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From the Desk of Chief Editor ...

Welcome to the Volume 3 Issue 1 of the RVIM Journal of Management Research. RVIM Journal of Management Research comprises of original research based papers in the area of Management. The current issue of the Journal include Papers and cases that will widen the horizon in management thoughts. The articles reflect the original thoughts, ideas, opinions and beleifs that will encourage professional thinking. A double blind referral process is involved in selecting the articles for this journal. This Journal would serve as a channel for knowledge sharing among academicians and practicing managers. We hope this will fulfil the information and practical application needs of researchers across the globe. We hope the readers will throughly enjoy the papers presented in the Journal and give thiere valuable feedback.

Dr. T V Raju,
Director, RVIM.

CONTENTS

LEVERAGING AND DIVIDEND PRACTICES IN INDIAN CORPORATES– A CASE STUDY

Anju B Nandrajog*

Abstract: *A proper mixture of debt and equity is a significant financial decision of the corporate firm from the perspective of its shareholders and other stakeholders. The excessive use of debt may endanger the survival of a corporate firm while the conservative policy may deprive the advantage of cheaper debt. An appropriate capital mix influences both the return and risk of the shareholders. The proper and efficient management of capital structure yields two advantages: (1) maximization of profit and wealth of shareholders, and (2) minimization of cost of capital and risk. Therefore, the objective of a firm should be directed towards the maximization of the firm's value. The capital structure or financial leverage decision should be examined from the point of its impact on the value of the firm. In the dividend decision the company's policy to retain or distribute earnings affects the owner claims. Thus the dividend decision has a bearing on the capital structure of the company. So the financial manager is confronted with the task of determining determinants of a capital structure of the firm, which on the one hand maximizes the wealth of the owners and on the other hand minimizes the cost of funds. The present study examines the trends in dividend payout as well as leverage ratios of CIPLA pharmaceutical Limited over the period 2000-2010.*

Key Words: *Leverage, Capital Structure, Dividend, EPS, Debt- Equity Ratio*

Introduction:

The main objective of financial management in any management organization is value maximization. The value/wealth maximization criteria is based on the concept of cash flows generated by the investment decision and also the value maximization is used in terms of worth to the owners i.e. equity shareholders. Wealth maximization implies the maximization of the market price of shares. Leverage, Capital Structure and Dividend policies are the important decision areas in financial management. So the finance manager must decide when, where from and how to acquire funds to meet the firm's investment needs. The central issue before him or her is to determine the appropriate proportion of equity and debt. The mix of debt and equity is known as the firm's capital structure. The financial manager must strive to obtain the best financing mix or the optimum capital structure for the firm. The firm's capital structure is considered optimum when the market value of shares is maximized. Whereas in dividend decision financial manager must decide whether the firm should distribute all profits, or retain them, or distribute a portion and retain the balance. Like the debt policy, the dividend policy should be determined in terms of its impact on the shareholder's value. This paper concentrates on these three areas, its impact on the solvency and financial performance of the firm. It mainly studies the leverage, capital structure and dividend policies and practices of CIPLA Pharmaceuticals Limited, over a period of 2000-2010.

Review of Literature:

Mishra and Narendra (1996) analyse the dividend policies of 39 state-owned enterprises (SOE) in India for the period 1984-85 to 1993-94. They find that earnings per share (EPS) are a major factor in determining the dividend payout.

Pitabas Mohanty(1999) has observed the dividend paying behaviour of more than 200 Indian companies over 15 years. A study of the dividend and bonus policies of Indian companies revealed that most of the companies do not maintain a constant payout ratio. Most of the companies reward their shareholders by offering a bonus issue. The dividend rate does not fall proportionately in most cases and hence the cash dividend paid to the shareholder increases after a bonus issue.

Narasimhan and Vijayalakshmi (2002) analyze the influence of ownership structure on dividend payout of 186 manufacturing firms. Regression analysis shows that promoters' holding as of September 2001 has no influence on average dividend payout for the period 1997-2001.

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Oza (2004) study on thirty non financial Indian companies dividend behavior finds that current earnings is the most influencing factor while deciding on dividend policy followed by pattern of past dividends.

Singhania Monica (2005) in her studies examines the trends in dividend payout of select Indian companies over the period 1992–2004. The study was based on 590 companies listed on the Bombay Stock Exchange. During the study it was found that a major proportion of the sample companies (over 50% throughout the period of study) followed a dividend policy of part retention and part distribution of profits.

R. Azhagaiah (2008) has examined the impact of dividend policy of shareholders' wealth in Organic and Inorganic Chemical Companies in India during 1996–1997 to 2005-2006. He found that as far as the dividend paying companies are concerned, there is a significant impact of dividend policy on shareholders' wealth in Organic Chemical Companies. Whereas, as far as the Inorganic Chemical Companies are concerned, the shareholders' wealth is not influenced by the dividend payout.

Pruitt and Gitman (1991) found that risk (year to year variability of earnings) also determines the firms' dividend policy. A firm that has relatively stable earnings is often able to predict approximately what its future earning will be. Such a firm is more likely to pay a higher percentage of its earnings than a firm with fluctuating earnings. In other studies, Rozeff (1982), Lloyd et. al. (1985), and Colins et. al. (1996) used beta value of a firm as an indicator of its market risk. They found statistically significant and negative relationship between beta and dividend payout. Their findings suggested that firms having higher level of market risk will payout dividends at lower rate. D'Souza (1999) also found statistically significant and negative relationship between beta and dividend payout.

Thus, Dividend decision in the corporate sector is governed by a large number of determinants. The foregoing discussions on the review of empirical studies disclose that profit, cash flow, lagged dividend, capital expenditure, retained earnings, flow of external fund, cost of debt, changes in sales, share price behaviour etc., are expected to have a direct bearing the dividend policy decision of the firms.

Research Methodology:

Objectives of the Study:

- To study the operating, financial and combined leverage of CIPLA pharmaceutical Ltd. during the period of 2000-2010
- To know about the impact of fixed charges on Earnings before Interest and Taxes (EBIT) and Earning per Share (EPS).
- To understand the capital structure policies and practices in CIPLA pharmaceutical Ltd. And its impact on Market Price per Share (MPS)
- To know about the dividend policy of the company and its influence on Price-Earning (P/E) and MPS.

In this study capital structure, debt equity ratio, interest coverage ratios are calculated. D/E ratio is compared with market price for analysis and interpretation. For studying the dividend policy, ratios like dividend per share, earnings per share, dividend yield, earnings yield and P/E ratio have been computed with the help of appropriate formulas.

Sample Period

The period under study is 2000-2010.This period of 10 years covers a business cycle of CIPLA pharmaceutical limited. The period chosen covers both recessionary and booming phase of market.

Nature and Sources of Data

The paper is analytical in nature and makes use of secondary data and the data is mainly collected from annual reports, brochures of CIPLA, magazines, National Stock Index and web sites of the organization. The average market price of share is based on the closing price of share at the end of each month quoted in NSE. For computation of operating and financial leverage, the year 2000 is taken as the base year.

Data and Variable Construction

EBIT = Earnings before Interest and Taxes

EPS = Earnings per Share

DOL = Degree of Operating Leverage

DFL = Degree of Financial Leverage

EBT= Earnings before Taxes

EAT= Earnings after Taxes

D/E Ratio = Debt- Equity Ratio

DPS = Dividend per Share

DY %age= Dividend Yield percentage

EY %age = Earning Yield Percentage

P/E Ratio = Price Earnings Ratio

DOL= % change in EBIT/ % change in sales

DFL= %change in EPS/ %change in EBIT

Analysis of leverage of CIPLA

In financial management, the term leverage is used to describe the firm's ability to use fixed cost of assets or funds to increase return to its owners i.e. equity shareholders. It provides the framework for financing decisions of a firm. Leverages are of three types

(1) Operating Leverage

(2) Financial Leverage

(3) Combined Leverage

Operating Leverage (OL)

Operating Leverage refers to the use of fixed costs in the operations of a firm. It affects a firm's operating profit (EBIT). It studies the sensitivity of EBIT to sales. The firm's operating leverage would be higher if the firm has high quantum of fixed cost and low variable cost. The low operating leverage represents the high variable cost and low fixed cost. A company with high proportion of fixed costs to total costs will have a high operating leverage. A company with a high operating leverage will have higher break-even level. The degree of operating leverage is defined as the percentage change in the earnings before interest and taxes relative to a given percentage change in sales. From safety point of view, the operating leverage should be rather low. Thus:

There is presence of operating leverage in the firm if: **DOL > 1**

Analysis of Leverages with reference to CIPLA

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sales	759.75	966.68	1400.51	1460.27	1923.02	2254.5	2991.93	3572.14	4226.81	5270.54	5630.01
EBIT	173.8	238.4	311.47	314.21	414.47	522.24	721.26	807.78	842.25	943.62	1259.17
Interest	1.14	0.83	2.10	1.72	10.39	7.63	11.42	6.96	11.59	33.54	23.66
EBT	172.66	237.57	309.37	312.49	394.44	514.61	709.84	800.82	830.66	910.08	1330.51
Tax	39.60	58.50	74.25	64.75	87.75	105	102.2	140	130.18	142.25	248.5
EAT	133.06	179.07	235.12	247.74	306.69	409.61	607.64	660.82	700.42	767.83	1082.01
EPS	22.19	29.86	39.21	41.31	51.14	13.66	20.26	8.50	9.01	9.88	13.48

Degree of Operating Leverage (taking 2000 as base)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
%age change in EBIT	--	37.17	79.21	80.79	138.48	200.48	315	364.78	384.61	442.93	624.5
%age change in Sales	--	27.24	84.34	92.2	153.11	196.74	293.8	370.17	456.34	593.72	641.03
DOL	--	1.36	0.94	0.88	0.90	1.02	1.07	0.99	0.84	0.74	0.97

Analysis: If the firm is operating with high leverage a proportionate change in sales will brings a more than proportionate change in EBIT and vice-versa. From the above table it is clear that in year 2001 DOL of 1.36 implies that for a given change in CIPLA's sales, EBIT will change by 1.36 times and it can be explained for the other years also. In the above table the company is operating with lower operating leverage. In most of the years company's operating leverage is less than 1, like the years except 2001, 05 and 2006 it is less than 1. So it is clear that the company is using the high variable cost and low fixed cost. The lower the operating leverage ratio less risky is the situation. A low ratio indicates a larger absorption capacity of a firm in times of adversity. In the tenure of 10 years there are more or less ups and downs in the operating leverage and the firm is almost safe.

Financial Leverage (FL)

The use of fixed charges capital like debt with equity in the capital structure is described as financial leverage or trading on equity. The main reason for using financial leverage is to increase the return of equity shareholders. Financial leverage studies the sensitivity of EPS to EBIT. When the economic conditions are good and the firm's EBIT is increasing, its EPS increases faster with more debt in the capital structure. The degree of financial leverage (DFL) is defined as the percentage change in EPS due to a given percentage change in EBIT.

Degree of Financial Leverage and D/E Ratio

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EBIT	173.8	238.4	311.47	314.21	414.47	522.24	721.26	807.78	842.25	943.62	1259.17
EBT	172.66	237.57	309.37	312.49	394.44	514.61	709.84	800.82	830.66	910.08	1330.51
DFL	1.01	1.02	1.01	1.01	1.05	1.01	1.02	1.01	1.01	1.04	0.95
D/E	0.03	0.033	0.038	0.089	0.17	0.13	0.24	0.038	0.15	0.22	NA
EPS	22.19	29.86	39.21	41.31	51.14	13.66	20.26	8.50	9.01	9.88	13.48

Analysis: As the rule of thumb, Higher the DFL ratio, the lower the cushion for paying interest on borrowings. A low ratio indicates a low interest outflow and consequently lower borrowings. It is very clear from the table that the degree of financial leverage and the debt-equity ratio of company are positively correlated. If the degree of financial leverage increases, then the debt-equity ratio also increases and vice-versa. For instance, in the year 2004, D/E ratio increased from 0.089 to 0.17, the DFL also increased from 1.01 to 1.05 and so on; this shows that there is positive correlation between DFL and D/E ratio. Later on as D/E ratio declined in 2005, DFL also declined.

This trend can be clearly understood with the help of the table. On an average the company is following a stable financial leverage which is between 0.95 and 1.05 in the 10 years. So the company didn't have the problem of servicing its debt.

Another interesting point is that there is no considerable relationship between the degree of financial leverage and Earning per Share (EPS) as the debt equity ratio is more or less stable, and sales are increasing year by year, the EPS is also increasing irrespective of the changes in financial leverage up to 2004 but there is a drastic reduction in EPS during the years 2005-10. That means the effect of fixed charges sources of funds on EPS is very less.

Combined leverage:

Both financial and operating leverages magnify the revenue of the firm. The degree of Operating Leverage (DOL) and Degree of Financial Leverage (DFL) can be combined to see the effect of total leverage on Earnings per Share (EPS) associated with a given change in sales. The combined leverage is also called total leverage. The methods of production employed, which are reflected in the asset structure of the firm, influence its operating leverage. For example, substituting machinery for labour usually increases operating leverage. The capitals sources employed, which are reflected in the capital structure of the firm, influence its financial leverage. For example, substituting debt for common stockholders' equity increases financial leverage. Degree of total leverage can be calculated as follows:

DTC (Degree of Total Leverage) = Operating Leverage* Financial Leverage

Or = Contribution/EBT

Or %change in EPS/%change in Sales

DTC measures the sensitivity of EPS to change in quantity produced and sold.

We combine Operating leverage and Financial Leverage to assess the impact of all types of fixed costs on the firm. High operating leverage may be balanced off against lower financial leverage, if this is deemed desirable and vice versa. On the other hand, dividend payment to shareholders can be cut in emergencies when the firm uses only stock in capital structure designing. A percentage change in EBIT results more than a proportionate change in earning per share. The combined effect of different degrees of operating and financial leverage on the firm is explained as follows:

Operating Leverage	Financial Leverage	Effect/Conclusion
High	high	Very risky. High interest outflow, not commensurate with earnings
High	Low	Sales still unsatisfactory in relation to the fixed costs to be absorbed. Long -term borrowings not a strain on earnings
Low	High	Ideal situation for profit maximization
low	Low	Management overcautious

Degree of Combined Leverage

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
DOL	--	1.36	0.94	0.88	0.90	1.02	1.07	0.99	0.84	0.74	0.97
DFL	1.01	1.02	1.01	1.01	1.05	1.01	1.02	1.01	1.01	1.04	0.95
DCL	--	1.39	0.95	0.89	0.95	1.03	1.09	1	0.85	0.77	0.92

Analysis:

From the above table it is clear that there is a positive relationship between DOL and DCL. In the previous 10 years if DOL was increasing then DCL was also increasing and vice versa. As DFL is more or less stable, the DCL is highly dependant on DOL. In the year 2001, DCLwas very high because DOL was also high as compared to other years. Similarly , DCL was very low in year 2009 because of low DOL in that year. So it's clear that DCL is more affected by the DOL as compared to DFL.

