) Percentage of not audit fees to total payments to auditors.

(ii) Top auditor in terms of audit fees.

(iii) Top auditor in terms of audit clients.

(iv) Change in auditor from last year.

From their empirical analysis of the Corporate Governance, Index and its components for last six years (2003 to 2008) show an upward trend in the governance practices of large listed firms in India. At the same time, there is a tightening of the distribution of Index over the years implying that companies are moving change to each other in terms of their governance standards. However, there is sufficient scope for improvement.

Their regression results shows a strong correlation between the Corporate Governance Index and the market performance of the company whether judged in term of raw returns or excess returns. Companies with higher values of Corporate Governance Index earn higher economically meaningful raw and excess returns in the market. This should provide an added incentive for companies to undertake the various governance reforms even if doing so requires the allocation of additional resources. The positive relation also implies that prospective investors perceive a well governed company as less risky and are willing to lend capital at lower cost. Their result also provide strong evidence of strengthening of the relation between the corporate governance index and market performance over the years as Corporate Governance reforms continue to be enacted in the Indian Corporate Sector. Coupled with this, the fact that the years should provide encouraging news to the regulators about the success of the already instituted governance reforms as well as those that are stated in the years to come.

We have given the finding of the three studies on Corporate Governance in India. In addition to these researches, many more researches are going on this topic. ICRA is also conducting research on this issue, PRIME has also conducted research on independent directors and asked the question whether they are really independent in their working as independent director in the board meetings.

In conclusion the real Corporate Governance crisis in India i.e. from 2008 period onwards started notable with the Satyam Fiasco. Post Satyam Corporate Governance issues came into the forefront and the companies with poor corporate governance practices came into limelight with many companies exodus of independent directors from their boards (Chakrabarti et at 2011). However, the data in this paper stop at 2008 and hence misses many of these interesting cases. Hence there is need for further research on other important corporate governance mechanism like related party transactions, remuneration patterns and accounting practices into the picture. Researches should be conducted in the actual proceeding of the board room meetings and what was the role of independent director on a particular issue in the board room meeting.

Since independent directors are also in audit committee and shareholders grievance committee, separate researches should be conducted on the functioning of audit committee and role of independent directors in different issues discussed in audit committee. Then and then only we can check the frauds and manipulation and can have the interest of the minority shareholders. Then we can have good corporate governance. It will be interesting to see if the corporate governance index is able to identify the good and poorly governed companies which in turn should provide a test for the acceptability of the index. While these studies show preliminary evidence of benefits of improving corporate governance in the Indian context. In the sprit of this paper policy makers should constantly evaluate incremental benefits of new governance related mechanisms.

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INDIAN ACCOUNTING ASSOCIATION

CONSTITUTION (w.e.f. 1ST APRIL-2013)

1. NAME

a. The Association shall be called "**Indian Accounting Association**" and its Head Office shall be at ML Sukhadia University Udaipur. The Association shall have its own Emblem.

b. Admn./Executive office will move with the General Secretary.

2. AIMS AND OBJECTIVES

The aims and objectives of the Association are as follows:

a. To Promote and Disseminate the knowledge of Accounting and its related subjects in India and abroad.

b. To undertake studies of the existing Accounting Practices in the country and to develop sound Accounting Principles.

c. To Cooperate with other similar Organisations within the country and abroad, and

d. To undertake and encourage research in the field of Accounting for the Industrial and Commercial Organisations as also for the overall progress of the people.

3. ACTIVITIES

a. Convening of Conferences, Seminars and Symposia and arranging Workshops, Lectures and Exhibitions.

b. Publication of Bulletins, Journals, Books, Pamphlets and other teaching and research material.

c. Preparation of Accounting Glossary, Handbooks, Manuals and books in Hindi and other Indian languages and the propagation of Accounting knowledge by publication of Accounting Literature in Indian languages.

d. Collection and preservation of Historical Accounting Records and Manuscripts.

e. Organizing a Central Library of Accounting and such other Regional Libraries as may be found necessary.

f. Opening of Local Offices to facilitate holdings of Seminars, Conferences etc and to conduct studies in Local Accounting systems and practices.

g. Affiliating regional and other associations connected with Accounting and allied subjects.

h. Organizing summer schools and other special programs.

i. Undertaking such other activities as may be necessary in furtherance of the Association's Aims and Objectives.

