VANIJAY SHREE

An Annual National Journal of Commerce And Management
(Double Blind Peer Reviewed Journal)

वाणिज्य श्री

वाणिज्य और प्रबंधन की एक वार्षिक राष्ट्रीय पत्रिका

Volume - I Issue - I December 2021

"हम शोध गुणवत्ता एवं विकास के लिए हमेशा प्रतिबद्ध हैं"

Email for online journal-
vanijayshree.dei@ac.in

Prof. P.K. Kalra
Director, D.E.I

Prof. L.N. Koli
Chief Editor

PUBLISHED BY

Dayalbagh Educational Institute (Deemed to be University)
Dayalbagh –Agra 282005
www.dei.ac.in

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DAYALBAGH EDUCATIONAL INSTITUTE (DEEMED TO BE UNIVERSITY)
DAYALBAGH, AGRA, 282005

PRESIDENT'S MESSAGE

Gur Saroop Sood
President

The Education Policy, 1975 of Dayalbagh Educational Institute (Deemed to be University) aims to develop a 'Complete Man' by focusing on his physical, intellectual, emotional and spiritual attributes. The course curriculum, co-curricular & extra-curricular activities and the research programmes of DEI persevere potently in delivering multidisciplinary value-based education to nurture and develop the inherent potential of its students, staff and faculty members.

The release of the first issue of **"Vanijay Shree"**, an annual online National Research Journal of Commerce and Management is another feather in the cap of DEI which is growing in an all-round manner. It gives me immense pleasure to convey my heartiest congratulations to the members of the Editorial Board and the Contributors to its first issue.

Gur Saroop Sood
President
Radhasoami Satsang Sabha & Dayalbagh Educational Institute
(Deemed to be University), Dayalbagh, Agra – 282005

DIRECTOR'S MESSAGE

Prof. P.K. Kalra,
Director

To launch a Research Journal is expected to bring benefits to a University in many ways. It would also contribute for the career development of faculty and researchers through their participation in the creation and sharing of new innovations, research and development. I congratulate all the team members of "Vanijay Shree (वाणिज्य श्री)" (An Annual Online Journal of Commerce and Management) who have put in their best efforts to bring out the First Issue of "Vanijay Shree (वाणिज्य श्री)" covering the emerging issues related to Commerce and Management streams.

I believe it will provide a wonderful opportunity to young researchers to present their ideas, findings and observations on a suitable platform and later discuss and deliberate upon the same in an academic environment. I convey my best wishes to everyone associated with this unique venture for grand success. I am sure "Vanijay Shree (वाणिज्य श्री)" will open a new horizon of meaningful research publication.

Prof. P.K. Kalra,
Director,
Dayalbagh Educational Institute,
Agra, Uttar Pradesh

BEST WISHES

Prof. Umesh Holani
Ex-Pro Vice Chancellor

I am extremely glad to know that Dayalbagh Educational Institute (Deemed University), Agra has decided to publish an Annual Online Journal namely “Vanijay Shree” (National Journal of Commerce and Management- NJCM). It includes original research papers in the field of Commerce and Management. Dayalbagh Educational Institute is rated “A+” by NAAC. I expect that the research paper to be published in this Journal will be of highest quality which will guide the society and nation towards positive thoughts and development.

I wish best for this journal and expect in future it will prove as a successful milestone in the field of Commerce and Management.

Prof. Umesh Holani
Ex-Pro Vice Chancellor
Jiwaji University
Gwalior
(Ex-President All India Accounting Association)

BEST WISHES

Prof. Ajay Taneja
Pro Vice Chancellor

I am happy to learn that DEI is going to launch Commerce and Management peer reviewed research journals. This journal will provide valuable information to teaching and research community.

My best wishes are for the editorial team.

Prof. Ajay Taneja
Pro Vice Chancellor
Dr. Bhimrao Ambedkar University
Agra

BEST WISHES

Prof. S. C. Jain
Director Research

At the outset let me thank all members of the Editorial team for having reposed faith in me through nominating me as the member of Advisory Board for our Journal "Vanijay Shree (वाणिज्य श्री)" I take this opportunity to thanks all those who contributed research papers to this 1st issue and sincerely request all my friends to come up with more research work and research publications which we would welcome.

Wishing you all the very best and hoping to see quality research Papers in future, I conclude with gratitude.

Prof. S. C. Jain
Director Research
[Dean, Faculty of Commerce and Management]
Maharishi Arvind University,
Jaipur, Rajasthan

BEST WISHES

Prof. J K Verma,
Head, Department of English

It gives me immense pleasure to learn that "Vanijay Shree (वाणिज्य श्री)" (An Annual Online Journal of Commerce and Management) is being launched. I believe that Journal publication is not an easy job. It requires a lot of effort and academic commitment. I hope the team of "Vanijay Shree (वाणिज्य श्री)" will leave no stone unturned in maintaining its academic commitment and standard. The Journal will definitely give a wide opportunity to researchers especially young ones to show their talent and bring out some extraordinary observations to the fore front.

I convey my best wishes to everyone associated with the Journal for a grand success. ALL THE BEST!

Prof. J K Verma,
Head, Department of English &
Chief Proctor,
Dayalbagh Educational Institute,
Agra, Uttar Pradesh

CHIEF EDITOR'S MESSAGE

Prof. L.N. Koli (D.Litt.)
Chief Editor

Dear Readers,

It gives me much pleasure to publish 1st issue of "Vanijay Shree (वाणिज्य श्री)" to you an "Online Journal of Commerce and Management" in the month of April 2022 of the edition of December 2021. The first issue of the journal is being released to mark this important milestone in the history of the University. There are only a few institutions in the country that have an ever-increasing Commitment towards providing a value-based system of quality education and the DEI is one of them. DEI is a name that reminds us at the very first instance about 'values. A university that provides academic excellence to the students with relevance to the contemporary needs of this dynamic, competitive era – Today, when the fabric of the society is deteriorating, this University provides unique, innovative, comprehensive and value – based education to its students; contributing to the all-round development of the students, hence creating a well-rounded personality. In this way, at the later stage, shall contribute to the nation – building, as the youth of this country are torch bearers of development.

"Vanijay Shree (वाणिज्य श्री)" would like to show – case pertinent research outcomes in the domain of Commerce and Management researchwhich would be an eye opener for researchers as well as readers. With the expectation, this issue of the ""Vanijay Shree (वाणिज्य श्री)" will serve the philosophies of the research to encourage the research practices while fulfilling social and academic obligation.

This journal my gratitude to one more step in our journey towards research and education in serious issues particularly at a time when India making sustained efforts to establish its growth momentum for long journey.

I congratulate the editorial team, advisory board, review board and contributors of "Vanijay Shree (वाणिज्य श्री)" for its wonderful endeavor in developing worthwhile reading materials. Wishing you all the very best and hoping to see quality research papers in future, I conclude with gratitude.

Prof. L.N. Koli (D.Litt.)
Chief Editor
(University Coordinator)
University Post Graduate Studies and Research, DEI

FROM THE EDITOR'S DESK

Dear Readers

Greeting's !!!

It is our great pleasure to welcome you to the 1st online edition of the Double-Blind Refereed Peer Reviewed Journal "Vanijay Shree (वाणिज्य श्री)": An Annual Online National Journal of Commerce and Management.

We are thankful to the contributors for their valuable contribution to make the Journal a Success. We are also grateful to the advisory board members, review panel and contributors for their support, without which the accomplishment of the journal would have been worthless. We value your association with us and welcome your comments and observations to improve the Journal.

Thank you.

Prof. L. N. Koli (D. Litt.)
(Chief Editor)

Dr. Anisha Satsangi
(Assistant Editor)
Faculty of Commerce, DEI, Agra

CONTENTS

IFRS IMPLEMENTATION ON INSURANCE COMPANIES IN INDIA: AN EMPIRICAL STUDY

By: Dr. Veena Kumari[1] Prof. (Dr.) Shiv Prasad[2]

[1]. Principal, Mangalyam Drishti Girls College, Nagaur.

[2]. Head and Dean, Faculty of Management Studies, Maharshi Dayanand Saraswati University Ajmer

ABSTRACT

The aim of the research paper is to empirically investigate the impacts of IFRS adoption in Indian insurance sector. The respondents include CA professionals and people working in accounting firms at Ajmer, Jodhpur and Jaipur. The sample size is 50. SPSS is used as the statistical tool to analyse the data. The analysis proved that the variables and components are dependent on IFRS. As the world become a global village, cross border movements of capital and other resources are becoming increasingly common. To ensure the trust and confidence of the investors chasing global opportunities, a sound financial reporting system, supported by strong governance, high quality standard and a firm regularity framework are necessary. From the study conducted it is evident that the organization has to go through tough times while implementing IFRS because integrating the present system with the IFRS standards is not an easy job. The companies would find it hard when the IFRS implementation takes a toll on the financial resources of the company. This is because the implementation of IFRS on insurance company would incur costs such as auditing costs, training costs, additional resources and a lot of changes would be required in the IT infrastructure and the HR policies of a company.

KEY WORDS: International Financial Reporting Standard (IFRSs), Convergence, International Accounting Standards Board (IASB), Generally Accepted Accounting Principles (GAAP), Insurance Companies.

1. INTRODUCTION

The magical phenomenon of globalization has made the world a global village. Globalization has changed the close economy into open economy. Now a day's national economy is integrating in international market with other countries by spreading their trade and business outside their own country. Foreign Direct Investments, Foreign Institutional Investors, Merger and Acquisition, Franchising and Business Outsourcing are some example of international transaction in global business. In an era of increasing globalization, it is imperative to have a single language of financial reporting.

On 16th February 2015, Ministry of Corporate Affairs has announced a new road map for the implementation of New Indian Accounting Standards (Ind AS) with effect from 1st April 2015 as voluntarily basis and from 1st April 2016 as mandatorily. ICAI has issued 39 accounting standards converged with IFRS**.** The insurance companies, banking companies and non-banking finance companies shall not be required to apply Indian Accounting Standards (Ind AS) for preparation of their financial statements either voluntarily or mandatorily as per MCA notification.

1.1 International Financial Reporting Standard (IFRS)

It is a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions.

The Council of the Institute of Chartered Accountants of India (ICAI) opined in May 2006 that adopting IFRS was considered and supported by the ASB. IFRS task force was set up to provide a road map for convergence and it decided to converge with IFRS from the accounting period commencing on or after 1 April 2011. In India, Ministry of Corporate Affairs carried out the process of convergence of Indian Accounting Standards with IFRS after a wide range of consultative process with all the stakeholders in pursuance of G-20 commitment and as result thirty five Indian Accounting Standards converged with International Financial Reporting Standards (henceforth called IND AS).

1.2 Key study on convergence with IFRS in India

Adoption of IFRS has become a vital issue of discussion and debate in the different country. Due to the variation in different country's GAAP of an individual country, a threat is always sustain on the harmonization of accounting standards. IFRS is one of the best financial reporting systems, which does not include any country with variation of accounting policies. Now a single set of financial reporting is final statement to present across the world at a reduced cost and more reliable, transparent and fair reporting of an entity. These benefits are attracting each country to set mandatory for adopting IFRS in their country. India has also mandate the IFRS for financial reporting statement from 1st April 2011 but still India have been not succeeded to resolve its issues relating to conversion with IFRS such as taxation. Corporate Affairs Minister Salman Khurshid said on the sidelines of an ASSOCHAM seminar on International Financial Reporting Standards (IFRS) here “We are still working on fair value concepts and other issues like depreciation, but I can assure you that we will stick to the roadmap laid for the convergence of Indian standards with the IFRS".

After enactment of Companies Act 2013 the ministry of corporate affairs has focus to implement IFRS from April 1 2011. According to the draft plan the ministry announce to implement IFRS in the companies having turnover over Rs. 1000 crore from April 1 2015 and from April 1 2016 for those whose turnover is between Rs. 500 crore to Rs. 1000 crore but the professionals are still having difference on how to get fair value of assets and liabilities. Therefore India needs to develop its conference regarding to IFRS convergence. Therefore Indian companies will have to create awareness amongst its customers, investors and stakeholders as well as they need to make clear themselves to explain the reason for this changes and maintain understanding, transparency and reliability of their financial statements. Due to the lack of availability of professionals with adequate valuation skills to stimulate Indian Corporate to get fair value estimate, India has not gain benefits of IFRS. But those companies are talking the challenging of convergence of IFRS effectively have succeed to get more earning in the last year like IT companies have gain benefits from the convergence with IFRS. Azim Premji, Chairman of Wipro, commenting on the results said – "There are positive indicators on the global economy. Client confidence is on the uptick and we see it reflected in our results."

1.3 Beneficiaries of Convergence with IFRS

The researchers have pointed out several beneficiaries to the convergence of Indian Generally Accepted Accounting Principles (GAAP) with IFRS. Some of them are discussed here below.

1. ***The Investors***: Convergence of Indian Accounting Standards with IFRS makes accounting information more reliable, relevant, timely and comparable across different legal and economic frameworks and requirements since it would then be prepared by using a common set of accounting standards which will facilitate the investors who willing to invest in the countries apart from India.

2. ***The Industry***: The industry which in the event of convergence with IFRS will be benefited because of some basic reasons. Firstly it will enhance confidence in the minds of the foreign investors, secondly, it decreases the burden of financial reporting, thirdly, it would make the process of preparing the individual and group financial statements easier and simplest, and the last and important one is that this will reduce cost of preparing the financial statements using different sets of accounting standards.

3. ***Accounting Professionals***: However, there would be initially many problems but convergence with IFRS would surely benefit the accounting professionals and it will be helpful them to sell their talent and expertise across the globe.

4. ***The corporate world***: Convergence with IFRS would build the reputation and long lasting relationship of the Indian corporate world with the international financial entities. Moreover, the corporate entities back in India would be benefited because of several reasons. The higher level of consistency will be maintained between external and internal reporting, two, because of better access to global financial markets, three, it will improve the risk rating and makes the corporate world more and more competitive globally as their comparability with the global competitors will increase.

5. ***The Economy***: All the discussions made above explains how convergence with IFRS would help industry grow and is beneficial to the corporate entities in the country as this would make the internal and external highly consisted, and it will report improvement in the risk rating among the foreign investors. Moreover, the international comparability is also benefiting the industrial and capital markets in the country which lead to better economy across the country.

1.4 Indian insurance sector

India‘s rapid rate of economic growth over the past decade has been one of the more significant developments in the global economy. This growth has its roots in the introduction of economic liberalization in the early 1990s, which has allowed India to exploit its economic potential and raise the population‘s standard of living. Insurance has a very important role in this process. Health insurance and pension systems are fundamental to protecting individuals against the hazards of life and India, as the second most populous nation in the world, offers huge potential for that type of cover. Furthermore, fire and liability insurance are essential for corporations to keep investment risks and infrastructure projects under control. Private insurance systems complement social security systems and add value by matching risk with price. Life insurance, funded pension systems and (to a lesser extent) non-life insurance, will accumulate huge amounts of capital over time which can be invested productively in the economy. In 2003, the Indian insurance market ranked 19th globally and was the fifth largest in Asia. Although it accounts for only 2.5% of premiums in Asia, it has the potential to become one of the biggest insurance markets in the region.

The insurance industry in India has come a long way since the time when businesses were tightly regulated and concentrated in the hands of a few public sector insurers. Following the passage of the Insurance Regulatory and Development Authority Act in 1999, India abandoned public sector exclusivity in the insurance industry in favour of market-driven competition. This shift has brought about major changes to the industry. The inauguration of a new era of insurance development has seen the entry of international insurers, the proliferation of innovative products and distribution channels, and the raising of supervisory standards. By mid-2004, the number of insurers in India had been augmented by the entry of new private sector players to a total of 28, up from five before liberalization.

2. REVIEW OF LITERATURE

Comparability and uniformity of financial statements among companies and countries making the work of investment analysts easy, attraction of foreign investors in addition to general capital market liberalization. Kamath and Desai (2014) in their study The Impact of IFRS Adoption on the Financial Activities of Companies in India An Empirical Study, categorized the financial activities into financial risk, investment activities, operating activities and debt covenant. And with the help of ratios suggested that investment activities and operating activities showed improvement, whereas financial risk and debt covenant showed no difference. Findings of Kenneth Enoch Okpala (2012) showed that IFRS has been adopted in Nigeria perceived that IFRS implementation will promote FDI inflows and economic growth and it was recommended that all stakeholders should endeavor to have full implementation to reap benefits of the global GAAP and principle - based standards. Dr. M. Jayasree (2012) 's observation of the balance sheet revealed differences in respect of Intangible Assets, Available for Sale financial assets, Interest Bearing Loans, Provisions, Deferred Tax Liability, Provisions under Current liabilities, and General Reserve.

Pawel Punda (2011) stated in result obtained that increase in Profitability ratios, liquidity ratio noted less significant, but still quite substantial increase, and however, one market-based ratio (P/E ratio) noted slight decrease after the conversion to IFRS. The obtained results indicate that the increase in profitability ratios and decrease in P/E ratio are due to very high income statement profits under IFRS. Dr Vidhi Bhargava

(2013) emphasised the valuation and depreciation of property, plant and equipment is also a big cause of difference. The study of P. A. Isenmila (2013) reveals IFRS introduction will facilitate better investment decision making in the capital Market. (ii) The new standards will lead to an enhanced or favorable financial measure, such as profitability, growth, leverage, liquidity, and size, Good Corporate Practices, quality and timeliness of management information and transparency. The statement of Wilson E. Herbert (2013) said that "IFRS Course in Accounting Curriculum" and "IFRS training for management and staff" are the two major indicators of successful implementation of IFRS. It is hoped that the findings of Dr. Kwok Shu Hung (2014) will provide some insight to the professional accounting bodies in these two jurisdictions to put extra effort on educating the students and the public to have a positive image of the profession. Surveys of preparers' experiences with the IFRS implementation process are rare. A survey questionnaire by Richard D. Morris (2014) shows that the IFRS implementation significantly reflect more respondents rated as difficult, considerable, or serious, rather than as easy or little, items making up General Issues with IFRS and Accounting Issues. From the study of Dr. B. Shekhar (2013) shows IFRS removing the confusion from the minds of investor because it gives accurate, transparent single accounting statements.

3. RESEARCH OBJECTIVES & METHODOLOGY

3.1 Statement of Problem

The IFRS implementation roadmap has been set for the insurance companies in India. So it is required by the insurer to mandatorily adhere to the standards that are set in the IFRS. But this may have an impact on the insurance industry in many ways. This study is aimed at finding out the impact of the implementation of IFRS on the insurance companies as the insurance industry in India is all set to converge to IFRS standards in the coming years. This research is aimed at analyzing the various factors that affect the implementation of IFRS.

3.2 Objectives of the Study

a) To study the concept of IFRS and its impact on insurance companies.

b) To portray the IFRS adoption procedure, procedure and key study on convergence with IFRS in India.

c) To display the beneficiaries of convergence with IFRS.

d) To analyse the impact of implementing IFRS on the insurance companies in India.

3.3 Sources of Information and Type of Research:

Primary source includes the questionnaire. Questionnaire was sent to Chartered Accountants, CA final year students and the people working in accounting firms. Secondary sources comprised books, journals, web-sites, news papers and other documents published by the Government from time to time. This research is basically descriptive and analytical in nature.

3.4 Sampling Plan

Sample Design: The sampling process used was the convenience sampling method in which the respondents were not selected on a systematic basis. The respondents were sent a questionnaire through mail and their response was collected.

Sample Size: The sample size undertaken includes 50 Chartered Accountants, CA final year students and the people working in accounting firms. The samples were taken from Ajmer, Jodhpur and Jaipur.

3.5 Hypotheses

H_0: The working of Insurance Companies in India will not have any impact of IFRS implementation.

H_1: The working of Insurance Companies in India will have impact of IFRS implementation.

4. ANALYSIS OF DATA AND DISCUSSION

The primary objective of the study is to analyse the impact of implementation of IFRS on Insurance companies in India.

Table 1: Impact of IFRS on Indian insurance industry

S. No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	IFRS require the organization to put in more internal process control	11	29	10	0	0
2	IFRS is better than IAS	11	22	15	2	0
3	IFRS requires additional resource, as compared to present accounting practice.	9	27	10	4	0
4	IFRS “Conversion project team” is required for implementation in an organization.	11	28	11	0	0
5	Implementation of IFRS would increase the complexity of financial report.	15	24	11	0	0
6	Implementation of IFRS would	12	25	10	3	0

	have a impact on key performance indicators.					
7	A training program is essential for the employees, for a organization for implementing IFRS.	10	27	10	3	0
8	If training program is provided, it would be a huge financial expense for the company.	10	26	14	0	0
9	The regulatory authorities have to make significant changes in the norms for the industry.	13	25	11	1	0
10	Measurement of insurance liabilities is the CEV (Current Exit Value) method specified in IFRS has significant difference than Gross premium valuation done in India GAAP.	9	23	15	3	0
11	The fair vale method used for valuing embedded derivatives is a complex method. Do you agree?	10	28	10	2	0
12	Extra efforts in IFRS result in better Internal management reporting.	9	26	15	0	0
13	The unbunding concept used in the IFRS would result in significant changes in the presentation of accounts.	13	29	6	2	0
14	The insurers would have to make changes in the IT infrastructure & compensation policies when IFRS is implemented	13	25	8	4	0

Table 2: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Row * Column	70	100.0%	0	0.0%	70	100.0%

Table 3: Observed, Expected and Residual Frequencies

		DA	N	A	SA
1	**O**	0	10	29	11
	E	12.8	12.8	12.8	12.8
	R	-12.8	-2.8	16.2	-1.8
2	**O**	2	15	22	11
	E	10.2	10.2	10.2	10.2
	R	-8.2	4.8	11.8	0.8
3	**O**	4	10	27	9
	E	10.2	10.2	10.2	10.2
	R	-6.2	-0.2	16.8	-1.2
4	**O**		11	28	11
	E	12.8	12.8	12.8	12.8
	R	-12.8	-1.8	15.2	-1.8
5	**O**		11	24	15
	E	12.8	12.8	12.8	12.8
	R	-12.8	-1.8	11.2	2.2
6	**O**	3	10	25	12
	E	10.2	10.2	10.2	10.2
	R	-7.2	-0.2	14.8	1.8
7	**O**	3	10	27	10
	E	10.2	10.2	10.2	10.2
	R	-7.2	-0.2	16.8	-0.2
8	**O**		14	26	10
	E	12.8	12.8	12.8	12.8
	R	-12.8	1.2	13.2	-2.8
9	**O**	1	11	25	13
	E	10.2	10.2	10.2	10.2
	R	-9.2	0.8	14.8	2.8
10	**O**	3	15	23	9
	E	10.2	10.2	10.2	10.2
	R	-7.2	4.8	12.8	-1.2
11	**O**	2	10	28	10
	E	10.2	10.2	10.2	10.2
	R	-8.2	-0.2	17.8	-0.2
12	**O**		15	26	9
	E	12.8	12.8	12.8	12.8
	R	-12.8	2.2	13.2	-3.8
13	**O**	2	6	29	13
	E	10.2	10.2	10.2	10.2

	R	-8.2	-4.2	18.8	2.8
14	**O**	4	8	25	13
	E	10.2	10.2	10.2	10.2
	R	-6.2	-2.2	14.8	2.8

Table: 4 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	201.908[a]	69	.000	.000[b]	.000	.000
Likelihood Ratio	180.019	69	.000	.000[b]	.000	.000
Fisher's Exact Test	136.389			.000[b]	.000	.000
N of Valid Cases	70					

a. 110 cells (100.0%) have expected count less than 5. The minimum expected count is .20.
b. Based on 10000 sampled tables with starting seed 2000000.

The Pearson Chi-Square test gives a value of 201.908. The Chi square table gives a value of 85.50 at degrees of freedom of 69. This means that the null hypothesis is rejected

Interpretation: From the above it can be narrated that the IFRS implementation has an impact upon the working of the insurance industry. This hypothesis proves that the organization that is implementing IFRS has to undergo serious or significant changes in the way the organization works and they way in which the financial reporting is done in an organization.

FINDINGS

i. The data explores that the IFRS will demand from an organization to put in more internal process controls.

ii. The implementation of IFRS would result in the organization bringing in more resources and should be done by a conversion team in an organization

iii. IFRS would result in an impact on the accounting data of the organization hence the company's employees who deal with financial data requires more clarity regarding the financial data of the organization.

iv. The training program is essential in implementing IFRS in an organization and the Training cost may result in a huge financial expense for the organization.

v. Regulators have to make significant changes to the norms of the working of the industry. The internal management reporting would be improved after IFRS is implemented in an organization

vi. Cev method difference have a significant impact on the books of accounts of the organization, The fair value method the accounting of the insurance contracts even more complex and the unbundling concept is a complex method and the presentation of accounts would be affected by this concept.

CONCLUSION

From the study conducted it is evident that the organization has to go through tough times while implementing IFRS because integrating the present system with the IFRS standards is not an easy job. The companies would find it hard when the IFRS implementation takes a toll on the financial resources of the company. This is because the implementation of IFRS would incur costs such as auditing costs, training costs, additional resources and a lot of changes would be required in the IT infrastructure and the HR policies of a company.

But the fact that the insurance companies have to keep in mind is the benefits that arise out of the implementation of IFRS. Better financial information for shareholders, better financial information for regulators, enhanced comparability, improved transparency of results, increased ability to secure cross-border listing, better management of global operations, decreased cost of capital etc can be some of the benefits of implementing IFRS. These benefits would increase the image of the company among the investors and the company may get more investors for their financial instruments.

So for arriving at the best results, the company should make an adequate plan for implementing IFRS in it. This plan should cover each and every aspect related to the implementation which includes the financial, training etc. When the company implements IFRS by using a systematic plan, it would be able to decrease the complexities involved and also could derive the benefits of the single global accounting standard.

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An Empirical Study on Marketing and Sales Problems of Micro, Small and Medium Enterprises (MSMEs) in Madhya Pradesh

Prof. D.K. Nema[1] Toran Lal Verma[2]
1 Professor
2 Research Scolar
Department of Commerce, Dr Hari Singh Gour Vishwavidyalaya, Sagar, Madhya Pradesh

Abstract

Micro, Small and Medium Enterprise sector serves as one of the most vital sector of the Indian economy. The sector provides employment to a large section of population and makes a significant contribution in India's total Gross Domestic Product (GDP), manufacturing output and exports. However, despite its mammoth contribution to the Indian economy, the MSMEs have been facing various difficulties and problems and struggling to ensure their growth and survival. Among many problems that hinder the growth of MSMEs is marketing and sales problems. Majority of the MSMEs do not have separate marketing department to have a clear marketing strategy to develop an effective marketing strategy. The present research attempts to study the marketing and sales problems of MSMEs in Madhya Pradesh.

Keywords: MSMEs, Marketing Problems, Marketing Strategies, Advertising, Promotion

Introduction of Micro, Small and Medium Enterprises

It is an inevitable fact that MSME sector is one of the most vibrant sector which contributes substantially in the growth of Indian Economy. The MSME sector ensures the economic growth of the country with a vast network of 6.3 crore MSME units spread throughout India. The sector contributes around 30 percent of the nominal GDP of the country and the share of MSMEs in total manufacturing output is nearly 45 percent (Nema et al., 2021). These enterprises in the MSME sector produces over 8000 value-added products ranging from food products, cloths, metal products, sports goods, wood products, auto parts etc. (Khan, 2011). The MSME sector in India huge and 99% of the businesses in India are MSMEs (The Times of India, 2020). This sector is the growth engine and backbone of the economy. The MSMEs are crucial in bridging the social disparities in the country. The social divide in India is much higher than other developing countries. Given this fact, MSMEs are an important tool to bridge the infrastructural gap betweenrural and urban areas. MSMEs are also a very important participant of the value chain and collaborate with large enterprises in manufacturing and delivering services to ultimate consumers. MSMEs play a major part in the value chain by playing different roles mainly as manufacturers, distributors, retailers, contractors, etc. In export, products from MSMEs have a major share. It is estimated that the share of MSME is 50% of the total export from India. The sector has continuously helped to maintain the Balance of Payment (BoP) position of the country by sharing a large portion of the total export. (Yadav, 2014). The MSMEs in India are defined under the MSMED Act, 2006 under three categories Micro, Small and Medium. The definition is based on a composite criterion of net investment and net turnover. The net investment means the net investment in plant and machinery & equipment and not the book value or cost value. The net turnover means the total turnover of the enterprises less exports.