Capital Structure:

The two principle sources of finance available to every concern are debt and equity. The capital structure of a firm should be planned in such a way that the cost of servicing the debts should be minimum and the return should be maximum. While developing an appropriate capital structure, the financial manager should aim at maximizing the market value of the share. Such a capital structure can be determined empirically.

Capital Structure and Debt Service

Source: Annual reports of CIPLA Ltd.

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Debt	19.57	24.03	33.88	94.79	210.59	195.04	468.91	123.56	580.53	940.24	NA
EBIT	173.8	238.4	311.47	314.21	414.47	522.24	721.26	807.78	842.25	943.62	1259.17
Interest	1.14	0.83	2.10	1.72	10.39	7.63	11.42	6.96	11.59	33.54	23.66
Net Worth	575.51	724.66	890.14	1070.08	1264.05	1553.63	1983.27	3236.27	3755.82	4350.75	NA
D/E	0.03	0.033	0.038	0.089	0.17	0.13	0.24	0.038	0.15	0.22	NA
Int. Coverage (no. of times)	152.46	287.2	148.3	182.68	39.89	68.45	63.16	116.06	72.67	28.13	NA

Source: Annual reports of CIPLA Ltd.

Analysis of Capital Structure of CIPLA

D/E ratio is the most significant of leverage ratios as it gives the composition of the long-term funds of the firm in terms of the stake of the owners and outsiders in the business. A high ratio indicates large outside borrowings and consequently a larger outside stake in the business. The company has been following a very conservative policy through the years. The company D/E ratio is very low in the last ten years. Generally it's negligible and varies from 0.03 to 0.24 and its fluctuation is very low.

By observing the table, it is very clear that the debt equity ratio and interest coverage have no correlation. The company's interest coverage ratio has been fluctuating during the last ten years. It was 287.2 times in the year 2001 and was reduced to 39.89 times in 2004, and again it started to shoot up and reached the level of 116.06 in 2007 and then sharply decline to 28.13 up to the year 2009. So from here we see that the company is in safer position of debt providers because the more the number of times interest earned, safer the position of debt providers. It can be concluded that the company is using very low debts and all the debts holders are in safer side in respect of their funds as well as interest payments. But from the year 2008 to 2009 company is using more debts which reduce its interest coverage ratio and increase D/E ratio. Still the company has a large reserve debt capacity providing it with financial capability to easily fund its diversification, modification and expansion programs.

It is significant to note that in spite of the ups and downs in debt-equity ratio and interest coverage ratio, the average market price is not affected by these policies. Thus the debt equity and average market price of CIPLA are not closely related.

Effect of Interest on Sales

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sales	759.75	966.68	1400.51	1460.27	1923.02	2254.5	2991.93	3572.14	4226.81	5270.54	5630.01
Interest	1.14	0.83	2.10	1.72	10.39	7.63	11.42	6.96	11.59	33.54	23.66
Int. as % on sales	0.15	0.09	0.15	0.12	0.54	0.34	0.38	0.19	0.27	0.64	0.42
Int. Coverage (No. of times)	152.46	287.2	148.3	182.68	39.89	68.45	63.16	116.06	72.67	28.13	NA

If we observe the above table we find that sales are increasing year by year but the percentage of increase varies from year to year. And it also shows that the interest covers only a small part of the annual sales. In all the previous ten years interest covers only less than 1 percent share of sales. Due to having in high interest coverage company is in safer mode for payment of interest on debts and in future when so ever company wants to raise funds through debts it can be easily raised.

Dividend Policy and Practices:

Shareholders of every company expect two forms of returns, dividend and capital gains. A major decision in financial management is the dividend decision in the sense that the firm has to choose between distributing the profits to the shareholders and plugging them back to the business. Dividend policy determines what portion of earnings will be paid out to stockholders and what portion will be retained in the business to finance long-term growth. Both dividends and growth are desirable but are conflicting to each other. This situation is an existing challenge for the financial manager and necessitates the need to establish an optimum dividend policy that has no adverse effect on the future progress of the firm.

Capital Structure and Market Price

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Debt	19.57	24.03	33.88	94.79	210.59	195.04	468.91	123.56	580.53	940.24	NA
Net Worth	575.51	724.66	890.14	1070.08	1264.05	1553.63	1983.27	3236.27	3755.82	4350.75	NA
D/E	0.03	0.033	0.038	0.089	0.17	0.13	0.24	0.038	0.15	0.22	NA
Average Market Price	1109.59	993.04	1017.43	714.82	1156.16	255.78	656.46	235.58	221.41	221.02	339.04

Source: Annual Reports of CIPLA and NSE Stock Prices

Analysis:

From the above table it is clear that there is no correlation between the D/E ratio and average market price of shares. As debts are increasing, net worth is also increasing and D/E ratio is also increasing but there is no stable change in the market price of share. But we see that during the period of depression CIPLA share price also decreased sharply from 2007-09 but after the recovery of market it's started increasing.

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EPS	22.19	29.86	39.21	41.31	51.14	13.66	20.26	8.50	9.01	9.88	13.48
DPS	NA	NA	NA	NA	NA	3.50	2	2	2	2	NA
Average Market Price	1109.59	993.04	1017.43	714.82	1156.16	255.78	656.46	235.58	221.41	221.02	339.04
Payout %age	--	---	---	---	---	0.26	0.098	0.23	0.22	0.20	NA
DY %age	---	---	---	---	---	1.37	0.30	0.84	0.90	0.90	NA
EY%age	2	3	3.85	5.78	4.42	5.34	3.09	3.61	4.07	4.47	3.98
P/E	50	33.26	25.95	17.3	22.6	18.72	32.4	27.7	24.57	22.37	25.15

Source: Annual Reports of CIPLA and Stock Prices

Analysis:

The above table reveals that up to year 2004, company's EPS was increasing sharply, but after 2004 it began to decline sharply and during the depression it declined very sharply and reached 9.01 from 51.14 which was in the year 2004, but in recovery year 2009-2010 it again increased marginally. DPS of the company has been almost stable for the past 5 years, it's close to Rs. 2/- per share it means company is adopting stable dividend policy during the period of 2006-09. The company's payout ratio is very low in the past 5 years company is paying only a small part of their earnings in the form of dividend so it means that company believes in the retained earnings that are way company's debts are less as compared to the market. The Company believes in own funds as compared to borrowings. P/E ratio indicates the market price of an equity share to the earning per share. It measures the number of times the earnings per share discounts the market price of an equity share. The ratio indicates how much an investor is prepared to pay per rupee of earnings. The ratio helps to ascertain the value of equity share, if the EPS and probable price earnings ratio of the industry to which the company belongs. A high P/E ratio reflects high earnings potential and a low ratio reflects the low earnings potential. During all the ten years the company has had a high P/E ratio which reflects its high earnings potential.

Conclusion:

CIPLA Ltd. has abundant internal resources. It uses low operating leverage ratio because of high variable cost and low fixed cost. Due to fewer ups and downs in the operating leverage, the situation is less risky and the firm is almost safe. There is a positive correlation between DFL and D/E ratio of the company; if DFL increases then D/E ratio also increases and vice versa. There is no considerable relationship between the DFL and EPS. But there is positive relationship between DOL and DCL. DCL is more affected by the DOL as compared to the DFL.Company's interest coverage ratio is very fluctuating during the last ten years. But it is in safer position of debt providers. It is using very low debts and has the potential to raise the funds from borrowings for diversification and expansion. Company's D/E ratio and average market prices are not closely related. It's share price during depression from 2007-09 declined sharply but after the recovery of the market it's started increasing. It has adopted almost a stable dividend policy during the last 4 years and the company's payout ratio is also very low. So it believes in retained earnings as compared to borrowings. It has a high P/E ratio which reflects the company's high earnings potential.

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RURAL INDIA: A PROMISING MARKET PLACE - A CASE STUDY

Ms Asha E Thomas*

Abstract : *Villages are integral part of any nation. They become even more important in the Asian and African context, where a majority of the population lives in villages. Rural Marketing is all about planning and implementation of marketing function for the rural areas. The key for succeeding in rural markets lies in comprehending the psychology of rural consumers and their needs. This study is conducted to assist marketers who are trying to enter into the rural markets of India. To achieve this objective, the researcher has studied the behavior of rural consumers, the importance of rural markets and the possible issues and challenges that will be faced by the companies trying to penetrate into rural market. Strategies for effective rural marketing have also been evolved through the research by focusing on the existing players in the rural markets of India. Rural marketing in India has a tremendous potential. But the key challenge that companies face in rural markets relates to developing appropriate products with affordable pricing taking into account the divergent characteristics of Indian villages.*

Key Words: Rural Marketing, Rural Consumers, Indian Villages, Emerging Economies, Promising Market Place, Rural India

Introduction

"There has been no impact of the economic slowdown on the rural economy. On the other hand, rural markets offer great opportunities to marketers trying to find a way out of the current economic crisis."

Kashyap,
Vice-President of RMAI & CEO of MART

Introduction

Rural Marketing can be defined as a "process of delivering better standard of living and quality of life to the rural environment, taking into consideration the prevailing rural milieu. It encompasses social interactions between the rural and urban as well as within rural areas, which may be spontaneous or planned" (Rao, 1985).Importance of rural markets in emerging economies is growing day by day. Increase in purchasing power and thereby the demand for wide variety of products by rural consumers paved the way for greater opportunities in these markets. The next big marketing revolution in the emerging countries could be expected to happen in the rural sector. This underlines the importance of studying the rural markets and evolving new strategies that can help in penetrating among the rural consumers.

Rural marketing in India, in its present form, is the net result of evolution over many decades. The different phases in the evolution can be categorized as:

- From Independence to Green revolution
- Green-Revolution to Pre-Liberalization Period
- Post-Liberalization extending up to 20th century
- The 21st century

In a country where a larger portion of population falls under the category of 'poor', success of rural marketing can be ensured only through developmental strategy. It should be a business model to create a win-win situation.

In India rural areas are still home to more than 70% of country's population. Rural marketing can bring in higher revenues because there are around 450 districts and more than six lakh villages. Two third of country's consumers live in rural areas and almost 50 percent of the national income is generated here. With more than 120 million households, rural population accounts for nearly three times of that of urban. The present trend appears to be one of manufacturers developing new products with rural consumers in mind besides using various marketing

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strategies for their brand promotions in rural sector. The importance of Indian rural sector lies in the fact that urban market in India is getting saturated because of several players. The supply is often more than the demand. Moreover, growth in agricultural sector has also resulted in the rapid rise of rural income.

Growth obtained by the companies through their rural penetration during the recent years can also be cited as evidence supporting for rural marketing ventures. One of the largest Fast Moving Consumer Goods (FMCG) Company in the country, Hindustan Unilever has more than half of its sales coming from rural market. The situation is more or less similar for many big players like LG Electronics, Coca-Cola, Britannia, Philips, Life Insurance Corporation of India, who have a very significant presence in the Indian rural market.

Taking into account all these factors, the present study is conducted with the theme of helping the marketers who are trying to enter the rural markets of India. To achieve this objective, this researcher has studied the behavior of rural consumers, the importance of rural markets and the possible issues and challenges that will be faced by the companies trying to penetrate into rural market. Strategies for effective rural marketing have also been evolved through research by focusing on the existing players in the rural markets of India.

Understanding Rural Consumers

The rural consumer was not important till recently due to his low purchasing power, limited size of market and narrow approach towards market. However, the emergence of a liberalized economy and the saturation of urban market have given birth to varied marketing policies which business agencies have adopted to attract rural consumers. The growth of the service sector, commercialization of farming, expansion of administrative and commercial services in the rural areas has changed the demography of rural consumers. Although profiling of rural consumer is very essential for formulating rural marketing strategies, it is very difficult to develop a single personification that can represent the whole market accurately.

There is a tremendous heterogeneity in the rural market, because the educational background, income levels ,socio-cultural outlooks, brand behaviors and their overall awareness level differ from not only region to region but very often within the region itself. Therefore, the marketers have to treat rural markets as a mosaic of different markets.

Issues and Challenges in booming rural marketing:-

The Indian rural market is very large in size and diverse in nature. The main source of income for rural people is agriculture and hence the seasonal nature of agriculture and the frequent crop failures will adversely affect their purchasing power. Moreover, poor infrastructure, heterogeneous population, complex buying behavior and price sensitive consumers all impose severe challenges on marketers trying to enter the rural markets. The major problems exhibited by Indian rural markets include:

- Large and diverse market which restricts the proper implementation of marketing strategies. Seven Indian states accounts for more than 75 percent of country's rural retail outlets, which is around 3.5 million in number and it becomes extremely difficult for the marketers to even make the product available at all retail outlets.
- Underdeveloped markets having traditional methods and practices
- Traditional outlook of people in rural areas which plays a major role in influencing their thinking and purchasing behavior. However, the increasing rate of literacy has helped a lot in resolving this situation
- Improper infrastructure and communication facilities making the marketing communication activities expensive. Many villages in the country do not even have proper road facilities and many, having road facility become inaccessible during monsoons, making the situation even worse.
- Low per capita income compared with the urban population, which has a direct impact on the rural purchasing power
- Absence of adequate banking and credit facilities in rural sector
- Diversity in socioeconomic background of rural consumers, who are spread across the country with diverse social background and economic status, making the job of designing suitable products and services for them more difficult.

Multi National Corporations(MNCs) in Rural Marketing

The rural market is growing in India. The attraction of rural markets lies in their size as mass market .Every year more than 2 million households are added. With new players entering the battle the urban market gets crowded and manufacturers are struggling to hold on to their market shares. As a result they have to look for new avenues. The obvious choice is to go to villages where the market has not been fully exploited. Many of the national and multinational companies have come to realize this and are gearing themselves for exploiting the rural potential. Currently there are several companies engaged in increasing their products and marketing to the worldwide economy.

Coco-Cola India adopted the hub and spoke model for reaching out to the rural population after identifying the vast potential of rural India. The objective was to have an efficient distribution network. The company appointed a main distributor for a village who would serve as a hub and receive full load supplies for a supply period which was normally twice a week. Small distributors are appointed by these main distributors to serve as spokes and the result is uninterrupted distribution through out the year. The rural market was attractive for the company as the total consumption of Coco-Cola in rural area was less than 18 percent when compared with urban consumption of more than 30 percent. The company also increased the number of distributors in rural India by more than 10 percent .During 2001-2203, the number of distributors in rural India was increased from about 4,000 to more than 5,000 which resulted in increasing the penetration rate from 13 percent to 25 percent.

The company also positioned the drink with a tagline "Thanda matlab Coco-Cola" meaning Coco-Cola is equivalent of chilled drinks. Rural areas in India generally used the word 'Thanda' to refer to a chilled drink. The company also made celebrity Aamir Khan as brand ambassador to promote the product (a well-known bollywood actor) who played several characters like that of a farmer, a shopkeeper, a government official to ensure the popularity of the product among rural mass. This helped the company in penetrating the rural market at much faster rate.