4. MEMBERSHIP

a. Membership is open to those who are in teaching, research, administration etc. and are willing to associate in the advancement of accounting knowledge.

b. There shall be Two types of members as;

1. Life Members and 2. Annual Members.

c. Membership fee(vide amendment made on 6th Jan.2013 at Rajkot)

Member Fee	India	Abroad
Individuals : Life	Rs 3600	US$ 200
Annual (Non-voting)	Rs 500	US$ 50
Institutional : Life	Rs 8000	US$ 500
Annual	Rs 2000	US$ 150

d. Only Life Members will have voting rights. The Institutional Life members can depute up to two individuals for voting purpose.

e. The official accounting year of the Association shall be from April 1st to March 31st (Financial Year)

5. FELLOWS AND PATRONS

a. Persons who have been members for at least five years in continuation and have done work of recognised merit in the field of Accounting may be elected as fellows of the Association.

b. The Executive Committee may admit:

(i) Eminent and distinguished scholars as Honorary Fellows of the Association.

(ii) Contributors of a sum not less than Rs. 5,000 in one or two installments, as Patrons of the Association.

c. Fellows, Honorary or otherwise, may use "**F.I.A.A**." after their name during the period of their membership of this Association.

d. Such members of the Association as are elected by the Executive Committee of the Association as Fellows, shall have the privilege of affixing '**F.I. A.A**' after their names on receipt of fellowship cards of the Association.

6. PRIVILEGES OF MEMBERS

a. All members shall receive copies of the issues of the Journal of the Association when published. They shall also receive other publications of the Association but on such conditions as may be decided by the Executive Committee from time to time.

b. All members shall have the right to vote and to seek election, provided their membership fee is not in arrears.

7. CESSATION OF MEMBERSHIP

The subscription fee for the current years is payable by the first week of March every year. In the event of default for more than a year, the Executive Committee may debar the member from further privileges of the Association and where the default continues for three years, he shall ipso facto cease to be a member.

8. MANAGEMENT

The management of the Association shall vest in the Executive Committee which shall consist of :

1. The President
2. Senior Vice-President
3. Junior Vice-President
4. General Secretary
5. Joint Secretary
6. Treasurer
7. Joint Treasurer
8. Chief Editor
9. Two Editors
10. Thirty elected members on Zonal Basis @ Six members from each Zone of which one-third will be retiring annually.

    There will be Five Zones viz.,

    (i) East Zone-North East States, Assam, West Bengal, Orissa, Bihar and Jharkhand

    (ii) West Zone – Rajasthan, Gujarat, Maharashtra and Goa

    (iii) North Zone – Jammu & Kashmir, Punjab, Haryana, Himachal Pradesh, Uttaranchal, Chandigarh and Delhi

    (iv) South Zone – Kerala, Tamil Nadu, Pondicherry, Karnataka and Andhra Pradesh and

    (v) Central Zone – Madhya Pradesh, Utter Pradesh and Chhattisgarh
11. Fifteen Co-opted members for one year term on Zonal Basis @ Three members from each Zone (Zones as above)
12. The Conference Secretary of the forthcoming Conference
13. All the Past Presidents, Coordinator of IAA Website and Coordinator of IAA Talent Search Committee will be the Ex-officio members.
14. The President of IAA Research Foundation will be an Ex-officio member, provided the IAA Research Foundation ensures the President of IAA as ex-officio member on its Executive Committee.

9. ELECTION/NOMINATION & TERM

a. The Committee shall also have the power to fill casual vacancies of Office Bearers and Members of the Executive Committee, except the Vice-Presidents, from amongst the members, till the next election is held.

b. The Executive Committee shall carry on all the work of the Association and devise ways and means to promote its aims and objects. It shall frame rules and introduce amendments and changes, if necessary, with the sanction of the General Body.

c. The Junior Vice-President shall be nominated by a Nomination Committee consisting of (i) President of the Association; (ii) Sr. Vice-President; (iii) Three members nominated by the Executive Committee; and (iv) Two senior members elected by the General Body. On the appointment of the Junior Vice-President, the earlier Junior Vice-President and the Senior Vice-President shall automatically become the Senior Vice-President and President of the Association, respectively.

d. The General Secretary, Secretary, Treasurer, Joint Treasurer, Chief Editor and Two Editors shall be elected for a period of three years but can be reelected for another term of three years only, thereby restricting a total of to two terms only.