Table No. 01 Definition of MSMEs

Criteria: Investment and Annual Turnover			
Classification	**Micro**	**Small**	**Medium**
Manufacturing & Service Enterprise	Investment < ₹1crore and Turnover < ₹5 crore	Investment < ₹10 crore and Turnover < ₹50 crore	Investment < ₹50 crore and Turnover < ₹250 crore

Source: Press Information Bureau, 2020

The above table no. 1 shows the definition of MSMEs in India. As per the definition criteria, the enterprises with an investment of upto ₹1 crore and turnover upto ₹5 crores are defined as micro enterprises. An enterprise that has an investment of ₹1 crore to ₹10 crores and a turnover of ₹5 crores to ₹50 crores is defined as small enterprise. Medium enterprises are those enterprises that have an investment of ₹10 crores to ₹50 crores and a turnover of ₹50 crores to ₹250 crores.

Marketing and Sales Problem of Micro, Small and Medium Enterprises

Due to Globalisation, Liberalization and Privatisation, there is cut throat competition among companies in every industry. The emergence of multinational Corporations has amplified the competition among businesses in every aspect including marketing and sales. With the involvement of large companies including Multinational Corporations (MNCs), it has become very difficult for MSMEs to position themselves. Among other problems like financial problems, production problems, infrastructural problems, etc. marketing is also a fundamental challenge faced by Small Medium Enterprises (MSMEs) to succeed (Hadiyati, 2015). Also, due to advancement in technology and easy access to information, there is huge change in the buying behaviour of the consumers which makes it difficult for MSMEs to devise effective marketing strategy. In the recent years, marketing has certainly become the decision maker of an enterprise's survival and growth. MSME entrepreneurs generally have a lack of knowledge and skill in marketing aspects. The enterprises which do not make marketing strategies and do not put enough marketing efforts fail to satisfy the customers and eventually forced to exit from the businesses. Businesses need to constantly assess the latest and most attractive marketing trends in order to survive (Chaubey & Pant, 2017).

Basic principles of marketing apply to all companies irrespective of their size whether they are small or large. But the large companies usually have the resources and sophisticated marketing departments which enables them to market their products with ease. The MSMEs do not usually have a dedicated marketing department which is a big problem for them. However, in the recent years, the increased use of internet could prove a boon for small companies where they can promote their products with limited expenses through own websites and social media marketing. Some researches which have highlighted the marketing problems among MSMEs are discussed under 'review of literature' section.

Review of Literature

(Senapati, 2014) in their study on Marketing of small business in India, the researcher highlighted the problems of marketing of small businesses in India. According to him, most of the MSME businesses in India are established because of government subsidies and incentives. These units face the problem of promotion in the later stages. He concluded that innovative marketing strategies must be designed to make the MSMEs more sustainable.

(Sudhakar, Nagarjuna, & Raj, 2017) the researchers studied the technology upgradation among MSMEs that could be helpful for them to grow through digital marketing. The researchers also stressed the importance of marketing assistance in this area. They opined that the

MSMEs must concentrate on branding of their company and product by adopting the advance and updated technology.

(Kumar, Batra, & Sharma, 2009) studied the growth, challenges and issues of MSMEs in India. Researchers highlighted the major obstacles faced by MSMEs which included barriers in financing of MSMEs, marketing problems such as competition from large scale industries, lack of marketing knowledge etc, the researchers also outlined the available opportunities for the MSMEs like cluster development program, outsourcing and globalization. They concluded that MSMEs should be given adequate support in terms of infrastructure facilities, development of industrial parks, technology incubators etc.

(Chanu & Sharma, 2015) studied the marketing problems of micro enterprises in papum pare district. The researchers surveyed 51 micro enterprises in papum pare district and found that majority of the micro enterprises were facing sales/marketing problems along with raw material problems and production problems. It was revealed that the marketing problems were prevalent inthe micro enterprises irrespective of the kind of business activity. They concluded that the micro enterprises were need to focus on marketing strategies and adopt innovative marketing practices and have awareness about marketing schemes and assistances provided by the government.

(Trivedi, 2013) stated that MSMEs should improve their marketing strategies to counter cut- throat competition and gain a competitive advantage in domestic as well as international markets. As per the Researcher, marketing could be effective when people and management in the organization are fully committed. Organizations should formulate their goals clearly and then evaluate various innovative and marketing alternatives based on their capabilities and resources.

Objectives of the study

1. To study the marketing and sales problems of MSMEs.
2. To study the differences in the marketing and sales problems among the MSMEs.
3. To suggest measures for addressing the marketing and sales problems of MSMEs.

Hypothesis of the Study

H0: There is no significant difference in the marketing and sales problem among the micro, small and medium enterprises.

HA There is a significant difference in the marketing and sales problem among the micro, small and medium enterprises.

Research Methodology

The study is empirical in nature and is based on both primary and secondary data. Secondary data is collected from various sources including books, journals, magazines, e-books and other online & offline sources. Primary Data is collected with the help of a well thought-out interview schedule. The interview schedule was prepared after an extensive literature review and pilot survey. A list of ten major marketing and sales problems was identified and responses were sought from 437 MSME units of 10 selected districts of Madhya Pradesh. The districts include Jabalpur, Gwalior, Satna, Sagar, Indore, Morena, Ujjain, Sidhi, Bhopal and Dewas. The collected data obtained from primary and secondary sources have been analysed, interpreted and presented in meaningful way with the help of various statistical tools and techniques. The statistical tools used in the study are Microsoft Excel 2016 and Statistical Package for Social Sciences (SPSS) version The analysis of One-way ANOVA is done using SPSS whereas the calculation of Relative Importance Index is done using Microsoft Excel.

Data Analysis and Interpretation

The data is collected from 437 MSME entrepreneurs regarding the marketing and sales problems faced by them. The following table shows the Categorisation of MSMEs selected in the study:

Table No. 02
Category of MSME Units

Enterprise	Frequency	Percent
Micro	248	56.75
Small	155	35.47
Medium	34	7.78
Total	**437**	**100**

The table no. 2 showS the classification of MSME units into micro, small and medium enterprises. Out of the total 437 units included in the study, 248 units are micro units (56.75%), 155 units are small units (35.47%) and 34 units are medium units (7.78%).

The identified marketing and sales problems through literature review and pilot survey are competition from big brands, expensive advertising and promotion, lack of government support in marketing, cooperation from distributors and retailers, lack of proper distribution channel, lack of knowledge about the target market, inability to retain old customers, lack of demand, inability to adopt digital marketing and inability to participate in trade shows and exhibitions. For better identification of the problems and for ease of understanding, the problems are provided code nameswhich range from MP_1 to MP_10.

The responses are collected as Likert scale responses ranging from Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) and Strongly Disagree (SD). The collected responses for marketing and sales problems are shown as follows:

Table No. 03
Likerts Scale Responses for Marketing and Sales problems

SN	Variable	SA	%	A	%	N	%	D	%	SD	%
MP_1	Competition from big brands	183	41.90	148	33.90	73	16.70	30	6.90	3	0.70
MP_2	Expensive advertising and promotion	47	10.80	124	28.40	152	34.80	94	21.50	20	4.60
MP_3	Lack of government support in marketing	77	17.60	125	28.60	122	27.90	80	18.30	33	7.60
MP_4	Lack of cooperation from distributors and Retailers	87	19.90	133	30.40	124	28.40	69	15.80	24	5.50
MP_5	Lack of proper distribution channel	73	16.70	135	30.90	122	27.90	71	16.20	36	8.20
MP_6	Lack of knowledge about the target market	96	22.00	126	28.80	94	21.50	90	20.60	31	7.10
MP_7	Inability to retain old Customers	76	17.4	113	25.9	152	34.8	66	15.1	30	6.90
MP_8	Lack of demand	82	18.8	116	26.5	123	28.1	77	17.6	39	8.90
MP_9	Inability to adopt digital Marketing	85	19.5	129	29.5	121	27.7	70	16.0	32	7.30
MP_10	Inability to participate in trade shows and exhibitions	78	17.8	154	35.2	114	26.1	70	16.0	21	4.80

Source: Primary Data

The above table No. 03 shows the shows the Likert scale responses of the opinion of MSME entrepreneurs towards marketing and sales problems of the MSMEs. Based on these responses the Relative Importance Index is calculated to find the most important marketing and sales problems of MSMEs. The Relative Importance Index is calculated with the help of following formula

$$\text{Relative Importance Index}(RII) = \frac{\sum W}{A * N}$$

$$= \frac{(5n5 + 4n4 + 3n3 + 2n2 + 1n1)}{5n}$$

Where,

W = Weight given to each factor ranging from 1 to 5,

n1 = Number of respondents for weight 1,

n2 = Number of respondents for weight 2,

n3 = Number of respondents for weight 3,

n4 = Number of respondents for weight 4,

n5 = Number of respondents for weight 5).

A = The highest weight (i.e 5 in the study)

N = The total number of sample

Table No. 04

Relative Importance Index for Marketing and Sales Problems

SN	Variable	RII	Rank
MP_1	Competition from big brands	0.819	1
MP_10	Inability to participate in trade shows and Exhibitions	0.691	2
MP_4	Lack of cooperation from distributors and Retailers	0.687	3
MP_9	Inability to adopt digital marketing	0.676	4
MP_6	Lack of knowledge about the target market	0.676	4
MP_7	Inability to retain old customers	0.664	5
MP_5	Lack of proper distribution channel	0.663	6
MP_3	Lack of government support in marketing	0.661	7
MP_8	Lack of demand	0.657	8

MP_2	Expensive advertising and promotion	0.638	9

Source: Table No. 03

From the above table no. 04, it is clear that the problem of competition from big brands is the major marketing and sales problem for MSMEs which has the highest RII score (0.819), followed by their inability to participate in trade shows and exhibitions (0.691) and inability to adopt digital marketing practices (0.687).

Testing of Hypothesis

To test the stated hypothesis, one-way ANOVA is performed on the responses collected for the marketing and sales problems among the micro, small and medium enterprises.

ANOVA is helpful in checking the impact of one or more factors by comparing the means of different samples with the help of F statistic. The F statistic compares the variability between the groups to the variability within the groups

$$\mathbf{F::}\ \boldsymbol{MST / MSE}$$

Where,

F=ANOVA coefficient

MST = Mean sum of square due to treatment

MSE = Mean sum of square due to error

The results of one-way ANOVA for marketing and sales problems are as follows:

Table 05

Hypothesis Statement and Inference for Analysis of Variance on Marketing and Sales problem

S.N.	H_0 no.	Hypothesis Statement	F Value	P Value	H_0 Accept/Reject at .05 significance Level
		There is no significant difference in the marketing and sales problem among micro, small and medium Enterprises			

MP_1	1	There is no significant difference regarding the problem of competition from big brands among micro, small and medium Enterprises	4.876	.008	H_0 Rejected
MP_2	2	There is no significant difference regarding the problem of expensive advertising and promotion among micro, small and medium enterprises	2.289	.103	H_0 Accepted
MP_3	3	There is no significant difference regarding the problem of lack of government support in marketing among micro, small and medium enterprises	5.256	.006	H0 Rejected
MP_4	4	There is no significant difference regarding the problem of lack of cooperation from distributors and retailers among the micro, small and medium enterprises	3.590	.028	H0 Rejected
MP_5	5	There is no significant difference regarding the problem of lack of proper distribution channel among micro, small and medium enterprises	2.974	.052	H0 Rejected
MP_6	6	There is no significant difference regarding the problem of lack of knowledge about the target market among micro, small and medium enterprises	1.289	.277	H0 Accepted
MP_7	7	There is no significant difference regarding the problem of inability to retain old customers among micro, small and medium enterprises	6.991	.001	H0 Rejected
MP_8	8	There is no significant difference regarding the problem of lack of demand among micro, small and medium enterprises	3.122	.045	H0 Rejected
MP_9	9	There is no significant difference regarding the problem of inability to adopt digital marketing among micro, small and medium enterprises	5.053	.007	H0 Rejected
MP_10	10	There is no significant difference regarding the problem of inability to participate in trade shows and exhibitions among micro, small and	10.146	.000	H0 Rejected

		medium enterprises			

Source: Table No. 03

From the above table no. 05, it is clear that the null hypothesis is rejected at 0.05 significance level for the problems of competition from big brands, no government support in marketing, cooperation from distributors and retailers, lack of proper distribution channel, inability to retain old customers, lack of demand, inability to adopt digital marketing and inability to participate in trade shows and exhibitions. Null hypothesis is accepted for lack of knowledge about the target market and the problem of expensive advertising and promotion. It means that there is no significant difference among micro, small and medium enterprises regarding the problem of lack of knowledge about the target market and the problem of expensive advertising and promotion.

Findings

With the help of Relative Importance Index, it was revealed that the most important marketing andsales problem was competition from big brands followed by inability to participate in trade shows and exhibitions and inability to adopt digital marketing practices.

The ANOVA results showed that there were significant differences among micro, small and medium enterprises regarding the problem of competition from big brands, no government support in marketing, cooperation from distributors and retailers, lack of proper distribution channel, inability to retain old customers, lack of demand, inability to adopt digital marketing and inability to participate in trade shows and exhibitions. This infers that there is a significant difference among regarding the stated marketing and sales problems. Except for the problem of lack of knowledge about the target market and the problem of expensive advertising and promotion.

Suggestions

Based on the results of the analysed data and interviews conducted with the MSME entrepreneurs, following suggestions are made:

- The improvement of marketing skills in MSME owners is a very important aspect which has not been recognized and addressed properly. The MSME owners should be trained about effective marketing strategy by organizing Entrepreneurship Development program (EDPs) on regular basis.

- It was revealed from the interviews that the MSMEs could not adopt to the digital changes that took place in recent years. Leveraging the digital media for marketing is one of the efficient ways to promote a product. It was also revealed that most of the MSMEs do not maintain a website for their enterprise. Maintaining a website helps in advertising and promotion of their product generating customer leads.

- Lack of marketing support was one of the important marketing and sales problem for MSMEs. Unlike large companies, MSMEs cannot spend a large amount of money on advertising and promotion. To help the MSMEs in the marketing of their products, the government and industry associations should take steps towards organizing trade fairs and exhibitions in every district regularly.

- The competition from big brands is one of the biggest challenges of MSMEs. Large companies are entering into small niches; it has become difficult for MSMEs to compete with these companies. The 'Vocal for Local' program must be encouraged, as it will benefit the local MSMEs to serve a particular niche.

- The MSMEs could form marketing cooperatives to enable the member MSMEs to market their products. The marketing cooperatives could prove highly beneficial for MSMEs which have lesser or no resources for marketing their products.

Conclusion

Having an effective marketing strategy has become the need of the hour for every company whether small or large, as the product does not sell itself. Having informed choices has made the consumers more selective than ever. No company could compromise on quality as the chances of having a near substitute are very high. Also, the chances of consumers getting shifted from one brand to another brand are very high with little deterioration in quality. It is also important to note that irrespective of the quality of the product, the consumer will not purchase it if he is not aware about the availability of that product in the market. Thus, the MSMEs should make efforts to market their products wisely so that the information of its quality and availability penetrates to the masses. If MSME entrepreneurs start focusing on the marketing aspects too.

They will be able to generate sales and increase their revenue manifolds.

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Tax Revenue and Life Expectancy Index of Select Countries

Neelam Yadav[1], Shurveer S. Bhanawat
1 Research Scholar 2 Professor & Head
Department of Accountancy and Business Statistics, (MLSU), Rajasthan

Abstract

Life expectancy is a key indicator of health in both developing and developed countries. Life Expectancy reflects the quality of life in a particular place. The objective of the study is to explore the inter-relationship between tax revenue and the life expectancy index (Health Index) of select countries. For the present study 5 countries, France, Italy, Brazil, Canada, and India, have been selected. These countries have been selected on the basis of the GDP of a particular country. For data analysis, Correlation, Regression have been used. For testing of hypothesis, t-test have been administered. Results of correlation show that Canada's tax revenue and life expectancy index have highly correlated other than remaining countries. Results also show the prediction model of the life expectancy index for select countries. The results show that the regression prediction model has been significant in all five countries. The difference between the actual life expectancy index and the predicted life expectancy index is not significant. It clearly indicates that the model developed by us is significant. It can be applied anywhere in the real world of life. For identifying the best prediction model from all select countries, results found that Canada's prediction model for the life expectancy index is the best prediction model. In the case of all select countries, the prediction model can be used to identify a particular target of life expectancy and also helps to determine how much tax revenue will be required for enhancing a life expectancy.

Keywords: Countries, Interrelationship, Life Expectancy at Birth, Life Expectancy Index, Tax revenue.

Introduction

Today health is the most important indicator of social and economic development of a particular country. Life expectancy is a key indicator of health in both developing and developed countries. It reflects the quality of life in a particular place. The high quality of society's health can be used as an indicator of the success of the health programs and the development of a social and economic program that can increase life expectancy indirectly Budiantara, *et al.* [1].The health of any country's people depends upon government expenditure and welfare programs on people of the country. This expenditure is done through tax revenue. Therefore we can say that there is any relationship between tax revenue and life expectancy index. Generally, itis an assumption that there is a correlation between tax revenue and life expectancy. People agrees that as soon as tax revenue is increased the life expectancy of the country is also increased because if the government collects good revenue through the taxes it will spend on the welfare of the society and if sufficient amount is spent on the welfare of the society in terms of health, education and standard of living than definitely the life expectancy will also be increased. Life expectancy is directly related to the medical facilities and medical facilities require expenditure. Expenditure is spent through the government and the main source of government is taxation, so definitely there should be a good relationship between the two but it is a matter of investigation whether really it works or not. In order to examine the relationship here, an attempt has been made to find out the relationship between life expectancy index and tax revenue whether it holds good or not, whether it held positive correlation or negative correlation. We have tried to develop a prediction regression model that means if a particular country wants to achieve a particular life expectancy how much tax revenue is required. This prediction model can be used by the select countries to identify a particular target of life expectancy.

A lot of literature is available on the relationship between tax revenue and other factors. Edame&Okoi [2] examined the impact of taxation on investment and economic growth in Nigeria. Results show that taxation is negatively related to the level of investment and GDP. In another study, Ahmad *et al.* [3]explored the relationship between total tax revenues and economic growth in Pakistan. Some researchers find the relationship between economic growth and part of total tax revenue individually i.e. Ojong*et al.* [4] examined the relationship between petroleum profit tax, company income tax, non-oil tax revenue, and economic indicator GDP. Few authors, Venkataraman&Urmi [5] studied components of direct and indirect taxation and examined their individual effects on economic growth in India. Results revealed that in the longer period, the component of direct and indirect taxes, personal income tax and excise duty had a no statistically significant impact on economic growth. Gatawa *et al.* [6] investigated the impact of VAT on economic growth in Nigeria.

Researchers studied the relationship between life expectancy and other factors i.e. Ling *et al.* [7] investigated the impact of trade openness on life expectancy in Malaysia. Results concluded that economic growth has increased life expectancy. Exports and imports both have a positive impact on life expectancy. A few authors Cylus*et al.* [8]compare health system efficiency using the DEA technique. They applied DEA {output orientation model}. Some authors i.e. Korkmaz&Kulunk [9], Khodabakhshi [10] examined the relationship between higher education, Human development indicators, life expectancy at birth and economic growth. Findings of [9] show that unidirectional causality from economic growth to the schooling rate as well as from economic growth to life expectancy at birth. Results of [10] show that per capita GDP in the economy has good growth and human development indicators have low growth in a country. Some studies have a focus on economic development indicators with human development indicators i.e. Gorka [11] focused on the relevance citation for the economic indicators (GDP, GNI, Inflation, Unemployment, and Per Capita Income) with that of social indicators (Literacy Rate, Poverty Rate, Health Index, education index).

In this way, this study is trying to find a relationship between tax revenue and the life expectancy index of select countries.

Material and Methods

- **Objective of the study**

The objective of this study is to explore the Interrelationship between the Tax Revenue and Life Expectancy (Health) Index of select Countries.

- **Hypothesis**

Mostly a review of literature analyses the relationship of GDP, HDI, Government spending, consumption with tax revenue. Edame&Okoi [2], Ahmad *et al.* [3]etc. found a negative correlation between the level of investment and GDP with Taxation. Although so many factors are affecting to decide the life expectancy index to a particular country yet here an attempt has been to find a relationship between tax revenue and life expectancy index. Hence before analysing the fact an assumption is made that there is no significant relationship between Tax Revenue collected and Life Expectancy Index. Because so many other factors are also responsible to decide Life Expectancy of a particular country. To keeping this fact in mind the following hypothesis have been developed;

There is no significant relationship between Tax Revenue collected and the Life Expectancy(Health) Index of select countries.

- **Data Collection procedure**

In order to determine the sample size for the present research work, GDP of 195 countries have been examined and sample size determination formula has been used. As per the formula results, 5 sample countries have been considered. After analysing the size of GDP in terms of value, it is found that France, Italy, Brazil, and Canada are having more or less equal GDP to India. These countries' percentage share in total world GDP is France (3.31%), Italy (2.49%), Brazil (2.42%), Canada (2.12%) and India (2.86%). Finally 5 countries France, Italy, Brazil, Canada and India have been selected as a sample for present research work. The reason for the selection of these countries other than India is that their GDP value is nearby India's GDP value. GDP data of 195 countries have been retrieved from the World Development Indicators Database Report, World Bank. In order to achieve the objective of the present research work, data have been collected through secondary sources. Data of Life Expectancy at Birth Index (Health Index) is collected from UNDP (United Nations Development Programme) reports. Data on Tax Revenue of select countries (France, Italy, Brazil, Canada and India) have been collected from www.stats.oecd.org, International Monitory Fund (IMF) and ACE Knowledge Portal (ACEKP). For this study, 2013 – 2018 data have been considered.

- **Statistical Tools and Techniques**

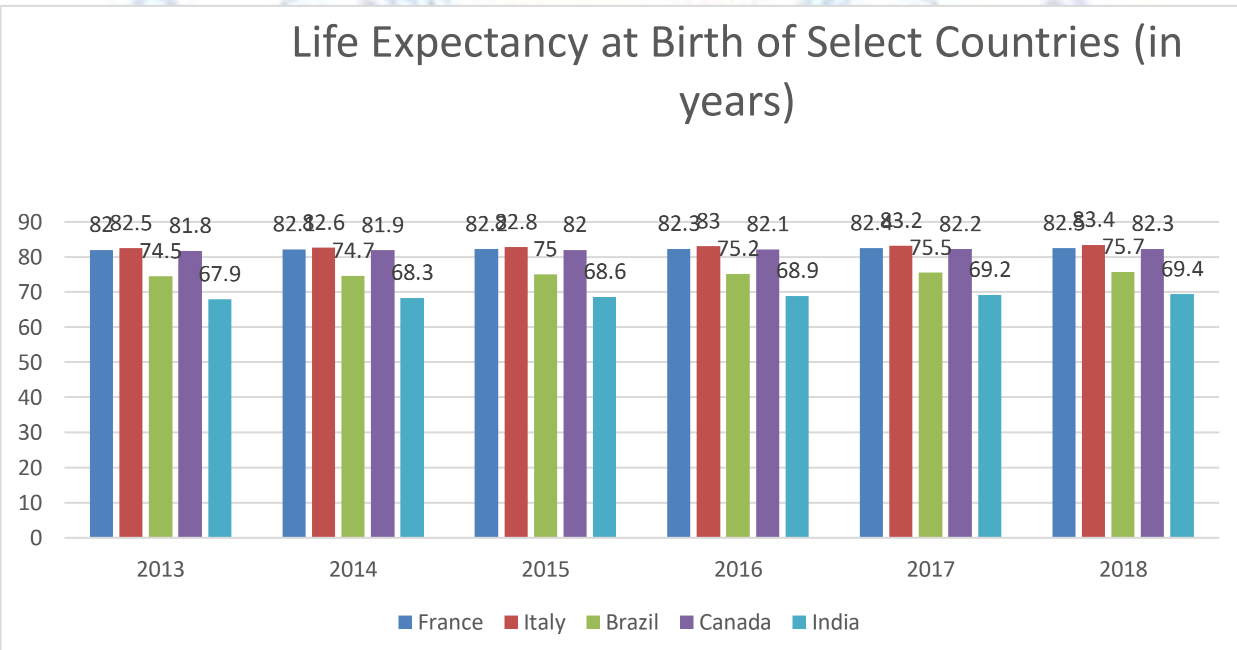
In order to achieve the objective of present research work, Correlation have been administered. For testing the hypothesis, 't' test have been administered. In order to develop a prediction model, Regression analysis is used.

Result and Discussions

Table 1 shows a comparison of Life Expectancy at Birth of select five countries for the period of 2013-2018. Life expectancy at birth is a number of year person can expect to live. This table shows that the highest average life expectancy at birth observed in Italy that is 82.91in years and the lowest life expectancy at birth observed in India that is 68.71 in years.

Table: 1 Comparison of Life Expectancy at Birth of select countries (in years)

Year	France	Italy	Brazil	Canada	India
2013	82	82.5	74.5	81.8	67.9
2014	82.1	82.6	74.7	81.9	68.3
2015	82.2	82.8	75	82	68.6
2016	82.3	83	75.2	82.1	68.9
2017	82.4	83.2	75.5	82.2	69.2
2018	82.5	83.4	75.7	82.3	69.4
Average	**82.25**	**82.91**	**75.1**	**82.05**	**68.71**



Examine Interrelationship between Tax Revenue and Life Expectancy (Health) Index of select Countries

In order to examine the inter-relationship between tax revenue and life expectancy (Health) Index, Correlation has been calculated. The table 2 shows the correlation between tax revenue collected and the life expectancy (Health) index of select countries. In order to test the hypothesis, there is no interrelationship between tax revenue collected and the life expectancy (Health) index of select countries, a t-test has been used.

Table: 2 Correlation between Tax Revenue and Life Expectancy (Health) Index of select countries

Year	India		France		Italy		Brazil		Canada	
	Tax Revenue	**Life Expectancy (Health) Index**	**Tax Revenue**	**Life Expectancy (Health) Index**	**Tax Revenue**	**Life Expectancy (Health) Index**	**Tax Revenue**	**Life Expectancy (Health) Index**	**Tax Revenue**	**Life Expectancy (Health) Index**
2013	18,46,545	0.737	9,66,817	0.954	7,06,829	0.961	17,26,353	0.838	5,92,206	0.951
2014	20,20,728	0.743	9,83,465	0.956	7,05,075	0.964	18,30,531	0.842	6,23,732	0.953
2015	22,97,101	0.748	10,02,131	0.957	7,08,768	0.967	19,13,555	0.846	6,53,264	0.954
2016	26,22,145	0.752	10,20,206	0.959	7,14,911	0.969	20,11,724	0.85	6,72,809	0.956
2017	30,13,223	0.756	10,65,242	0.961	7,27,790	0.972	21,18,464	0.853	7,02,704	0.957
2018	34,94,102	0.76	10,91,541	0.962	7,38,820	0.975	26,17,395	0.857	7,32,087	0.959
Correlation (r)	***0.97148427***		***0.981240089***		***0.925855934***		***0.912321519***		***0.993836589***	
(R^2)	0.943781804		0.962671		0.857209		0.832331		0.987711	
't' computed value	9.997798426		51.87828		130.16879		15.7971		31.72552	
't' table value (5%)	2.228138852		2.228138852		2.228138852		2.228138852		2.228138852	
P value	1.59276E-06		1.71E-13		1.757E-17		2.12E-08		2.28E-11	
't' test result	**Significant**		**Significant**		**Significant**		**Significant**		**Significant**	

Source: Own Calculation on Ms-Excel 2013

Table 2 shows the interrelationship between tax revenue and the life expectancy index of select countries. For check, interrelationship correlation has been used. Results show that all country's tax revenue and life expectancy index are highly correlated. The result of table 2 shows that in India, the tax revenue collected and life expectancy index correlation is 0.9714 it means both are very highly positively correlated. Positive correlation shows that when tax revenue is increased, the life expectancy index will be increased because the government spends tax revenue funds on the health of the countries people. Salome, *et al.* [12] also examined the effect of tax revenues on economic development(human development index & its indicators). This study also found that tax revenues have a positive correlation with the Human development index. Hassan, *et al.* [13]examined the relationship between life expectancy rate (as a proxy for health status) with health expenditure. The empirical results from this study showed a positive relationship between life expectancy rate and health expenditure. In this context, in the present study relationship between tax revenue and life expectancy index has been established for testing the hypothesis that there is a no inter-relationship between tax revenue collected and the life expectancy index of India, ‘t’ test has been administered. Result of ‘t’test for India shows that ‘t’ table value 2.22 is less than ‘t’ computed value that is 9.99 at 5% level of significance it indicated that hypothesis have been rejected and p-value is less than 0.05 it shows that relationship exists between tax revenue and life expectancy index in India. Results also indicated that in all four countries i.e. France, Italy, Brazil, Canada tax revenue and life expectancy index are highly correlated. In all four countries, t table value less than t computed value at a 5% level of significance shows that there is a relationship exists between tax revenue and life expectancy index of a country. Result show strong positive correlation exist between tax revenue collected and life expectancy index of all selected countries i.e. India, France, Italy, Brazil and Canada.