The growth of mobile users in rural India is expected to have an increase of more than 60 percent by 2011.Many mobile companies have already realized this and they have introduced many new products exclusively to rural people. The multinational company Nokia has brought low range models which can fit into the pockets of rural customers. Further the company is promoting a subscription – based service called 'Life Tools' which will provide useful information on agriculture, education and health facilities to rural people. The price for this service is also kept at very nominal rate. Nokia's penetrating strategies also include installment payment facility made available to the rural poor, which is a combined effort of the company and a popular microfinance institution SKS.

One of the oldest brands in the country, Dabur India Ltd. has started to make their presence in rural India in association with Indian Oil Corporation (IOC). IOCs retail outlets all over the country will sell Dabur's products comprising healthcare, skin care and home care products. Godrej Agrovet and Gulmohar Foods constitute the rural retail wing of Godrej Group which entered the agri-business almost 30 years ago. The company's rural marketing initiatives are done through two projects called 'Addhaar' and 'Manthan'. Through 'Addhaar', Godrej offers its own products as well as other brands along with various additional services like soil testing and veterinary care. Through Manthan, the company concentrates on quality animal feed.

Automobile giant Maruti Suzuki has introduced various innovative schemes like "Wheels of India", Ghar ghar mein Maruti: Mera sapna meri Maruti"(In every home there is Maruti: My dream, my Maruti) All these schemes mentioned above have helped them in moving into rural economy in a stronger way. The scheme "Wheels of India" was targeted for India's Government employees and helped the company in selling more than 5000 automobiles. A considerable portion of it was among rural population. Hindustan Unilever's project Shakti, ITC's e-choupal ,Amaron batteries' "Amaragaon campaign" were all successfully launched in the Indian rural market and helped these companies in penetrating among rural mass within a short span of time.

The objective of rural marketing in the current scenario is all about improving the quality of life of rural population by satisfying the needs and wants through innovative products. The success always depends on presenting comprehensive and integrated solutions which might need a set of inter-related products or services.

Effective Rural Marketing Strategies

Marketers always like to keep a finger on the pulse of the rural markets in India. This is because of the fact that 57 percent of sales of consumer goods and 59 percent of durables sales come from rural markets and small towns. The Indian rural consumer lives in over 600,000 villages across the country and for several product categories, rural markets account for over 60 percent of the national demand. While the rural consumers are generally seen as less affluent than their urban cousins, things are changing in rural India over the last ten years. During 1998-99 over 83 percent of rural households fell in the lower and lower middle classes, the number has fallen to 70 percent by 2006-07.The comparative fall for urban India is from 53% to 27% [National Council for Applied Economic Research (NCAER).And as per expert's opinion, the number is set to fall at a rapid rate over the next 20 years.

While urban India was in the midst of a slowdown, with the meltdown in the US economy as a result of the sub-prime crisis, rural markets were ticking along well. All these facts put together explains the reason for inviting more and more players in to the battle field.

Although the rural market does offer a vast untapped potential, it should also be recognized that it is not easy to operate in these rural market. The major challenges include:

- Ensuring the availability of product or services at the right time and in the right place at adequate level. To tap these unexplored country markets, one of the leading MNCs-LG-has set up more than 45 area offices and over 60 rural/remote offices
- Affordability is the second challenge before companies entering the rural market. With low disposable income, products should be affordable to rural consumers. Many players like Godrej have addressed this issue by introducing small unit packs.
- Creating awareness is yet another challenge with large parts of rural India inaccessible to conventional advertising media. The key dilemma for MNCs eager to enter the rural market is whether they can do so without hurting the company's current profit margin
- The fourth and most difficult challenge put forth by rural economy in India is the acceptability of a product or service.

In spite of all these challenges more and more players are attracted towards this evergreen sector. Each one of them is introducing new and new strategies to increase their market share. Strategic choice is usually influenced by the competitive situation. Some of the strategic options that can help in targeting the rural population effectively are as follows:

1. For identifying the needs of the rural consumers a proper match between the aspirations of target consumers and the value offered by the marketers must exist.
2. Providing quality products at affordable prices should be made possible by incorporating the appropriate marketing mix strategies with the company objectives.
3. Understanding the threats posed by substitute products and taking the necessary measures including various educational and promotional activities .e.g. freely available ash poses severe challenges for vessel cleaning brands like Vim and Prill in rural areas.
4. Delivering superior value product at a price point that satisfies rural customer is the pulse of getting accepted in the rural market. A balanced equation of price, quality and image is what is expected by the rural population. If this is not possible companies will have go for backward integration to achieve the economies to ensure success in rural market. Understanding this concept, Britannia came with the tag line "Eat Health, Think Better". This helped the company in establishing the image of a healthy food for a health conscious consumer.
5. Packaging is defining new paradigms in rural marketing. Introduction of sachets by Velvette shampoo paved the way for developing market for shampoos in rural area. The size of the pack should be in such a way that it should help the rural consumer pick the product at a price he can afford.
6. The branding strategy has to be geared to the rural market in terms of price, packaging and communication and delivered to target audience in the language they can understand . Idiom specific communications have proved to be more effective in achieving the desired results.

7. Logos and Symbols protect the product from fake or counterfeit version of the brand. If the logo or symbol is registered in the mind of rural consumers it will be easy to protect him from fake ones. Tortoise mosquito coils is a brand which was able to succeed with its brand name and logo and it was well received by rural population.

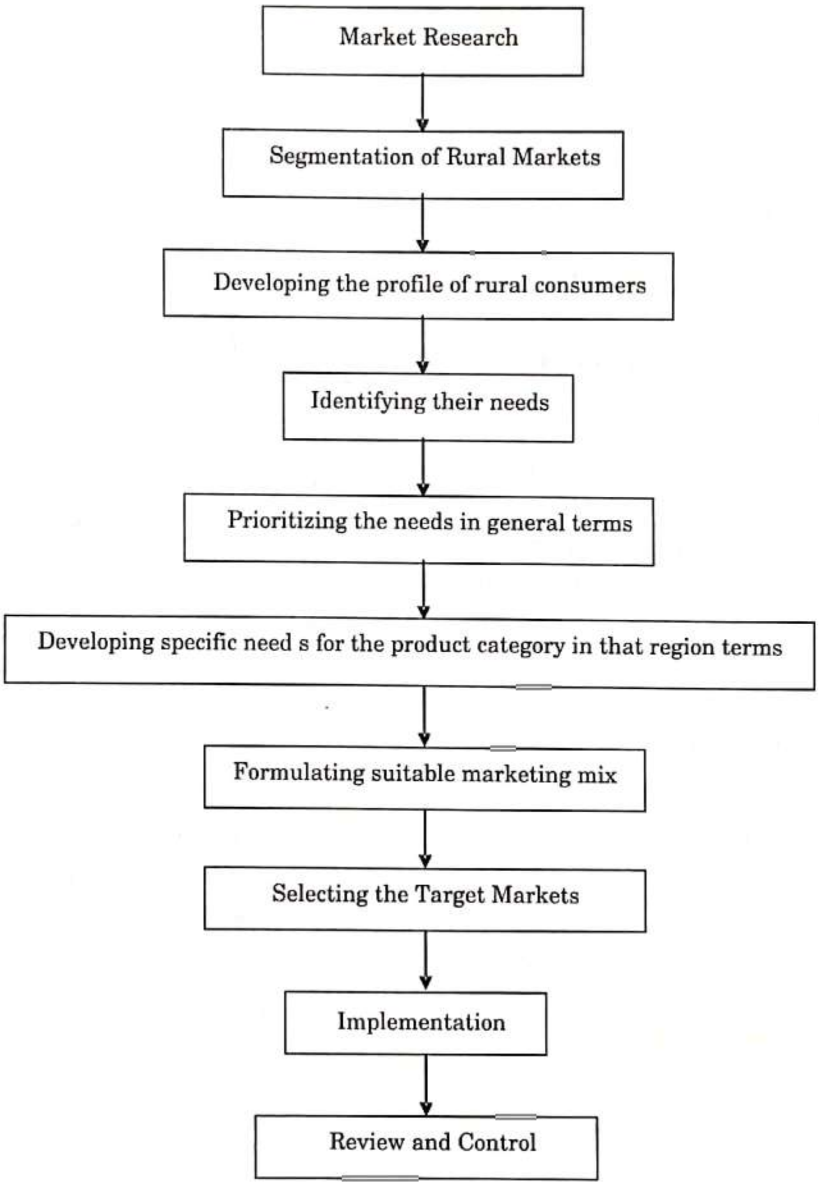
8. Tricky, gimmicky or even suggestive advertising does not work with rural population. The basic principle for communicating to rural population is that it has to be like an educational message. Interactive and entertaining formats have brought better results.

9. Unconventional media is also needed along with traditional media options to ensure sufficient reachability to rural poor. Mandis (agricultural market) melas (exhibitions) are some of the popular unconventional mass media options.

10. Marketer has to be very innovative in promoting a product in rural market, taking into consideration the specific characteristics of people living there. e.g. 'Home to Home' contact program launched by Hindustan Unilever for it fairness cream 'Fair & Lovely' was a grand success in Indian rural market. The program was supported by audiovisual shows, product demonstration and retail sales at those villages.

Rural Marketing Model

Figure 1: Rural Marketing Model



Rural India-A Promising Market Place

Liberalization of Indian economy at the beginning of 1990s had far reaching impact, extending to the 21st century. In the initial years, the entire marketing efforts concentrated on well developed urban markets. But large number of brands, and cut throat competition led to excess supply in urban market resulting in saturation in the sector. This situation made the sector less attractive in recent years. Slowly all eyes are turning towards world's most promising potential market with more than 700 million rural consumers i.e. rural sector.

Table 1: Comparative sizes of Rural and Urban markets

	Urban	Rural
Population 2001-02(million households)	53	135
Population 2009-10(million households	69	153
Market(Number of towns and Villages)	3768	627000

Source: Statistical Outline of India, NCAER

Some of the impressive facts about rural India are:

- Rural India constitutes about 70 percent of India's total population
- It contributes to one third of India's total savings.
- Rising rural prosperity
- The Fast Moving Consumer Goods (FMCG) industry in India was worth around US$ 16.03 billion in August 2008 and the rural market accounted for a robust 57 percent share of the total FMCG market in India.
- For the automobile industry, semi-urban and rural markets contribute close to 40 percent of sales, dominated by demand for two-wheelers, entry-level cars and tractors.
- By 2012, rural users will account for over 60 percent of the total telecom subscriber base in India.
- According to a recent McKinsey report, the rural and tier-II Pharmaceutical market will account for almost half of the growth by 2015.

Conclusion

Rural marketing in India has a long way to go and rural marketers have to understand the fact that rural marketing in India has a tremendous potential. The key challenge that companies face in rural markets relates to developing appropriate products for different markets with accurate pricing strategy along with adequate promotional measures, without hurting company's profitability. The rural customer responds positively only when products are made available at the right time and place at affordable price. "You must have a mind share before you can have market share" (These words of Christopher M. Knight seem to suggest the added mantra for a successful brand building in Indian rural market.)

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DETERMINANTS OF PROFITABILITY OF INDIAN COMMERCIAL BANKS

Dr. Dharmendra S. Mistry*

Abstract : *Villages are integral part of any nation. They become even more important in the Asian and African context, where a majority of the population lives in villages. Rural Marketing is all about planning and implementation of marketing function for the rural areas. The key for succeeding in rural markets lies in comprehending the psychology of rural consumers and their needs. This study is conducted to assist marketers who are trying to enter into the rural markets of India. To achieve this objective, the researcher has studied the behavior of rural consumers, the importance of rural markets and the possible issues and challenges that will be faced by the companies trying to penetrate into rural market. Strategies for effective rural marketing have also been evolved through the research by focusing on the existing players in the rural markets of India. Rural marketing in India has a tremendous potential. But the key challenge that companies face in rural markets relates to developing appropriate products with affordable pricing taking into account the divergent characteristics of Indian villages.*

Key Words: Rural Marketing, Rural Consumers, Indian Villages, Emerging Economies, Promising Market Place, Rural India

Abstract

The banking sector in India has been providing support to other economic sectors such as agriculture, small-scale industries, exports, and banking activities in the developed commercial metro, urban, and a limited number of semi-urban centres. The purpose of this study is to analyse the financial data of three categories of the commercial banks i.e. public sector banks, private banks and foreign banks in India for the financial period 2005-06 to 2008-09 with a view to examining impact of determinants such as business volume, deposits, advances and investments on operating profit of various categories of Indian banks. An attempt has also been made to examine productivity and profitability thereof. The study found that foreign banks in India occupied first place in profitability followed by public sector banks and private sector banks. It was also found that determinants of profitability have significant impact on profitability of various categories of the banks. The study brought into light that though low output (Business) per input (Employee) suggested low productivity of the public sector banks low output (profit) per input (Employee) suggested low productivity of the private sector banks.

Key words: determinants of profitability, productivity, profitability Determinants of Profitability – A Firm Level Study of Indian Commercial Banks

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Introduction

A banking sector is of great significance for any economy because it operates the payment system, mobilizes savings and allocates such savings to investment projects by limiting involvement of risks and costs (Rajan and Zingales, 1998). Through active involvement of the government either by direct ownership of banks or restrictions thereon, it ensures better economic outcome from the banking sector by channeling savings to strategic projects not receiving enough funding (Arun and Turner, 2002). The banking sector in India has been providing support to other economic sectors such as agriculture, small-scale industries, exports, and banking activities in the developed commercial metro, urban, and a limited number of semi-urban centres. The Indian financial system has been regulated mainly by interest rate regulation, credit restrictions, equity market controls and foreign exchange controls. Since implementation of Narasimhan committee Reports, some restrictions have been relaxed including a deregulation of interest rates, an easing of directed credit rules under the priority sector lending arrangements, a reduction of statutory pre-emptions, and a lowering of entry barriers for both domestic and foreign players (Bhide et al., 2001). Report by Vaghul committee has contributed to the present deregulation in India. However, the role played by the Indian Public Sector Banks remained unchanged. To improve the functioning of the Indian public sector, report of the Verma committee was implemented but the inefficiency of the Indian Public Sector banks continued. The Reserve Bank of India has been unremittingly working towards the establishment of a facilitating regulatory framework with punctual and effective supervision as well as the development of technological and institutional infrastructure. It has also been making relentless efforts towards adoption of worldwide yardsticks as suitable to Indian conditions and hence Indian financial system stands adjacent to international standards. The purpose of this study is to analyse the financial data of three categories of the commercial banks i.e. public sector banks, private banks and foreign banks in India for the financial period 2005-06 to 2008-09 with a view to examining impact of determinants such as business volume, deposits, advances and investments on operating profit of various categories of Indian banks. An attempt has also been made to examine productivity and profitability thereof with the help of technique of ratio analysis.