e. The thirty members at the Executive Committee (on zonal basis vide Clause 8 sub-clause 10) shall be elected for 3 years but 1/3 of them will retire every year by rotation. An EC member can be elected for another term of three years, thereby restricting the total term to six years only. The maximum number of elected EC members from a Branch will be restricted to two only. Branches having at least fifty life members will be considered for representation in the EC.

f. The coopted members may be coopted for another two times, thereby restricting the total term to three years only.

g. The Conference Secretary will be nominated by the EC for a period of one year

h. The two editors will be nominated by the EC on the recommendation of the Chief Editor.

i. The Executive Committee may frame rules and regulations within the framework of this Constitution to regulate the activities of the Association. Such rules and regulations may be adopted, amended or deleted at a meeting of the General Body of the Association by a two-thirds majority.

10. MEETINGS

a. The Annual General Meeting of the Association shall ordinarily be held latest by December 31st, following the end of the financial year. It will require 14 days clear notice.

b. An Extra-Ordinary General Body Meeting of the Association may be called by the Executive Committee at a 4 day's notice if requisitioned in writing by not less than 25 members.

c. The quorum for the General Meeting will be 25 or one-third of the members whichever be less.

d. Meeting of the Executive Committee may be held any time when needed at one week's notice.

e. An Emergent Meeting of the Executive Committee may be called at the instance of the Association at 48 hours' notice.

f. The quorum for the meeting of the Executive Committee shall be **five.**

11. ELECTION

Arrangements for Elections may be made by postal ballot or any other method approved by the Election Committee, nominations duly proposed and seconded should reach the General Secretary at least one week before the date of election. The election committee shall consist of:(a) President; (b) Senior & Junior Vice-Presidents; and (c) General Secretary.

12. POWERS AND DUTIES

1. President

a. To preside at all meetings of the Association and of the Executive Committee and to regulate the proceedings at such meetings.

b. To be an ex-officio member of all sub-committee appointed by the Executive Committee.

2. Senior/Junior Vice-Presidents

a. To preside at the meetings of the Association and of the Executive Committee in the absence of the President, and regulate the proceedings at such meetings.

b. To perform such functions and duties as may be delegated to him by the Executive Committee or the President.

3. General Secretary

a. To conduct correspondence of the Association, of the Executive Committee and Sub-Committees and to sign all letters and papers connected with the Association.

b. To attend various meetings of the Association, to keep record of the proceedings of such meetings and to present various schemes and proposals before the meeting.

c. To maintain all records and documents of every kind connected with the business of the Association.

d. To exercise general supervision over the employees, affairs and business of the Association and to enforce rules and regulations and orders laid by the Committee or President from time to time.

e. To convene and make arrangements for meetings, election, etc., of the Association.

f. T counter-sign cheques and other bank papers with the Treasurer.

g. To carry out such other duties as may be assigned by the Executive Committee.

4. Joint Secretary

To carry such duties as may be delegated to him/her by the General Secretary or the Executive Committee

5. Treasurer

a. To receive and hold all monies and properties of the Association.

b. To disburse all sums due by the Association and sign cheques and other bank papers.

c. To maintain proper accounts of all receipts and payments and to prepare and present Statements, Accounts and Budget in the Annual General Meeting of the Association.

6. Joint Treasurer

To carry such duties as may be delegated to him/her by the General Secretary, Treasurer or the Executive Committee

7. Chief Editor

To arrange for the publication, distribution and sale of the Indian Journal of Accounting and such other publications of the Association.

8. Editors

To carry such duties as may be delegated to him/her by the Chief Editor or the Executive Committee

13. CONFERENCE SECRETARY

He / She is responsible for the organisatiion of the conference, and to the submit the audited conference account within a period of six months while transferring the surplus amount to IAA Corpus.

14. FUNDS

a. The funds of the Association consist of subscription from members, donations and gifts from individuals, organisations and government and from the sale proceeds of the publications of the association.

b. **CORPUS FUND :** IAA-Corpus Fund may be created and the annual interest on this may be utilized to meet the revenue expenditure of the Association. The fund is to be jointly operated by the Treasurer and General Secretary.