Development of Country-Wise Prediction Model for Estimating Life Expectancy Index

For the development of the prediction model of life expectancy (Health) index on the basis of tax revenue of select five countries, regression analysis has been administered. In past literature, some similar studies i.e. Ibanichuka *et al.* [14],Lawal & Abdulkadir [15], Shah [16], Sharma & Kaur [17]also adopted regression technique for prediction and establishing the relationship , hence in this study we have adopted simple linear regression technique.All five countries' regression prediction models summarised in the following.

- **India**

The table 3 shows the regression prediction result of the life expectancy index for India.

Table: 3 Regression Output of Prediction model of India’s Life Expectancy (Health) Index

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.7157187	0.004203395	170.2716	7.14E-09

TAX REVENUE	1.32E-08	1.60929E-09	8.194592	0.001208
R Square	0.943781804	F-Statistic		67.15134
Adjusted R Square	0.929727256	Significance F		0.001208
Standard Error	0.00224728			

Regression Equation of Prediction Model
Life Expectancy Index (y) = Constant (a) + βIn TR (bx)
β – Regression Coefficient

Life Expectancy Index India = 0.7157 + 1.32E-08*TR---------------------Regression Equation
Life Expectancy Index (y) = Dependent Variable
Tax Revenue (x) = Independent Variable

Source: Own Calculation through Ms-Excel 2013

The table 3 shows the regression output for the prediction of the life expectancy index for India. The result shows the intercept value i.e. 0.7157 is statistically significant because its t statistics is more than t table value at a 5% level of significance. Tax revenue value 1.32E-08 is also significant because its t statistics is more than t table value. The p-value of both variables is less than 0.05 it means values are significant. The coefficient of determination r^2 is 0.9437 it means 94.37% of the variability in the life expectancy Index have influenced by the Tax Revenue. Hence 5.63% variability in life expectancy Index has explained by other factors outside tax revenue. The F statistics 67.151 shows the overall significance of the regression model. Therefore, the tax revenue has a positive and significant influence on the life expectancy index thus tax revenue is an important instrument for economic development in India. The above equation shows the regression model for the prediction of life expectancy index on the basis of tax revenue. In this equation, the life expectancy index is the dependent variable and tax revenue is the independent variable.

- **France**

For the development of the prediction model of life expectancy (Health) index of France again regression analysis has been administered. The table 4 shows the regression prediction result of the life expectancy index for France.

Table: 4 Regression Output of prediction model for France's Life Expectancy (Health) Index

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.894569	0.006268	142.7295	1.45E-08
TAX REVENUE	6.23E-08	6.13E-09	10.15652	0.000529
R Square	0.962671	F-Statistic		103.1549
Adjusted R Square	0.953339	Significance F		0.000529
Standard Error	0.000661			
Estimated Life Expectancy Index of France = 0.8945 + 6.23E-08*TR ------------Regressi Equation				

Source: Own Calculation through Ms-Excel 2013

The table 4showsthe regression output for the prediction of the life expectancy index for France. The result shows the intercept value i.e. 0.8945 it is statistically significant because its t statistics is more than t table value at 5% level of significance. Tax revenue value 6.23E-08 is also significant because its t statistics is more than t table value. The p-value of both variables is less than 0.05 it means values are significant. The coefficient of determination r^2 is 0.9626 it means 96.26% of the variability in the life expectancy Index have influenced by the Tax Revenue. Hence 3.74% variability in life expectancy Index has explained by other factors outside tax revenue. The above equation shows the regression model for the prediction of life expectancy index on the basis of tax revenue.

- **Italy**

For the development of the prediction model of life expectancy (Health) index for Italy again regression analysis has been administered. The table 5 shows the regression prediction result of the life expectancy index for Italy.

Table: 5 Regression Output of prediction model for Italy's Life Expectancy (Health) Index

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.715199918	0.051596229	13.8614764	0.000157034
TAX REVENUE	3.52564E-07	7.19474E-08	4.900307283	0.008042216
R Square	0.857209211	F-Statistic		24.01301147

Adjusted R Square	0.821511514	Significance F	0.008042216
Standard Error	0.002170736		
Estimated Life Expectancy Index of Italy = 0.715199 + 3.52564E-07 *TR ----------------- Regression Equation			

Source: Own Calculation through Ms-Excel 2013

The table 5 shows the regression output for the prediction of life expectancy (health) index for Italy. The result shows the intercept value i.e. 0.7151 is statistically significant because its t statistics is more than t table value at 5% level of significance. Tax revenue value 3.52564E-07 is also significant because its t statistics is more than t table value. The p-value of both variables is less than 0.05 it means values are significant. The coefficient of determination r^2 is 0.8572 it means 85.72% of the variability in life expectancy (Health) Index has influenced by the Tax Revenue. Hence, 14.28% variability in the life expectancy (Health) Index has explained by other factors outside tax revenue.

- **Brazil**

For the development of the prediction model of life expectancy (Health) index of Brazil again regression analysis has been administered. The table 6 shows the regression prediction result of the life expectancy index for Brazil.

Table: 6 Regression Output of prediction model for Brazil's Life Expectancy (Health) Index

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.806118212	0.009416982	85.6026	1.12E-07
TAX REVENUE	2.04035E-08	4.57883E-09	4.45606	0.0111943
R Square	0.832330554	F-Statistic		19.856463
Adjusted R Square	0.790413192	Significance F		0.0111943
Standard Error	0.003232862			
Estimated Life Expectancy Index of Brazil = 0.806118 + 2.04035E-08* TR -----------------Regression Equation				

Source: Own Calculation through Ms-Excel 2013

The table 6 shows the regression output for the prediction of health index for Brazil. The result shows the intercept value i.e. 0.8061 it is statistically significant because its t statistics is more than t table value at 5% level of significance. Tax revenue value 3.61E-08 is also significant because its t statistics is more than t table value. The p-value of both variables is less than 0.05 it means values are significant. The coefficient of determination r^2 is 0.8323 it means 83.23% of the variability in life expectancy (Health) Index have influenced by the Tax Revenue. Hence, 16.77% variability in life expectancy (Health) Index has explained by other factors outside tax revenue.

- **Canada**

For the development of the prediction model of life expectancy (Health) index of Canada again regression analysis has been administered. The table 7 shows the regression prediction result of the life expectancy index for Canada.

Table: 7 Regression Output of Prediction Model for Canada's Life Expectancy (Health)Index

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.917693165	0.00208581	439.969624	1.6012E-10
TAX REVENUE	5.62867E-08	3.13918E-09	17.9303862	5.6864E-05
R Square	0.987711166	F-Statistic		321.498751
Adjusted R Square	0.984638958	Significance F		5.6864E-05
Standard Error	0.000359211			
Life Expectancy Index of Canada = 0.917693 + 5.62867E-08* TR ---------------- Regression Equation				

Source: Own Calculation through Ms-Excel 2013

The table 7showsthe regression output for the prediction of health index for Canada. The result of the table show intercept value i.e. 0.9176 is statistically significant because its t statistics is more than t table value at 5% level of significance. Tax revenue value 5.62867E-08 is also significant because its t statistics is more than t table value. The p-value of both variables is less than 0.05 it means values are significant. The coefficient of determination r^2 is 0.98.77 it means 98.77% variability in life expectancy (Health) Index has influenced by the Tax Revenue. Hence 1.23% variability in life expectancy (Health) Index has explained by other factors outside tax revenue.

Validity of Regression Model for all select countries

In order to check the validity of the regression model for all select countries developed by us the predicated life expectancy index has been calculated by applying their own developed models. The results are given in the following table no. 8.

Countries	*India*			*France*			*Italy*			*Brazil*			*Canada*		
Year (a)	***Actual life Expectancy Index (b)***	***Predicated Life Expectancy Index ©***	***Square of mean difference d = (b-c)2***	***Actual life Expectancy Index (b^1)***	***PredicatedLife Expectancy Index (c^1)***	***Square of mean difference (d^1)=(b^1-c^1)^2***	***Actual life Expectancy Index (b^2)***	***Predicated Life Expectancy Index (c^2)***	***Square of mean difference (d^2)=(b^2-c^2)^2***	***Actual life Expectancy Index (b^3)***	***Predicated Life Expectancy Index (c^3)***	***Square of mean difference (d^3)=(b^3-c^3)^2***	***Actual life Expectancy Index (b^4)***	***Predicated Life Expectancy Index (c^4)***	***Square of mean difference (d^4)=(b^4-c^4)^2***
2013	0.737	0.74[1]	9E-06	0.954	0.955	5.75 E-07	0.961	0.964	1.16 E-05	0.838	0.841	1.12 E-05	0.951	0.951	7.01 E-10
2014	0.743	0.742	0.000001	0.956	0.956	4.22 E-08	0.964	0.964	4.65 E-08	0.842	0.843	2.15 E-06	0.953	0.953	3.96 E-08
2015	0.748	0.746	4E-06	0.957	0.957	1.88 E-09	0.967	0.965	3.66 E-06	0.846	0.845	7.03 E-07	0.954	0.954	2.15 E-07
2016	0.752	0.75	4E-06	0.959	0.958	8.43 E-07	0.969	0.967	3.06 E-06	0.85	0.847	8.04 E-06	0.956	0.956	1.91 E-07
2017	0.756	0.755	0.000001	0.961	0.961	1.31 E-08	0.972	0.972	4.29 E-08	0.853	0.849	1.34 E-05	0.957	0.957	6.05 E-08
2018	0.76	0.761	0.000001	0.962	0.963	2.73 E-07	0.975	0.976	4.64 E-07	0.857	0.860	6.36 E-06	0.959	0.959	1.00 E-08
Average	0.749	0.749	**3.33 E-06**	0.9582	0.9582	2.91 E-07	**0.968**	**0.968**	**3.14 E-06**	**0.848**	**0.848**	**6.97 E-06**	**0.955**	**0.955**	**8.60 E-08**
t Stat	0.07004835			6.34263E-14			0			2.84498E-14			0		
t Critical two-tail	2.228138852			2.228138852			2.228138852			2.228138852			2.228138852		
p value	0.945536191			1			1			1			1		
Result	Not significant			Not significant			Not significant			Not significant			Not significant		

Source: Own Calculation through Ms-Excel 2013

[1]Calculation of predicted Life Expectancy Index in 2013 for India
Tax Revenue in 2013 = 1846545
Actual Life Expectancy Index = 0.737
Regression Equation = 0.7157 + 1.32E-08*TR
Predicated Life Expectancy Index = = 0.7157 + 1.32E-08*1846545 = 0.74

Now it has to be checked whether any significant difference exists between the actual and predicted life expectancy index of select countries. The above table shows the actualand predicted life expectancy index for all select countries. For checking the significant difference between actual and predicated expectancy index t-test has been applied. The result of the t-test for all countriesshows that t statistics value is less than t table value 2.22 it means there is no significant difference between actual and predicted life expectancy index. The p-value for all countries is more than 0.05 it is also evidence that there is no significant difference between the actual and predicted life expectancy index. The prediction model for all select countries i.e. India, France, Italy, Brazil and Canada developed by us is significant.

Selection of Best Regression Prediction Model

Now, to identify the best model for prediction for the life expectancy index from select countries, the comparison has been made in the table no. 9.

Table: 9 Best Regression Model for prediction of Life Expectancy (Health) Index in all Countries

Countries	India	France	Italy	Brazil	Canada
Square of Mean difference	0.0000038	0.000000291375	0.000003141 4	0.000006967 6	0.000000086021 8

Source: Own Calculation through Ms-Excel 2013

Table 9 shows the average values of (square of the mean difference) of the actual life expectancy index and predicted life expectancy index. The table shows that the best prediction model will be of that country whose square of the mean value is lowest. The result shows that Canada's square of the mean value is 8.60218E-08 which is the lowest value in all of the country's square of mean values. The result shows Canada's life expectancy index prediction model is the best prediction model in all country's prediction model.

All Countries Regression Prediction Model developed by us:

The table 10 shows a summary of select all countries' regression prediction models for estimation of the Life Expectancy (Health) Index.

Table: 10All Countries Regression Prediction Model at a Glance

S. No.	Country	Regression Prediction Model
1.	India	Life Expectancy (Health) Index = **0.7157 + 1.32E-08*TR**
2.	France	Life Expectancy(Health) Index = **0.8945 + 6.23E-08*TR**
3.	Italy	Life Expectancy (Health)Index = **0.715199 + 3.52564E-07*TR**
4.	Brazil	Life Expectancy (Health)Index = **0.806118 + 2.04035E-08*TR**
5.	Canada	Life Expectancy (Health)Index = **0.917693 + 5.62867E-08*TR**

Source: Own Calculation through Ms-Excel 2013

Conclusion and Recommendations

The life expectancy index of a particular country depends upon the health of a person. Results of Vatavu, *et al.* [18]show that a positive relationship between human development & taxes is associated with longer life expectancy, which is related to higher government spending's, better welfare systems and therefore increased levels of taxation. The relationship between tax revenue and life expectancy index of France, Italy, Brazil, Canada and India has been explored through correlation statistical technique. Our study showed that there is a high positive correlation (more than 0.75) between tax revenue collected and the life expectancy index throughout the study period. It is also proved by the t-test. The regression model has been developed for all select countries. In all five countries, the results of the t-test show that the regression prediction model have been significant and the difference between actual life expectancy index and the predicted life expectancy index is not significant, it clearly indicates that the model developed by us is significant. It can be applied anywhere in the real world of life. The result found that Canada's prediction model for the life expectancy index is the best prediction model. These all countries' prediction model can be used to identify a particular target of life expectancy and also how much tax revenue will be required for enhancing a life expectancy.

The regression model shall help to the countries in order to decide the quantum of budgeted tax revenue required to achieve a particular life expectancy age. A universal regression model has also been developed along with country-specific models. Hence such a model can be used by other than sample countries in order to identify the required tax revenue. While preparing the budget the countries facing the problem of determination of amount which is allocated to a particular head like, health expenditure. To resolve this problem the developed regression model can be used.

Limitations

- In the present article, only one factor has been considered i.e. Tax Revenue for deciding the life expectancy index of a country on the basis of a review of literature. But in actual so many factors i.e. tax revenue, pollution, environment, happiness, GDP, good access to the hospital, health expenditure etc. are also to be considered in order to decide life expectancy in a particular country [19,20,21].
- In the present time,a huge number of factors are responsible for determining life expectancy. In order to determine the life expectancy of a country, some other factors will also be considered using the factor analysis technique.
- In the present study, only 5 countries have been considered for identifying relationships, in future study other countries can also be considered

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An Evaluation of Financial Performance of Selected MNC Companies (With Special reference to Du Pont Model)

[1]Eeshita Goyal, [2]Shreya Agarwal
[1]Research Scholar, [2]Research Scholar
Department of Accountancy and Law, Faculty of Commerce
Dayalbagh Educational Institute - 282005

ABSTRACT

This paper puts forward the evaluation of financial performance with Du Pont Model of five selected MNC Companies namely Ashok Leyland Ltd, Britannia Industries Ltd, Hindustan Unilever Ltd, Maruti Suzuki India Ltd and Vedanta Ltd. This model is an important tool for evaluating financial analysis of Return on Equity (ROE). A useful index for a company's ability to turn Shareholder's investment in profitable return. This research paper shows that ROE should not be the sole norm to evaluate a company's financial well-being. Asset turnover ratio etc. are itemize for the company's financial analysis through Du Pont model. On the basis of this model, the corresponding performance of the five companies are put as conclusion Interest burden, Tax Efficiency, Financial leverage, Asset turnover, Management Profit Earning. It shows that Hindustan Unilever Ltd is relatively stable and reflects negligible volatility in the return of Equity. While Asset turnover as well as Interest burden of Britannia Industries Ltd is in a good trend than other selected MNC's companies from 2018-21.

Key Words: Return on Equity, Du Pont Model, Interest burden, Tax Efficiency, Financial leverage, Asset turnover, Management Profit Earning.

INTRODUCTION

DuPont Analysis is a method of measuring the Financial Performance that was started by DuPont Corporation from USA in 1920s. It is one of the most useful and reliable method for measuring the Financial Performance of the Company. It basically helps to know that how much profit and wealth is generated for the shareholders. One simple way to know how much profit is generated is through ROE. Dupont model uses the information from Balance Sheet and Income Statement as well. It breaks down the Equity Ratio to know how it will affect each unit. It helps to overcome the disadvantage of the ROE. It tells how Company Management is creating a wealth for its shareholders or we can say that the ratios help to calculate how much money is based on the investor's investment. Under this model Assets are measured at their

Gross Book Value rather than Net Book Value to produce a higher return on equity (ROE). ROE has three major elements – assets turnover ratio, net profit margin.

To meet the demands of goods and services that are slightly higher than its original price a company can control it through net Profit margin.in order to increase the efficiency of the company one of the best measure is the total assets turnover ratio which helps in generating sales by utilizing the assets. This gives financial experts and creditors an idea of how a business is run and how it uses its resources to manufacture goods and sell them. Equity multiplier is a ratio that evaluates how the assets are financed by the company's stockholders. This ratio explains the amount of debt used by a company to buy the assets. The higher the percentage of this ratio the more the firm is reliable on high debts to obtained funds. This model indicates that how well a firm operates and how profit is made in relation to sales and total assets. In order to enhance the Company Financial performance this model serves as the best technique for the managers as well.

Making meaningful comparisons using typical financial ratios may be impossible. As a result, modern financial statement analysis techniques are necessary for the organizations with a wide range of operations. One of the most modern techniques is the DuPont Analysis, which provide both the investors as well as the owners with a full view that how the company is performing. This model compares returns in similar businesses using Return on Equity (ROE). The DuPont Equation method analyzes return on equity (ROE) using three major Components Profit Margin, Asset Turnover and Financial Leverage.

REVIEW OF LITERATURE

The following are the reviews on Dupont Analysis which are as follows-

Ding Li(2020) "*Analysis of Enterprise Profitability based on Dupont Analysis Method*" Taking China Life Insurance Group Company as an Example, the research paper focused mainly on the DuPont Analysis Method which was amplify by factor Analysis method and Comparative analysis method to examine the Profitability.

K Bhagyalakshmi ,et.al (2019) "*Study On Financial Performance Evaluation Using Dupont Analysis in Select Automobile Companies*" the main objectives of the study was to analyse the profitability of

Automobile companies using ROE and ROA in Dupont model, To study the effect of Return on assets and Equity Multiplier on Return on Equity, To study the effect of Net profit margin and total Asset turnover ratio on Return on Asset. Data has been taken for five years and a sample of 10 Automobiles Companies has been taken into consideration which was listed in NSE. The findings of the study show that some positive relationship exists among the variables taken in the study.

**SrilakshmiRamu,et.al (2019*)* *"Financial Performance Analysis of HDFC Using Dupont Analysis"* the researcher aim is to investigate the HDFC's financial performance from 2009 to 2018 using the DuPont system of financial analysis, which is based on ROE Analysis. It was Found that HDFC's financial performance is generally stable, with little fluctuation in the return on equity.

AnnisaSanny,et.al (2019) *"Du Pont Analysis Integrative Approach to Ratio Analysis at PT. Federal International Finance"* The goals of this study was to examine financial performance utilising the du Pont analysis and the ratio technique. The main objective of the study was to evaluate the application of the DuPont using ROE and ROI. In the end it shows that there are some differences that exist between the ROE and ROI. It means that using a Dupont should involve the ROE.

MaliniR,et.al(2019) "*A Study On Financial Performance Analysis Of Indian Tobacco Corporation Limited*" The purpose of this research was to analyse the liquidity and solvency of the firm in converting its resources into service. Secondary sources were used to gather the relevant information in the end the study concludes that the companies should take initiatives to make the most of its resources and inventories in efficient manner.

ArvinderKaur (2018) *"Financial Performance Analysis of Selected Indian IT Companies: A comparative Study"* The study explains that Financial Performance Analysis is a method of assessing a company's competency, stability, and profitability based on financial data. The main objective of the paper is to identify the financial situation and performance of chosen Indian IT businesses during a ten-year period. This study would help investors in improving their understanding of the financial status and growth of IT firms in terms of making better investments.

TusharShani, et.al (2017) "*Return on Equity Analysis Using Dupont Model"* The research paper focused on to analyse and examine the firm's Financial Performance using various indicators such as EBIT, Assets turnover ratio the study talks about that ROE is not a single method to find that how a firm is performing well.at last it shows that to find out the possibilities of improvement and to compare it with the firm financial performance DuPont tool serves as the best as it helps to breakdown the roe into various Different ratios which helps the firms to operate effectively and efficiently.

Susan Wright (2017)*"A case study using the DuPont Approach for formulating Managerial Decisions"* This study introduce a new way to look at financial statements that mainly focused on managerial Decisions. Instead of grouping ratios into traditional ways like liquidity, asset efficiency, profitability and market ratios they had come up with a new model called as DuPont which serves as the best and most relevant measure to assess the Firms Financial Performance to a broader way.

MishelleDoorasamy (2016)*"Using DuPont analysis to assess the financial performance of the top 3 JSE listed companies in the food industry"* This study helps to assess the financial performance of the food business by focusing on the top three JSE-listed firms, Pioneer Foods, Tiger Brands, and RCI, from 2013 to 2014. To meet the research goals, ratios such as return on equity (ROE) and return on assets (ROA) were determined using the DuPont analysis. It has been found that DuPont model is one of the best tool to evaluate the Financial Performance since it offers to stakeholders with a more comprehensive picture of progress.

ButalalC,et.al (2012) "*Analysis of financial health of banking industry through DuPont Model*" the researcher mainly focused to examine the financial Performance of the selected public sector banks and in the last it found that among the selected bank out of 5 one bank is performing better and is having high level of profitability among the selected banks.

OBJECTIVES OF THE STUDY

1. To measure and analyze the efficiency of selected MNC's companies with the help of Return on Equity.
2. To evaluate and analyze the interest burden, tax efficiency and financial leverage.
3. To find and analyze the asset efficiency through asset turnover ratio.
4. To evaluate efficiency of the management's for profit earning.

HYPOTHESIS

H_0: There is no significant difference between Return on Equity of selected MNC's Companies throughout the study period.

H_1: There is significant difference between Return on Equity of selected MNC's Companies throughout the study period.

RESEARCH METHODOLOGY

"An Evaluation of Financial Performance of Selected MNC Companies (With Special reference to Du Pont Model)" has been made by using the annual reports of all the selected MNC Companies of the selected three year. The data is collected from 2018-2021 (i.e. F.Y.). The researcher has evaluated with the help of secondary data. The data was collected from the annual reports of the selected companies. The researcher has selected the top five Nifty MNC Companies which are Ashok Leyland Ltd, Britannia Industries Ltd, Hindustan Unilever Ltd, Maruti Suzuki India Ltd and Vedanta Ltd. The research type is analytical. Evaluations of data have been done by using statistical tools such as percentage, ratio analysis and anova.

ANALYSIS

Management Profit Earning Efficiency

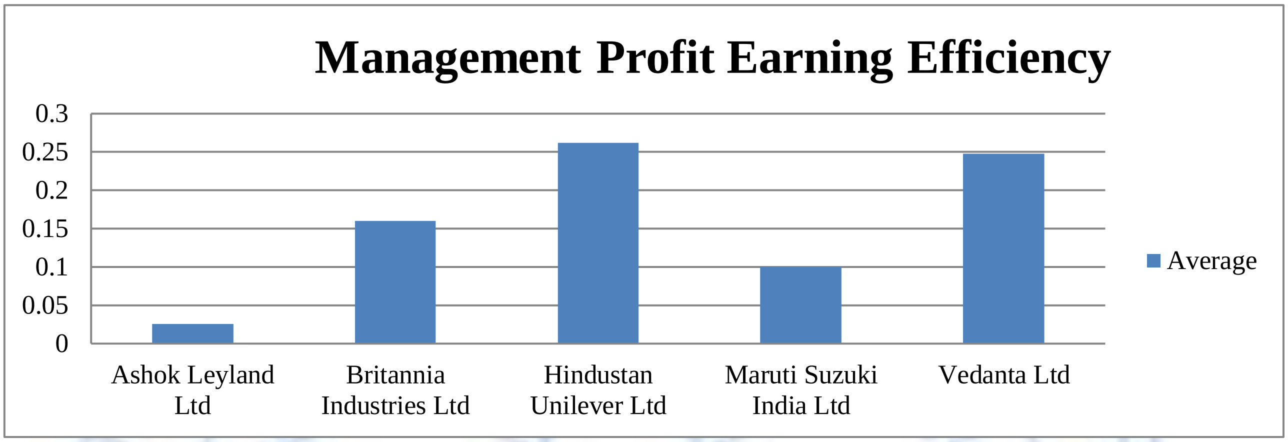
In this ratio the main focus is on the net profit margin which helps to perform various operations of the business before the deductions of tax and interest. In management profit earning ratio EBIT is computed by dividing i.e., Earning before Interest and tax and sales. To obtain EBIT first we will subtract all the expenses from the given revenue which was generated from sales and other incomes too.

Management Profit Earning Efficiency = EBIT/ Sales

Table 1.1 Management Profit Earning Efficiency

Year	Ashok Leyland Ltd	Britannia Industries Ltd	Hindustan Unilever Ltd	Maruti Suzuki India Ltd	Vedanta Ltd
2018-19	0.085	0.148	0.226	0.126	0.235
2019-20	0.021	0.157	0.324	0.098	0.218
2020-21	-0.026	0.176	0.236	0.077	0.293
Average	0.026	0.160	0.262	0.100	0.248
Variance	0.003	0.001	0.003	0.001	0.002

Figure 1.1 Management Profit Earning Efficiency



The researcher observed that the average earning efficiency of Hindustan Unilever Ltd is higher as comparison to (Ashok Leyland, Britannia Industries Ltd, Maruti Suzuki Ltd and Vedanta Ltd) as it shows that these companies are continuously facing the decreasing trend of profit earning ratio.

Assets Turnover Ratio

To generate sales we used Assets. For the maximization of the sales a firm should manage the Assets in a very efficient manner. This ratio basically tells the ability of the firm in increasing the sales from all the resources which are related to finance.