It is hypothesised for the study that Business Volume, Deposits, Advances and Investments have impact on profitability Operating Profit of the various categories of banks and there is positive relationship among them. It is also hypothesised for the study that there is significant difference in profitability as well as productivity of various categories of the banks over the period of the study.

The study proceeds as follows: section two gives a brief overview over the literature review. A study methodology follows in section three. Section four describes the result and analysis of the available data and the final section presents the main conclusions.

Literature Review

Due to shifting of the focus of domestic and international banks in India from 'revenue' to 'cost' in order to enhance productivity and guarantee a win-win situation, there have not been many attempts to compare the profitability amongst the various categories of banks. Studies conducted by Divatia and Venkatachalam (1978), Subramanyam and Swamy (1994) and Hansda (1995) found uniformity in banking functions and difference in productivity due to technological improvement and competence with the help of traditional techniques such as ratio analysis and index number approach. Studies conducted by Noulas and Katker (1996), Battacharya et. al (1997) Mukherjee et. al (2002) and Ram Mohan and Ray (2004) revealed that Public Sector Banks were efficient but, still many of them had improper utilization of resources.Sarkar and Das (1997) in their study tried to investigate performance of public sector banks, private banks and foreign banks in India for the year 1994-95 on the grounds of profitability, productivity and financial management and found that performance of public sector banks was not as impressive as that of private banks and foreign banks. Das (1999) in his study attempted to analyse performance of public sector banks for 3 years in the post reform period, 1992, 95 and 98 and found that banks opted for risk free investments as compared to risky loans whenever emphasis on non-interest income has increased. Ganeshan (2001) found that determinants i.e. interest cost, interest income, deposits per branch, credit to total assets, proportion of priority sector advances and interest income loss had significant impact on profits as well as profitability of public sector banks. Ram Mohan (2002) in his study found that despite profitability of public sector banks improved as compared to private banks and foreign banks in India during 1996-97 to 1999-2000, they could not attract depositors and were lagging behind in terms of upgradation of technology, staffing and employment practices. Sathey (2005) in his study revealed that performance of partially privatized banks during 1998-2002 was better than that of fully public sector banks due to privatization of banks. Shanmugam and Das (2004) also divulged that state bank group and private – foreign group banks have performed well during 1992-1999. Singla (2008) studied profitability performance selected sixteen banks during 2000-01 to 2006-07 and found negative correlation between return on net worth and the debt equity ratio and interest income to working funds and non performing assets to interest coverage ratio.

Study Methodology

The major findings of the above mentioned studies did not focus on profitability, productivity and impact of determinants such as business volume, deposits, advances and investments on profitability of commercial banks in India and therefore this study has been initiated with the following objectives during 2005-06 to 2008-09, a period of recession

across the globe:

1. To appraise the profitability as well as productivity of public sector, private and foreign banks in India.

2. To analyse the impact of determinants i.e. Business Volume, Deposits, Advances and Investments on profitability of banks in India.

   The data for the accomplishment of the aforementioned research objectives used was secondary. With a view to evaluating performance and calculating profitability ratios, the data was gathered from banks' financial statements as published in their annual reports (2005-06 to 2008-09). The data base of Indian Banking Association has also been utilized. Besides, the review of different articles and research papers was another source of the data.

The sample of this study includes

- 28 Indian public sector banks consisting of (19) nationalised, SBI & its associates (8) and other public sector bank (1),
- 25 Indian private sector banks consisting of old private sector banks (17) and new private sector banks (8) and
- 32 Foreign banks in India.

With a view to evaluating profitability performance and productivity of different categories of banks, technique of ratio analysis has been used. In order to measure profitability performance, profitability ratios have been computed and analysed on the basis of business volume (Total Assets which is used as a base for calculation of spread ratio), while productivity ratios have been computed and analysed on the basis of no. of employees (performance of the banks is judged on the basis of output per input i.e. employee/branch). Following profitability ratios have been used for the study:

(1) Interest Earned Ratio (I)= Interest Earned/ Business Volume

Where, Business Volume = Total Assets

(2) Interest Expended Ratio (E) = Interest Expended/ Business Volume

(3) Other Income Ratio (OI)= Other Incomes/ Business Volume

(4) Other Operating Expenses Ratio (OE) = Other Operating Expenses/ Business Volume

(5) Profitability Ratio = Spread Ratio (S) – Burden ratio analysis (B)

Where, Spread Ratio (S) = Interest Earned Ratio – Interest Expended ratio analysis

Burden Ratio (B) = Other Operating Expenses Ratio – Other Income Ratio

Following hypothesis has been framed for measuring profitability performance on the basis of profitability ratios:

H0 – there is no significant difference in profitability of various banks.

H1 – there is significant difference in profitability of various banks.

Following productivity ratios have been used for the present study:

(1) Business Per Employee = Total Business/ Total Employees

(2) Profit Per Employee = Total Profit/ Total Employees

Following hypothesis has also been framed for measuring productivity of various banks on the basis of productivity ratios:

H0 – there is no significant difference in productivity of various banks.

H1 – there is significant difference in productivity of various banks.

Profitability performance is the dependent variable and is measured by operating profit earned by the bank and therefore operating profit has been taken as dependent variable for the present study. Operating profit depends on variables like Business Volume, Deposits, Advances and Investments and, therefore, they have been taken as determinants (independent variables) for the study.

Above discussed variables have been taken together as determinants of profitability and Profitability model has been developed in order to analyse whether the profitability (Operating Profit – dependent variable) of the banks under the study have significant relationship with determinants (independent variables - Business Volume, Deposits, Advances and Investments) or not. The profitability model has been estimated using data of banks in India for a period of 4 years from 2005-06 to 2008-09. It has been based on Multiple Linear Regression consisting of four variables as shown below:

P = (bo + b1BV + b2DEP + b3ADV + b4INVT)

Where,	P	-	**Operating Profit**
	BV	-	**Total Assets**
	DEP	-	**Deposits**
	ADV	-	**Advances**
	INVT	-	**Investment**

In order to examine and compare the impact of independent variables on the dependent variable, techniques of correlations and regression have been applied. Technique of Analysis of Variance (ANOVA) has also been used in testing the hypotheses.

H0 - The Independent Variables (Business Volume, Deposits, Advances and

Investments) have no impact on profitability (Operating Profit) of the various categories of banks.

H1 - The Independent Variables (Business Volume, Deposits, Advances and

Investments) have impact on profitability (Operating Profit) of the various categories of banks.

H2 – There is relationship between dependent and independent variables of various categories of banks.

Result and Analysis:-

Profitability

Table 1 reveals that Interest earned ratio has increased over the study period for all categories of banks. Private sector banks were able to have high interest earned ratio as compared to public sector banks as well as foreign banks. However, marginal decrease in interest earned ratio has been observed in SBI & its associates. As the calculated value of 'F' among the groups (4.412781) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Interest earned ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. Similarly, the calculated value of 'F' among the years (6.534013) is more than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Interest earned ratio during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted.

Table 1 Interest Earned Ratio (I) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005 -06	2006 -07	2007 -08	2008 -09
Public Sector Banks				
Nationalised Banks	6.739219	6.819507	7.158468	7.458638
SBI & its Associates	7.12594	6.635041	6.964981	6.967267
Other Public Sector Bank	6.075461	6.110806	6.152448	6.746789
Overall	6.842832	6.728434	7.050227	7.259052
Private Sector Banks				
Old Private Sector Banks	6.929358	7.146205	7.518687	8.054691
New Private Sector Banks	5.893525	6.513293	7.561317	8.332674
Overall	6.150125	6.649624	7.552496	8.272223
Foreign Banks				
Overall	6.165201	6.532193	6.686194	6.782365
Source of Variation	SS	df	MS	F
Between the groups	3.340495	5	0.668099	4.412781
Between the years	2.967766	3	0.989255	6.534013
Residual	2.271013	15	0.151401	
Total	8.579274	23		

Table 2 divulges that interest expended ratio has also increased over the study period for all categories of banks. However, the lowest interest expended ratio for the foreign banks featured efficiency of management in raising funds at lower cost on one hand and disposing them at high interest earning securities. The interest expended ratio of private banks was somewhat more than public sector banks. As the calculated value of 'F' among the groups (36.94084) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Interest expended ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. Similarly, the calculated value of 'F' among the years (13.61959) is more than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Interest expended ratio during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted.

Table 2 Interest Expended Ratio (E) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
	Public Sector Banks			
Nationalised Banks	3.844854	4.159715	4.984588	5.24482
SBI & its Associates	4.052934	4.046501	4.728075	4.825017
Other Public Sector Bank	5.646516	5 .477202	5.634849	5.977715
Overall	3.995496	4.178394	4.926885	5.135684
	Private Sector Banks			
Old Private Sector Banks	4.15523	4.393662	5.119585	5.514644
New Private Sector Banks	3.61925	4.41178	5.168355	5.54688
Overall	3.752025	4.407878	5.158263	5.53987
	Foreign Banks			
Overall	2.58304	2.77103	2.904411	2.866783
Source of Variation	**SS**	**df**	**MS**	**F**
Between the groups	17.9523	5	3.59046	36.94084
Between the years	3.971263	3	1.323754	13.61959
Residual	1.457923	15	0.097195	
Total	23.38148	23		

Table 3 confirms that other income ratio was about 15% of interest earned ratio in public sector banks and private banks, while about 50% thereof in foreign banks in India because of having competitive advantage through making available to the customers more and more fees based services. As the calculated value of'F' among the groups (50.68926) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Other income ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. However, the calculated value of 'F' among the years (1.101566) is less than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was no significant difference in the mean of other income ratio during the study period and therefore null hypothesis is accepted and alternate hypothesis is rejected.

Table 3 Other Income Ratio (OI) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
Public Sector Banks				
Nationalised Banks	0.899087	0.864857	0.981854	1.068139
SBI & its Associates	1.376883	1.169071	1.168721	1.255469
Other Public Sector Bank	1.445777	0.989201	1.251373	0.806207
Overall	1.087178	0.970606	1.056031	1.119819
Private Sector Banks				
Old Private Sector Banks	0.819847	0.976717	1.116006	1.200353
New Private Sector Banks	1.614556	1.837186	1.987938	1.905864
Overall	1.417688	1.651839	1.807509	1.75244
Foreign Banks				
Overall	2.69427	2.567034	2.906352	3.330471
Source of Variation	**SS**	**df**	**MS**	**F**
Between the groups	10.92593	5	2.185187	50.68926
Between the years	0.142464	3	0.047488	1.101566
Residual	0.646642	15	0.043109	
Total	11.71504	23		

Table 4 confirms the private and foreign sector banks in India as high cost operators because of heavy spending on technology upgradation in order to provide better customer support as well as on advertisement campaign for brand promotion. As the calculated value of 'F' among the groups (86.18399) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Other operating expenses ratio of the various categories of banks during the study period and, therefore, null hypothesis is rejected and alternate hypothesis is accepted. Similarly, the calculated value of 'F' among the years (5.486792) is also more than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of other operating expenses ratio during the study period and, therefore, null hypothesis is rejected and alternate hypothesis is accepted.

Table 4 Other Operating Expenses Ratio (OE) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
Public Sector Banks				
Nationalised Banks	1.999968	1.730725	1.526886	1.459057
SBI & its Associates	2.277951	1.983977	1.680501	1.569093
Other Public Sector Bank	0.970456	0.749687	0.733607	0.776039
Overall	2.050167	1.772607	1.543977	1.465193
Private Sector Banks				
Old Private Sector Banks	2.029201	1.847962	1.662307	1.689582
New Private Sector Banks	2.122388	2.112196	2.284526	2.242737
Overall	2.099304	2.055279	2.15577	2.122446
Foreign Banks				
Overall	2.93649	2.822464	2.840325	2.75078
Source of Variation	**SS**	**df**	**MS**	**F**
Between the groups	8.832595	5	1.766519	86.18399
Between the years	0.337389	3	0.112463	5.486792
Residual	0.307456	15	0.020497	
Total	9.47744	23		

Table 5 reveals that despite the lowest interest earned ratio, foreign banks had high spread ratio because of the lowest interest expended ratio. In spite of the highest interest earned ratio, private sector banks occupied the second position due to the highest interest expended ratio. Spread ratio of public sector banks has been decreasing because of rising interest expended ratio during the study period. As the calculated value of 'F' among the groups (53.22583) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of spread ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. However, the calculated value of 'F' among the years (0.851808) is less than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was no significant difference in the mean of spread ratio during the study period and, therefore, null hypothesis is accepted and alternate hypothesis is rejected.

Table 5 Spread Ratio (S)(I-E) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
Public Sector Banks				
Nationalised Banks	2.894365	2.659792	2.17388	2.213818
SBI & its Associates	3.073006	2.58854	2.236906	2.14225
Other Public Sector Bank	0.428945	0.633604	0.517599	0.769074
Overall	2.847336	2.55004	2.123342	2.123368
Private Sector Banks				
Old Private Sector Banks	2.774128	2.752543	2.399102	2.540047
New Private Sector Banks	2.274275	2.101513	2.392962	2.785794
Overall	2.3981	2.241746	2.394233	2.732353
Foreign Banks				
Overall	3.582161	3.761163	3.781783	3.915582
Source of Variation	**SS**	**df**	**MS**	**F**
Between the groups	20.80763	5	4.161526	53.22583
Between the years	0.199799	3	0.0666	0.851808
Residual	1.172793	15	0.078186	
Total	22.18022	23		

Table 6 divulges decrease in burden ratio due to higher other incomes over other operating expenses. Foreign banks in India had enough incomes from fees based services to cover other operating expenses i.e. up gradation of technology, advertisement campaign and establishment expenses incurred on staff as well as branches. As the calculated value of 'F' among the groups (15.79287) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Burden ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. Similarly, the calculated value of 'F' among the years (4.907614) is also more than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of Burden ratio during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted.

Table 6 Burden Ratio (B)(OE - OI) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
Public Sector Banks				
Nationalised Banks	1.100881	0.865868	0.545032	0.390918
SBI & its Associates	0.901068	0.814906	0.51178	0.313624
Other Public Sector Bank	-0.47532	-0.23951	-0.51777	-0.03017
Overall	0.962989	0.802001	0.487946	0.345374
Private Sector Banks				
Old Private Sector Banks	1.209354	0.871245	0.546301	0.489229
New Private Sector Banks	0.507832	0.27501	0.296588	0.336873
Overall	0.681616	0.40344	0.348261	0.370006
Foreign Banks				
Overall	0.24222	0.25543	-0.06603	-0.57969
Source of Variation	SS	df	MS	F
Between the groups	3.997126	5	0.799425	15.79287
Between the years	0.745261	3	0.24842	4.907614
Residual	0.759291	15	0.050619	
Total	5.501677	23		

Table 7 reveals that public sector banks were less profitable as compared to private banks and foreign banks in India. As far as public sector banks were concerned, there was decrease in profitability thereof during the study period due to high interest expended ratio and low other income ratio. Private banks were at the second position in profitability due to high interest earned ratio as well as other income ratio. Foreign banks in India occupied first place in profitability due to low interest expended ratio as well as high other income ratio. As the calculated value of 'F' among the groups (54.7875) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of profitability ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. However, the calculated value of 'F' among the years (1.919793) is less than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was no significant difference in the mean of profitability ratio during the study period and therefore null hypothesis is accepted and alternate hypothesis is rejected.