15. LOCAL BRANCHES

a. Local Branches may be started at any place if at least 30 local life members make a request in that behalf.

b. The Local Branches may organise activities at the local level in furtherance of the objectives of the Association and also such other activities as may be assigned by the Executive Committee.

c. The Local Branch shall elect the Local Executive Committee, at least once in every three years while the same is to be informed to the General Secretary

d. The Local Secretary shall also act as Sub-Treasurer of the Association and responsible for remitting the subscription to the Treasurer of IAA under intimation to the General Secretary.

e. 75% of the 'membership fee' of Local Branches shall be transferred to the accounts of the Association with the treasurer along with a list of members with full postal address under intimation to the President, the General Secretary and Chief Editor.

f. 25% of the 'Membership fee" of the Local Branches is to be retained in the Branch.

g. 100% of the Institutional Life or Institutional Annual Membership is to be transferred to the Treasurer, IAA.

h. The Local Branch Secretary shall submit a copy of the annual report and duly audited final accounts of the local branch to the General Secretary within three months of the end of a financial year.

i. In the event of failure to submit the Annual Reports and/or duly Audited Final Accounts by a local branch, the Executive Committee may decide to initiate action against the local branch including withdrawal of recognition after giving notice to the Local Branch Secretary.

16. AWARDS AND ENDOWMENTS

The Executive Committee is authorized to frame rules from time to time for the institution of Awards and Endowments if any.

17. AFFILIATED ASSOCIATION

a. The Indian Accounting Associations may grant Affiliation to such other organisations which have similar aims and objectives as those of the Association.

b. The privileges and responsibilities of the affiliated organisations shall be laid down at the time of affiliation.

18. AUDIT

The Accounts and the Assets of the Association shall be audited every year by an authorised auditor elected by the General body.

19. AMENDMENTS

Any amendment or alteration in the Constitution of the Association shall be forwarded in a special meeting of the General Body, and shall be passed by a two-thirds majority of the members present.

20. LIQUIDATION

The Funds and Assets of the Association after meeting the liabilities shall be transferred to an organisation having similar aims and objectives.

THE INDIAN ACCOUNTING ASSOCIATION, GUJARAT BRANCH has organized National Conference on "GLOBAL ISSUES AND CHALLENGES IN ACCOUNTING AND FINANCE" at Ahmedabad on December 23, 2012.

We are glad to inform you that Post-Graduate Diploma in Investment & Financial analysis (P.G.D.I.F.A.), S.D. School of Commerce, Gujarat University, Ahmedabad in collaboration with The Indian Accounting Association, Gujarat Branch has organized National Conference on **"GLOBAL ISSUES AND CHALLENGES IN ACCOUNTING AND FINANCE"** at Ahmedabad on **December 23, 2012.**

Throughout the world, there are tremendous changes in the area of accounting and finance. There are so many global issues and challenges related to these areas. As an academician, one has to discuss these matters at National as well as International Level in various Conferences, Seminars and Workshops.

In light of this, the Theme chosen for deliberation in **"GLOBAL ISSUES AND CHALLENGES IN ACCOUNTING AND FINANCE"** at the conference was divided in Three Technical Sessions as under :

I. Emerging Issues in Capital Market

II. Global Climate Change and Environmental Accounting & Reporting

III. Shareholder Value Creation & Measurement

More than 150 delegates from various parts of the country have presented research papers in the conference.

We are highly thankful to Dr. Adesh Pal, Hon. Vice-Chancellor, Gujarat University for his financial and academic support in organizing National Conference.

Mr. K. C. Mishra of Ahmedabad Stock Exchange has given Presidencial Remarks on Emerging Issues in Capital Market. Prof. P. K. Rathod, Vice-President, IAA Gujarat Branch, Prof. Shirish Kulkarni, Vice-President, IAA Gujarat Branch, Dr. Ajay Soni, Secretary have given Key Note speech in the three technical sessions. 110 members of IAA Gujarat Branch have attended the conference. Prof. V. Chari, Prof. B. V. Pathak, Dr. H. C. Sardar, Dr. Hemal Pandya and Chetana Parmar, Faculty members of S. D. School of Commerce have given kind support in organizing the seminar.

Prof. Harish S. Oza
President Indian Accounting Association-Gujarat Branch
&
Co-Ordinator PGDIFA

REPORT OF 35TH ALL INDIA ACCOUNTING CONFERENCE AND INTERNATIONAL SEMINAR HELD AT SAURASHTRA UNIVERSITY, RAJKOT

35th All India Accounting Conference and International Seminar on Accounting Education and Research was organized by the Department of Business Management, Saurashtra University, Rajkot in association with ATMIYA Institute of Management & Technology, Rajkot during January 5-6, 2013.