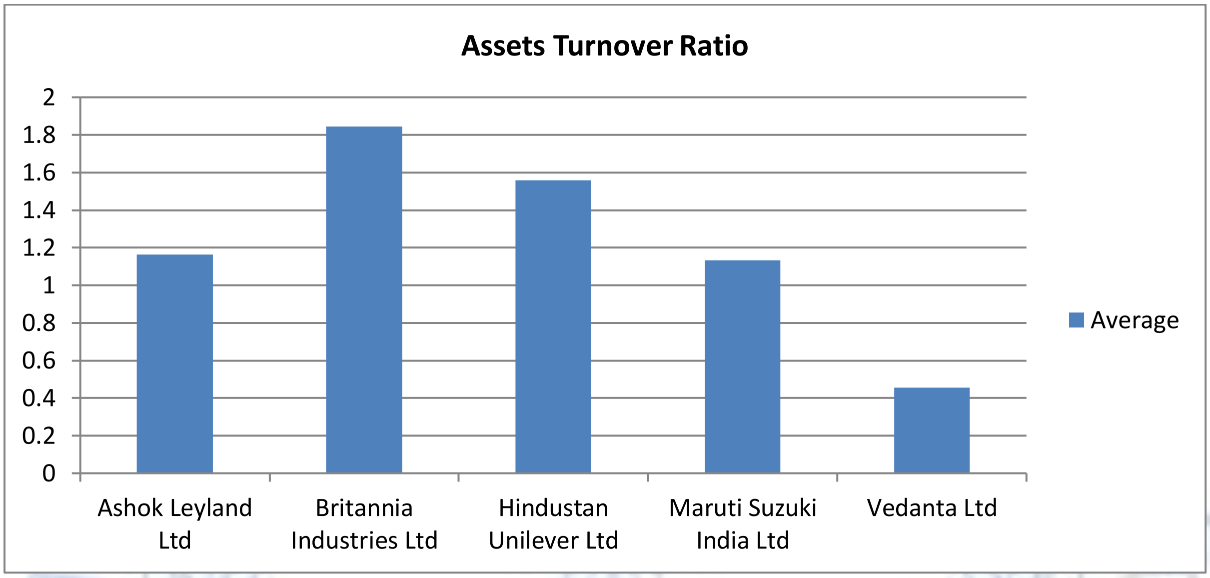
Assets Turnover Ratio = Sales/ Total Assets

Table 1.2 Assets Turnover Ratio

Year	Ashok Leyland Ltd	Britannia Industries Ltd	Hindustan Unilever Ltd	Maruti Suzuki India Ltd	Vedanta Ltd
2018-19	1.594	2.048	2.108	1.320	0.450
2019-20	1.066	1.665	1.899	1.146	0.454
2020-21	0.830	1.820	0.665	0.933	0.467

Average	1.163	1.844	1.557	1.133	0.457
Variance	0.153	0.037	0.608	0.037	0.056

Figure1.2 Assets Turnover Ratio



The researcher found that the Asset Turnover Ratio is higher in Britannia Industries Ltd which is 1.844 as followed by Vedanta Ltd which is 0.457.

Interest Burden Ratio

This ratio particularly tells the interest burden on a firm. It will be computed after subtracting all the expenses related to interest from EBIT knows as EBT i.e.,(EBT). If there is a high charge of Interest ratio it will create a major problem for a firm. A firm should keep the balance between the internal as well as external source of funds.

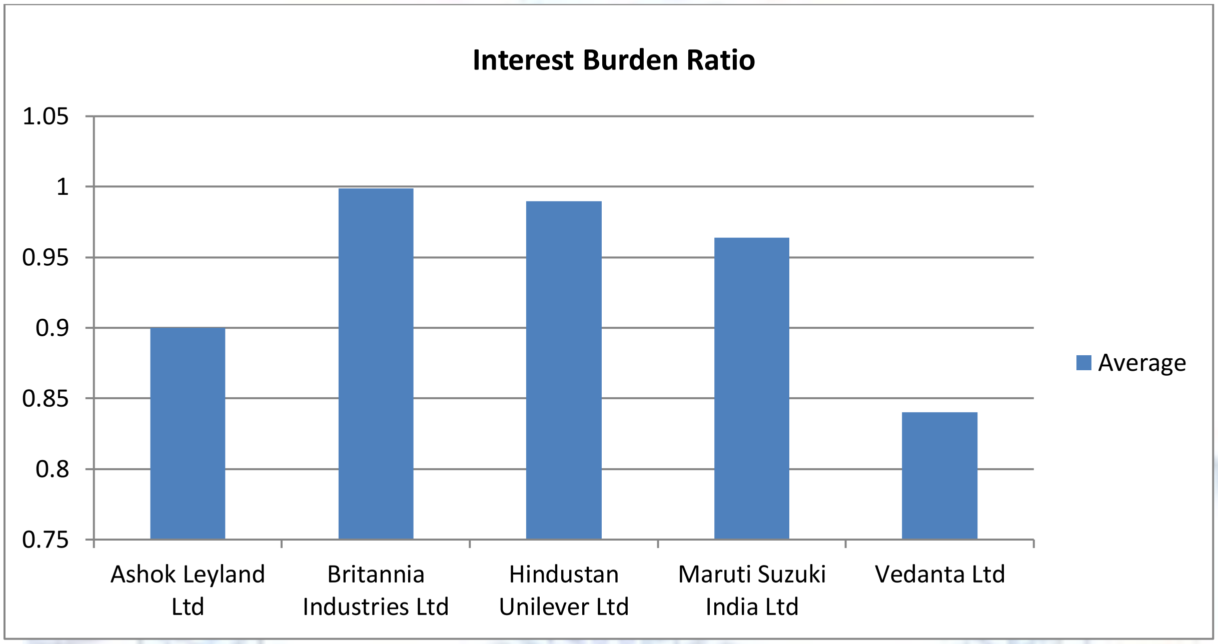
Interest Burden Ratio= EBT/ EBIT

Table 1.3 Interest Burden Ratio

Year	Ashok Leyland Ltd	Britannia Industries Ltd	Hindustan Unilever Ltd	Maruti Suzuki India Ltd	Vedanta Ltd
2018-19	1.035	0.999	0.996	0.981	0.826
2019-20	1.425	0.999	0.987	0.964	0.819

2020-21	0.240	0.999	0.989	0.948	0.875
Average	0.9	0.999	0.990	0.964	0.84
Variance	0.364	0	0.165	0.001	0.001

Figure1.3 Interest Burden Ratio



The above table shows the Interest Burden Ratio by analyzing the above table and Graph it is found that the average of Britannia Industries Ltd is higher among all the selected ones. While Ashok Leyland, Hindustan unilever ltd, Maruti Suzuki and Vedanta which means that these companies are not able to repay the interest.

This ratio tells the ability of the firm to repay the tax. Every profit earning organization will be liable to pay the tax to the government official. A higher tax efficiency ratio tells that a company is earning a good profit margin. On the other hand lower tax efficiency ratio tells that a company is earning a low profit and cannot be able to pay the tax.

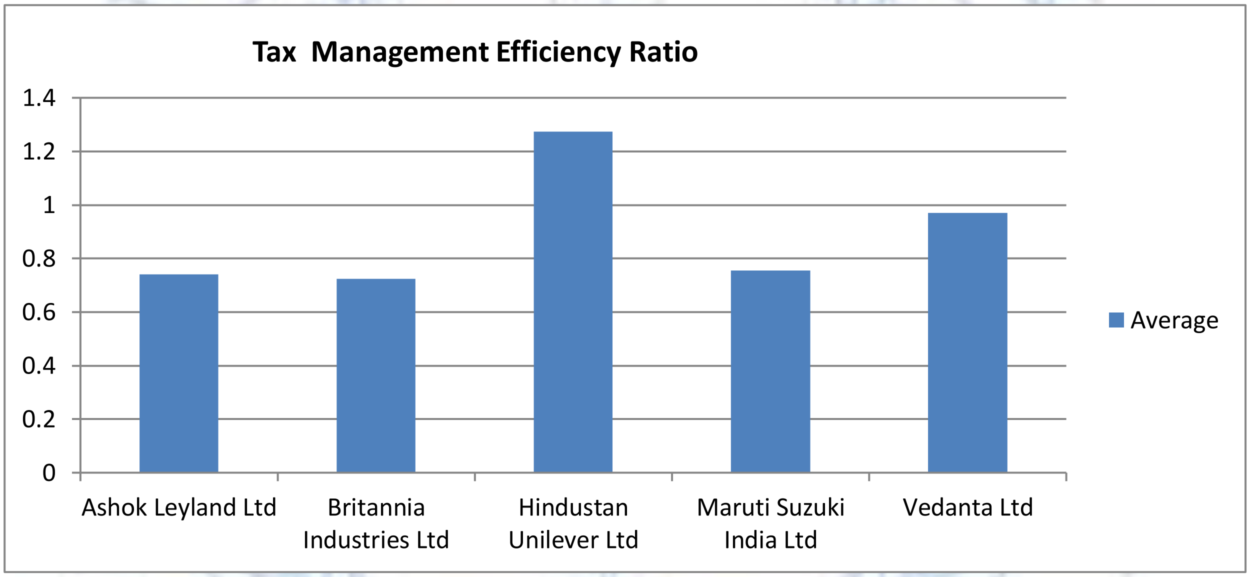
Tax Management Efficiency Ratio

Tax Management Efficiency Ratio= 1-(tax expenses/ (EBIT- Interest Expense))

Table 1.4 Tax Management Efficiency Ratio

Year	Ashok Leyland Ltd	Britannia Industries Ltd	Hindustan Unilever Ltd	Maruti Suzuki India Ltd	Vedanta Ltd
2018-19	0.738	0.654	1.315	0.712	1.007
2019-20	0.459	0.778	1.266	0.739	1.001
2020-21	1.026	0.74	1.239	0.81	0.904
Average	0.741	0.724	1.273	0.754	0.971
Variance	0.080	0.004	0.001	0.003	0.003

Figure1.4 Tax Management Efficiency Ratio



The above table and graph shows the tax Efficiency ratio of the selected Companies which is of the period for three years (2018-19 to 2020-2021) as it shown that the Hindustan Unilever Ltd has the highest tax efficiency ratio which is 1.273 in comparison to Ashok Leyland Ltd, Britannia Industries Ltd, Maruti Suzuki India Ltd and Vedanta Ltd.

Financial Leverage Ratio

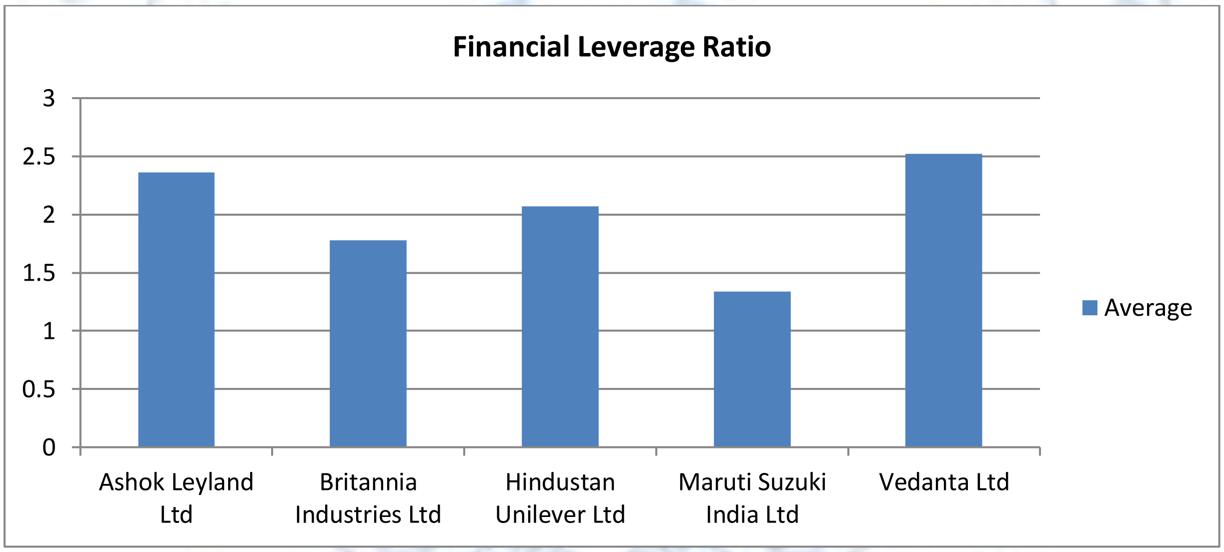
In a company the capital structure shows the percentage of the borrowed funds and owners fund. This ratio is computed by dividing the total assets and shareholder's equity of the company. This ratio helps us to find the relation between the total assets and shareholder's equity of the company.

Financial Leverage Ratio= total assets/ shareholder's equity

Table 1.5 Financial Leverage Ratio

Year	Ashok Leyland Ltd	Britannia Industries Ltd	Hindustan Unilever Ltd	Maruti Suzuki India Ltd	Vedanta Ltd
2018-19	2.187	1.399	2.332	1.363	2.606
2019-20	2.256	1.696	2.443	1.291	2.559
2020-21	2.644	2.234	1.436	1.357	2.398
Average	2.362	1.776	2.071	1.337	2.521
Variance	0.061	0.179	0.305	0.002	0.012

Figure1.5 Financial Leverage Ratio



The researcher found that the financial leverage ratio among the selected samples shows the huge difference as it is found that Vedanta ltd has the highest leverage ratio which is 2.521 while others are having less financial ratio which is Ashok Leyland Ltd, Britannia Industries Ltd, Hindustan Unilever ltd.

Return on Equity (ROE)

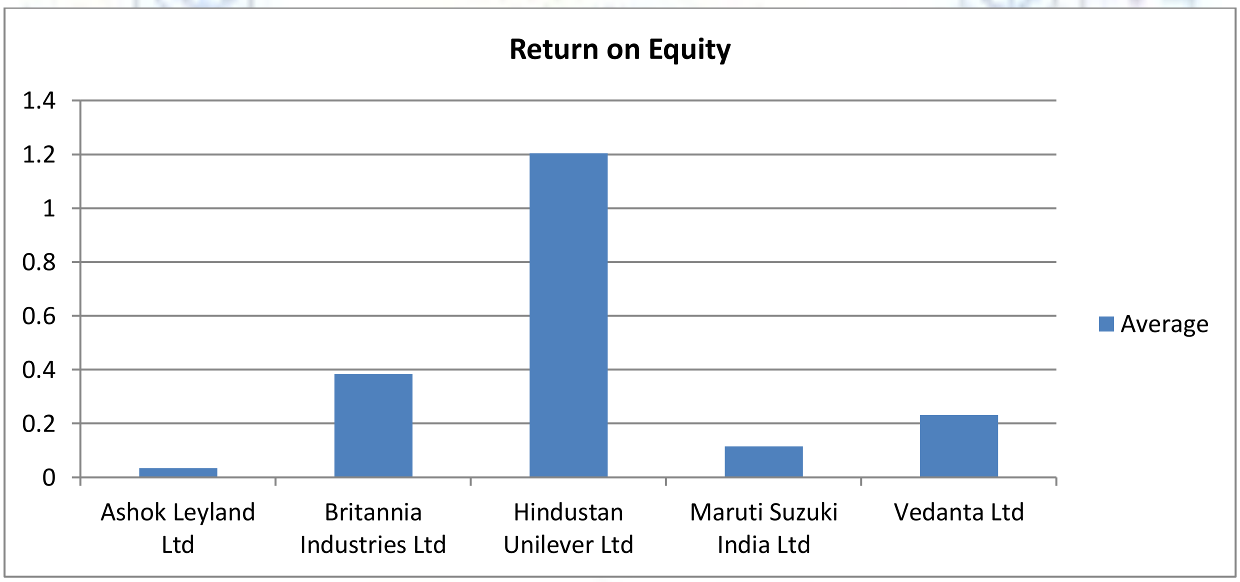
Return on Equity is computed after multiplying all the above five calculated ratios. It tells that how much the company is receiving the return by using the shareholder’s Equity.

*Return on Equity (ROE)= leverage ratio * Tax Efficiency * Interest Burden *Assets Turnover * Management Profit Earning Efficiency*

Table 1.6 Return on Equity

Year	Ashok Leyland Ltd	Britannia Industries Ltd	Hindustan Unilever Ltd	Maruti Suzuki India Ltd	Vedanta Ltd
2018-19	0.085	0.277	1.455	0.158	0.230
2019-20	0.033	0.344	1.878	0.111	0.207
2020-21	-0.014	0.529	0.276	0.075	0.259
Average	0.035	0.383	1.203	0.115	0.232
Variance	0.002	0.017	0.689	0.002	0.001

Figure1.6 Return on Equity



The researcher found that the return on equity ratio is higher in Hindustan Unilever Ltd 1.203 which is followed by Ashok Leyland Ltd. 0.035

Hypothesis

H_0: There is no significant difference between Return on Equity of selected

MNC's Companies throughout the study period.

H_1: There is significant difference between Return on Equity of selected MNC's Companies throughout the study period.

Table 1.7 Anova Test

Source of Variance	Sum of square	Degree of freedom	Mean Of square	F-Ratio	F limit
Between sample	2.663956	4	0.665989	7.564737833	3.837853
Within sample	1.422258	10	0.26274545		
Total	4.086214	14			

As per the above table, it is calculated that value of F-test is7.564737833, with degree of freedom being V_1 =4and V_2 =10, which is higher than the table value of 3.837853. So here Null Hypothesis (H0) is rejected and thereby concluded that there is significant difference between Return on Equity of selected MNC's Companies throughout the study period.

CONCLUSION

The Present Paper attempted to focus on the measurement of financial performance using Dupont analysis and profitability ratios such as Management Profit Earning Efficiency, Assets Turnover Ratio, Interest Burden Ratio, Tax Management Efficiency Ratio, Financial Leverage Ratio and ROE. Overall performance of all the selected MNC's Companies shows a fluctuating trend as Hindustan Unilever Ltd show a high average in Management Profit Earning Efficiency, Tax Management Efficiency and ROE. It is also concluded that asset turnover and Interest Burden is more of Britannia Industries Ltd. And Vedanta Ltd. Show high increase in Financial Leverage. ROE of Hindustan Unilever Ltd is more followed by other MNC's Companies. According to the study, it was discovered that MNC's companies low return on equity is primarily due to low asset turnover ratios. To improve the accuracy of future profitability forecasts analysts and investors following the MNC's sector should focus on changes in profit margins rather than changes in asset turnover, ROE.

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An Analytical Study of Pharmaceutical Sector's Corporate Social Responsibility Expenditure

Dr. Kshitiz Maharshi[1], Kunal Vijay[2], Pooja Chaudhary[3], Dr. Swati Vashisth[4]
[1]Assistant Professor, [2]Research Scholar, [3]Research Scholar
Department of Business Finance and Economics
Jai Narain Vyas University, Jodhpur
[4]Director, DR CBS Cyber Security Service LLP, Jaipur

ABSTRACT

According to section 135 (5) of the company act, a company with a net profit of five crores and more or net worth of five hundred crores need to spend 2 % of their profits on corporate social responsibility. This research paper gives insight into the expenditure done by the companies on CSR. CSR activities are evaluated and analyzed with the help of tools like tabular presentation and graphical presentation. We have considered only the amount spent on the projects in the financial year 2020-21. Through this research paper, we aim to find the nature of CSR activity and their weightage in the total. We have distributed the CSR projects of the company in the categories such as education, health care, poverty reduction, Covid, rural development, drinking water, environment, and others, to identify the direction of the CSR activities and the fund allocation. It was found that a greater number of projects leads to an increase in administration expense. Most of the CSR projects are categorized under education and healthcare.

KEY WORDS: Corporate Social Responsibility, Pharmaceutical Sector, Rural Development, CSR Projects, Sustainable Development.

INTRODUCTION

Corporate social responsibility is an action by the companies which is mandatory as well as voluntary taken for the upliftment of society. India is a developing country and needs numerous hands for its cultivation. One organization is not sufficient therefore the CSR practice is very essential for the living beings in the environment. Initially, CSR activities were organized based on the concept of a legal framework, ethics of the company, economic development, and philanthropy. With the change in era, new activities were added, such as protecting the environment from pollution, rural development, infrastructure development, providing food, education, and many more. CSR is now viewed as in to solve the crises of the nation. This study is an attempt to understand the CSR activities undertaken by the pharmaceutical companies and analyze the expenditure done on the various activities. The paper will help to understand the trend of CSR activity and the categories which are more preferable by the pharmaceutical companies as well as the activities which form a very less part. Corporate social responsibility is vey vital in the cut-throat environment, as various stakeholders are look over the social and environmental action taken by the pharmaceutical companies.

LITERATURE REVIEW

Yoon, Y., Gürhan-Canli, Z., and Schwarz, N. (2006)[1]The grounds for corporate social responsibility activity should be sincere, then only the activity will show the effect. According to the authors of the paper, corporate social responsibility activities will have a positive impact on financial performance if the consumers have perceived the heartfelt efforts of the company. While, if the companies are doing corporate social responsibility just for the show and with insincere attitude, it leads to a negative impact on financial performance. Some factors that have an impact on corporate social responsibility are consumer sources of learning about the company's CSR, company advertisement, CSR activity benefits on society. Authors suggested that it is beneficial for the company to increase their budget on corporate social responsibility activities and decrease the budget of advertisement to improve the image of the company.**Blombäck, A., and Wigren, C. (2009)**[2]This study was conducted to enhance the knowledge about corporate social responsibility. The study covers the disclosures practices of CSR by the firms. The study also depicts, the activities carried out by multinational corporations and medium-sized firms. According to the authors, stakeholders should not view the corporate social responsibility attitude of a company, based on company size. Some factors that depict the corporate social responsibility behavior of the companies are relation in the local area, government policies, and enthusiasm of the company. **Lattemann, C., Fetscherin, M., Alon, I., Li, S., & Schneider, A. M. (2009)**[3]The study aims to find the degree of corporate social reasonability activities by firms in China. According to the authors, the firms in China contribute less than Indian firms through corporate social responsibility. The comparison was between Indian firms and China firms; therefore, the study is said to be conducted at the country level. The authors have conducted the study on 68 companies, which are substantial multinational companies of the selected countries. It was found that in comparison to companies of China, Indian companies are more engaging in corporate social responsibility activities. According to the authors, the reason that Indian companies are engaged in corporate social responsibility activity was because of governance of the country and environmental protection. The study was also conducted at the industry level, all the industries were compared. Through the study, it was found that the manufacturing industry is most engaged in corporate social responsibility activity. When the analyses were done on the firm level, it was found that size, duration of chief executive and board chairperson, and percentage of external members on the board are also the factors that impact the degree of corporate social responsibility undertaken by the companies. The researchers through the study, depict that the country governance is the main force than country income for deriving the companies CSR. The paper suggests that the governance policy for corporate social responsibility need to be improved so that the effect of corporate social responsibility is larger.**Rahman, S. (2011)**[4] According to him, CSR definition can be summed up in ten dimensions. That is CSR is an obligation of the company towards society. CSR is incomplete without stakeholders' involvement. CSR is compulsory so that it can improve the quality of life. CSR is essential for the economic development of all. Practicing CSR shows the ethics of the company and its directors. CSR practice means the company is working according to the laws of the Nation. CSR is a voluntary concept that shows your willingness to contribute. CSR activities toward the environment to share the burden of cleaning the environment. CSR also includes activities for promoting human rights. Transparency helps investors to understand the company more accurately.

Sharma, A., & Kiran, R. (2013)[5] According to the authors, the CSR practices need to change with the change in the environment for the benefit of all. According to them, the companies should be considered the four items in the corporate social responsibility items, which are legal framework, ethics of the company, economic development, and philanthropic. Stopping on these four is not advisable in changing scenarios. Therefore, promoting health, providing education, and environmental protection activities should additionally be considered in implementing CSR

Mukherjee, A., & Bird, R. (2016)[6]The objective of the authors was to examine the variants that instigate corporate social responsibility expenditure. The paper also aims towards finding the variants, that is an obstruction in corporate social responsibility expenses. Through this study, the researcher seeks to find the impact of corporate social responsibility compulsion on the companies. The primary data was collected for the study through the survey. Total 223 companies were selected and surveyed. Through the study, it was found that expenditure of corporate social responsibility varies according to the size of the company, establishment years of the company, and executive heads of the company. It was found that even though corporate social responsibility is mandatory by the government, it did not impact the expenditure of the companies.

Shyam, R. (2016)[7] The objective of the author was to explain the CSR concept and identify the possible trends in CSR in India. The paper is explaining the importance of small micro-enterprises in corporate social responsibility and the legal framework of CSR in India. According to the author corporate social responsibility is maintaining a balance between the interest of the stakeholders and company development. CSR is an initiative towards social inclusion, a healthy environment, and successful business. In a developing country like India combining the efforts of various organizations and governments can make a better living environment.

Min, M., Desmoulins-Lebeault, F., & Esposito, M. (2017)[8]The study was conducted to understand the impact of corporate social responsibility on the financial performance of the companies, in the pharma sector. According to the authors, mostly corporate social responsibility activities are aimed towards environment protection, economic development, and social upliftment, by many pharmaceutical companies to strengthen their image in the consumer's mind. The study is based on primary data. The data was collected through survey technique and a seven-point Likert scale tool was used to analyze the data. 45 questions consisted in the questionnaire. The authors collected 140 responses. It was found that corporate social responsibility contributes to the financial performance of the company. According to the authors, corporate social responsibility needs to be considered as a long-term investment instead of an expenditure. It can be considered as an investment because it invests in shareholder's management, customers and brings a brighter image of a company. Corporate social responsibility is helpful irrespective of the size of the company.

Cook, L., LaVan, H., & Zilic, I. (2018)[9] The paper highlights the corporate social responsibility activities performed by pharmaceutical companies in the United States. The data was collected by secondary sources. Companies report Lexis- Nexis database. The comparison was made between the companies based on four categories. Item under which categorization was made are legal framework, ethics of the company, economic development, and philanthropic. The relationship between return on assets and CSR reporting was established. It was found that companies' reports are mostly concentrated on their economic development and philanthropic activities. The business organization mostly reports about the concerned organizational topic.

OBJECTIVES

To analyze the amount spent by selected pharmaceutical companies on corporate social responsibility.

To examine various kinds of corporate social responsibility activities in which selected pharmaceutical companies are engaged.

RESEARCH METHODOLOGY

The study was conducted to inquire about the corporate social responsibility activities conducted by the companies in the financial year 2020-21. The data is collected from the annual reports of the selected companies and various websites. The companies considered for the study are Sun Pharma, Aurobindo, and Dr. Reddy. CSR activities are evaluated and analyzed with the help of tools like tabular presentation and graphical presentation. The research is analytical. Analytic research helps to derive the required conclusion systematically and scientifically. Mainly concerned with statistics and data analysis. Determine the cause-and-effect relationship between variables. Analytical research is fundamental because assessments help to generate philosophy, enhancing rational outlook for problems We have considered only the spent on the projects in the financial year 2020-21, not the unspent amount transferred for the project by the company. Through this research paper, we aim to find the nature of CSR activity and their weightage in the total. We have distributed the CSR projects of the company in the categories such as education, health care, poverty reduction, Covid, rural development, drinking water, environment, and others, to identify the direction of the CSR activities.

ANALYSIS

Table 1: Corporate Social Responsibility Details of the Company's (₹ in Millions)

Items\Company's	Sun	Dr. Reddy	Aurobindo
Average Net Profit	6490.63	1,700.14	2.239.4

CSR (2% of ANP)	129.81	341.00	447.9
Set off Amount	NA	NA	NA
Total CSR Compulsory	129.81	341.00	447.9
Actual Spent on CSR	269.503	360.80	555

Source: annual reports of the company of the financial year 2020-21

Interpretation: Table 1 shows the average net profit of the financial year 2020-21, the CSR obligation, and the actual amount spent on the CSR activities. According to section 135 (5) of the company act, a company with a net profit of five crores and more needs to spend 2 % on corporate social responsibility. Through table 1 we can know the profits of the company and the obligation amount of the CSR. It is found that Sun pharma, Dr. Reddy, and Aurobindo all the three selected companies spend more than the obligated amount according to the company act. Sun Pharma has spent 139.693 million more than the compulsion amount. While Dr. Reddy has spent 19.8 million more than the compulsion amount. Aurobindo's expenditure on CSR activities has exceeded 107.1 than their obligated amount.