Table 7 Profitability Ratio (S - B) of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
Public Sector Banks				
Nationalised Banks	1.793484	1.793924	1.628848	1.8229
SBI & its Associates	2.171938	1.773634	1.725126	1.828626
Other Public Sector Bank	0.904265	0.873114	1.035369	0.799244
Overall	1.884347	1.748039	1.635396	1.777994
Private Sector Banks				
Old Private Sector Banks	1.564774	1.881298	1.852801	2.050818
New Private Sector Banks	1.766443	1.826503	2.096374	2.448921
Overall	1.716484	1.838306	2.045972	2.362347
Foreign Banks				
Overall	3.339941	3.505733	3.847813	4.495272
Source of Variation	SS	df	MS	F
Between the groups	18.10869	5	3.621737	54.7875
Between the years	0.380725	3	0.126908	1.919793
Residual	0.991578	15	0.066105	
Total	19.48099	23		

Productivity

Table 8 represents business per employee of various categories of the banks. It is quite clear that public sector banks were much lower in business per employee as compared to private sector banks and foreign banks in India due to higher denominator i.e. number of staff because of higher number of branches. Consequently, low output (Business) per input (Employee) suggested low productivity of the public sector banks. As the calculated value of 'F' among the groups (155.0702) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of business per employee ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. However, the calculated value of 'F' among the years (2.962988) is less than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was no significant difference in the mean of business per employee ratio during the study period and, therefore, null hypothesis is accepted and alternate hypothesis is rejected.

Table 8 Business Per Employee of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	**2006-07**	**2007-08**	**2008-09**
Public Sector Banks				
Nationalised Banks	3.71	4.74	5.97	7.47
SBI & its Associates	3.30	4.04	5.04	6.34
Other Public Sector Bank	17.18	13.87	18.09	20.30
Overall	8.06	7.55	9.70	11.37
Private Sector Banks				
Old Private Sector Banks	363.38	410.06	519.57	594.44
New Private Sector Banks	686.53	677.90	707.35	744.34
Overall	524.95	543.98	613.46	669.39
Foreign Banks				
Overall	995.59	1037.55	1284.61	1384.78
Source of Variation	**SS**	**df**	**MS**	**F**
Between the groups	4629897	5	925979.4	155.0702
Between the years	53079.17	3	17693.06	2.962988
Residual	89570.35	15	5971.357	
Total	4772546	23		

Table 9 discloses profit per employee of diverse classes of the banks. Despite lowest business per employee ratio due to comparatively greater number of staff, profit per employee ratio of public sector banks was higher than private banks. Though Profit per employee ratio of private sector banks increased moderately during the study period, they were at the second position. Though foreign banks in India had first place in profit per employee, they could not capitalize higher business to have higher profit as compared to public sector banks. Consequently, low output (profit) per input (Employee) suggested low productivity of the private sector banks. As the calculated value of 'F' among the groups (44.92433) is more than the table value thereof (2.9012) at 5 percent level of significance, it can be concluded that there was significant difference in the mean of profit per employee ratio of the various categories of banks during the study period and therefore null hypothesis is rejected and alternate hypothesis is accepted. However, the calculated value of 'F' among the years (1.82014) is less than the table value thereof (3.2874) at 5 percent level of significance, it can be concluded that there was no significant difference in the mean of profit per employee ratio during the study period and, therefore, null hypothesis is accepted and alternate hypothesis is rejected.

Table 9 Profit Per Employee of Indian Banks from 2005-06 to 2008-09

Banks	Years			
	2005-06	2006-07	2007-08	2008-09
Public Sector Banks				
Nationalised Banks	2.24	2.99	3.94	4.55
SBI & its Associates	2.11	2.57	3.43	4.57
Other Public Sector Bank	12.45	8.44	8.86	8.42
Overall	5.60	4.67	5.41	5.85
Private Sector Banks				
Old Private Sector Banks	1.98	1.47	4.37	5.01
New Private Sector Banks	4.45	4.35	4.97	5.58
Overall	3.22	2.91	4.67	5.30
Foreign Banks				
Overall	26.49	26.10	43.63	39.17
Source of Variation	**SS**	**df**	**MS**	**F**
Between the groups	2923.489	5	584.6978	44.92433
Between the years	71.06832	3	23.68944	1.82014
Residual	195.2276	15	13.01517	
Total	3189.785	23		

Determinants of Profitability

Table 10 shows the results of correlations analysis between dependent variables and independent variables. It is clear that operating profit and all independent variables i.e. Business Volume (0.98887), Deposits (0.991853), Advances (0.989229) and Investments (0.988564) have positive correlation. As the values of correlation coefficient in respect of operating profit and all independent variables are closer to +1, the relationships between are more close. As far as correlation between operating profit and Business Volume is concerned, foreign banks have greater correlation as compared to the other categories of banks. As correlation coefficient between operating profit and deposits is higher for private sector banks, it can be said that when deposits are higher in private sector banks, operating profit is also higher. Higher correlation of coefficient between operating profit and advances for public sector banks suggests that the higher the advances in the public sector banks is, the higher the operating profit is. Operating profit and investments in private sector banks are relatively closely related.

Table 10 Correlation Analysis

Variables	Operating Profit		
	Public sector Banks	Private Banks	Foreign Banks in India
Operating Profit	1	1	1
Business Volume	0.98887	0.988261	0.994543
Deposits	0.991853	0.993341	0.991184
Advances	0.989229	0.982133	0.980693
Investments	0.988564	0.996286	0.958217

From multiple linear regression model, it is clear that the model has a coefficient of determination of 98.46% which explains 98.46% of variation in profitability of public sector banks for the study period as shown in Table 11. The model also states that the dependent variable operating profit can be predicted from a linear combination of the determinants of profitability Business volume, Deposits, Advances and Investments. Coefficients of determinants of profitability propose that each 1 percent change in Business volume, deposits, advances and investments leads to moderate increase of 0.003731 percent, the highest increase of 0.020212, reasonable decrease of 0.00722 percent and moderate increase of 0.009328 percent in profitability respectively. The calculated value of 'F' is 368.2228, while the table value with four degree of freedom in numerator and twenty three degrees of freedom in denominator at five percent significant level is 2.7955. As tabulated value of F is less than calculated value thereof, it can be concluded that determinants of profitability have an impact on profitability. The model fitted is best described as the behaviour of dependent variable against suitable alternatives and hence null hypothesis is rejected and alternate hypothesis is accepted.

Table 11 Determinants of Profitability in Public Sector Banks

Particulars	Coefficient	Std. Error	T	P
Constant	-226.137	111.6851811	-2.02477	0.054652
BV	0.003731	0.008642962	0.431672	0.67
DEP	0.020212	0.007470307	2.705708	0.012614
ADV	-0.00722	0.018568236	-0.38876	0.70103
INVT	0.009328	0.029671046	0.31439	0.756059
$R^2 = 0.984625$				
- + (0.003731*BV) + (0.020212*DEP) – (0.00722*ADV) + (0.009328*INVT)				
Group	**DF**	**SS**	**MS**	**F**
Regression	4	154986118.9	38746530	368.2228
Residual	23	2420192.982	105225.8	
Total	27	157406311.9		

From multiple linear regression model, it is clear that the model has a coefficient of determination of 99.4365% which explains 99.4365% of variation in profitability of private sector banks for the study period as shown in Table 12. The model also states that the dependent variable operating profit can be predicted from a linear combination of the determinants of profitability Business volume, Deposits, Advances and Investments. Coefficients of determinants of profitability propose that each 1 percent change in Business volume, deposits, advances and investments leads to moderate decrease of 0.02895 percent, reasonable decrease of 0.01789, moderate increase of 0.029711 percent and the highest increase of 0.155179 percent in profitability respectively. The calculated value of 'F' is 882.3074, while the table value with four degree of freedom in numerator and twenty degrees of freedom in denominator at five percent significant level is 2.8661. As tabulated value of F is less than calculated value thereof, it can be concluded that determinants of profitability have an impact on profitability. The model fitted is best described the behaviour of dependent variable against suitable alternatives and hence null hypothesis is rejected and alternate hypothesis is accepted.

Table 12 Determinants of Profitability in Private Sector Banks

Particulars	Coefficient	Std. Error	T	P
Constant	-19.396	34.92716	-0.55533	0.584829
BV	-0.02895	0.046191	-0.62685	0.537849
DEP	-0.01789	0.011386	-1.57164	0.131721
ADV	0.029711	0.05813	0.511117	0.614866
INVT	0.155179	0.058443	2.65525	0.015192
$R^2 = 0.994365$				
P = -19.396 - (0.02895*BV) - (0.01789*DEP) + (0.029711*ADV) + 0.155179*INVT)				
Group	**DF**	**SS**	**MS**	**F**
Regression	4	50421008	12605252	882.3074
Residual	20	285733.8	14286.69	
Total	24	50706742		

From multiple linear regression model, it is clear that the model has a coefficient of determination of 98.9924% which explains 98.9924% of variation in profitability of foreign banks for the study period as shown in Table 13. The model also states that the dependent variable operating profit of foreign banks in India can be predicted from a linear combination of the determinants of profitability Business volume, Deposits, Advances and Investments. Coefficients of determinants of profitability propose that each 1 percent change in Business volume, deposits, advances and investments leads to increase of 0.0063559 percent, reasonable decrease of 0.02476, moderate decrease of 0.01811 percent and marginal decrease of 0.0052 percent in profitability respectively. The calculated value of 'F' is 663.1443, while the table value with four degree of freedom in numerator and twenty degrees of freedom in denominator at five percent significant level is 2.7278. As tabulated value of F is less than calculated value thereof, it can be concluded that determinants of profitability have an impact on profitability. The model fitted is best described as the behaviour of dependent variable against suitable alternatives and hence null hypothesis is rejected and alternate hypothesis is accepted.

Table 13 Determinants of Profitability in Foreign Sector Banks

Particulars	Coefficient	Std. Error	T	P
Constant	-22.1308	23.46906	-0.94298	0.354053
BV	0.063559	0.015608	4.072131	0.000366
DEP	-0.02476	0.025376	-0.97565	0.337901
ADV	-0.01811	0.01492	-1.21402	0.235251
INVT	-0.0052	0.015809	-0.32865	0.744954
$R^2 = 0.989924$				
P = -22.1308 + (0.063559*BV) - (0.02476*DEP) - (0.01811*ADV) – (0.0052*INVT)				
Group	**DF**	**SS**	**MS**	**F**
Regression	4	28921745	7230436	663.1443
Residual	27	294388.1	10903.26	
Total	31	29216133		

Conclusion and Suggestions

The study found that public sector banks were less profitable as compared to private banks and foreign banks in India. As far as public sector banks were concerned, there was decrease in profitability thereof during the study period due to high interest expended ratio and low other income ratio. It was also found from the study that Private sector banks had modest profitability due to high interest earned ratio as well as other income ratio, while foreign banks in India occupied first place in profitability due to low interest expended ratio as well as high other income ratio. The study found that public sector banks were much lower in productivity in terms of business per employee as compared to private sector banks and foreign banks in India due to higher denominator i.e. number of staff because of higher number of branches. Despite lowest business per employee ratio due to comparatively greater number of staff, productivity in terms of profit per employee ratio of public sector banks was higher than private banks. Though profit per employee ratio of private sector banks increased moderately during the study period, they were at the second position. Though foreign banks in India had first place in profit per employee, they could not capitalize higher business to have higher profit as compared to public sector banks. From the study, it can also be concluded that determinants of profitability have significant impact on profitability of various categories of the banks. The study found that change in investment causes increase in profitability of the public sector as well as foreign banks in India, while affecting that of the private sector banks. Change in deposits advances profitability of public sector banks, while retreating profitability of private sector and foreign banks in India. Alteration in advances results into decline in profitability of public sector as well as foreign banks in India while promotes that of private sector banks. Variation in investments can improve profitability of both public and private sector banks while it may impact profitability of foreign banks in India. With a view to improving profitability, public sector banks should reduce overstaffing through Voluntary Retirement Schemes and keeping pace as well as embracing latest technology for enhanced products and services. They should also focus seriously on providing more and more fees based services to increase Non-interest incomes and thereby improve profitability. It is suggested that public sector banks should focus on efficient raising of funds at lower cost on one hand and disposing them at high interest earning securities. Rationalization of branches may be attempted by Public sector banks to improve overall productivity. Public sector banks will have to undertake effective cost management programmes since Government borrowings push up the cost of funds, reducing their interest margins. More effective measures to contain and reduce non-performing assets will also contribute to improved profitability of Public sector banks and Private Banks. This study may help various stakeholders of Indian commercial Banks and other categories of Banks in Indian Banking Sector to concentrate on banking activities and thereby to increase profitability performance thereof. It may also help the management in formulating appropriate strategies for achievement of objectives.