The conference had three concurrent sessions on:

- Shareholders Value Creation and Measurement
- Ethical Issues in Accounting and Finance
- International Financial Reporting Standards (IFRS) and India.

The program started with a prayer and lighting up of lamp by President of the function Prof. Mahendra Padalia, Hon. Vice Chancellor, Saurashtra University, Shree Bhupendrasinh Chudasama, Education Minister, Gujarat State, Prof. Umesh Holani, President – IAA, Jivaji University, Gwalior, Shree Govindbhai Patel, Agriculture Minister, Gujarat State, Shree Jayantibhai Kavadia, Minister, Gujarat State along with Prof. Pratapsinh Chauhan, Conference Secretary, Prof. D Prabhakara Rao, IAA General Secretary, Prof. K. Sasikumar Vice president (Sr), Prof. S. S. Modi Vice President (Jr), Prof. Harish S. Oza, Editor of IAA Journal and swami Sir Tyag Vallabh Dasji.

Prof. Pratapsinh Chauhan welcomes all the guest and delegates of the conference. Prof. D. Prabhakara Rao gave back ground of the IAA and welcome on behalf of the association. President of IAA Prof. Umesh Holani gave his presidential address and finally the inaugural function end with the presidential address by the Hon. Vice Chancellor, Prof. Mahindra Padalia. Formal vote of thanks was offered by Dr. Vijay K. Patel.

International Seminar's Chairperson was Prof. Harish S. Oza, Director, S. D. School of Commerce, Gujarat University, Ahmedabad along with Co-chair Prof. J K. Jain of Sagar University. The Key note address was presented by Prof. Shailesh Gnahdi of IIM-A. Technical Session - I was Chaired by Prof. B. Ramesh of Goa University, along with Co chair Prof. P K Rathod of Sardar Patel University, and Dr. Lalit Gupta of Jay Narayan Vyas University, Key note address was delivered by Prof. Vijaykumar Gupta of IIM Indore and Prof. B. A. Prajapati of HNGU, Patan.

Technical Session II was chaired by Prof. Nageshwar Rao, Pandit Jawaharlal Nehru Institute of Business Management Vikram University and Dr. Simon G of Kerala University. Key note address was offered by Mr. P M Karia of OTIS India Ltd. along with Dr. Mohamad Izzat Othar Allaha of Jordan.

Technical Session III was chaired by Prof. N. M. Khandelwal, UGC Visiting Professor Department of Business Management, Saurashtra University, along with Dr. Sujit Sikhdhar of Gauhati University, Assam the key note address was offered by CA Yagnish Desai from ICAI, Mumbai

Finally the conference was ended with valedictory function on 6th January at 12 pm in the presence of Speaker, Government of Gujarat Sri Vajubhai Vala, special guest of the function was Sir S L Jat ABST Rajasthan University, Jaipur, president of the function was Hon Dr. Mahindra Padalia, Vice Chancellor, Saurashtra University. The association nominated Prof. K. Sasikumar as President, Prof. S. S. Modi as Senior Vice President, Prof. Pratapsinh Chauhn as Junior Vice President and Prof. Sanjay Bhayani as Treasurer of IAA. IAA Accounting Talent Search first price was given to the student from Calcutta. While the best papers award for the international seminar was conferred to Dr. Yagnish Dalwadi, for technical session I was conferred to Dr. Survir sinh Bhanavat and for technical session II was conferred to Dr. Marzun E. Jokhi and for technical session III was conferred to Dr. Dhanesh Khatri.

703 delegates and 200 invitees enjoyed the conference. The venue of next conference is fixed at Andhra University, Vishakapatnam and Prof. D. Prabhakar Rao will act as Conference Secretary.

Prof. Pratapsinh Chauhan
Conference Secretary
35th All India Accounting Conference
Saurashtra University
Rajkot

Prof. D. Prabhakar Rao
General Secretary
All India Accounting Association
Andhara University
Vishakapatnam

A meeting of the **IAA General House** will be held at the Venue of 36th IAAConference, Visakhpatnam with Prof. Sasi Kumar, in the Chair on 7th Jan.2014 at 12 pm with the following agenda:

1. Consideration of minutes of Rajkot AGM.
2. Consideration of the Accounts of the Association
3. Topics for the next IAA Annual Conference
4. Venue of the 37th Conference
5. Nomination of Two Senior members for panel to nominate Jr. Vice President
6. Election of Executive Members as per rules and
7. Any other item with the permission of the Chair.