Sun Pharma

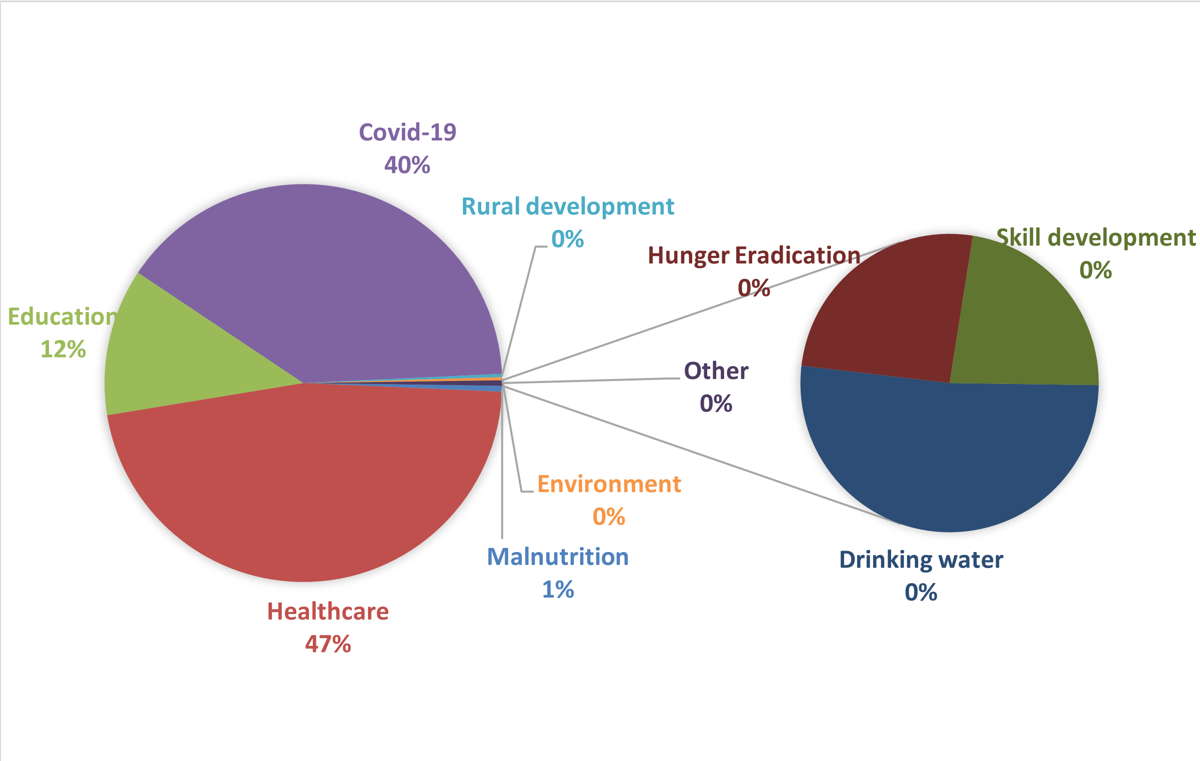
Table 2: CSR Activities and Their Expenditure by the Sun Pharma for the year 2020-21

Categories	Value (₹ in mill.)	No. of Projects
Malnutrition	1.241	1
Healthcare	122.863	3
Education	31.429	5
Covid-19	104.913	2
Rural development	0.699	2
Environment	0.657	2
Drinking water	0.6	2
Hunger Eradication	0.298	1
Skill development	0.264	1
Total	**262.964**	**19**

Administration	6.539	Not required
Total	269.503	Not required

Source: annual reports of the Sun pharma company

Figure 1: CSR Fund Allocation in Percentage



Source self-created according to table 2

Interpretation: Table 2 and figure 1 show the details of the corporate social responsibility expenditure on various projects. Approximately 3% of the total expenditure was utilized in managing the projects. A total of 19 projects have been reported by the company in the financial year 2020-21. The education sector and health care sector have most projects. 47 % of the fund was allocated to healthcare out of the total amount for projects. The second-highest amount of funds was allocated for the Covid-19 pandemic, which is 40% of the total amount for projects. The least amount was allocated to projects such as drinking water, skill development, and the environment. It was found that the CSR projects are very diversified includes the projects for skill development, hunger reduction, providing nourishment, etc.

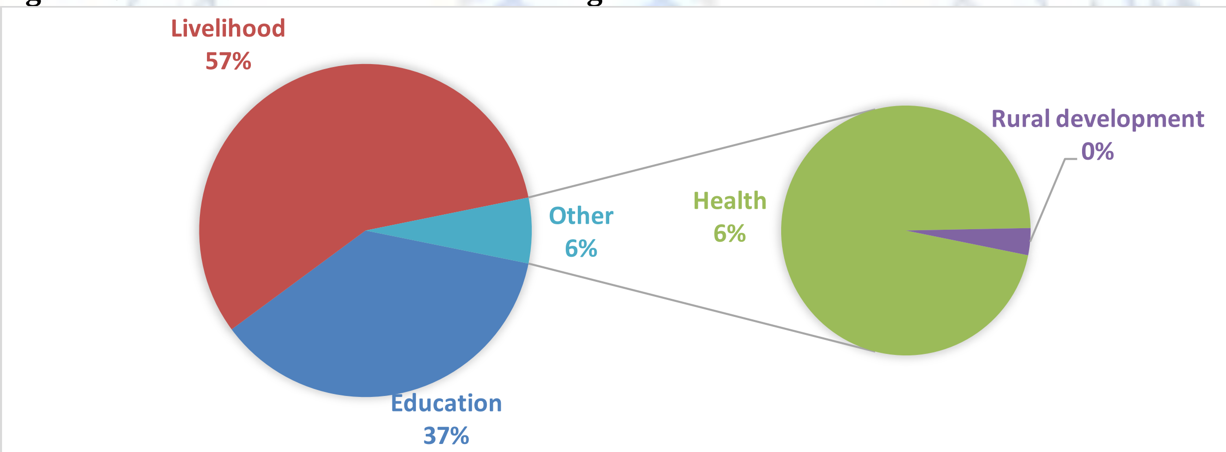
Dr. Reddy

Table 3: CSR Activities and Their Expenditure by the Dr. Reddy for the year 2020-21

Categories	Value (₹ in mill.)	No. of Projects
Education	97.012	4
Livelihood	150.473	3
Health	16.22	2
Rural development	0.587	1
Covid	91.683	1
Sum	**355.98**	**11**
Administrative	4.824	NA
Total	360.799	NA

Source: taken from the annual report of Dr. Reddy

Figure 2: CSR Fund Allocation in Percentage



Source: self-created according to table 3

Interpretation: table 3 shows the details of the CSR activities and expenditure of Dr. Reddy's company. It was found that there only 11 CSR projects taken by the company and the categorization of the project is rather simple, 11 projects were fell into 5 categories. 4 projects fell into the education category. It was found that most of the CSR fund was allocated to livelihood, which is 57% of the total fund. Least on rural development (almost to Zero %). For educational projects, 37% of funds were allocated. Only 1.33 % of the total CSR expenditure was utilized for the administration purpose.

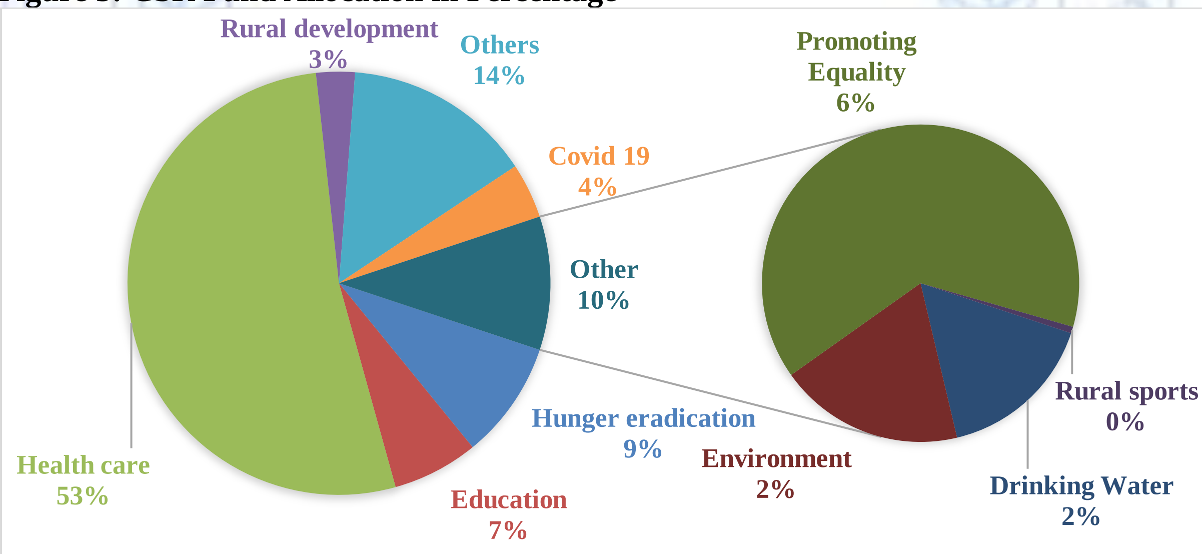
Aurobindo

Table 4: CSR Activities and Their Expenditure by the Aurobindo for the year 2020-21

Categories	Value(₹ in mill.)	No. of Projects
Hunger eradication	48.000	1
Education	35	10
Health care	280	4
Rural development	15.8	3
Others	77	3
Covid 19	22.5	1
Drinking Water	8.8	1
Environment	10.262	1
Promoting Equality	34.906	1
Rural sports	0.36	1
Sum	**532.628**	**26**
Administrative	21.447	NA
Total	554.075	NA

Source: taken from the annual report of the Aurobindo company

Figure 3: CSR Fund Allocation in Percentage



Source: self-created according to table 4

Interpretation: table 4 shows the details of the CSR activities and expenditure of Aurobindo company. It was found that there are many CSR projects undertaken by the company. Most of the projects are under the category of education. There are many projects related to healthcare and rural development. It was also found that most of the projects are multipurpose, which means addressing more than one issue of society. Although there are many projects under the education category it is observed that most of the CSR expenditure is done on health care, which is 53 % of the total amount is allocated to this category. Later on, hunger eradication (9%) and others (14%). The least amount is allocated for the rural sports category (almost to zero%), drinking water (2%), environment (2%), and rural development (3%). Almost 4% of the total CSR expenditure was utilized for administration purposes.

CONCLUSION

When compared with the projects of Sun Pharma and Dr. Reddy, Aurobindo has the highest number of corporate social responsibility projects. It can also be concluded that a greater number of projects leads to an increase in the administrative expense, as it is evident from the paper that Dr, Reddy spend the least percentage of total expenditure among the three companies because it has the least number of projects and the projects are less diversified than the Sun pharma and Aurobindo. If companies reduce their number of projects, maybe they can benefit more people in the society, by reducing their administrative expenses. Most of the projects are categorized under education, this implies that our society needs to improve more in the education area. Education equality is necessary because it's the only thing that can bring light in the future. It was also found the companies are working towards maintaining a sustainable balance in the society by proving to hungry, providing advanced education, working towards reducing gender inequality, and most importantly is health. Health is the ultimate wealth. It was observed that approximately 40% -50% of the CSR fund is allocated to healthcare.

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AN ANALYSIS OF SOLVENCY AND ITS IMPACT ON THE PROFITABILITY OF SELECTED GOLD FINANCING COMPANIES OF INDIA

Sakshi Soneja[1], Deeksha Agrawal[2], Karan Kumar[3]

[1]Research Scholar, [2]Research scholar, [3]Student BBA
Department of Accountancy & law, Faculty of Commerce
Dayalbagh Educational Institute, Agra

ABSTRACT

Gold plays a symbolic role in the cultural values in India as it carries various ethnic, spiritual and sentimental meanings for Indians. Indians consider gold as the symbol of pride, legacy and also as a durable investment. They believe in its high marketability and creditability. India has a wide range of gold financing market which can be categorized as organized and unorganized sectors of market. Here, this study focuses on the solvency and its impact on profitability of two major gold financing NBFCs of India. The results of correlation and regression analyses showed a difference in the relationship and impact of solvency in accordance to profitability of both the companies concerned.

Keywords: NBFC, Solvency, Profitability, Gold Financing Companies

INTRODUCTION

Gold has its own cultural value in India. It plays a symbolic role as it carries various ethnic, spiritual and sentimental meanings especially in the events of wedding. It is also known as the symbol of social status and legacy. Most of the jewellery worn by hindu brides is connected to gods or goddesses and wearing the jewellery signifies the ask of protection from these divines. In India, gold has another aspect of importance as well i.e. investment. Indians consider gold as safest and durable investment and their protector at the time of any financial crisis due to its high marketability and creditability. India has its own history of providing loans against gold. In history, people used to avail loans against gold from merchant lenders. But in modern times, many Non-Banking Financial Companies (dealing in gold financing) and Banks are also providing loans by accepting gold as collateral security. 65% of the gold loan market is still unorganized but for the rest 35% organized sector of this market these NBFCs are playing a vital role.

NBFCs are the financial companies which are not engaged in the banking activities. These institutions provide wide range of financial services such as credit, insurance, investment but do not accept public deposits and are registered under Companies Act 1956/2013. Reserve Bank of India (RBI) regulates these bodies by setting rules which are known as prudential norms.

The primary function of an NBFC is to provide financial services which truly depend on availability of funds. So, it becomes necessary for an NBFC to maintain its funds to meet its liabilities due at any point of time. The amount of money a company has to pay its debts when they become due is known as its solvency. The solvency of a company is affected by its liabilities and its assets and it can be measured by its solvency ratio.

Profile of Companies

1. Muthoot Finance Ltd: Muthoot Finance Pvt Ltd was founded by Mathai George Muthoot in 1939. It got incorporated on 14th March 1997 under the provisions of the Companies Act, 1956. Later, on 18th November 2008, it converted into a Public Limited Company with the name Muthoot Finance Ltd. It is a financial corporation and India's largest Gold Loan NBFC. It also provides some other services such as exchange services, money transfers, wealth management services, traveling and tourism services, and the selling of gold coins. Headquarter of Muthoot Finance Ltd is situated in Kochi (Kerala) and has more than 4400 branches throughout the country. Presently, its chairman and managing directors are M. G. George Muthoot and George Alexander Muthoot.

2. Manappuram Finance Ltd: Manappuram Finance Ltd was founded by V. C. Padmanabhan in Thrissur (Kerala). The company commenced its operations in Valapad. It got incorporated in 1992 in wake of economic reforms launched by the Government of India. It is a leading non-banking financial corporation of India which provides services such as gold loans, money transfer, foreign exchange, SME and loan against property, depository services, and commercial vehicle loans. The headquarters of Manappuram Finance Ltd is situated in Thrissur (Kerala) and has more than 4600 branches throughout the country. Presently, its managing director is V.P. Nandkumar.

REVIEW OF LITERATURE

Kannan S. (2021) conducted a study to compare the financial performance of Muthoot Finance and Cholamandalam Finance using CAMEL approach. The study has revealed a phenomenal improve in the performance of both the companies during the study period still Muthoot Finance Limited has outperformed the performance of Cholamandalam Finance Limited and the latter has to improve as per the components of CAMEL approach.

Sangeetha and Chitra (2021) conducted a study to explore solvency and survival positions of Private and Public NBFC MFIs using Altman Z's revised score model along with survival analysis. The results of the study concluded that proper promotion of productive economic activities among borrowers and concentration on solvency variables by the institutions is required to guarantee the profitability, sustenance and survival of MFIs.

Gupta and Kushwaha (2020) have conducted a study to compare and analyze the financial conditions of two major gold loan NBFCs Muthoot Finance Ltd and Manappuram Finance Ltd using CAMELS Model which concludes that both the companies have similar Capital Adequacy Ratio and have displayed proclivity in terms of Liquid Asset Ratio and Debt to Equity Ratio; Muthoot Finance Ltd scores better in terms of Earning Ratios while Manappuram Finance Ltd scores better in terms of Net NPA Ratio.

Rajasekaranand Premalatha (2020) analyzed the profile of NBFC's and financial performance of the selected NBFC's (Auto financing and Other Asset financing) during the year 2014-2020. In this study, 10 listed NBFC's have been taken as a sample. Both primary as well as secondary data have been used. This study concluded that there is a significant difference between the different ratios which are calculated.

Mall, et al. (2019) conducted a study to identify the triggers of credit default and to predict the solvency of borrowers of NBFCs using Z-Score Model. The model has predicted that the companied with lower ROE are in distress zone. It has found the low revenue generation and high burden of interest which results in reducing operating income margin that brings the ROE low in whole.

Biswas (2019) this study has examined the relationship among earnings, profitability and liquidity of ten selected NBFCs for the duration from March 2007 to March 2016. On the basis of this study, it can be concluded that out of 10 NBFCs only two Bajaj Finance, Sundaram Finance were showing good financial performance and growth.

Girija and Faisal (2019) studied the financial performance of NBFC in terms of NBFCs-D and NBFCs-ND-SI. This analytical research has been conducted during 2014-18 by taking secondary data as main source of data. NBFCs-ND-SI covers major part in NBFCs-D and there is need to increase NBFCs-D by providing services to the entrepreneurs.

GopalSamy and Nandhini (2017) analyzed the leverage based financial ratios of five selected NBFCs for examine the financial performance and position from 2013-17. Ratio analysis and Trend analysis have been used in this study. Out of five NBFCs, Tata Capital Housing Finance Limited is good in terms of working capital and growth in future.

Al-Aboud and Faisal (2016) conducted a descriptive study to explore the challenges and prospects to the successful provisions of micro finance companies of India and Saudi Arabia. The study resulted that Micro Finance Institutions have uplifted employment status of low income groups and women in both the countries. But, both the countries lacked in proper regulation, supervision and assistance from regulated bodies i.e. RBI in India and SAMA in Saudi Arabia.

Mulchandani and Mulchandani (2016) have concluded through their study that Muthoot Finance Ltd outshined Manappuram Finance Limited as it shows better efficiency in terms of capital adequacy, asset quality, liquidity, earning and management. It has also been proved more efficient than the latter in managing the lowest non-performing assets and higher returns on assets, capital employed and shareholder’s funds.

Kalra (2016) had conducted a study to analyze the performance of NBFCs which revealed that NBFCs have undergone qualitative changes over the years and their performance has been improved. They have become the dominant players of the financial market as they have become a distinct option for conventional banking for consumers and are capable of quickly customizing their services and charges as per the needs of their clients.

Das (2016) attempt to compare the performance of NBFCs with bank and their contribution for country. The duration of the study from 2006 to 2013 and data has been collected through secondary sources. The results showed that the total assets of NBFC's increasing very rapidly as comparison to banks and their contribution is more in GDP from banks.

Pellissery and Koshy (2015) conducted a study to analyze the best performer among the selected Public Sector Banking Companies and NBFCs which resulted that NBFCs have performed better than the Public Sector Banks and were showing the better position in the capital market due to its principle activities during the period of study and LIC Housing Finance Ltd had proved to be the best performer among the selected companies.

RESEARCH QUESTIONS:

1. Is there any relationship between solvency and profitability of selected gold finance companies?
2. Which type of relationship exists between solvency and profitability of selected gold finance companies?
3. What is the impact of solvency on profitability of selected gold finance companies?

OBJECTIVE OF THE STUDY

1. To examine the relationship between solvency and profitability of Muthoot Finance Ltd.
2. To examine the relationship between solvency and profitability of Manappuram Finance Ltd.
3. To analyze the impact of solvency on profitability of Muthoot Finance Ltd.
4. To analyze the impact of solvency on profitability of Manappuram Finance Ltd.

HYPOTHESES

H_{01}: There is no significant relationship between solvency and profitability of Muthoot Finance Ltd.

H_{02}: There is no significant relationship between solvency and profitability of Manappuram Finance Ltd.

H_{03}: There is no significant impact of solvency on profitability of Muthoot Finance Ltd.

H_{04}: There is no significant impact of solvency on profitability of Manappuram Finance Ltd.

RESEARCH METHODOLOGY

SAMPLE SIZE

Two Gold Loan Non-Banking Financial Companies have been selected for the study:

1. Muthoot Finance Ltd.
2. Manappuram Finance Ltd.

DATA TYPE AND COLLECTION

Secondary data has been used for the purpose of the study. Data has been collected through annual reports published on the company's website, research papers, magazines, books etc. For the study, two variables have been taken into consideration:

Dependent Variable	Return on Equity Ratio	Profitability
Independent Variable	Debt to Equity Ratio	Solvency

DURATION OF THE STUDY

For the purpose of this study, a period of five financial years has been taken into consideration commencing from year 2015-16 to 2019-20.

TOOL OF ANALYSIS

Ratio analysis, correlation analysis and regression analysis have been used for analyzing data and testing of hypotheses.

ANALYSIS AND FINDINGS

Descriptive Statistics for Muthoot Finance Limited

	N	Minimum	Maximum	Mean	Std. Dev.
Debt to Equity Ratio	5	2.43	3.46	2.93	0.390704
Return on Equity Ratio	5	14.43	26.08	20.292	4.446613

Source: Self Calculated

The result shows that Muthoot Finance had average 20.292% Return on Equity Ratio during the period of study which is positively considerable. It was also found that Muthoot Finance Limited was achieving increasing returns as compared to the respective previous years except for the year ending March 2019. While an average

2.93% Debt to Equity Ratio was found during the period of study. Debt to Equity Ratio was also found increasing every year in comparison to respective previous years.

Descriptive Statistics for Manappuram Finance Limited

	N	Minimum	Maximum	Mean	Std Dev.
Debt to Equity ratio	5	2.8	3.82	3.266	0.384877
Return on Equity Ratio	5	12.32	23.11	18.682	4.225526

Source: Self Calculated

The result shows that Manappuram Finance had average 18.682% Return on Equity Ratio during the period of study which is positively considerable. It was also found that Manappuram Finance Limited was achieving increasing returns as compared to the previous respective years except for the years ending March 2018 and March 2019. While an average 3.27% Debt to Equity Ratio was found during the period of study. Debt to Equity Ratio was also found increasing every year in comparison to previous years except for the year ending March 2017.

Correlation Analysis

Correlation Analysis for Muthoot Finance Limited

Muthoot Finance Limited	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Debt to Equity ratio (Solvency)	2.43	2.69	3.04	3.03	3.46
Return on Equity Ratio (Profitability)	14.4	18.1	22.75	20.13	26.08
Correlation	0.977645				

Source: Calculated using Microsoft Excel

The result is showing a strong positive relation between Debt to Equity and Return on Equity ratios of Muthoot Finance Limited because value of 'r' 0.977645 which states that change in debt to equity ratio effects return on equity much and it change respectively.

Correlation Analysis for Manappuram Finance Limited

Manappuram Finance Limited	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Debt to Equity ratio (Solvency)	3.03	2.8	3.31	3.37	3.82
Return on Equity Ratio (Profitability)	12.32	21.92	18.07	17.99	23.11
Correlation	0.360747				

Source: Calculated using Microsoft Excel

The result is showing a weak positive relation between Debt to Equity and Return on Equity ratio of Manappuram Finance Limited because value of ‘r’ is 0.360747 which states that change in debt to equity ratio does not change return on equity much.

Correlation analysis has been conducted to find the relationship between the debt equity ratio and return on equity ratio of both the companies. The result showed a strong positive relationship of 0.977645 between Debt to Equity and Return on Equity ratios of Muthoot Finance Limited while a weak positive relationship of 0.360747 was found between Debt to Equity and Return on Equity ratios of Manappuram Finance Limited.

Regression Analysis

Regression analysis has been conducted to find the impact of debt equity ratio over the return on equity ratio of Muthoot Finance Limited and Manappuram Finance Limited.

Muthoot Finance Limited

Regression Statistics

Multiple R	0.977645465
R Square	0.955790655
Adjusted R Square	0.941054207
Standard Error	1.079582337
Observations	5

ANOVA

	Df	**Sum of Squares**	**Mean Square**	**F**	**Significance F**
Regression	1	75.59299	75.59298593	64.85895682	0.003998717
Residual	3	3.496494	1.165498023		
Total	4	79.08948			

	Coefficients	Standard Error	t Stat	P-value
Intercept	-12.30892859	4.076732	-3.019312818	0.05679008
Debt to Equity ratio (Solvency)	11.12659679	1.381584	8.053505872	0.003998717

Source: Calculated using Microsoft Excel

The result showed a P-value of 0.003998717 which is lower than the significant value of 0.05. It implies that debt equity ratio doesn't have any significant impact on return on equity ratio. Hence, it can be said that there is no significant impact of solvency of Muthoot Finance Limited over its profitability.

Manappuram Finance Limited

Regression Statistics

Multiple R	0.360746972
R Square	0.130138378
Adjusted R Square	-0.159815496
Standard Error	4.550668838
Observations	5

ANOVA

	df	Sun of Square	Mean Square	F	Significance F
Regression	1	9.294519	9.294519	0.448824	0.550849
Residual	3	62.12576	20.70859		
Total	4	71.42028			

	Coefficients	Standard Error	t Stat	P-value
Intercept	5.746651252	19.41507	0.295989	0.786545
Debt to Equity ratio (Solvency)	3.960608925	5.911854	0.669944	0.550849

Source: Calculated using Microsoft Excel

The result showed a P-value of 0.550849 which is higher than the significant value of 0.05. It implies that debt equity ratio has significant impact on return on equity ratio. Hence, it can be said that there is high significant impact of solvency of Manappuram Finance Limited over its profitability.

CONCLUSION

The objectives of this study were to examine the relationship of solvency and profitability of the selected NBFCs and to analyze the impact of former on the latter. Debt to Equity ratio and Return on Equity ratio were considered for this study because these stand best indicators of solvency and profitability. The analysis showed high correlation between Debt to Equity ratio and Return on Equity ratio of Muthoot Finance Limited but a low correlation in case of Manappuram Finance Limited. The impact of solvency over profitability of NBFCs was analyzed through regression analysis which showed a high significant impact in case of Manappuram Finance Limited while no significant impact was found in case of Muthoot Finance Limited.

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MARKETING BUDGET – IMPERATIVE FOR BUSINESS SUCCESS

Dr. Reshma Rajani[1], Mrs. Padmini Shukla[2]
[1,2]Assistant Professor, Department of Commerce
Jagran college of Arts, Science and Commerce, Kanpur

Abstract

Marketing is a customer oriented philosophy which is integrated throughout an organization to serve the customers better than competitors in order to achieve profitability and growth. However businesses either allocate insufficient amount to marketing or spend excessively on it. It is thereby essential that good marketing is supported by proper budgeting of all marketing activities. A marketing budget is an estimate of projected costs to ensure proper planning, pricing and distribution of products or services. Thus this paper attempts to provide different techniques to determine the amount of marketing budget. It also suggests steps which can be considered as to allocate the cost of different marketing activities in preventing waste, reducing marketing expenses and building brand profitably.

Keywords: marketing, budgeting, marketing activities, brand profitability

Introduction

"Marketing is the analysis, planning, implementation and control of programmes designed to bring about desired exchange with target audiences for the purpose of personal and mutual gain. It realizes heavily on the adoption of product, price, promotion and place for achieving effective response"- Philip Kotler. It is a customer oriented philosophy which is integrated throughout an organization to serve the customers better than competitors in order to achieve profitability and growth. However businesses either allocate insufficient amount to marketing or spend excessively on it. **Kotler (2000),** in a study of seventy-five companies of varying sizes in different industries with the objectives of studying the marketing plan control procedures in implementing marketing strategies reported the following findings:

- Smaller companies do a poorer job of setting clear objectives and establishing systems to measure performance.
- Less than half of the companies studied knew their individual products profitability.

- About one-third of the companies had no regular review procedure for spotting and deleting weak products.
- Almost half of the companies fail to compare their prices with those of the competitors, to analyze warehousing and distribution costs, to analyze the causes of returned merchandise, to conduct formal evaluations of advertising effectiveness and to review their sales force call reports. This implies that marketing department has to monitor and control marketing activities continuously to prevent failures.

In (2013) Adobe conducted a survey of 1000 U.S. marketers and found that only 40% of those surveyed felt that their company's marketing efforts were effective. This same survey indicated that 68% of marketers were feeling **"more pressure to show a return of investment on marketing spend".** It is thereby essential that good marketing is supported by proper budgeting of all marketing activities.

A marketing budget is an estimate of projected costs to ensure proper planning, pricing and distribution of products or services. It is an overall blue print of a comprehensive marketing plan of operations and action expressed in financial terms. Basically a marketing budget includes all marketing costs such as- marketing communications, salaries of marketing managers, cost of office space, advertising agency commission, marketing assets, fixtures fittings, fixed costs etc. However major part of the budget is concerned with marketing communication for e.g. Personal selling, public relation, print and broadcast media, trade shows, printing and designing, website development and hosting, brochure design, advertising –television advertising, radio advertising, newspaper advertisement, proposal development, event attendance, sales promotion etc. In a competitive environment it helps to address questions as how much and how to spend on different marketing activities in order to attain sustainable development of the business.