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Appendix

Name of Banks

Sr. No.	Public Sector Banks	Private Sector Banks	Foreign Banks
1	Allahabad Bank	City Union Bank Ltd.	ABN Amro Bank N.V.
2	Andhra Bank	ING Vysya Bank Ltd.	Abu Dhabi Commercial Bank Limited
3	Bank of Baroda	Lord Krishna Bank Ltd.	American Express Bank Limited
4	Bank of India	SBI Commercial & International Bank Ltd.	American Express Banking Corporation
5	Bank of Maharashtra	Tamilnad Mercantile Bank Ltd.	Antwerp Diamond Bank N.V.
6	Canara Bank	The Bank of Rajasthan Ltd.	Arab Bangladesh Bank Limited.
7	Central Bank of India	The Catholic Syrian Bank Ltd.	Bank Internasional Indonesia
8	Corporation Bank	The Dhanalakshmi Bank Ltd.	Bank of America NA
9	Dena Bank	The Federal Bank Ltd.	Bank of Bahrain and Kuwait B.S.C.
10	Indian Bank	The Jammu & Kashmir Bank Ltd.	Bank of Ceylon
11	Indian Overseas Bank	The Karnataka Bank Ltd.	Barclays Bank PLC
12	Oriental Bank of Commerce	The Karur Vysya Bank Ltd.	BNP Paribas
13	Punjab & Sind Bank	The Lakshmi Vilas Bank Ltd.	Chinatrust Commercial Bank
14	Punjab National Bank	Nainital Bank Ltd.	Citibank N.A..
15	Syndicate Bank	The Ratnakar Bank Ltd.	Calyon Bank
16	UCO Bank	The Sangli Bank Ltd.	Deutsche Bank AG
17	Union Bank of India	The South Indian Bank Ltd.	JPMorgan Chase Bank
18	United Bank of India	Axis Bank Ltd.	JSC VTB Bank
19	Vijaya Bank	Centurion Bank of Punjab Ltd.	Krung Thai Bank Public Company Limited
20	State Bank of India (SBI)	Development Credit Bank Ltd.	Mashreqbank psc
21	State Bank of Bikaner & Jaipur	HDFC Bank Ltd.	MIZUHO Corporate Bank Ltd.
22	State Bank of Hyderabad	ICICI Bank Ltd.	Oman International Bank S.A.O.G.
23	State Bank of Indore	Indusind Bank Ltd.	Shinhan Bank
24	State Bank of Mysore	Kotak Mahindra Bank Ltd.	Societe Generale
25	State Bank of Patiala	YES Bank	Sonali Bank
26	State Bank of Saurashtra		Standard Chartered Bank
27	State Bank of Travancore		State Bank of Mauritius Ltd.
28	IDBI Bank Ltd.		The Bank of Nova Scotia
29			The Bank of Tokyo-Mitsubishi UFJ Ltd.
30			The Development Bank of Singapore Ltd.
31			The Hongkong and Shanghai Banking Corporation Ltd.
32			UBS AG

KNOWLEDGE MANAGEMENT: APPLICATION OF TACIT KNOWLEDGE IN BUSINESS ORGANIZATIONS

Olga Moros*
Carolan McLarney**

Abstract: *Purpose: This article reviews, explains, compares, and synthesizes the foundational theories in knowledge management. Its central theme is that knowledge management and knowledge creation are two crucial aspects of strategic management in modern organizations. The identification of the unique properties of knowledge is a starting point for its successful creation and management in organizations. The article briefly examines the context of knowledge management by looking into the originating disciplines and related theories as well as outlines the life and achievements of the most influential scholar in the field – Michael Polanyi. Next, the article discusses the various characteristics of knowledge important for its further successful application, specifically 'tacit knowledge.' It then looks into the main theories that involve application of tacit knowledge to modern business organizations.*

Research Limitations: Although several disciplines and theories include some aspects of knowledge management, due to the limited scope of this article, only the two that specifically develop the 'tacit knowledge' concept are studied here. Additionally, while some theories discussed in this article are applicable to various levels of analysis, such as individual, group, organization, and inter-organizational, this review is limited to knowledge management and creation within a business organization. The methodology for this research article consisted of secondary research on the influential works on knowledge management. It involved primary sources, when discussing the properties of knowledge and the foundational theories, and secondary sources that provided researchers' opinion on the importance of the subject.

Implications: The research on the knowledge management in organizations demonstrated the uniqueness of the qualities of knowledge that puzzled scholars since the Ancient Greeks, the importance of the personal component in any successful knowledge related process, the magnitude of the topic that undoubtedly warrants further research.

KEY WORDS: *Knowledge management, Michael Polanyi, tacit knowledge, performance measurement*

Introduction: Knowledge management is an emerging topic that has gained considerable attention by scholars and business community alike. It deals with processes and practices of identification, accumulation, creation, application, and distribution of knowledge in organizations. Knowledge is arguably the most important strategic resource as, unlike tangible technologies and other process components, it is contextual and the hardest for the competition to duplicate. The purpose of the article is to review, explain, compare, and synthesize information on foundational theories in knowledge management as they apply to modern organizations.

The article begins with discussion of originating disciplines and related theories, which are the context of modern knowledge management. It also provides a brief overview of life and works of Michael Polanyi, the social scientist and philosopher who developed the idea of 'tacit knowledge,' the underlining principle in knowledge management. Next, the article discusses the distinctive properties of knowledge, as proposed by the founding scholar Michael Polanyi in his groundbreaking work 'Personal Knowledge: Towards a Post-critical Philosophy' (1962).

The article continues with the overview of two main theories that use tacit knowledge concept to manage knowledge in modern business organizations. First, it provides an overview of "Knowledge-based theory of the firm" (KBT) whose advocates rightly suggest that knowledge bases and firms' capabilities are the main contributors to a company's long-term competitive advantage and financial performance. Findings of the often cited article on the subject – 'Toward a Knowledge-Based Theory of the Firm,' (1996) by Robert Grant – serve as a basis for discussion on the theory. Second, it summarizes later development of the field, primarily by Ikujiro Nonaka, the founder of 'Organizational Knowledge Creation Theory' (OKC), outlined in this

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principle text on the theory 'A Dynamic Theory of Organizational Knowledge Creation,' (1994). The article concludes with a summary and an opinion on the importance of effective knowledge management in modern organizations and the recent views on the subject.

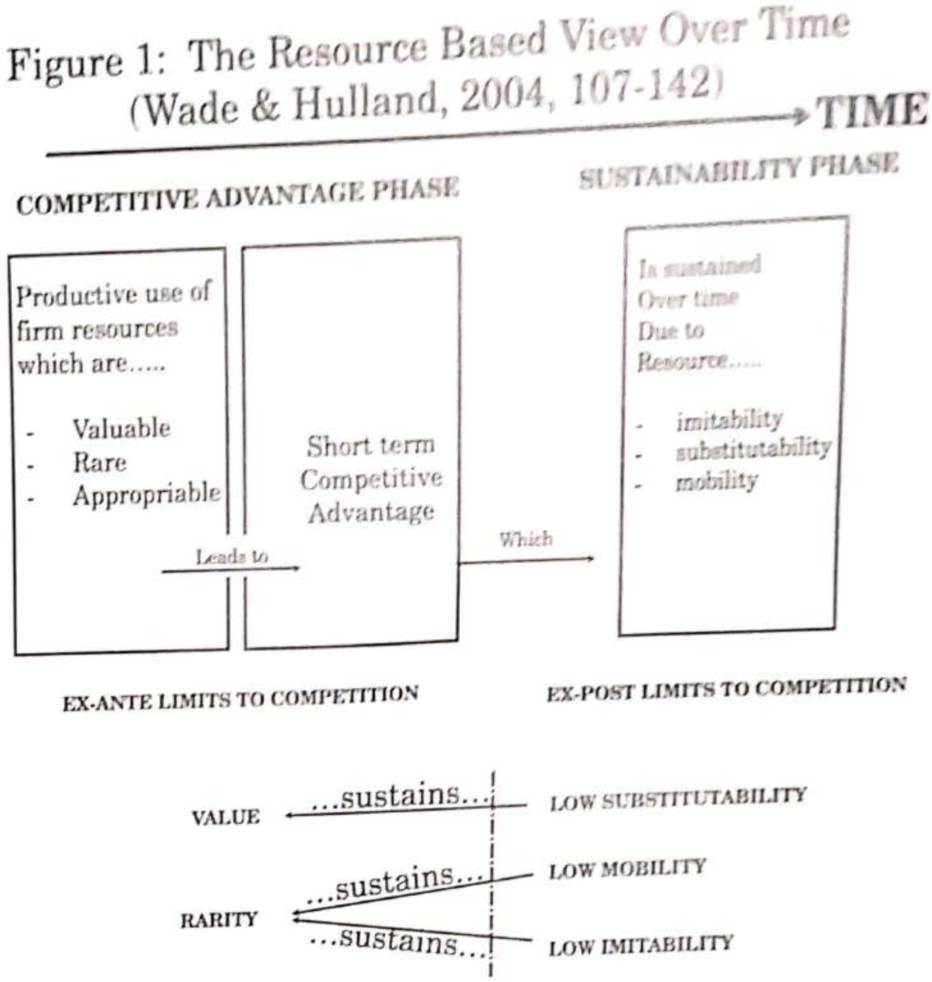
Context of the Topic:-

Knowledge management and KBT principally originated from Strategic Management, which encompasses the analysis, decisions, and actions that a company undertakes to create and sustain competitive advantage (Dess, Lumpkin & Taylor, 2005). It first analyzes the company's strategic direction through aligning the company's vision with delivering value proposition for the clients. Next, it analyzes the internal strengths and weaknesses, and the external environment in which the company operates. The result of the initial strategic management analysis is the strategy formulation. Strategy determines what industries to compete in and how to do it. Second, a company determines a particular course of action that would allow it to maintain long- term competitive advantage. In the last decades, the main source of competitive advantage has been the superior operational effectiveness. However, this type of advantage proved to be very short-term as rivals easily replicate processes due to recent technological advances.

As Michael Porter accurately suggests, operational effectiveness alone will not determine sustainable competitive advantage in the future (Porter, 1979). To sustain competitive advantage, a company has to perform tasks differently or it has to redefine the production process by developing a unique, internally consistent, and difficult to imitate activity system. KBT and OKC offer the solution to increasing pace of technological replication by recognizing the importance of knowledge, as one of the most contextually complex resources that define a company's innovating ability and advocating the role of knowledge creation and management in companies. Knowledge is arguably the most significant strategic resource since it is socially complex and difficult to imitate. The KBT proponents argue that heterogeneous knowledge bases and capabilities determine financial performance and degree of sustained competitive advantage. While KTB traces its origins to Strategic Management discipline, its later adaptation OKC incorporates and builds on several topics of Philosophy (Polanyi, 1962), Cognitive Psychology (Anderson, 1983), and Organizational Theory (Nonaka, 1995) as it analyzes knowledge creation at individual, group, organizational, and inter-organizational levels.

Discipline of Knowledge Management closely relates to several theories and schools of thought that contributed to development of KBT and OCK. KBT builds upon the mid 20th century's ground-breaking "Theory of Growth of the Firm" that is often referred to as a "Resource-Based View of the Firm" (RBV), illustrated in Figure 1, first promoted by Edith Penrose (1959) and later extended by Wernerfelt (1984), Barney (1991), and Conner (1991). The focus of the theory is the analysis and appraisal of importance of managerial activities, decisions, organizational routines, and knowledge creation within the company. The theory argues that the company's resources are critical to its growth ability. An important premise of RBV is that both the management's and the company's success lies in striving towards product excellence and growth maximization (Penrose, 1959). The theory also attempts to explain economic expansion by the processes occurring within the firm. "Managerial Theories of the Firm" further developed the idea and incorporated it into its findings (Marris, 1964). Although Penrose and followers discussed "knowledge" as one the resources of the company, they treated it as one of the generic resources and did not explore its unique properties. Scholars consider the later formulated KBT an extension of the RBV.

Figure 1



KBT also relates to "Resource Dependency Theory" (RDT), which had been defined by its founding father as "organizations maximizing their power" (Pfeffer & Salancik, 1978). The theory steps away from analyzing intra-organizational relations and starts looking into the links among organizations. It argues, that if a company is lacking some important resources it would attempt to establish synergies with the companies that are able to provide them with the lacking recourses demonstrating an exchange based set of power relations. Meanwhile, the company would attempt to balance its dependency on other organizations either by developing its own resources or by increasing the dependence of other organizations. Although originally formulated to discuss inter organizational dynamics, theorists found that it is applicable to relationship between the different business units within the organization (Pfeffer & Salancik, 1978).

Life and Work of Michael Polanyi

Michael Polanyi was a Hungarian scientist and philosopher who lived from 1891 to 1976. He completed his medical degree in 1913 and a Ph.D. in physical chemistry in 1917 at the University of Budapest. Michael Polanyi's career consisted of two very distinct periods: during the first, he was an accomplished chemist, and after World War II, he became an acclaimed theologian (Scott & Moleski, 2005).

From the 1910's through 1930's he was involved in various projects in physical chemistry, worked in European science centres of the time, and greatly contributed to revolutionary research in absorption forces and natural fibres. He achieved most success in the field of chemical kinetics and dynamics by developing the first potential energy surface for chemical reactions (Scott, 1983).

In 1933, he immigrated to Britain and joined the University of Manchester after the Nazi regime rose to power in Germany. During that period, he started to devote more time to economic and political theories, which had been his interest for a long time. During the World War II, he mainly worked on philosophical issues, and eventually retired as a senior research fellow at Oxford in 1959 (The Polanyi Society, 2007).

Michael Polanyi has greatly contributed to Knowledge Management by analyzing the unique characteristics of knowledge from a philosophical perspective. In his classic study of knowledge, 'Personal Knowledge: Toward a Post-Critical Philosophy' (1962) originally published in 1958, he introduced the "tacit knowledge" concept and discussed its various applications from theology to artificial intelligence (Polanyi, 1962). This famous quotation highlights the importance of personal component to knowledge:

We must now recognise belief once more as the source of all knowledge. Tacit accent and intellectual passion, the sharing of an idiom and have a cultural heritage, affiliation to a like-minded community: such are the impulses, which shape our vision of the nature of things on which we rely for our mastery of things. No intelligence, however critical or original, can operate outside such a fiduciary framework. (Polanyi, 1962, p. 266)

Michael Polanyi had excelled in multiple fields such as physical chemistry, epistemology, economics, patent law, social and political theory, aesthetics, and theology (Scott & Moleski, 2005). His profound contribution to philosophy of science and social science proves him to be one of the great European thinkers of the 20th century.

Application Of Tacit Knowledge In Modern Business Organizations

Unique Characteristics of Knowledge :-

Michael Polanyi analyzes various aspects of knowledge in his groundbreaking book 'Personal Knowledge' (1962). One of the central ideas developed in this work is the modification of the concept of 'personal knowledge' that would avoid the perceived contradiction between the 'objective' and 'subjective.' The academic convention of the time believed scientific knowledge to be objective and independent of any personal characteristic. Polanyi, however, basing his modification on the ideas of Gestalt Psychology, founded by Max Wertheimer, defines knowledge as 'an active comprehension of things known' that requires skill. Next, he proposes that the personal participation of the 'knower' does not make the process 'subjective', as it does not necessarily lead to comprehension. He treats personal knowledge as an active experience, "a responsible act claiming universal validity" (Polanyi, 1962, p. vii). He argues that it remains objective as it assists in getting in contact with 'condition for anticipating an indeterminate range of yet unknown (and perhaps yet inconceivable) true implications'. He finally defines personal knowledge as a "fusion of the personal and objective" (Polanyi, 1962, p. viii).