All the members are requested to kindly attend the meeting.

General Secretary, IAA

A meeting of the **IAA Executive Committee** will be held at the Venue of 36th Annual Conference, Visakhpatnam with Prof. Sasi Kumar , in the Chair on 6th Jan 2014 at 8.00 pm with the following agenda:

1. Consideration of the minutes of Rajkot EC meeting;
2. Consideration of the Accounts of the Association
3. Nomination of 3 EC members for panel to nominate Jr. Vice President
4. Venue of the 37th Conference;
5. Consideration of election to EC as per rules
6. Co option of members to EC and
7. Any other item with the permission of the Chair.

All the Executive Members are requested to kindly attend the meeting.

General Secretary, IAA

ANNOUNCEMENT OF YRA AWARD

IAA invites proposals for **Young Researcher Award – 2013**, on the Research Work done during the last five years in the area of Accounting by scholars/faculty members of not more than 35 years of age as on 31-12-2012, for the consideration of IAA Young Researcher Award-2013. Proposals are invited only from the life members of IAA.Proposals may be submitted on or before 25th Oct. 2013, to

DR. D. PRABHAKAR RAO, PhD(Gold Medal), FDP(IIM-A)
General Secretary-Indian Accounting Association
Principal, College of Arts & Commerce
Andhra University, Visakhapatnam-530003
Email: drdpr_2009@yahoo.co.in Mobile: 9440131863

Announcement

INDIAN ACCOUNTING ASSOCIATION (1969)

Regd Office : ML Sukhadia University, Udaipur

XXXVI ALL INDIA ACCOUNTING CONFERENCE & INTERNATIONAL SEMINAR - JANUARY 6-7, 2014

organized by

Department of Commerce & Management Studies, Andhra University

&

Indian Accounting Association, Visakhapatnam Branch

The Department of Commerce & Management Studies, Andhra University and Visakhapatnam Branch of Indian Accounting Association consider it as a privilege to host the XXXVI All India Accounting Conference during January 6-7, 2014. The conference would have an International Seminar on Accounting Education and Research followed by three concurrent technical sessions as noted below:

International Seminar	Accounting Education and Research (With Focus on Pedagogical Tools and Evaluation Methods)
Technical Session I	Government Accounting
Technical Session II	Corporate Reporting (With focus on Accounting Standards and XBRL)
Technical Session III	Emerging Dimensions of Accounting

The Papers to be sent to the Conference Secretary (two hard copies with one soft copy in MS Word, Font : Times New Roman, 12 Size and 1.5 line spacing) latest by October 31, 2013. Papers would be subjected to a blind review by a technical committee. High Quality Papers would be allowed upto 15 minutes for presentation, while only the summary of the Satisfactory Papers will be allowed for about three minutes. Papers received on or before the stipulated time alone will be considered for presentation. For details please contact:

PRESIDENT :	Prof K Sasi Kumar	Kerala University Trivandrum
GENERAL SECRETARY :	Prof D Prabhakara Rao	Andhra University Visakhapatnam
VICE PRESIDENT :	Prof S S Modi	University of Rajasthan Jaipur
VICE PRESIDENT :	Prof Pratap Sinh Chauhan	Saurashtra University Rajkot
TREASURER :	Prof. Sanjay Bhayani	Saurashtra University Rajkot
CHIEF EDITOR :	Prof. Harish S Oza	Gujarat University Ahmedabad

REGISTRATION & DELEGATE FEE :

(only by bank draft crossed in favour of "36th All India Accounting Conference" Payable at Visakhapatnam)

IAA Members registered by 31-10-2013	Rs. 1200 (Rs. Twelve hundred only)
IAA Members registered after 31-10-13 but before 15-11-2013	Rs. 1500 (Rs. Fifteen hundred only)
Non-members registered by 31-10-2013	Rs. 1700 (Rs. Seventeen Hundred only)
Non-members registered after 31-10-13 but before 15-11-2013	Rs. 2000 (Rs. Two thousand only)
Accompanying Persons (NO CONFERENCE KIT)	Rs. 1500 (Rs. Fifteen hundred only)
Corporate Delegates on or before 15-11-2013	Rs.2500 (Rs. Two Thousand fie hundred)