Bonoma (1984), in an article titled, 'Making Your Marketing Strategy Work', in the Harvard Business Review, stated that marketing strategy and the execution of the strategy have a reciprocal effect on each other. Problems in implementation can often disguise a good strategy. If the execution of the strategy is poor, it may cause marketing management to attribute the failure to a poor strategy and permanently change its approach. However, at the other extreme, one may find an inappropriate strategy compensated for by excellent execution. In this situation, management may have time to recognize the strategic mistakes and adjust its strategy.

Kumar and Pauwels (2020) suggested not reducing marketing budget in recession He said marketing in a recession will never be easy, largely because it often involves going against instincts and standard operating norms. In this environment it is important to go along with customers on their new, different journey, shifting the message and even re-engineer the value proposition

According to Magalhaes (2018), the importance of marketing budget optimization is undeniably growing. A review by Gartner showed that marketing budgets increased to 12% of company income in 2016, from 11% in 2015. Not exclusively are marketing budgets increasing, advancements in data assortment and analytics deliver firms an entirely different array of marketing information to decipher, opening additional opportunities to marketing budget optimization.

Smith (2020) has opined that, as firms keep searching for new ways to optimize expenditures; marketing managers have been forced to examine the transitory targets of efficient allocation levels and effective firm performance. Although various investigations exist addressing the relationship between marketing expenditures and sales performance, the impact of this information has been gradually applied.

Thus this paper attempts to provide different techniques to determine the amount of marketing budget. It also suggests steps which can be considered to allocate the cost of different marketing activities in preventing waste, reducing marketing expenses and building brand profitably.

Techniques of Marketing Budget

Marketing budget vary from business to business. Generally there are four common methods to determine the amount of marketing budget.

- **Percentage of Sales or Net Profit Method**

Percentage of sales or net profit is the most popular method for developing marketing budget. It is ratio of the companies' past marketing budget to the past sales or net profit to compute the percentage. The same percentage is then applied to the projected sales or net profit to ascertain the budget for that year. Usually companies allocate between 1% and 10% of their revenue to marketing budget. The main advantage of this budget is that the marketing budget increases or decreases with sales or net profit .However this method is not suitable in case of new product.

- **The Flat Rate / Amount Method**

The companies which cannot afford to spend huge amount on marketing use this method. It is based on historical approach as the companies allocate a uniform rate or amount on marketing every year. It is suitable when there is no change in the market or slow growth is slow. However it is difficult for new companies to define flat rate or amount as there are no past records of sales and marketing expenditures.

- **Competition Oriented Method**

This is another method of establishing a marketing budget. Companies which want to stay competitive spend in line with the competitors. Though it is difficult to get reliable information but it is quite beneficial in case of new products and services. The company is also able to utilize the budget more efficiently and achieve more with less money.

- **Marketing Objective Oriented Method**

In this budget the companies allocate the cost of all marketing activities for the next year. Then total amount of all these costs gives the marketing budget for that year. Though it is a simple technique to set the budget but acquiring accurate costing information from different dealers in advance is very difficult. Apart from this there is little scope for making changes in strategy during the year.

All the above methods are arbitrary and may not provide an easy solution to the problem of allocation. Generally, allocations can be made in relation to sales or profit but an ad-hoc allocation is found in practice at the initial stage.

Steps to Design a Sound Marketing Budget

After deciding the amount of limit that could be spent on marketing of product and services, the problem arises how and where to spend the amount to achieve maximum return. The marketing manager in association with an accountant can take into consideration the following steps (Fig: 1) to apportion cost of all marketing activities:

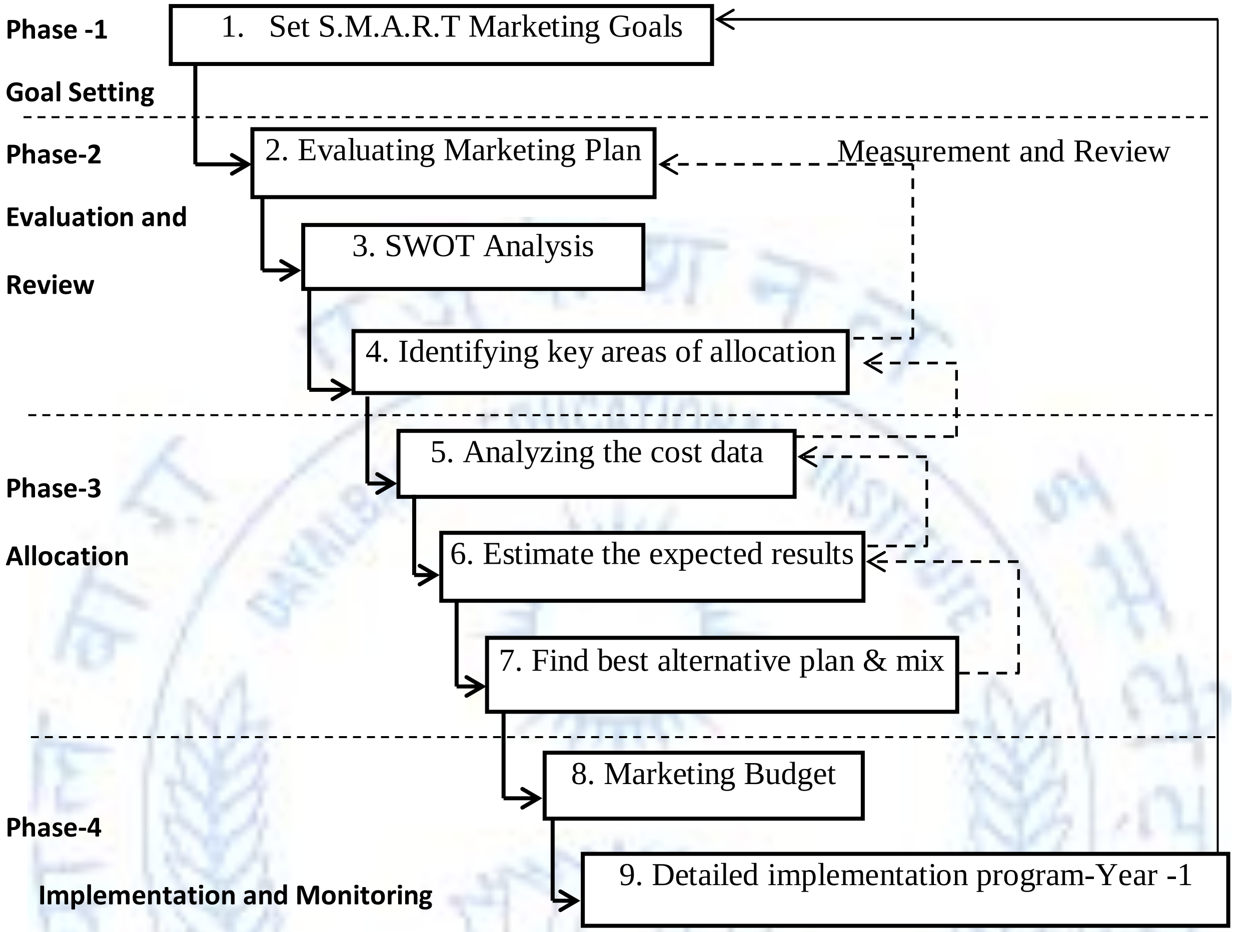

Fig: 1 Steps to design a sound marketing budget

➢ **Set S.M.A.R.T Marketing Goals**

Business goals are the foundation stone of budget construction. Thus setting of S.M.A.R.T (specific, measurable, attainable, realistic, time based) marketing goals is the first and foremost step towards the allocation of marketing budget.

Some of the smart goals can be –

- To increase the website traffic measured by visitors per month.
- To add three new features to the product this quarter.
- Starting new business or developing a new division measured on the basis of total leads and sales revenue.

➢ **Evaluating Marketing Plan and Identifying Key Areas of Allocation**

The comprehensive knowledge of the key industry and market research of both micro and macro environmental variables help the business to identify and allocate the cost of different areas where it needs to focus in marketing the products and services to reach the target audience. However it depends on three main factors:-

- **The size of the budget** for e.g. business having limited marketing budget should use small print ads, online ads, social media and e-mail to increase the number of customers.
- **The past records /experiences and growth** – the internal records and performances guide the spending plan. Examine the current spending patterns to see if there are any areas where you may cut costs. It may entail canceling unused subscriptions, negotiating better pricing with suppliers and vendors, etc. Reviewing the performance of internal records and measuring the return on investment regarding a certain marketing activity help to drop or choose the same to reach the right customer in the changing environment. The allocation of cost of marketing is also affected by competitor. The business should assign the amount as to take the advantage of competitor's weakness and emphasize its strength to increase the market share or improves its brand equity. Apart from this the companies in business for more than five years which have established itself and have brand equity should allocate between 6 and12% of gross revenue or projected revenue. It is important for these companies to spend time and money in improving the content of the websites so as to create consistent brand image for consumers. The companies which have been in business for one to five years should allocate 12-20% of gross revenue or projected revenue for marketing budget. They can budget money for customer surveys and focus groups to bring in new clients. And the companies less than a year in business should allocate sufficient amount for market research. It can develop a target customer profile and test–marketing for new product and service including the cost of free samples or demonstration.
- **Able to reach the right customer through appropriate marketing channels-** For this the business should identify their prospective customer and media they are using. They should find their niche markets. This is the place where it should go for advertising. Business can also set aside small portion

of marketing money for testing a new marketing channel.

- **Analyzing the Cost Data and Making Appropriate Changes**

  The final step to make the sound marketing budget is the proper assessment of the marketing plan and making appropriate changes. The main aim of marketing plan is to increase revenue. If any marketing strategy is not able to generate extra revenue in excess of cost, then it is better to change the strategy and use the best alternative solution. When maximum profit yielding combinations of marketing estimates are selected, the estimates should be treated as final.

Conclusion

The marketing budget helps in preventing waste, reducing marketing expenses and building brand profitably. However its success or failure depends upon the accuracy of basic estimates or forecasts. Mere preparation of marketing budget will not ensure proper execution. It is very much required that each executive must feel the responsibility to attain the set goals.

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An Analytical study on Environmental Accounting- A Case Study of Bhilai Steel Plant

Dr. Anisha Satsangi
Assistant Professor
Department of Accountancy & law, Faculty of Commerce
Dayalbagh Educational Institute, Agra

ABSTRACT

In this paper the researcher wants to examine the environmental Accounting Practices followed by Bhilai Steel Plant, Bhilai, Chhattisgarh. As per the researcher point of view the environmental accounting is related with the policies adopted by businesses keeping in mind the environmental protection as a whole.

INTRODUCTION

"Environmental accounting is a division of accounting where a company relates certain accounting procedures in the course of business, which permits them to find the cost of environmental protection."If a paint manufacturing company manufactures paint from items that contain lead they make a profit by selling it but consumers are negatively affected due to allergies and diseases and pollution of water bodies by product residues and soil over the years. It includes Internal and External environment's like cost and benefit analysis, decision making, stake holders protection in all aspects.

The objectives are:

1. To find and study the parameters of environmental cost in environmental accounting.

2. To analyze the functioning of parameters at Bhilai Steel Plant

3. Search and give suggestions.

ENVIRONMENTAL ACCOUNTING

ITS AIM IS TO ACHIEVE SUSTAINABLE DEVELOPMENT

Environmental accounting is a ground that classifies the use of resources, quantifies and communicates the cost of a company's effect on the environment.

Environmental accounting is a broad term that covers both national and corporate level environmental performance actions and related stakeholder interfaces. This includes the treating of both financial and non-financial information regarding environmental and ecological influences.

Here, environmental protection is defined as the prevention and evading of environmental impact, removal of such impact, restoration after the happening of a tragedy, and other actions. Environmental impacts are the load on the environment from business processes or other human actions and possible constraints that may hinder the conservation of a encouraging environment.

For example: If a paint manufacturing company manufactures paint from items that contain lead they make a profit by selling it but consumers are negatively affected due to allergies and diseases and pollution of water bodies by product residues and soil over the years.

Functions of Environmental Accounting:-

1) Internal Functions: As a phase of the company's environmental information system, internal work to manage environmental protection costs and analyze the benefits obtained in comparison with the costs of environmental protection activities and conduct effective and efficient environmental protection activities through appropriate decision-making makes it possible.

2) External Functions: By revealing the quantitatively measured results of its environmental protection actions, external actions permit a company to encourage the decision-making of stakeholders such as consumers, investors and local people.

BHILAI STEEL PLANT

HISTORY OF BHILAI STEEL PLANT

The Bhilai Steel Plant, located in Bhilai, Chhattisgarh (India), is India's first major maker of steel rails, as well as a main producer of wide steel plates and other steel products. The plant also produces steel and advertises various chemical by-products from its coke oven and coal chemical plant. It was established in 1955 with the help of the USSR.

Bhilai Steel Plant is the winner of the Prime Minister's Trophy for Best Steel Plant in the country eleven times. The plant is the only supplier of the longest rail tracks in the country, measuring about 260 metres. The 130 meter rail, which will be the world's longest rail in one piece, was commissioned on 29 November 2016 at Bhilai Steel Plant.

The plant also produces goods such as wire rods and commercial products. Bhilai Steel Plant has been the flagship integrated steel plant of the Steel Authority of India Limited, a public sector steel company and has the largest and most profitable production facility. It is the main plant of SAIL.

The Government of India and the USSR entered into an agreement, which was signed on 2 March 1955 at New Delhi for the formation of an integrated iron and steel works at Bhilai with an primary capability of one million tonnes of steel.

The key reason for taking Bhilai was the accessibility of iron ore at DalliRajhara, which is about 100 km from the site; Limestone from Nandini, about 25 km from the plant, and dolomite at Hirri, about 140 km away, and coal from the Korba and Kargali coalfields. Water for the plant originates from Tandula Dam and electricity from Korba Thermal Power Station. The plant was commissioned on 4 February 1959 with the inauguration of the first blast furnace by the the President of India Dr. Rajendra Prasad.The plant was stretched to 2.5 million tonnes in September 1967 and additional expansion of 4 million tonnes was completed in 1988. The key attention in the 4 MT phase was the continuous casting unit and plate mill, a fresh technology in steel casting and shaping in India.

Environmental Accounting in Bhilai Steel Plant

Environment Accounts Management Division (EAMD), established in 1989, is a corporate entity certified with ISO 9001 standard. The unit plays a vital role in strengthening the efforts of plants, mines and units towards environmental protection and resource optimization through its diverse actions which include:-

Proactive interface between the SAIL units and the regulatory agencies
Monitoring and Assessment,
Technology dissemination,
Awareness campaign and
Skills up-gradation.

Apart from these, EMD, in constant collaboration with Plants, Mines and Units, is leading the way for the spread of ISO 14001 compliant EMS in various shops and units including godowns.

Challenges before Corporate sector:

a. New costing and capital appraisal systems: There is a need to develop new cost and capital assessment systems for complete environmental accounting and reporting.

Whether these structures are based on ordinary accounting information systems, they should provide stakeholders with sufficient info about environmental expenses and threats.

b. Long-term-planning forecasting systems: Long-term planning requires forecasting systems that incorporate environmental improvement goals and their financial implications. Accountants should have access to new and revised information and requirements of financial systems.

c. Support of senior management: Applying a new cost accounting system in an organization needs the support of senior management as well as a formal implementation plan. An execution plan should expect desires such as employee training, the assignment of responsibility for provided that input to the system, and the possible effects of new information on current processes.

d. Cost accounting system: Like any other investment, any cost accounting system conversion must be cost effective.

e. Identification of concealed overheads: Environmental costs are often hidden in overhead accounts. These costs should be detached and applied to suitable accounts to help the company well understand its environmental costs and their reasons.

f. Identification of relevant environmental factors: Accountants want to find methods to account for quantitative and physical environmental aspects in investment decisions. If not, some suggestions that are economically and environmentally sound in the long run may be excluded; On the other hand, the omission of significant environmental costs may force the company to accept environmentally bad offers.

Based on the relationship between business activities and environmental impact, these guidelines categorize information based on key business operations, administrative, R&D, social and other activities.

Key business operations are the series of activities covering the purchase of materials and services, manufacturing and distribution, sales and supply, but exclude administrative, R&D and social activities.

Category	Content
Business area cost	Environmental conservation cost to control environmental impacts which result from key business operations within the business area
Upstream/downstream cost	Environmental conservation cost to control environmental impacts which result from key business operations upstream or downstream
Administration cost	Environmental conservation cost stemming from administrative activities
R&D cost	Environmental conservation cost stemming from R&D activities
Social activity cost	Environmental conservation cost stemming from social activities
Environmental remediation cost	Cost incurred for dealing with environmental degradation
Other cost	Other costs related to environmental conservation

Present Scenario of Indian Steel Industry

India is exclusively positioned to be one of the largest producers and consumers of finished steel products in the world. Adequate stock of high grade iron ore, low wage rate, high level of technical and managerial skills has enabled India to achieve this stature.

Unluckily, for the Indian steel industry, price and distribution controls, under which the process of e-liberalization began in the early 1990s, forced large integrated steel plants to modernize their steelmaking facilities or transfer their technologies to the state. With the economic liberalization that began in 1992, the Indian steel industry would have to appreciate the inevitable i.e. the implications of lower import duties, face foreign competition and in some way learn and produce good quality products at low prices to improve your strength and competitive edge to survive in the market.

After liberalization, the steel industry is well established on the track of globalization. The dynamic forces of the world steel industry are closely related to the Indian steel industry.

Objectives of the study

1. To find and study the parameters of environmental cost in environmental accounting.

2. To analyze the functioning of parameters at Bhilai Steel Plant

3. Search and give suggestions.

The primary as well as secondary data will be taken in to consideration. The primary data will be taken from the respondents belonging to the Administrative staff of Bhilai Steel Plant with the help of interview and questionnaire methods. The secondary data will be taken from the topic related websites, research publications, magazines.

Sampling techniques: Random sampling method will be taken for selecting respondents.

Sample: 50 respondents from officials and administrators of Bhilai Steel plant

Table showing the Total Population under Bhilai Steel Plant:-

S.NO	NO. OF EMPLOYEES	POPULATION
1.	EXECUTIVES	3767
2.	NON EXECUTIVES	25350
3.	CONTRACT LABOUR	28377
	TOTAL	57494

Table showing the Sample for the study

S.NO	RESPONDENTS	POPULATION	SAMPLE
1.	EXECUTIVES OF THE DEPARTMENT OF ENVIRONMENTAL ACCOUNTING	142	50

Duration of the study: data will be taken for 2 years from 2016-2018

Area of study: Bhilai Steel plant, Chhattisgarh,

Research Parameters:

- **Relevance:** The data should be only fulfilling the need, should be relevant in today's world and in a simple and understandable form.
- **Reliability:** The data should be reliable i.e. should be from sources which are valid and not faked just for completion of project.
- **Neutrality:** The study should be fair and neutral which means that there should be no partiality for both the sides.
- **Completeness:** The project presented should be complete in a

sense that only the required data should be present and all should be on the topic.

- **Verifiability:** The data, when checked should be verifiable that it is from the right sources and not fake or copied.
- **Tools for analysis:** Weighted Average , SWOT analysis

Hypothesis

H_{O1}: There is significant impact of environmental accounting on the working of Bhilai Steel Plant

RESEARCH PLAN

S.NO	OBJECTIVE	HYPOTHESIS	DATA ANALYSIS
1.	To study and examine the parameters of environmental costing in environmental accounting.	NIL	secondary data will be taken
2.	To analyse the working of the parameters at Bhilai steel Plant	There is no significant impact of environmental accounting on the performance of Bhilai Steel Plant	primary data will be taken

REVIEW OF LITERATURE

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9. KuruvaSyamala Devi,(2006), "Environmental Accounting Practices in India", Issues and Challenges focuses on Maintaining accounts of such environmental and natural resources in the country has become more urgent. Moreover, international awareness and acceptance of the importance of environmental issues has motivated the development of a branch of accounting called "Green Accounting" or "Environmental accounting".The present research paper concentrates on exploring the concept of Environmental/Green accounting, its practices and reporting in India. A modest attempt has been made to throw light on the environmental awareness in developing nations like India and discuss the problems associated with the implementation of environmental accounting.

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Parameters of environmental accounting:-

According to this division of Bhilai Steel Plant,these parameters can be derived:-

a) Recognition of Environmental Interfaces

Economic crafts by the entity that concern the environment can be documented as one of the elements of financial reports if they result from market based trades of legally separate entities (can include proprietorships). An entity can accept an environmental asset such as a piece of paraphernalia or a permit to adulterate. An entity can pay a waste disposal company to eliminate waste products from its premises. An entity can sell a wind power-driven electric generator and have costs linked with the production, sale, and financing of such an environmental item. Profitable transactions that have occurred can stereotypically be known because their dimension is delivered by the market.

b) Impairment

If an object pays too much for an asset because of the environmental cost then transcribe is required because the benefit from the asset is less than the cost. (AS, Section 3063, para. 04) A grouping of assets is recommended so that the need to assign the future benefit attributable to the specific asset is minimized. Thus, an environmental component would need to be assembled with its accompanying asset so only the total future remunerations would be required. Such a group practice recommends that aupward mobilityformerly discussed could be an asset if the group still has a total benefit in excess of its cost.

c) Environmental Liabilities

Liabilities associated with environmental dealings require contemplation of concerns of when a transaction has occurred, what is the probability of the need to settle, and how to measure the amount.

Measurement of the amount of a transaction involves the interrogation of most likely value or mean value or some other amount from aassortment of possible settlement amounts.

Such a probabilistic calculation of the depth is likely for environmental responsibilities because settlements are likely to be tentative in amount or timing.

The timing of a transaction can be an issue because the interaction with the environment may not activate a responsibility at the point of pollution. May be clean up is imposed later by government authorities or managerial decision. Thus when the environmental interaction actually constitutes a transaction can be a question in requirement of purpose in order to determine if a liability exists. Legal recognition can be later than moral recognition. There may be the ways to handle environmental liabilities such as reduce water consumption, electricity, paper, use of newer agricultural methods, speed awareness etc.

f) **Environmental Auditing:** Environmental auditing is basically an environmental management tool for calculating the properties of certain doings on the environment alongside set gages or standards. Contingent on the types of ethics and the focus of the audit, there are different types of environmental audit. Bodies of all kinds now distinguish the importance of ecological matters and agree that their environmental presentation will be examined by a wide range of interested parties. Environmental auditing is used to

- investigate
- understand

- identify

These are used to help progress existing human activities, with the aim of tumbling the adverse effects of these deeds on the environment. An environmental auditor will study an organisation's environmental effects in a logical and predictable manner and will produce an environmental audit report. There are many reasons for undertaking anconservational audit, which include issues such as environmental regulation and gravity from customers.

Impact of Bhilai Steel Plant

The company had to provide basic amenities like power, drinking water, and education and medical facilities for its workforce at these plant locations; these facilities have multiplied over the decades as SAIL's business has grown.

Healthcare

S.NO	ACTIVITIES PERFORMED	FACILITATED TO…..
1.	Primary Health Centres	54 established
2.	Child Health Centres	12 Reproductive
3.	Hospitals	17
4.	Super-Specialty Hospitals	7 (specialized healthcare)
5.	Peoples examined/ inception	30 million
6.	Special health centre(KalyanChikitsalyas)	5 (poor and needy people for free)
7.	health camps	more than 3,000 every year
8.	Coverage	Jharkhand, Chhattisgarh, Odisha, West Bengal, Tamil Nadu, Karnataka, Bihar, Maharashtra, Madhya Pradesh, Haryana, Rajasthan,
9.	MMUs /ambulances	24 (provided to various NGOs like Help Age India, Bharat SewashramSangha, AnugrahaDrishtidaan, etc.)
10.	'Akshaya'(a special project)	free investigation to TB patients
11.	'Chetna'	under privileged sections of society for the treatment of sickle cell anemia

Education

S.NO		
	Schools	146 (for providing modern education)
	Children	70,000
	Schools of villages surrounding steel plants/units	286

	tribal children at Bhilai	more than 55,000 students
	Adoption of childrens from nearby villages	225 girls and 12 boys of the nearly extinct Birhore tribe at Bokaro
	Girls/ boys ratio	1:1
	Special Schools exclusively for poor	6(SAIL has also set up 6, underprivileged, BPL children at its 5 integrated steel plant locations covering around 1,400 children providing free education, midday meals, uniform, including shoes, textbooks, stationery items, school bag, water bottles, etc.)
	Midday meals	providing to more than 18,000 students in different schools of Bhilai every day with the help AkshayPatra Foundation
	Additional classrooms	across the country
	Projects	Bhilai, Durgapur, Bokaro, Rourkela, Burnpur, as well as areas where SAIL carries out mining activities.

Connectivity

Construction of Roads by SAIL:

S.No.	No. of Villages covered	No. of People covered
1.	435	73 Lakh

Water

SAIL plant has guaranteed that villages within the range of about 16-18 kms of its township have access to potable water.

S.NO.	No. of Water Sources	No. of people Covered
1.	5,153	38 lakhs

Model Steel Villages

S.NO.	Comprehensive development of both physical and social infrastructure	
1.	Villages	79 identified as ‘Model Steel Villages’
	States across the country	8
medical and health services, education, roads and connectivity, sanitation, community centers, livelihood generation, sports facilities, etc.		

Solar Power (Thrust areas of SAIL)

	Community Solar Power Plants in Jarri, Albert Ekka Block, Jharkhand with the help of Jharkhand Renewable Energy Development Agency	100-kw
	Installing solar street lights	In rural and mines areas

Calamity Aid

SAIL has been always a trend setter in supporting people during natural calamities and recently it has supported construction of low cost houses at Leh after a cloud burst, providing galvanized sheets to Sikkim earth quake victims, contributing to Chief Minister's Relief Fund for aid to people affected by the Odisha floods, and provided flood relief packets during the floods in Uttar Pradesh.

Vocational Training

S.NO	**Villagers are being provided vocational training**
1.	Agriculture, mushroom cultivation, animal husbandry (goatery, poultry, fishery, and piggery), achar/ppapad/agarbatti making, etc.
	Skill enhancement as welders, fitters and electricians, in sewing and embroidery, smokeless chullah making, etc
	Vocational training centres like Bhilai IspatKaushalKutir for rural and unemployed youth
	Skill Development and Self Employment Training Institutes for the benefit of women and girls
	Self Help Group programmers is 'Kiran' which is run by 97 lady artisans of nearby villages of Kiriburu Ore Mines. Kiran branded towels, bedsheets, sarees, Diwali candles and agarbattis are beinhg sold through door-to-door marketing efforts and through cooperatives.

Sports

SAIL has also become a part and parcel of the sporting history of the Nation. Right from the early trickles to the recent deluge of medals, awards and accolades, the steel major has supported many sports disciplines and promoted numerous sportspersons.

	Wrestlers(Beijing Olympics and Commonwealth Games 2010)	Sushil Kumar, Yogeshwar Dutt, Deepak Sharma

	Sponsoring	World Cup Hockey 2010, Asian Tour-level
	Sponsoring	Open Golf Championship for the past 4 years
	Prestigious annual events	Davis Cup, SAIL Trophy Cricket Tournament, DSA league, Nehru Cup, etc
	Academics (plant and mines locations for Athletics (boys and girls), Hockey, Football and Archery)	6 Academic Institutes

Preservation of Art and Culture

Promotion and preservation of various forms of Indian arts and cultures enriches our cultural diversity. To fulfill this aspiration, SAIL has supported maintenance of monuments in Delhi's Lodhi Gardens, and Vedvyas, Saraswatikund in Rourkela. To take care of distinct features of tribal culture, a 5-day Chhattisgarh Lok Kala Mahotsav is celebrated every year in Bhilai and nearby places in which more than 600 artistes participate. To promote local culture and games, various GraminLokotsavs and Gramin athletics competitions are organised by SAIL at different locations throughout the year.