Fundamental Aspects of Human Knowing:- The analysis begins with discussion of the fundamental aspects of human knowledge mechanism, which he calls 'The Art of Knowing'. They include, in Polanyi's view, the notions of objectivity, probability, order, and powers (skills). "Objectivity" is examined through the lenses of Copernican revolution, positivism, and Einstein's theories of relativity as it demonstrates itself in modern physics. He identifies 'intellectual powers, and their passionate participation in the act of knowing' as main components of personal knowledge (Polanyi, 1962). "Probability" is discussed by assessing the grades of confident assertion derived from unambiguous statements, probability statements and maxims. The importance of asserting probability is the ability to judge when the events occurred accidentally and when as the result of a natural law. "Order" is examined as 'randomness and significant pattern' and the relevance of crystallography to experience. Finally, "skills" of personal knowing is discussed as the areas where personal awareness greatly contributes to successful comprehension, the practice of skills (that is, riding a bicycle), destructive analysis (superstition and specious practices), tradition (apprenticeship), and connoisseurship (wine-tasting) (Polanyi, 1962). He concludes the discussion on knowledge mechanism with the proposition that personal knowledge requires an 'intellectual commitment' or 'responsible decision' to apply to 'personal knowing skills'.

Introduction of Tacit Component:- He proceeds to develop his main thesis of the importance of tacit component in personal knowledge by looking into the origins of intelligence. He first examines different aspects of articulation showing the relationship between inarticulate (animal) and articulate (human) intelligence. He discusses this relationship by applying operational principles of language and powers of articulate thought as well proposed innovative views on logical operations and problem solving. He attempts to apply the mechanics of scientific strive towards the discovery to explaining how the reasoning powers result in articulation (Polanyi, 1962). He states that we share the most fundamental tacit intellectual powers with 'animals and infants' and that the scope of human knowledge expands immensely by the acquisition of speech (Polanyi, 1962). By examining language and articulation, he shows the origins of personal involvement and participation that lie in the very fact of speaking.

Second, Polanyi investigates the role of 'intellectual passions,' which form the foundation of "appreciation of the intellectual beauties of science" (Polanyi, 1962, p. 133). He analyses the main components of intellectual passion – scientific value, heuristic passion, and elegance. 'Scientific value,' in his view, is the scientist's personal opinion in distinguishing which scientific facts are worthy of scientific interest. He shows that a 'sense of intellectual beauty' ultimately guides the assessment of relative importance of demonstrable facts (Polanyi, 1962). He describes the heuristic function of scientific passion as the merger of the appreciation of scientific value into the capacity for discovering it. The heuristic passion is what makes the artist's appreciation of art transform into his creative powers and what guides creative scientists' drive to discovery (Polanyi, 1962). When discussing 'elegance and beauty', he claims that the theory must exemplify an intellectual beauty to be in contact with reality. He shows the validity of this opinion by describing the progression of acceptance of the Copernican system, which originally suffered from bitter confrontation by contemporaries but later became one of the postulates of modern civilization (Polanyi, 1962).

Building on the discussion of passions, Polanyi proceeds to examine the gradual transformation of the initial passionate preoccupation with a problem by the discovering scientist, to its toned down manifestation, when the discovery is published and becomes available to the academic community, to the routine learning of its results by new generations of students, and finally to the accepting of the once novel theory as a true fact. He pointed out that the initial heuristic act of seeking the discovery was full of personal participation whereas the final stage of theory acceptance becomes very public. The dynamic initial process of discovery eventually transforms into a static state of public theory acceptance.

The scientist's attempt to propose a new theory involves all of the intellectual passions, specifically heuristic, and at the same produces an inevitable tension in the academic community resulting in scientific controversy. Polanyi discussed the implications of scientific controversy, the logical gap that separates the existing and the proposed conflicting systems, the great difficulty of persuading others to accept a new view by formal argument, as long as it is done within their framework, and the unfortunate inevitable personal attacks on the opponents in case of rivalry between scientific visions. From this, he concludes that the historic outcomes of scientific controversies undoubtedly shaped our appreciation of scientific value (Polanyi, 1962).

In further investigation of intellectual passions, Polanyi contrasts them to other powerful motivators of human behaviour such as hunger, sex, and fear. On the surface, they display characteristics similar to intellectual passions as they seek to discover the means of satisfaction for their motives. The fundamental contrasting element is that, unlike with satisfaction of the cravings and emotions similar to the ones animals possess, the strive for scientific pursuit does not expire with the incident of discovery. Similar to behavioural passions, scientific discovery resolves the immediate impulse for seeking the solution; however, it results in knowledge of the 'knower,' which, in turn, sustains the drive for further discovery. Consequently, striving for knowledge is a perpetual process as desire for further discovery builds on the preceding achievements (Polanyi, 1962). Polanyi also studied the unique characteristics of two distinct fields that involve a set of interesting and complex relationships making them invaluable in comprehending various aspects of tacit knowledge, abstract art (especially music) and mathematics. He maintains that "owing to its sensuous content a work of art can affect us far more comprehensively than a mathematical theorem," stressing the importance of personal component in knowledge (Polanyi, 1962, p. 199).

His discussion of intellectual passions concludes with a description of the components of a valid articulate framework. While natural science builds on facts of experience, or 'verification,' abstract fields of mathematics, religion, and various arts are mainly tested and accepted by 'validation' in which personal participation is more evident. Regardless of the articulate system, that constitute a variety of mental dwelling places, 'verification' and 'validation' acknowledge personal commitment and, therefore, make the process of knowing objective, as they prove the existence of an external to the speaker reality (Polanyi, 1962). Finally, Polanyi asserted the interdependence of intellectual passions, articulate systems, and society, and established the need for convivial support of articulate systems, which enable intellectual passions, by society.

Justification of personal knowledge:- The exploration of various properties of knowledge continues with the attempt to establish a viable framework for it. It begins by restating the human capacity of acquiring knowledge by utilizing our cognitive powers. Then, it examines the logic of affirmation by looking into the confident use of language, the role of inference, and the function of criticism. Next, it researches the doctrine of doubt by breaking it down to reasonable and unreasonable doubt, scepticism evident in natural sciences, doubt manifestation as a heuristic principle, and religious doubt (Polanyi, 1962). It also demonstrates the three aspects of stability of implicit beliefs and belief systems. Firstly, the beliefs are stable, as the belief holders can meet the objections on at a time. Secondly, the belief stability is rooted in the automatic expansion of its reach due to the manner in which interpretative systems operate. Thirdly, beliefs remain stable as they deny the validity of any rival theories (Polanyi, 1962). Polanyi expands his discussion by providing insights on universal doubt, which he views as a contributing factor to fanaticism (Polanyi, 1962). He concludes the discussion by emphasizing the importance of commitment and finding that "commitment offers to those who accept its legitimate ground for the affirmation of personal convictions with universal intent" (Polanyi, 1962, p. 324).

Commitment to Personal knowledge:- Polanyi wraps up his discussion by incorporating his views on commitment to personal knowledge into metaphysics, the nature of ultimate reality. He first probes the 'logic of achievement' by studying the rules of rightness, causes and reasons, logic and psychology, and originality in animals. He then proves that our comprehension deepens as we evolve and it affects our knowledge of an animal's biological achievements. Next, he investigates morphogenesis, the living organism machinery, the development of learning, human knowledge, and the connotation of acknowledgment of superior knowledge concept. He concludes with the deliberation on the 'definite theory concerning the nature of things,' which he calls 'the rise of man' (Polanyi, 1962). Lastly, he asks himself the question, "Is evolution an achievement?" (Polanyi, 1962, p. 382). In attempt to answer it, he examines the randomness, as an example of emergence, the logic of emergence, the emergence of machine-like operations and ends the discussion with his reflection on first causes and ultimate ends (Polanyi, 1962). He believes that at some point 'the observer's appraisal of biological achievement turns into his submission to the leadership of the superior minds' and at that point "the theory of evolution finally bursts through the bounds of natural science" (Polanyi, 1962, p. 404). He defines a free society as 'fellowship fostering truth and respecting the right' and observes the past is shaped by our ultimate beliefs (Polanyi, 1962). Finally, he states, "the appearance of the human mind has been so far the ultimate stage in the awakening of the world" (Polanyi, 1962, p. 405).

Knowledge Based Theory of the Firm

Philosophical examination of knowledge characteristics in mid 20th century has evolved into two main theories of knowledge creation and management in modern business organizations. The first is a 'Knowledge- based Theory of the Firm' (KBT). While RBV stresses the importance of resources to the superior financial performance, it stops short of examining the unique properties of knowledge as they relate to management in modern organizations.

KBT holds that various components of business organization, such as organizational culture, systems, and employees, carry knowledge within the organization. The increasing market value of knowledge has made it an invaluable resource to business organizations and the primary source of Ricardian rents (Grant, 1996). KBT operates on important assumptions and observations that help to understand the nature of knowledge and its implications to business organization.

KBT mainly deals with the effective management of common and specialized knowledge within the organization. One of the central ideas of the theory is the importance of coordination of specialized knowledge. The convention of the time, developed by the organizational theory scholars, held that the main obstacle to superior achievements within the organization rests in lack of cooperation due to conflicting goals of members of organization, that is, employees vs. owners (Weick, 1979). Grant states that even if organization achieves cooperation, the coordination of the specialized knowledge remains challenging (Grant, 1996).

The theory rightly holds that the competitive advantage of an organization primarily depends on its ability to coordinate and integrate knowledge collectively held by individuals within the firms. In the modern environment, the knowledge integration process and the mobility of employees determine the organizational capability in larger degree than the specialist knowledge that employees possess. Thus, the integration of common knowledge, rather than development of specialist knowledge, becomes increasingly important. The broader the scope of knowledge the company integrates the harder it is to replicate, coordination becomes a crucial source of sustained competitive advantage. Innovative organizational practices, such as cross training, job rotation, etc.; achieve successful integration and coordination of common knowledge (Grant, 1996).

Organizational Knowledge Creation Theory

The dynamic OKC provides further application of tacit knowledge concept, as it moves from an issue of the existing knowledge management within the organization to its creation. The theory primarily builds on classic works of Michael Polanyi; however, Professor Ikujiro Nonaka formally defined it in mid 1990's in 'The Knowledge-Creating Company' (1995). When developing OKC, he summarized, synthesized, and modified the ideas proposed by other scholars whereby demonstrating the importance of social interaction to knowledge creation advocated in this theory.

Nonaka's approach to knowledge derives from the importance of practicality emphasized in Japanese culture. He believes that knowledge is a livelihood of an organization, and proposes a practical application of tacit knowledge concept, developed by Polanyi, to enhance organizational 'knowledge creation'. The theory restated classic definition of the types of knowledge. According to Nonaka, tacit knowledge involves an 'analogue activity' of communication in attempts to share it to achieving mutual understanding. This type of understanding involves 'parallel processing' of continuous complex variables.

On the contrary, explicit knowledge is discontinuous, discrete, and involves 'digital' processing. The focus of the theory is tacit knowledge, which Nonaka uses to gain further access to knowledge resources of the person (Nonaka, 1994).

Personal tacit knowledge, often defined as the flow of information that individuals created by their committed and effective actions, provides starting point for OKC. The theory discusses the need for conversion of internal tacit knowledge into a codified knowledge that company can share among its members, and proposed a framework for its crystallization and amplification (Nonaka, 1994). Nonaka developed a 'spiral' process of OKC, which demonstrates the various stages knowledge undergoes in organization. First, knowledge converts among various tacit forms; second, it moves from tacit to explicit state, third, it modifies among different explicit possibilities, and finally becomes a tacit knowledge on an organizational level. The stages are very distinct as they involve unique experience for participants and require different personnel management styles (Nonaka, 1994).

These conversions become the 'modes on knowledge creation' they constitute the core contention of OCK. 'Socialization,' the first stage, involves the interaction between individual members of 'microcommunity' through mechanisms of observation, apprenticeship, and imitation. 'Externalization,' the next stage, allows for conversion of tacit knowledge to explicit knowledge comprehended by others often through the contradictions found in metaphor and harmonies present in analogy. In 'Combination,' the third stage, the newly explicit knowledge becomes widely communicated, discussed, modified, in other words, combined through conversations or using information systems. The final stage, 'Internalization,' converts the new organizational explicit knowledge back to its tacit form, however on an organizational level.

While all four modes can create knowledge independently, the creation of organizational knowledge is only possible when they interact dynamically and support the continuous exchange between the tacit and explicit knowledge that takes place in externalization and internalization. This continuous interchange and dynamic interaction between all four modes of knowledge conversion consequently leads to a 'spiral' model of knowledge creation, illustrated in Figure 2. The model demonstrates that with the increasing number of players, the interaction between the tacit and explicit knowledge accelerates. Since the conversion process starts at the individual level and moves towards the group level, and eventually the organizational level, the upward spiral visually represents the organizational knowledge creation process (Nonaka, 1994).

Figure 2

Figure 2: Spiral of Organizational Knowledge Creation (Nonaka, 199, p. 20.)

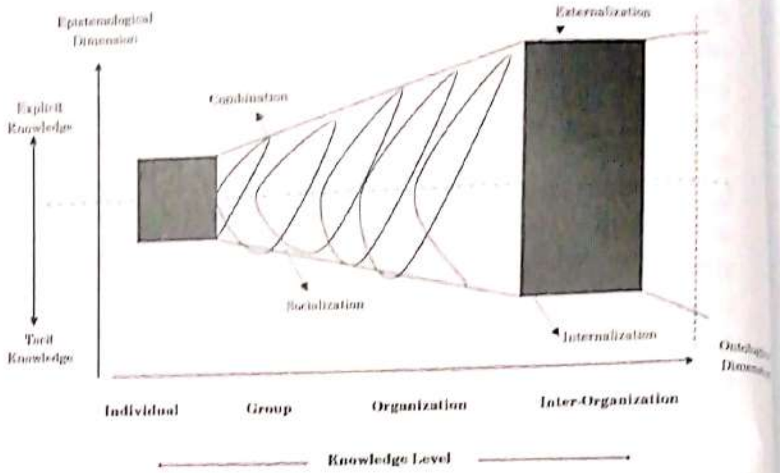
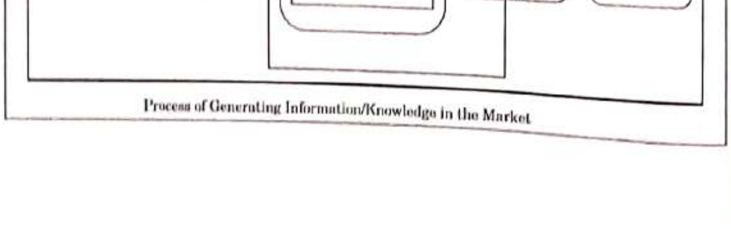


Figure 3: Organizational Knowledge Creation Process (Nonaka, 1994, p. 27)

The theory proceeds to suggesting practices that enable application of the 'spiral' model to a corporate organizational setting. Among the suggested initiatives are – 'the enlargement of an individual's knowledge', 'sharing tacit knowledge and conceptualization', 'crystallization', 'the justification and quality of knowledge', and 'networking knowledge' (Nonaka, 1994, p.20). The theory concludes with reflection on practical aspects of OKC and outlines the organizational knowledge creation process, illustrated in Figure 3. It combines the aspects of 'individual commitment' – intention, autonomy, and fluctuation – with the 'organization-wide' enabling conditions – creative chaos, redundancy, and requisite variety and develops two specific management models. While the first, 'middle-up-down management', relates to managerial style, the other, 'hypertext' organization, focuses on organizational design (Nonaka, 1994).