$ 150 for foreign delegates and Rs. 2500 from delegate of SAARC–on or before 15-11-2013

PLEASE NOTE THAT THERE IS NO SPOT REGISTRATION

***Registration Form* for 36th *IAA Conference,* January 6-7, 2014**

1. Name & Address with mobile & email(Block Letters):
2. IAA Membership Number:
3. Paper Title (Full paper-Hard and Soft copies, & Abstract of 250 words :
(If accepted by the Technical Committee, it will be notified by 30th Nov 2013)
4. Food Habits(Please Tick): (i)Veg (ii) Non-Veg
5. Travel Plan: (i) Arrival: (ii) Departure:
6. Delegate Fee : Demand Draft Number_________Dated ________for Rs.__________
7. Any other Information:
PLACE & DATE : **SIGNATURE**

Duly filled in Registration form to be sent By registered/speed post to :

PROF D. PRABHAKARA RAO, IAA Conference Secretary
Principal-College of Arts & Commerce, Andhra University, Visakhapatnam-530003(AP)
Ph. : 0891-2844666 Fax : 0891-2755075 Mobile : 094401-31863 Res:0891-2755538
E-mail : drdpr_2009@yahoo.co.in Web : www.indianaccounting.org

Annual General Meeting of IAA, Midnapore Branch held at Haldia Institute of Technology, Haldia, Purba Medinipur, WB on 27th of December, 2012

The second day of the two-day national seminar at Haldia Institute of Technology, Haldia was followed by the Annual General Meeting of the Indian Accounting Association, Midnapore Branch on 27th of December, 2012. In the meeting, the performance of the branch since the last AGM was reviewed, audited accounts were adopted and new Executive Committee was formed. The new Executive Committee for the branch as unanimously elected in the AGM is as follows:

Prof. Jaydeb Sarkhel, Professor, Dept. of Commerce, University of Burdwan, Burdwan as **President**; **Prof. Arindam Gupta**, Professor, Dept. of Commerce with Farm Management, Vidyasagar University, Paschim Medinipur as **Vice – President**; **Prof. Hrishikesh Paria**, Associate Professor, Dept. of Commerce, Egra SSB Coleege, Purba Medinipur as **Secretary**, **Dr. Anupam Parua**, Assistant Professor, Dept. of Commerce (Accounting & Finance), K. D. College of Commerce & General Studies, Paschim Medinipur as **Joint Secretary**; **Mr. Amit Baran Mahapatra**, Accounts & Finance Co-ordinator, Barasat Municipality, Barasat, 24 Parganas (North) as the **Treasurer**, **Prof. Sudipti Banerjea**, Professor, Dept. of Commerce & Director, I.Q.A.C., University of Calcutta, Kolkata as **Member**, **Prof. Debdas Ganguly,** Dean, School of Management & Social Science, Haldia Institute of Technology, Purba Medinipur**,** as **Member, Prof. Prithul Chakraborty,** Professor, Globsyn Business School, 24 Parganas (South) as **Member, Prof. Bijay Krishna Bhattacharya**, Professor, Globsyn Business School, 24 Parganas (South) as **Member, Ms. Arundhati Basu,** Proprietress, A. Basu & Co., Cost Accountants, Salt Lake, Kolkata as **Member, Prof. Pradipta Banerjee,** Assistant Professor, Dept. of Commerce, Sidho Kanho Birsha University, Purulia**,** as **Member, Prof. Rabindra Nath Changdar,** Associate Professor, Dept. of Commerce, Kharagpur College, Paschim Medinipur as **Member, Prof. Nirmal Chakraborty,** Assistant Professor, Dept. of Commerce, Mahishadal Raj College, Purba Medinipur, as **Member, Ms. Sikha Nandan,** Proprietress, S. Nandan & Co., Cost Accountants, Salt Lake, Kolkata as **Member**, **Prof. Baneswar Kapasi**, Assistant Professor, Dept. of Commerce, Netaji Mahavidyalaya, Arambagh, Hooghly as **Member** and **Prof. P. K. Haldar**, Professor, Department of Commerce, Tripura University, Agartala as **Co-opted Member**.