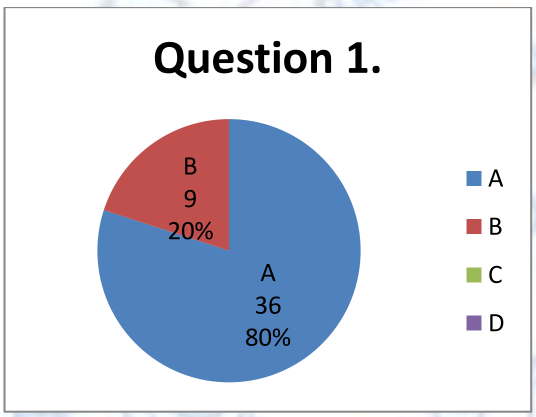
Awards and Accolades

	Awards and Accolades	
	The SKOCH Financial Inclusion Award-2012	For Women Empowerment
	India Shining Star CSR Award-2010	Wockhardt Foundation in the Iron and Steel category
	SCOPE Meritorious Award for Corporate Social Responsibility and Responsiveness for the year 2008-09	
	Annual FICCI Awards 2008-09	'The Vision Corporate Triple Impact – Business Performance, Social and Environmental Action and Globalization'
	World -FICCI-SEDF CSR Award	2006
	FICCI Award for Rural and Community Development 2006-07	
	CSR Award of the Ministry of Rural Development	
	Government of India, Golden Peacock Award – 2008, 2009 and 2008-09 for CSR to Bhilai Steel Plant	

	CSR Award of Tamil Nadu Government to Salem Steel Plant for the consecutive years 2007-08 and 2008-09, etc	

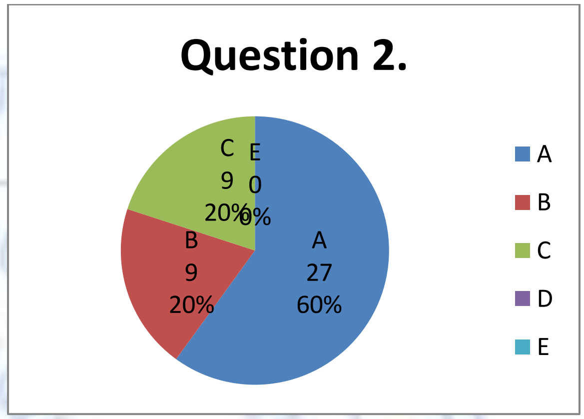
Questionnaire Response:

Environmental protection and management is one of the most important challenges faced by business these days?



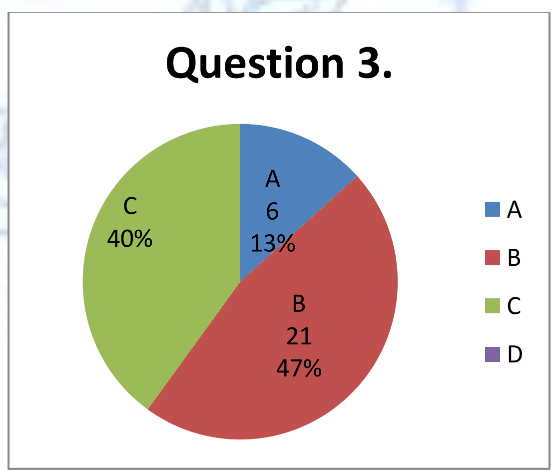
As per analysis it was observed that most of the respondents are strongly agree with the environmental protection and management challenges i.e., 80% and other 20% are agree with the same. No respondent had shown their disagreement for that.

How essential would you think is for firms to ensure environmental accounting and reporting?



The analysis has been done on five point Likert scaling. 60% says it is extremely essential, 20% very essential, and remaining 20% says it is moderately essential.

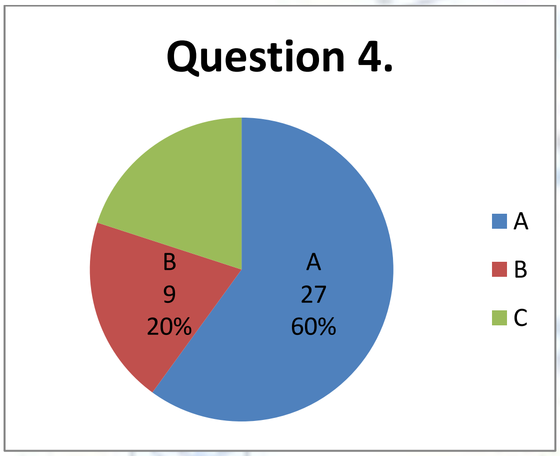
What do you think the costs of environmental accounting and reporting would inevitably be?



13% respondents said the cost of environmental accounting is very high.

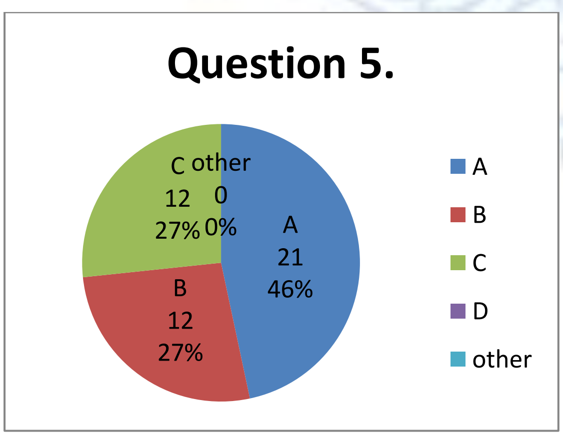
Other 47% said it is high remaining 40% said it not high may be due to the return and reduced negative effects on the health of the society.

The nature of disclosures of environmental accounting and reporting.

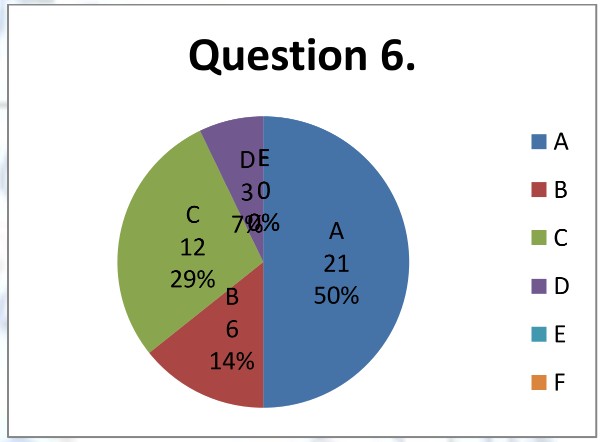


The data has been classified in to three parameters Quantitative, Qualitative and both, 60% data treated as quantitative, 20% Qualitative and remaining 20% shows both.

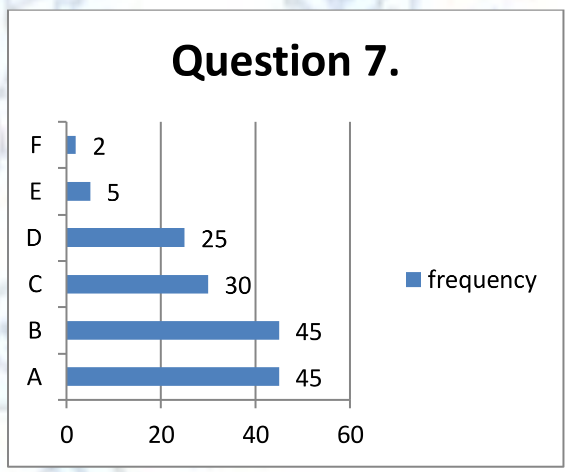
What is the periodicity of reporting?



The periodicity of reporting 46% suggested the reporting should be monthly, 27% said it should be Quarterly and other 27% respondents suggested that half yearly reporting practices should be adopted.



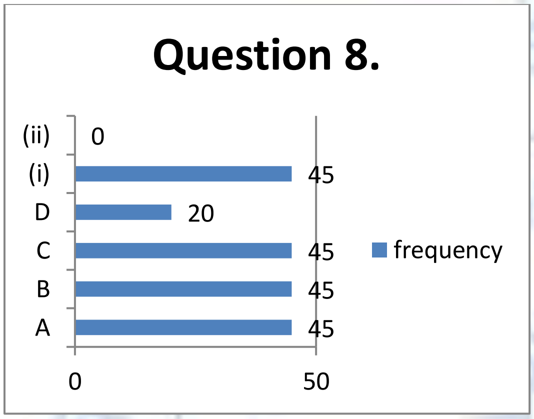
Do you agree that the business environment is concerned with its surroundings and includes?



In response of this question related with Business Environment has been divided in to six parameters. Among which Air is indicated most important shown 45out of 50, similarly water, land shown 30 out of 50

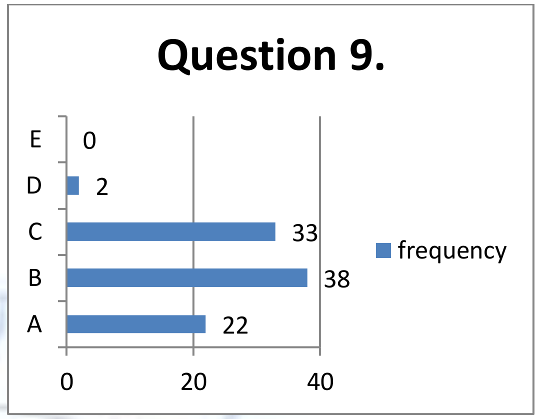
Flora shown 25 Fauna 5 and Fossil fuels and minerals shown 2 out of 50.

In your opinion environmental accounting has been defined as:



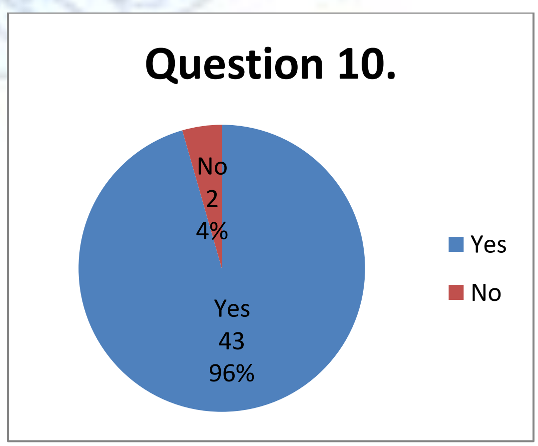
The opinion survey from respondents how they define the concept of environmental accounting the researcher provide them 4 measures among which most of them are agree with the provided measures. The fourth one related with benefits, assets and liabilities are related with environmental accounting are treated least important only 20 respondents accept that.

Does your company encounter any of the following problems in implementing environmental accounting and reporting?



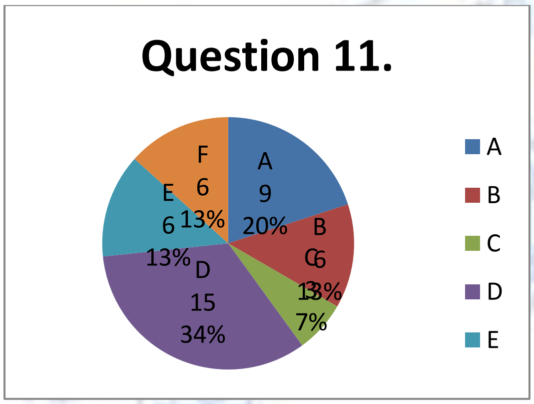
This question is related with problems facing by Steel plant while implementing environmental accounting and reporting. In response of this question the researcher enlisted 4 major problems. The problem of changed prices: 22 respondents out of 50 says it is a problem, availability of required technology shown 38 out of 50, problem of increasing cost indicate 33 out of 50, legal requirement shows 2 out of 50 which is least as per the responses.

Do you have a formal environmental accounting and reporting system?



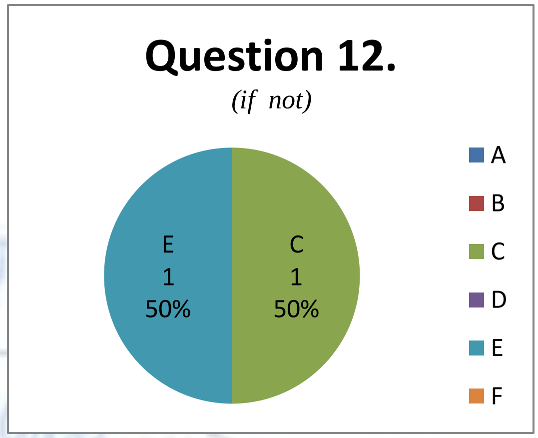
As per responses 96% respondents of Bhilai steel plant agree that they are following formal environmental accounting and reporting system.

If yes, which of the following in your company is responsible for environmental accounting and reporting?



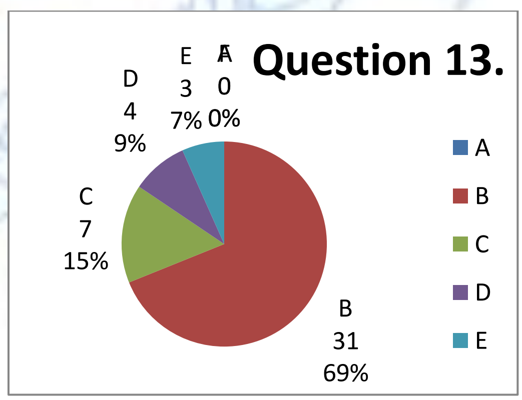
In response of previous question five ways are identifies for environmental accounting and reporting such as internal accounts i.e., 20%, chartered accountants 13%, shareholders 7%, chief executive officers 34%, and through directors 13% are responsible for environmental accounting and reporting.

If no, the main causes for less formal environmental accounting and reporting system in your financial statements are?



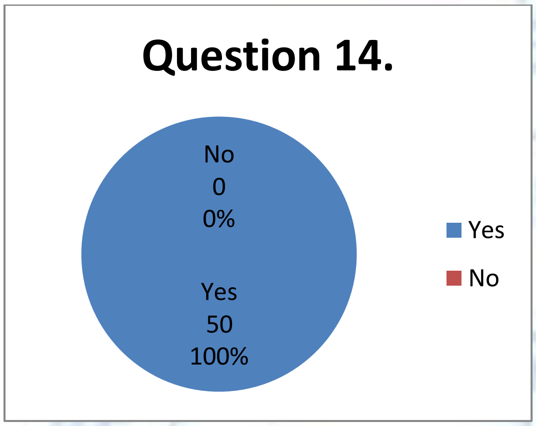
Only 2% respondents had shown their disinterest in environmental accounting practices which is negligible in all aspects. In this graph 1% respondents had shown not an area of interest, and remaining 1% shown lack of accounting standards.

Have any of the following creation been made by BSP in the organizational structure to accommodate environmental accounting?



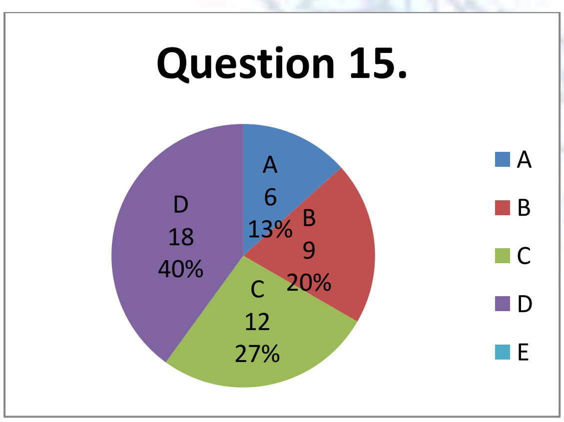
As per the response of the following question it had been shown that there is no post of corporate environmental officer in

BSP till date, 69% respondents says there is a separate department, 15% respondents says there is a committee for monitoring environmental responsibilities, 9% says management itself, 7% says other



All respondents said it is necessary to adapt environmental accounting and reporting beneficial.

If yes, do you think that environmental cost information generated by environmental accounting will be useful for better managerial decision relating to,



There are four basic parameters for managerial decision making i.e., cost

arrangements are also there to monitor the concerned activity.

Is adaptation of environmental accounting and reporting beneficial?

reduction 13%, appraisal of investment for environmental risks 20%, evaluation of environmental performance of a company 27%, and designing various processes using environmental friendly technologies 40%.

Findings and suggestions

1. The top running of Bhilai Steel Plant gives prime prominence to environment management and green initiatives.
2. BSP, as a liablefor corporate citizen is fully committed to safeguard, maintain and improve the quality of the environment and guarding human health.
3. BSP is subsidizing to reduction of 45 million tons of carbon dioxide considering 30 years' service life of its new generation products.
4. BSP has also adopted various environmental protection measures through natural resources conservation, pollution control systems implementation and waste minimization, recycling and reuse strategies.
5. These efforts have resulted in minimizing the hostile impacts on the

environment and health of employees and people occupying the surroundings.

6. BSP is the leading public sector company in India to have circulated this report and second steel plant in world to circulate sustainability report as per GRI G3 guidelines.
7. As a symbol of a "New Age" in India, Bhilai Steel Plant has been regularly performing on various grounds including CSR and green initiatives, despite several odds and has completed profit for the twenty first consecutive years.
8. Their journey is marked by strong Bhilai spirit which enabled organization to scale newer heights every year.

Limitations

1. Less support from employees as Bhilai Steel Plant is undergoing privatization and the remaining employees have lots of work to do.
2. Out of 50 only 45 forms filled by the employees, when asked, reason not given.
3. Due to privatization, less government made rules are followed as contractors control sites rather than engineers.
4. Less employees work for conservation of environment through environmental accounting and calculation of costs is done by a single person.
5. Less to no studies done on Bhilai Steel Plant which makes it difficult to draw comparison.

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https://www.accountancyeurope.eu/wp-content/uploads/Review_IAS_for_Environmental_Issues17320057157.pdf
https://unctad.org/en/Docs/iteeds4_en.pdf
https://sail.co.in/other-unit/environment-management-division
All information gathered from visiting bhilai steel plant.
Knowledge gained from meeting officials working in Bhilai Steel Plant.

Questionnaire:

https://drive.google.com/open?id=1FB2W8MpaBNyl7G54E5i-3I20tOE3HQ3V

Analysis of Financial Performance of Indian Private Banks

Nikhil Kumar
Research scholar
Department of Accountancy & Law, Faculty of Commerce
Dayalbagh Educational Institute, 282005

Abstract

This study identifies financial performance of private banks in India. The data is collected from Financial Statements (i.e. Profit and loss Account & Balance Sheet) of Respective Private Sector Banks. Top 10 Private Sector banks of India taken as Sample. To search out the Problem Author used Regression and correlation Analysis Tools. There is positive Relation between Bank size (i.e. Total Assets) and Asset Management with ROA while there is negative relation between operating efficiency with ROA. On the other hand, there is positive relation between Bank size& Asset Management with Interest Income while there is negative relation between Operating Efficiency & Interest Income.

***Keywords**:* Financial performance, Operating Efficiency, Asset Management, Bank Size, Interest Income.

INTRODUCTION

Funds are channelized to industries, in this process Indian Banking sector plays a significant role and Banking Sector also contributing towards economic and financial growth and stability (Shah S.Q.&Rizwan Jan,2014).In addition to cooperative credit institutions, There are 12 public sector, **22 private sector**, 46 foreign, 43 regional rural, 1474 urban cooperative & 97,006 rural cooperative banks consist in Indian banking system. Due to its strong linkage with performance of the economy for regulators and policy makers, "How Banks are performing" is a major concern (Arora Padmasai, 2012). The Main Purpose of this study is to analyze, Indian private banks financial Statement data of the periods 2017-2021. To study the relationship among different Variables such as Bank Size, Asset management, operating efficiency, Interest income and RoAs and What is their impact on the performance of Banks.

Banks Profile

1. HDFC BANK

It is the Largest Private Banks on the basis of Sales in India by Total sales. It was the first to receive approval from the RBI to set up a bank in the Pvt. Sector. It was incorporated in August 1994 and its registered office in Mumbai, India. HDFC Bank started operations in January 1995 and also top private banks in India.

2. ICICI BANK

It is a leading private Bank in India. ICICI Bank was come in existence in 1994 in the name of ICICI Limited, as an Indian financial institution. It is one of the best private banks in India. Through a variety of delivery channels, it offers a wide range of banking products and financial services to corporate and retail customers. It is on 2nd Number out of Top 5 private banks in India.

3. AXIS BANK LTD

It is the third-largest Private Banks in India. It offers financial services to customers covering Large and Mid-Corporates, and to different MSME, Agriculture, and Retail Businesses. It has a 5,710 cash recyclers all over country as on 31st March 2021. It began its operations in 1994. It has also foreign operations spread over nine international branches in Singapore, Hong Kong, Dubai, Colombo and Shanghai; representative offices at Dhaka, Dubai, Abu Dhabi and an overseas subsidiary at London, UK.

4. KOTAK MAHINDRA BANK LTD

In February 2003, it received banking license from central bank RBI in the name of Kotak Mahindra Finance Ltd., it became the first NBFC in India. It is the Fourth-Largest Private Banks in India. Effectively on April 1, 2015, ING Vysya Bank Ltd. merged with this Bank. It has four SBUs – Consumer Banking, Corporate Banking, Commercial Banking, and Treasury, which provide Services to retail and corporate customers all over urban and rural India.

5. INDUSIND BANK LTD

Ithas ranked 19th amongst the Top 50 Valuable Indian Brands 2014 as per the Brand Z Top 50 rankings powered by the WPP and Millward Brown. Also, it has bagged 39th rank in The Economic Times and Interbrand Best Indian Brands Study – 2014. It is the Fifth Largest Private Banks in India. This banks is responded along with innovation. It also launched for Indian consumers a wide range of banking products and services which are unique, convenient and very relevant. In the recent, it has launched a host of innovative services like My Account My Number, Choice Money ATMs, Check-on-Cheque, Cash-on-Mobile, Direct Connect, Quick Redeem Service and 365 Days Banking. All these unique services which is widely publicized and have been well appreciated by the customers.

6. YES BANK LTD

It is sixth-largest private sector bank is a high quality, customer-centric and service oriented Bank. Since its inception in 2004, YES BANK has grown into a 'Full-Service Commercial Bank' providing a complete range of products, services, and technology-driven digital offerings, catering to corporate, MSME & retail customers. It operates its Investment banking, Merchant banking &Brokerage businesses through its securities. Its Headquartered in Mumbai, it has a branches across all 28 states and 9 Union Territories in India including an IBU at GIFT City.

7. FEDERAL BANK LTD

It is a major Indian commercial bank in private sector and its headquartered at Aluva, Kerala and it has more than a thousand branches & ATMs spread across different States in India. It was among the first banks in India to computerize all its branches. It offers its customers, a variety of services such as Internet banking, Mobile banking, online bill payment, online fee collection, depository services, Cash Management Services, merchant banking services, insurance, mutual fund products.

8. IDFC FIRST BANK LTD

It was set up in 1997 to finance infrastructure focusing primarily on project finance and mobilization of capital for private sector infrastructure development. The Promoter expanded business to Asset Management, Institutional Broking and Infrastructure Debt Fund. He applied for a commercial banking license to the RBI in 2013. But in 2014, RBI granted approval to IDFC Limited to set up a new bank in the private sector. It diversified from being a predominantly infrastructure financier to wholesale banking operations. Since a large portion (90%) of bank was wholesale (infrastructure & corporate loans) as a legacy from IDFC Limited until 2017, the company swiftly put together a strategy to retailise its loan book.

9. SOUTH INDIAN BANK LTD

It came during the Swadeshi movement. It is in top 10 private banks in India. Establishment of bank was the fulfillment of the dreams of a group of enterprising men who joined together at Thrissur, a major town (now known as the Cultural Capital of Kerala). In the erstwhile State of Cochin to provide for the people a safe, efficient and service-oriented repository of savings of the community on one hand and to free the business community from the clutches of greedy money lenders on the other by providing need-based credit at reasonable rates of interest.

10. BANDHAN BANK LTD

It is a subsidiary of Bandhan Financial Holdings Limited (BFHL). BFHL is a wholly-owned subsidiary of Bandhan Financial Services Limited (BFSL). It is focussed on serving the unbanked and underbanked population of India. It offers world-class banking solutions and financial services in the form of asset & liability products and services. It offers regular banking services, microfinance, MSME, & affordable housing finance to urban, semi-urban and rural customers. BFSL's public shareholders include International Finance Corporation (IFC), IFC FIG Investment Company, Small Industries Development Bank of India (SIDBI) and Caladium Investment Pte Ltd., a company managed by GIC Special Investments Private Limited. (https://indiancompanies.in/top-10-private-banks-in-india/)

Profile of above Private Sector Banks

Bank	Revenue (Rs.)	NIM (Net interest margin) (%)	CASA (current account savings account) (%)	ATMs (No.)	Branches (No.)	Gross NPA (%)	Customer Base (No.)	5 Yrs. Avg. ROE
ICICI	1,61,336	3.61%	45.2%	14,987	4,874	6.7%	18.5 million	8.1
HDFC Bank	1,55,885	4.3%	48%	13,160	5,103	1.36%	49 Million+	17.3
Axis Bank Ltd	80,848	3.56%	43.2%	11,801	4,094	5.25%	25 million	5.1
Kotak Mahindra Bank Ltd	56,815	4.3%	52.5%	2,352	1,500	1.9%	17 million+	13.5
IndusInd Bank Ltd	35,501	4.05%	43.1%	2,605	1,938	2.15%	9 million+	13.2
Yes Bank Ltd	23,475	2.8%	30.2%	1,450+	1,120	5.01%	-	-7.5
IDFC	18,222	3.15%	15.08%	199	279	2.66%	4 million	-2.5

First Bank Ltd								
Federal Bank Ltd	16,272	3.15 %	31.44 %	1,606	1,251	2.99%	9.7 Million	10.1
Bandhan Bank Ltd	14,633	10.45%	36.06%	481	999	2.04%	24.3 million+	20.7
South Indian Bank Ltd	8,491	2.53%	24.1 %	1,400	870	4.96 %	-	4.7

(https://indiancompanies.in/top-10-private-banks-in-india/)

Literature Review

Tarawneh (2006) found that banks having high total capital, deposits, credits, or total assets do not always means that has healthier profitability performance. Operational efficiency & asset management, in adding to bank size, +vely influenced financial performance of these banks. In light of his empirical study he concluded that operational efficiency & asset mgmt, in addition to bank size, strongly & +vely influenced financial performance of banks.

Ahmad, (2011) in his study of financial performance of 7Jordanian commercial banks used ROA as a measure of banks' performance & bank size, assets mgmt&operationalefficiencyas3independentvariablesaffectingROA.

He concluded that thereis a strong -ve correlation b/w ROA & bank size & with operational efficiency, while, find +ve correlation b/w ROA & asset management ratio.

Khizeret.al. (2011), in his study about profitability indicators of banks in Pakistan for period of 2006-2009 find that profitability is directly & +vely affected by operating efficiency, assets mgmt ratios, & size when using ROA as profitability indicator.

Association b/w profitability & other indicators is different, when using ROE as profitability indicator. ROE is +vely relatedwithassetsmgmt&-veassociationisfindwithsize&operatingefficiency.

SidquiandShoaib, (2011) concluded in their study "Measuring performance through capital structure in Pakistan" that size of bank plays an imp. role in determining profitability of bank using ROE as profitability measure.

In addition, Tobin's Q model was also

used in study to measure banks profitability & performance & found direct & +ve relation with size of banks, leverage ratio & Investments by banks in assets.

Rizivi (2001) conducted a study to analyze productivity of banking sector in Pakistan through 1993-1998 using Data Envelopment Analysis. According to his productivity indices Pakistani banking sector is performing poor due to technological regress & suboptimal combinations of services & products. This should be overcome by providing value added services & increase customer base.

Research Methodology:

Data

Data has been collected from Annual Reports of 2017-18 to 2020-21 issued by Respective Top Ten Private sector Banks of India. Top 10 Private sector banks were taken as a sample for purpose of analysis of financial performance, on the basis of highest sales value.