Prof. Hrishikesh Paria
Hony. Secretary
IAA, Midnapore Branch

Two-day National Seminar on *"Service Sector in India– Its Dimensions and Emerging Issues"* organised by IAA, Midnapore Branch in Collaboration with Haldia Institute of Technology, Haldia, Purba Medinipur, WB on 26th - 27th of December, 2012

A Two-day National Seminar on "Service Sector in India– Its Dimensions and Emerging Issues" was organized by the School of Management & Social Science, Haldia Institute of Technology, Haldia, Purba Medinipur, WB in collaboration with Indian Accounting Association, Midnapore Branch at the premises of the Institute on 26th and 27th of December, 2012. Notable presence in the seminar includes **Prof. Jaydeb Sarkhel**, Professor, Dept. of Commerce, University of Burdwan, and President, IAA, Midnapore Branch as the *Chairperson in the Inaugural Session and Plenary Session*, **Prof. K. V. Achalapathi,** Professor, Dept. of Commerce, Osmania University & Former President, Indian Accounting Association as the *inaugurator as well as key-note speaker in Plenary Session*, **Prof. P. K. Haldar,** Dean, Faculty of Arts and Commerce and Professor of Commerce, Tripura University as the *key-note speaker in Plenary Session and Chairman in 1st Technical Session*, **Prof. Sudipti Banerjea**, Professor of Commerce, University of Calcutta as the *Chairman in 2nd Technical Session*, **Dr. Tridib Chakraborty**, Former Programme Coordinator, Centre for Studies in Public Enterprise Management, IIMC as key-note speaker in *3rd Technical Session*, **Prof. Arindam Gupta,** Professor of Commerce, Vidyasagar University & Vice President, I.A.A., Midnapore Branch, **Prof. Debdas Ganguly**, Dean, School of Management and Social Science, Haldia Institute of Technology, Haldia as *Organizing Secretary,* **Prof. A. B. Maity**, Director-In Charge, Haldia Institute of Technology, Haldia, **Prof. Hrishikesh Paria**, Associate Professor, Dept. of Commerce Egra SSB College and Secretary, IAA, Midnapore Branch as *Joint Organising Secretary.* As many as 32 papers covering Financial Services, Marketing of Services, HR Issues in Service Sector, ITES and Miscellaneous issues were presented in the seminar.

Prof. D. Ganguly
Prof. H. Paria
Jt. Organizing Secretaries

UGC-Sponsored Workshop on "Research Methodology"
Jointly Organized by
Department of Commerce with Farm Management, Vidyasagar University
and
Indian Accounting Association, Midnapore Branch

A seven-day **workshop on** "**Research Methodology**" sponsored by **University Grants Commission** was organized jointly by Department of Commerce with Farm Management, Vidyasagar University and Indian Accounting Association, Midnapore Branch at Vidyasagar University campus from 7th December, 2012 to 13th December, 2012. Resource persons comprised of **Prof. P.S. Das,** Ex-Professor, Vinod Gupta School of Management, IIT Kharagpur; **Prof. Arup Chattopadhyay**, Professor, Dept. of Economics, University of Burdwan; **Dr. Jitendra Mahakud**, Associate Professor, Dept. of Humanities and Social sciences, IIT Kharagpur; **Prof. Debasish Mondal**, Professor, Dept. of Economics, Vidyasagar University; **Dr. Pulak Mishra**, Associate Professor, Dept. of Humanities and Social sciences, IIT Kharagpur; and **Dr. Goutam Banerjee**, Associate Professor, National Institute of Technology, Durgapur. Topics covered in the workshop were:- Introduction to Research Methedology; Procedure for Hypothesis Testing; Parametric & Non parametric Testing; Regression Analysis including Logit, Probit and Tobit models; Analysis of Qualitative Data; Data processing through SPPS and other statistical packages. **Prof. Tagar Lal Khan,** Head, Department of Commerce with F. M., Vidyasagar University and **Dr. Samir Ghosh**, Department of Commerce with F. M., Vidyasagar University were the Jt. Organizing Secretaries of the workshop. The workshop was inaugurated by **Prof. Syed Sirajul Islam**, a renowned Scientist and Researcher in the field of Chemistry at Vidyasagar University. An altogether 20 participants from different parts of West Bengal participated in the said workshop.

Prof. Hrishikesh Paria
Secretary,
IAA, Midnapore Branch