Table 1.Explanation of Variables

Type of	Variable	Formula
Dependant	RoAs (in %)	Net Income/Total Assets
Dependant	Interest income (in Rs.)	Interest received–Interest Paid
Independent	Size (in Rs.)	Total Assets
Independent	Asset Management (in %)	Operating Income/Total Assets
Independent	Operating Efficiency (in ratio)	Total Operating expenses/Interest Income

*Operating Income is defined as total earnings less total expenses, excluding provisions & contingencies (as per RBI explanatory notes)

Amount Rs. in Crore

Statement Showing Computation of Different Variables

Banks	**Variables**	**2020-21**	**2019-20**	**2018-19**	**2017-18**
HDFC	a. Interest Received	94,834.54	91,787.88	77,544.19	62,661.79
	b. Interest Expended	55,978.66	58,626.40	50,728.83	40,146.49
	c. Interest Income (a-b)	38,855.88	33,161.48	26,815.36	22,515.30
	d. Total Assets	1,746,870.52	1,530,511.26	1,244,540.69	1,063,934.32
	e. Net Profit/Loss	31,116.53	26,257.32	21,078.17	17,486.73
	ROAs = e/d	1.78	1.72	1.69	1.64
	f. Total earnings	120,858.23	114,812.65	98,972.05	80,241.36

	g. Operating Expenses	32,722.63	30,697.53	26,119.37	22,690.38
	h. Operating profit (f-g)	88,135.60	84,115.12	72,852.68	57,550.98
	Asset Mgmt.= h/d	5.04	5.5	5.85	5.41
	Operating Efficiency = g/c	84.22	92.57	97.4	100.78
ICICI	a. Interest Received	57,288.81	57,551.11	47,942.62	40,866.21
	b. Interest Expended	40,128.84	41,531.25	36,386.40	31,940.05
	c. Interest Income (a-b)	17,159.97	16,019.86	11,556.22	8,926.16
	d. Total Assets	1,230,432.68	1,098,365.15	964,459.15	879,189.16
	e. Net Profit/Loss	16,192.68	7,930.81	3,363.30	6,777.42
	ROAs = e/d	1.32	0.72	0.35	0.77
	f. Total earnings	79,118.27	74,798.32	63,401.19	54,965.89
	g. Operating Expenses	21,560.83	21,614.41	18,089.06	15,703.94
	h. Operating profit (f-g)	57,557.44	53,183.91	45,312.13	39,261.95
	Asset Mgmt.= h/d	4.68	4.84	4.7	4.47
	Operating Efficiency = g/c	125.65	134.92	156.53	175.93
AXIS	a. Interest Received	47,918.86	48,302.97	41,322.02	34,137.47
	b. Interest Expended	34,406.17	37,428.95	33,277.60	27,162.58
	c. Interest Income (a-b)	13,512.69	10,874.02	8,044.42	6,974.89
	d. Total Assets	996,118.42	915,164.82	800,996.53	691,329.58
	e. Net Profit/Loss	6,588.50	1,627.22	4,676.61	275.68
	ROAs = e/d	0.66	0.18	0.58	0.04
	f. Total earnings	63,645.29	62,635.16	54,985.77	45,780.31
	g. Operating Expenses	18,375.15	17,304.62	15,833.41	13,990.34
	h. Operating profit (f-g)	45,270.14	45,330.54	39,152.36	31,789.97
	Asset Mgmt.= h/d	4.54	4.95	4.89	4.6
	Operating Efficiency = g/c	135.98	159.14	196.82	200.58
Kotak Mahindra	a. Interest Received	18,589.08	20,999.24	18,371.25	14,727.95
	b. Interest Expended	11,500.62	13,429.95	12,684.25	10,216.81
	c. Interest Income (a-b)	7,088.46	7,569.29	5,687	4,511.14
	d. Total Assets	383,488.62	360,251.68	312,172.09	264,933.40
	e. Net Profit/Loss	6,964.84	5,947.18	4,865.33	4,084.30
	ROAs = e/d	1.82	1.65	1.56	1.54
	f. Total earnings	26,840.27	26,929.61	23,943.21	19,748.50
	g. Operating Expenses	8,584.14	8,850.94	7,514.80	6,425.72
	h. Operating profit (f-g)	18,256.13	18,078.67	16,428.41	13,322.78

	Asset Mgmt.= h/d	4.76	5.02	5.26	5.03
	Operating Efficiency = g/c	121.1	116.93	132.14	142.44
IndusInd	a. Interest Received	24,085.35	24,008.25	18,256.68	13,699.91
	b. Interest Expended	15,471.90	16,724.09	13,414.97	9,783.30
	c. Interest Income (a-b)	8,613.45	7,284.16	4,841.71	3,916.61
	d. Total Assets	362,972.75	307,057.55	277,819.42	221,626.16
	e. Net Profit/Loss	2,836.39	4,417.91	3,301.10	3,605.99
	ROAs = e/d	0.78	1.44	1.19	1.63
	f. Total earnings	28,999.80	28,782.83	22,261.15	17,280.75
	g. Operating Expenses	8,359.83	8,237.35	6,404.68	5,591.44
	h. Operating profit (f-g)	20,762.45	22,378.15	16,669.71	17,280.75
	Asset Mgmt.= h/d	5.72	7.29	6	7.8
	Operating Efficiency = g/c	97.06	113.09	132.28	142.76
YES	a. Interest Received	16,641.97	21,261.19	22,922.64	15,478.24
	b. Interest Expended	12,613.23	19,261.37	19,815.72	12,530.36
	c. Interest Income (a-b)	4,028.74	1,999.82	3,106.92	2,947.88
	d. Total Assets	273,542.77	257,826.92	380,826.17	312,445.60
	e. Net Profit/Loss	-3,462.23	-16,418.03	1,720.28	4,224.56
	ROAs = e/d	-1.27	-6.37	0.45	1.35
	f. Total earnings	20,041.84	26,066.60	29,624.75	20,267.42
	g. Operating Expenses	5,792.02	6,729.21	6,264.28	5,212.78
	h. Operating profit (f-g)	14,249.82	19,337.39	23,360.47	15,054.64
	Asset Mgmt.= h/d	5.21	7.5	6.13	4.82
	Operating Efficiency = g/c	143.77	336.49	201.62	176.83
Federal	a. Interest Received	10,795.12	10,670.87	9,089.62	7,538.78
	b. Interest Expended	8,224.20	8,561.85	7,242.68	6,170.05
	c. Interest Income (a-b)	2,570.92	2,109.02	1,846.94	1,368.73
	d. Total Assets	201,367.39	180,638.05	159,339.99	138,313.95
	e. Net Profit/Loss	1,590.30	1,542.78	1,243.89	878.85
	ROAs = e/d	0.79	0.85	0.78	0.64
	f. Total earnings	13,757.90	13,210.75	11,419.02	9,752.86
	g. Operating Expenses	3,691.72	3,375.61	2,764.27	2,450.90
	h. Operating profit (f-g)	10,066.18	9,835.14	8,654.75	7,301.96
	Asset Mgmt.= h/d	5	5.44	5.43	5.28
	Operating Efficiency = g/c	143.6	160.05	149.67	179.06
IDFC First	a. Interest Received	12,632.98	11,634.54	7,825.54	4,722.95
	b. Interest Expended	8,587.60	10,232.00	8,749.08	7,131.91
	c. Interest Income (a-b)	4,045.38	1,402.54	-923.54	-2,408.96

	d. Total Assets	163,143.88	149,200.40	167,184.86	126,520.18
	e. Net Profit/Loss	452.28	-2,864.21	-1,944.18	859.30
	ROAs = e/d	0.28	-1.92	-1.16	0.68
	f. Total earnings	15,967.86	15,867.31	11,948.17	8,930.00
	g. Operating Expenses	7,093.28	5,420.73	5,886.73	1,652.59
	h. Operating profit (f-g)	8,874.58	10,446.58	6,061.44	7,277.41
	Asset Mgmt.= h/d	5.44	7	3.63	5.75
	Operating Efficiency = g/c	175.34	386.49	-637.41	-68.601
SOUTH INDIAN	a. Interest Received	5,767.63	6,159.17	5,396.44	4,769.18
	b. Interest Expended	4,898.54	5,446.30	4,856.82	4,227.29
	c. Interest Income (a-b)	869.09	712.87	539.62	541.89
	d. Total Assets	94,149.17	97,032.90	92,279.22	82,685.87
	e. Net Profit/Loss	61.91	104.59	247.53	334.89
	ROAs = e/d	0.07	0.11	0.27	0.4
	f. Total earnings	7,305.44	7,763.80	6,876.52	6,192.81
	g. Operating Expenses	1,974.47	1,717.61	1,506.93	1,321.98
	h. Operating profit (f-g)	5,330.97	6,046.19	5,369.59	4,870.83
	Asset Mgmt.= h/d	5.66	6.23	5.82	5.89
	Operating Efficiency = g/c	227.19	240.94	279.26	243.96
BANDHAN	a. Interest Received	10,891.79	9,486.24	5,727.23	3,823.60
	b. Interest Expended	4,960.86	4,561.58	2,147.95	1,770.06
	c. Interest Income (a-b)	5,930.93	4,924.66	3,579.28	2,053.54
	d. Total Assets	114,993.05	91,717.80	56,441.71	44,310.06
	e. Net Profit/Loss	2,205.46	3,023.74	1,951.50	1,345.56
	ROAs = e/d	1.92	3.3	3.46	3.04
	f. Total earnings	12,524.21	10,885.49	6,643.37	4,802.30
	g. Operating Expenses	2,817.16	2,426.54	1,810.28	1,308.31
	h. Operating profit (f-g)	9,707.05	8,458.95	4,833.09	3,493.99
	Asset Mgmt.= h/d	8.44	9.22	8.56	7.89
	Operating Efficiency = g/c	47.5	49.27	50.58	63.71

Results &Discussion:

Table 2. Results of Descriptive Statistics

	ROA	**Interest Income**	**Size**	**Asset Mgmt.**	**Operating Efficiency**
Mean	0.77	7629.35	470904.85	5.77	130.19
Std. Dev.	1.23	8960.63	459357.37	1.14	80.95
Observations	10	10	10	10	10

The mean value of ROA is 0.77; which shows that percentage of ROA is 0.77 which is very low while the Standard deviation is 1.23. The mean value of Interest income is Rs. 7629.35, this shows that value of Interest income is high, while the standard deviation is 8960.63. Size measured as total assets registered a very high mean i.e. Rs. 470904.85 while standard deviation is also high Rs. 459357.37. The mean of Asset management is 5.77 and its standard deviation is 1.14. The mean of Operating Efficiency is 130.19 and its standard deviation is 80.95.

Correlation (r) Analysis

Table 3. Results of Correlation

	ROA	**Interest Income**	**Size**	**Asset Mgmt.**	**Operating Efficiency**
ROA	1.000000	NA	0.13	0.461	-0.292
Interest Income	NA	1.000000	0.9282	-0.2446	-0.292
Size	0.13	0.9282	1.000000	-0.485	0.034
Asset Mgmt.	0.461	-0.2446	-0.485	1.000000	-0.248
Operating Efficiency	-0.292	-0.08063	0.034	-0.248	1.000000

The value of correlation between ROA and size is 0.13.The result of correlations indicates a weak positive correlation between dependent variable (ROA) and independent variable (Size), which is 13 percent. It is also clear from correlation test there positive correlation between dependent variable (ROA) and Asset management (AM) which is 46%. While the relationship between dependent variable (ROA) and independent variable Operating Efficiency is -29.2 percent which shows negative correlation. Result of correlation between Interest Income dependent variable and size shows a strong positive correlation, which is 92.8%. It is clear from correlation test that there is a negative correlation between dependent variable Interest Income and Independent variable Asset Management that is -24.46%. The test indicates the negative correlation between dependent variable Interest Income and independent variable Operating Efficiency that is – 29.2%.

RegressionAnalysis

Table 4. Results of Regression Analysis (Dependant Variable ROA)

Variable	Coefficient	Std. Error	T-Statistic
C	-	2.860	-1.217
Size	0.446	0.00	1.222
Asset Mgmt.	0.640	0.406	1.701
Operating Efficiency	-0.149	0.005	-0.453
R-squared	0.396	F-statistic	1.313
Adjusted R-squared	0.095		

ROA with independent Variables

Bank Size

Bank size shows positive relationship with ROA with a coefficient of 0.446.This result indicates that with a 1percent increase in the Bank size, there is **0.446** Percent increase in ROA of a firm. There is a significant relationship between ROA and bank size. Thus we accept our first hypothesis about ROA and size of Bank.

Asset Management

According to the results, Asset Management is positively related with ROA with a coefficient 0.64. The regression co-efficient is also found to be statistically significant. Therefore we confirm our second hypothesis is accepted.

Operating Efficiency

According to the results, Operating Efficiency found to be negatively related with ROA with coefficient -0.149. However the relation in this study proves to be statistically significant, which makes third hypothesis to be accepted.

Table 5. Results of Regression Analysis (Dependant Variable Interest Income)

Variable	Coefficient	Std. Error	t-Statistic
C	-	7590.932	-1.66763
Size	1.05235	0.002597	7.9041
Asset Mgmt.	0.252167	1076..445	1.836048
Operating Efficiency	-0.05415	13.3045	-0.45057
R-squared	Adjusted R-squared	F-statistic	
0.919	0.879	22.840	

Interest Income with Independent Variables

Bank Size

It has been observed that Bank size is positively related with Interest Income with a coefficient of1.05235.There is a strong significant relationship between Interest income and bank size at 0% level of significance. Thus we reject our fourth hypothesis about Interest income and Bank size.

Asset Management

The result indicates that Asset Management is positively related with Interest Income with coefficient 0.252167. There is a significant relationship between Interest Income and Asset Management. Thus we accept our fifth hypothesis about Interest Income and Asset Management.

Operating Efficiency

According to the results, Operating Efficiency is negatively related with Interest Income with coefficient-0.05415. The relation in this study proves to be statistically significant which confirms that the sixth hypothesis is accepted.

Conclusion:

This study examines the impact on the financial performance of Indian private commercial Banks. Top ten Private commercials banks were taken as a sample for the purpose of analysis of financial performance. Returns on asset and interest income were taken as dependent variables while bank size, asset management and operating efficiency were taken as independent variables. Results showed that the ROA of the banks were strongly and positively influenced by the bank size. Asset Management is also positively related with ROA. Operating efficiency is negatively related with the ROA and results also showed that it was statistically significant so third hypothesis is also accepted. Other dependent variable interest income of the banks was strongly positive influence by the bank size and is statistically significant. It also positively related with Asset Management. Interest income showed negative relation with the operating efficiency and results were also statistically significant. On the practical dimension, this study is helpful for bankers in their decision making to increase the bank financial performance.

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Mutual Fund Investments Influence Indian Economy in a Globalized Era

Mrs. Archana[1], Dr. Rajendra Khatik[2]
[1]Research scholar, [2]Associate Professor, Department of Commerce and Business Studies
Jiwaji University, Gwalior (M.P.)

Abstract

Mutual Funds, regardless of the amount invested provide a platform for the common person to participate in the Indian Capital market with professional fund management. The mutual fund sector in India is quickly expanding, as seen by the increase of assets under administration at various fund institutions. Mutual funds are less hazardous than investing directly in equities, making them a safer option for risk averse investors. Monthly Income Plan funds offer monthly returns and invest majorly in debt oriented instruments with little exposure to equity. However it is observed that most of the investors are not aware with investment benefits in mutual funds, which is discussed in this paper. This paper makes an attempt to explore the numerous elements that influence investors' perception of mutual fund investment. The finding will assist mutual fund businesses in identifying areas that require development in order to raise investor knowledge of mutual fund investment. This study sheds light on the many form of hazards that might be found in a mutual fund schemed. The information was gathered from both mutual and non-mutual investors in this business. the study investigates the link between investment decisions and factors such as liquidity had an impact on an investor's decision to invest in mutual fund.

Keywords: Financial Instruments, Investors' Decision, Risk Return, Factors Affecting Mutual Fund Investment and SEBI Initiative.

Introduction

A Mutual Fund is a trust that pools the savings of a group of individuals with similar financial goals. The funds raised are subsequently invested in capital market instruments such as stock, bonds and other assets. The income generated by these assets, as well as capital gains obtained, are distributes to unit holders in proportion to the number of units they own. As a result, a mutual fund is a best investment for the average person because it allows them to invest in a diversified, professionally managed basket of securities at a reasonable cost. Monthly income plans, or MIPs, invest the majority of the assets in debt instruments and have very little exposure to stocks. It enjoys the advantages of both. It gets benefit of both equity and debt market. These schemes rank slightly high on the risk-return matrix when compared with other debt schemes. There is considerable amount of research being done regarding investment in mutual funds. However, relatively little research has been done to investigate investor perceptions of mutual funds, particularly MIP funds. The Indian financial market s growing increasingly competitive and the supply of various financial products must be in balance with investors' demand expectations. The goal of any investment is to achieve the best possible return with least amount of risk, and mutual funds give investor that option. The study sheds light on the many forms of hazards that might be found in mutual fund scheme. The information was gathered from both mutual fund and non-mutual fund investors in this business.

The study investigates the link between investment decisions and factors such as liquidity, financial awareness, and demographics. It was discovered that low risk fund and fund scheme liquidity had an impact on an investor's demand expectations. The goal of any investment is to achieve the best possible return with least amount of risk, and mutual funds give investors that option. The expansion of the capital market is linked to a country's economic growth. Capital market growth depends on the savings of the country. In India, notwithstanding a high rate of savings by the community, the capital market is not able to grow fast because the common man has not acquired the necessary knowledge and expertise to select appropriate avenues of investment which will serve his needs. In this context, mutual funds, one of the main constituents of the capital market have emerged as an important segment in the Indian financial sector.

Mutual fund have become a popular investment instrument in the Indian financial sector over the last twenty years or more. A mutual fund is a type of investment vehicle. The popularity of mutual funds has skyrocketed in recent years. Banks rates have plummeted recently, and storing significant sums of money in the bank is no longer a prudent decision, as the value of money decline in real terms over time. One alternative is to put the money into the stock market. However, the average investor is neither well-informed nor skilled enough to comprehend the complexities of the stock market. Mutual funds can help in this situation

Review of Literature

Syama Sunder (2018) conducted a survey with the goal of gaining an in-depth understanding of the functioning of private sector mutual funds, with the focus on Kothari Pioneer, According to the Poll, knowledge of the mutual fund concept was lacking in tiny towns like Visakhapatnam at the time. It was also indicated that agents can help to catalyze mutual fund culture, that open minded option are far more popular than other schemes, and that the brand of the asset management organization is the most important factor to consider when investing in mutual funds.

Madhusudhan V Jambodekar (2017 his research was carried out to assess the direction of mutual funds in the eyes of investors and to discover elements that influence mutual fund investing decisions. According to the study, open-ended schemes are chosen over close-ended and growth schemes. The utilization of news media as a source of information, as well as the safety of the main amount and investor services, are all important consideration when investing in mutual fund

SujitSikidar and Amrit Pal Singh (2017) conducted a survey to learn more about the behavior of investors in North-Eastern region when it comes to investing in stocks and mutual funds. According to the report, salaried and self-employed people favour mutual funds because of the tax benefits. In the part of the country, UTI and SBI Schemes were chosen over all others, while the other funds were found to be archaic at the survey.

Gupta (2016)surveyed household investor to learn about their preferences for mutual funds and other financial assets.. the study's conclusions were more important to policymaker and mutual funds designing financial products for the future at the time.

Shanmugham (2016) conducted a survey of individual investors with the objective to find out what information source investor depends on. The results concluded that they are economical, sociological and psychological factors which control investment decisions

De Bondt and Thaler (2015) suggested that investor retrogression is underpinned by mean reversion in stock prices, which is based on investor psychology to overvalue a firm's current performance in generating future expected results, also known as the endowment effect.

Ippolito (2014 states that an investor is ready to invest in those fund or schemes which have resulted in good rewards and most investors' are attracted by those funds or schemes that are performing better over the worst.

Goetzman (2014) opined that investor's psychology affects mutual fund selection for investment and to withdraw from the fund.

Objectives

1. To checkout the investment pattern of Indian Investor.

2. To evaluate the awareness level of investors regarding mutual funds.

3. To explore the type of scheme of mutual fund preferred by investor.

4. To ascertain the most preferred factor for investing in MIP fund.

Research Methodology

The basic goal of an investor is to achieve larger return while keeping risk and liquidity in mind. An investor searches for numerous investment opportunities with this goal in mind. When compared to a direct stock market investment, mutual funds offer higher retuens and lower risk. An attempt has been made in this research article to access investor perception of mutual fund investment. The study' data was primarily gathered from secondary information sources. Websites, books, SEBI bullions and journals are the examples of secondary sources. The data has been evaluated on the interpretations.

FACTORS AFFECTING MUTUAL FUND DECISION

The various parameters that affect the decision making of investors in mutual fund industry can be categorized as:

1. Risk factor
2. Return factor
3. Liquidity factor
4. Consistency factor
5. Awareness factor
6. Specialization factor

1. *Risk Factors:*

All the investments in the mutual fund and securities are subjected to market risk and the NAV of the schemes may vary depending upon the factors and forces affecting the securities market.

In this respect, the offer documents/SAI/SID/KIM may be helpful to the investors. All mutual funds also required to disclose the risk factors in their offer documents which are faced by the funds and thus by the investors. All the risks associated in a mutual fund investment can be grouped as:

A. Market risk: Stock prices are always sensitive to what is happening in an economy (local, national, international). Performance of an economy has inverse correlation with the risk involved. Market risk may include:

i) *Country risk*: The risk in foreign investment changes as per the political instability in a country where the investment was issued.

ii) *Political risk*: The risk in national investment changes because of political instability in home country like political unrest, government regulations, terrorism and other social changes.

iii) *Interest rate risk*: Long term and fixed income securities such as bonds and preferred stocks have the greatest amount of interest rate risk while shorter term securities like treasury bills and money market instruments affected less.

iv) *Currency risk*: It refers to the possibility changes in the price of one currency which will affect another. If the currency of home country declines against foreign currency the investment will lose value.

B. <u>Liquidity risk</u>: Liquidity risk refers to the possibility that an investor may not be able to buy or sell an investment as and when desired or in sufficient quantities because opportunities are limited. The liquidity of a stock depends upon the nature of the fund. Investment in equity funds hold volatility from time to time whereas debt funds hold a risk of interest rates.

C. <u>Credit risk</u>: This refers to the possibility that a particular bond issuer will not be able to make expected interest rate payments and/or principal repayment. Credit risk occurs when bonds of a particular company being downgraded by the rating agencies causing lower price. There is a risk whether the fund has been invested in higher grade investment securities as a company can default in terms of paying interest or principal or both. It can also be tuned as D.

D. Default risk: A diversified portfolio of investments is the best way to manage risk. There are various ways to mitigate the risks:

i) Having equity mutual fund exposure within the risk tolerance.

ii) Ensuring that debt mutual fund exposure is well spread out.

iii) Having adequate exposure to debt assets outside to mutual fund.

iv) Ensuring the general assessment of risk. If the fund's return varies a lot it may be considered a higher risk because its performance can change quickly in either direction.

2. *Return Factors*

It is the percentage increase or decrease in the value of the investment in a particular period.

The return on mutual funds can be calculated in three different degrees:

a) Absolute Return (Point to Point Return): Absolute return is the simple increase (or decrease) in investment in terms of percentage. It does not take into account the time taken for this change.

The absolute return method is used if the tenure of investment is less than 1 year.

b) Compounded Annual Growth Rate (CAGR): CAGR method is used to calculate return for

the period beyond one year for the investment in mutual funds. These are annualized in compounding effect. Hence it is also known as Annualized Return.

c) Total Return: This method overcomes the limitation of Absolute Return by including dividends.

3. *Liquidity Factors*

Before the global financial crisis liquidity factors of any investment was not on everybody's radar. Liquidity risk can be categorized as:

1. Funding (cash flow) liquidity: It tends to manifest a credit risk that is inability to fund liability produces defaults. The basic

ways of its measurement are current ratios and quick ratios

2. Market (Asset) liquidity: It tends to manifests as market risks that is inability to sell an asset at time of requirement i.e. the market price indecipherability of a stock. The market liquidity of an investment can be measured in respect of width (bid ask spread), depth (position size) and resiliency. However, Mutual funds are required to fulfill shareholder redemption requests within seven days. As a result, funds must maintain sufficient liquidity in order to meet redemptions, and to minimize the impact on remaining shareholders.

4. *Consistency Factors*

The investments in mutual funds depend upon the need of the investor. For example, debt investments may not be appropriate for investors of short term objectives. For medium to long term objectives, equity fund investments are advisable. Historical long term performance, while a good indicator of fund's potential, does not guarantee future performance. The consistency of a fund's performance can be measured in terms of its performance with respect to its benchmarks and category average. In a bearish mode market, the returns may be negative, but the funds that fall less than their benchmarks or category average are outperformers. Similarly, in the bull market the outperformers are those that gain more than their benchmarks or category averages. Such funds beat the market and entails superior and advanced fund management skills. CRISIL accords special importance to consistent performers. As such, they have a separate ranking based on consistent returns

5. *Awareness Factors*

From investor's point of view, the level of awareness of mutual funds can be termed as the first and foremost stage for investment in any such fund. A survey says that if the investors have been provided more funds, 50 per cent of the investors would like to invest in the Real Estate, followed by 23 per cent in Mutual Funds and only 2 percent in Equity Shares. According to the another survey, due to tax benefits high-income salaried and self-employed individuals are largely investors. Small company owners, farmers and people from rural and semi-urban areas in the low-income group were found to be unaware of mutual funds. Given the importance of the investor knowledge and protection, particularly in light of the global economic catastrophe, the govt, has decided to establish a committee to raise investor awareness, one of the key priority areas of regulators, govt., and other stakeholders has been investor knowledge and protection.. the global financial crisis has furthur underlined the need of the financial understanding. "as a result, it was agreed to form a committee," the govt. stated in a statement(April4, 2009, ET Bureau). Whereas the newspapers and magazines are another source of information about various mutual fund schemes.

6. *Specialization Factors*

In the context of specialization, financial literacy plays a vital role. Financial literacy is vital if mutual funds are to extend their reach to smaller towns. The financial knowledge is needed to fully participate in the economy or to make informed decisions about own financial futures. A financial ignorant person suffers from financial diseases like underinsurance, debt trap, insufficient retirement funds and low return on investment. Three-fourth of Indian adults do not adequately understand key financial concepts such as inflation, compound interest and risk diversification, Standard & Poor's Ratings Services said. This is lower than the worldwide average of financial literacy, but roughly in line with other BRICS and South Asian nations. In comparison, 57 percent of adults in US and 67 percent in UK are financially literate. (ET Bureau Dec 15, 2017). Investors are under great stress as a result of financial product developments and increased complexities. As a result, it is urged that financial literact be taught in schools. The investor education and protection fund(IEPF) of the BSE already exists, with one rupee from every stock exchange transaction going to a financial literacy fund. It is necessary to increase the amount of money available for conducting additional seminars and promoting financial literacy.

Changes to Mutual Fund Industry – SEBI Initiatives

SEBI has dictated various initiatives and directives to regulate the mutual fund industry and to protect investor interests. These can be classified into three segments –

1. Protecting investor interests – SEBI has introduced various directives to protect investor interests. These are as follows:

   a) Promote transparency by introducing higher disclosures by an Asset Management Company (AMC).

   b) Prevent mis-selling by making changes to the commission structure.

   c) Merging me-too schemes and not giving approval to NFO issuances that are in non-compliance to this rule.

   d) Introducing "risk meter" infographics in all mutual fund product brochures in a comprehensive and easily understandable format.

2. Increasing reach and lowering costs – SEBI offers the following solutions for increasing reach and lowering costs:

a) The launch of the MF Utility Portal, which will allow investors to trade using a single Account Number.

b) TER will be differentiated in areas other than T15 to encourage the selling of direct plan

c) Compiling and distributing consolidated account statements.

3. Protecting the mutual fund industry's health-

SEBI has established the following regulations to protect the mutual fund industry's health in India:

a) Proposing the study of compensation details for determining AMCs' fixed cost.

b) Consistently conducting stress testing.

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Prof. Koli has twenty-three years of teaching and research experience in Auditing, Management Accounting, Social Accounting and International Financial Management etc. He has participated and presented papers in IInd Round Table Conference at GNDU Amritsar (organized by All India University Association, New Delhi) and other important Conferences (All India Accounting Association and All India Commerce Association). He has published more than 50 noteworthy Articles and Research Paper in reputed Journals and Magazines like The Management Accountant and BVIMR Management edge. He has also published 8 Books in the field of Commerce and Management. More than 15 Ph.D Theses and more than 12 M.Phil Dissertations have been guided by him. He has organized more than Ten National and International Conferences under his Chairmanship.

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