Figure 3

Conclusion: Subsequent research in the field has led to additional insights by various authors who have



developed the direction of future research. One of the important aspects of research is that the transferability of knowledge greatly depends on its specific characteristics. While explicit knowledge (codified knowledge) can be easily articulated, communicated, and transferred between the individuals and organizations, transfer of tacit knowledge (skills, and know-how) is challenging and costly as it only becomes apparent when applied (Nonaka, 1994). Kogurt and Zander discussed the added challenges in knowledge application as the typical production process of goods or services requires application of many types of knowledge (1994).

It can be added that, as the complexity of the production processes exponentially increases, knowledge management will become instrumental to ultimate success for most business organizations. The importance of the issue becomes even more apparent with the increased globalization, as many organizations move their operations across the boarder in search of lower cost of production. As the article demonstrated, the transfer of tacit knowledge is difficult, slow, and costly due to the existence of the personal component, the very same component that actually makes it contextual, difficult to replicate, and hence, valuable. Dealing globally adds another dimension to the challenge due to cultural differences, diverse religious beliefs, and possibly conflicting value systems.

The economies of scale and scope play an important role in knowledge management. The economies of scale can achieve the reduction of the average cost since the initial knowledge creation is costly while the subsequent applications are not. Additionally, the economies of scale can translate into the economies of scope since knowledge is a general resource and is not specific to the particular production process. (Grant, 2002). Recent research further developed the economies of scope and scale assertion by determining the extent of its application based on the types of knowledge. The economies of scope and scale prove to be great in the case of explicit knowledge since its creation is expensive, but replication is cheap; meanwhile, the initial cost of tacit knowledge tends to be lower, but the replication is slow and expensive (Shapiro & Varian, 1998).

These modern views provide an interesting perspective and indicate the direction of further research. The importance of knowledge management cannot be overestimated by the scholars and business community as the modern organizations are often said to have become 'knowledge organizations'.

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A STUDY ON PERCEPTION OF INVESTORS AND INTERMEDIARIES TOWARDS SECURITIES MARKET REFORMS

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Abstract: *The Securities Market in India went through a major transformation during 1990s. The deregulation, liberalization and globalization of the Indian economy provided much needed impetus to the capital markets for its growth and development. The role played by the Securities Market was far reaching as compared to that of its role in the initial stages. The investor base in each of the markets has also expanded considerably and their active participation is imperative must to achieve a balanced growth and level of efficiency. This study attempts to understand the perception of the investors and intermediaries who are the most important market players towards security market reforms. From this study it became evident that the investors and intermediaries have a positive outlook towards the reforms of the market. It has become very clear that there is no significant difference in the perception of among investors and intermediaries relating to reforms of the market.*

KEY WORDS: *Security Market, Security Market Reforms, Capital Market, Investor perception, SEBI*

Introduction: The primary role of capital market is allocation of capital among competing sectors of the economy. The changes in law concerning the financial sector during the 80s and the economic reforms introduced after June 1991 contributed significantly to the growth of Indian Capital Market. The Securities Market in India went through a major transformation during 1990s. The deregulation, liberalization and globalization of the Indian economy provided much needed impetus to the capital markets for its growth and development. The role played by the Securities Market was far reaching as compared to that of its role in the initial stages. Now, the Indian securities market can be compared to that of the developed countries in terms of the infrastructure and sophistication. The efficient allocation of capital is sought to be achieved through abolition of various controls, industrial policy reforms, trade policy reforms, etc., thus allowing a free play of market forces. The earlier reforms facilitated faster growth and the latest one focused on strengthening the functioning of the capital markets in India by adoption and implementation of best international practices, systems and products. The investor base in each of the markets has also expanded considerably and their active participation is imperative to achieve a balanced growth and level of efficiency.

Capital Market is the barometer of the economy. This statement truly brings out the importance of the capital market in the macro economic affairs of any country. On breaking up of the shackles of protectionism and with the liberalisation and globalisation of economies, the world is becoming a global village and the role of capital markets is assuming immense importance. However, the larger the role of capital markets, the greater the responsibility on the regulators, participants, investors for the smooth functioning of the capital markets. The story in India is no different. Regulation is a political commodity which is demanded by the private interest groups and provided by the government agencies through legislation or regulatory bodies. Regulation has a role to play only when the market processes such as competition, existence of contestable property rights and routine laws for enforcement of economic contracts are unlikely to achieve allocation and productive efficiency in utilities. The absence of regulation leads to problems of information asymmetry, externalities and market power concentration. The Narasimham Committee report on financial sector reforms, which said that the Indian Capital Market is 'over-governed and under-regulated', only underlined the need for such a regulatory body. That is, at this juncture, the Government of India took a bold step of revamping the existing system and bringing in the new regulator for the market. The establishment of SEBI and the repeal of the Capital Issues (Control) Act,

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1947 in May 1992 is a major step in the liberalization process of the securities market. With this move the Government's control on various activities such as issue of capital, pricing of the issues, fixation of premium and control over the rates of interest was abolished. The timing could not have been better. With the stock markets riding the crest of an artificially engineered boom and the securities scams about to burst forth like a cluster bomb on an unsuspecting public. The Securities & Exchange Board of India (SEBI) Act was promulgated on April 4th 1992 (replacing the earlier ordinance), giving much needed teeth to the watch dog body to regulates the markets. SEBI was established with the objectives of:

a) protecting the interest of investors in securities,

b) promoting the development of securities market, and

c) regulating the securities market.

Review of literature:-

Some of the studies that have been carried out on this subject are being presented here in brief. Singh (1995) felt that unlike in the U.S and the U.K in the nineteenth century, stock market development in developing countries is not an evolutionary response to market forces but instead, developing county governments have played a major proactive role in the development of this market. Besides, for the period of the 1980s, firms in developing countries resorted to a lot to equity financing as the relative cost of equity capital fell significantly during those years. The fall in the cost of equity was due to a large rise in share prices that resulted from internal and external financial liberalization. As access to stock markets became easier the participation in stock markets increased in the 1980s. This was also the time when the relative cost of debt financing increased with embarkation of financial liberalization in developing countries and the steep rise in international interest rates. The cost of equity capital relative to debt was thus favorable to equity during 1980s and firms as a result resorted to equity financing more heavily.

Abhay Pethe and Ajit Karnik (2000) have looked at the role that stock exchanges are expected to play in an economy viz. that of providing liquidity and helping in price discovery. And they found that in the Indian context, neither seems to be fulfilled at the present time, at least not to the full extent. There are indications that we are getting there. This may be seen from the macro –economic changes that are taking place, especially in the policy design environment. The physical characteristics such as computerization and volatility seem to be mimicking the western more developed-economies, but whether this implies development or is merely a superficial similarity remains to be seen. The relationships between the macro-economic variables and stock indices are as yet, not very conclusive.

Roy M K (201) felt that there is an increasing recognition among policy-makers of Less Developed Countries (LDC) about the beneficial role of stock market in mobilizing and allocation of resources in support of growth and development. Specially, it is increasingly recognized that, given the competition for foreign sources of funding and the limited availability of domestic finance in LDCs relative to their development needs, equity market could play an important role in providing capital to the productive sectors, as well as facilitating the process of privatization. But efficient functioning of the market is an essential condition to ensure the above benefit to the economy. Dann and James (1982) examined the central issue in the economics of regulation concerning the behaviour of regulators. They argued that regulators act in the interest of the regulated, while others argue that they act in "public" interest or perhaps in their own interest. They explored the effect of deposit-rate ceiling changes on the stock prices of Savings and Loan institutions (S&L's). Their results suggest decrease in share prices of S&L's around the date of announcement of the removal of ceilings on certain types of deposits. They argued that S&L's have earned economic rents from restrictions on deposit interest rates. The decline in equity prices has been attributed to reduction in these rents as a result of removal of ceilings on deposit interest rates.

Need for the Study:-

The development of capital market is vital for the growth of real economy. A stronger capital market promotes sound and sustainable financial system. The growth and development of Indian capital market, in particular during the last two decades has been spectacular. The plethora of reforms that have taken place over a period has changed the outlook of the Securities Market. The important reforms introduced in the Indian Securities Market are more particularly, the establishment and empowerment of SEBI, market determined allocation of various recourses, screen based trading system, dematerialization and electronic transfer of securities, ban on trading of deferral products, introduction of rolling settlement, trading in derivatives and risk management, efficient trading and settlement system. This has led to a great deal of development both in terms of volumes of the trade and in terms of the depth of the market. The process of reformation has solved many problems and at the same time it gave birth to certain other problems. The legislature has been taking all the necessary steps to overcome the problems in the market. The market activity depends on the investors. In any well developed or developing market the role played by the retail investor is very crucial for the growth and development of the same. Unless there is an active participation and support from them, the market will not be able to perform the function of price discovery. And hence it becomes imperative to understand the perception of the investors and intermediaries who are the most important market players towards security market reforms.

Objectives of the study:-

1. To understand the perception of the investors and intermediaries towards security market reforms.
2. To identify the difference, if any, in the perception among the investors and intermediaries and to understand the reasons for the same.

Methodology:-

To achieve these objectives, the primary data has been collected through structured questionnaires from both the investors and the intermediaries during the year 2007-08. Secondary data has been collected from reports, Bulletins of RBI, Bulletins of SEBI, books, journals, magazines, conference papers, published and unpublished thesis etc. Averages, weighted averages and ANOVA are used to analyse the data and draw conclusions.

Hypothesis:-

When it comes to the perception of the investors and intermediaries towards reforms in the securities market, it is assumed that there is no difference in the perception of investors and intermediaries. The same has been tested by using one way ANOVA to test equality of population means.

The hypotheses are:

H0 (Null Hypothesis): There is no significant difference in the perception of among investors and intermediaries relating to reforms of the securities market.

H1 (Alternate Hypothesis): There is a significant difference in the perception of among investors and intermediaries relating to reforms of the securities market.

Sampling

In order to ascertain the opinions of the investors and the intermediaries, the state of Karnataka has been selected as it is truly cosmopolitan in its nature. A Sample of 300 investors from Karnataka state is taken for the study on the basis stratified, convenience and judgmental sampling. While selecting the investors, care has been taken to select them from Urban (State Head Quarters), Semi-Urban (District Head Quarters) and Rural (Other) areas. A sample of 150 investors from urban area i.e. Bangalore, 50 investors from semi-urban i.e. Gulbarga and Mangalore and 100 investors from rural areas is selected as the number of investors at urban area is comparatively more than that of the other areas. When it comes to the semi-urban areas, the number is taken as 50, as the number areas are comparatively lesser than the rural areas. The rural areas are given its due and accordingly ten places are selected for the study. The places covered under rural areas are Nanjanagud, Gauribidanur, Hospet, Thirthahalli, Somavarpet, Harihara, Karkala, Nippani, Birur and Bhalki.

A sample of 50 intermediaries such as stock brokers and depository participants of an urban area (Bangalore) is also taken for the study to understand their perception towards the reforms of the market.

Limitations of the Study

Any research by its inherent nature is bound to have some limitations and this study is not an exception to that rule. The major limitation of the study is that it is restricted to the state of Karnataka only and the size is also limited. However an effort is being made to minimize the impact of this limitation by selecting maximum number of investors from Bangalore, which is truly a cosmopolitan city. As this study is based on the responses of the investors and intermediaries, there is a possibility of personal bias. Care has taken to bring down the impact by asking cross reference questions. Some of the investors could not relate themselves to the impact of reforms as they were new entrants to the market. The investment activity is the outcome of innumerable factors. Whereas in this study only a limited number of factors are considered. With all these limitations, efforts are made to evaluate the situation as accurately and objectively as possible.

In this study it is assumed that the inferences drawn are applicable across the country. It is also assumed that the investors' confidence has been boosted only through the first generation reforms that have taken place during the 1990s, and therefore the study has focused on the same. The later set reforms are not structural in nature, and, hence, the same is not considered for the study.

Investors' Perception towards the Reforms of the Market

The compulsions of the Indian economy during 1990s forced the governments to take the path of reforms in all aspects. The governments have taken various measures to revive the economy that was almost at the level of bankruptcy. This study tries evaluating the perception towards some of the important reforms that are being initiated towards reforming the market. Towards this end, certain evaluative statements are prepared and the investors are asked to indicate their agreement with the statements from strongly agree to strongly disagree on a five point scale. After ascertaining their responses for each of the statement under the three area categories of investors, the corresponding scores are multiplied by 5 points for strongly agree, 4 points for agree, 3 points for neutral, 2 points for disagree and 1 point for strongly disagree. Then scores are divided by the number of their category in the sample to understand the score for each of three categories of the investors. Then the score is multiplied by their proportion in the total sample of investors. The scores thus arrived are multiplied with weights assigned for each of the statement to arrive at the comprehensive score of the market.

Table 1.1 gives us the details regarding investors' perception towards the reforms of the market. The first factor considered is the repeal of CCI, which had the control over the securities market and establishment of SEBI. It is seen as the most important reform that has taken place for the betterment of the market. This path breaking decision has gone a long way in bringing the market to comparable international standards. The investors also perceive that it has contributed to the growth of the market. The scores of all the investors are almost the same i.e. around 3.85. This indicates that they perceive the strong impact made by the SEBI.

The second factor is the introduction of depositories and dematerialization. This has not only solved the problems of having securities in the problems, but also brought in transparency and speed into the settlement etc. The investors do not seem to be fascinated by this. This can be clearly seen from the scores which are hovering around 2.75, which indicates that they are neutral about it.

Derivatives are viewed as the most important and powerful financial instrument in the 20th century. The basic purpose of introducing them is to provide for risk minimization and price discovery. From the study it appears that the investors are neutral about the impact of the introduction of them as the scores are around 2.96. This may be because of the fact that derivatives are not available on all financial securities.

Earlier the management of stock exchanges used to be in the hands of the individuals, who were the powerful brokers of the stock exchange. This used to lead to a lot of self-centred practices Corporatisation of stock exchanges gave a distinct identity to these bodies and made them more accountable with bifurcation of management. The score arrived is 3.21 which indicates a slightly positive opinion about the same in the minds of the investors.

When asked about the free pricing of securities and book building process in the primary markets the investors appear to be slightly skeptical about the same as the scores are around 2.3.

The next factor that is considered is the segregation of clients' accounts from that of the brokers. This is expected to have brought in transparency in the transactions and minimization of misuse of the clients' funds by the brokers. The investors appear to be neutral about the impact of the same on the market as the scores are around 3.

Speculation is and was the major problem in almost all the markets. Abolition of the "badla" system and introduction of Revised Carry Forward system in the beginning and later Modified Carry Forward system as per the recommendations of Shri. G S Patel and Prof. J R Verma committees, is supposed to have reduced the quantum of unwanted speculation in the market. The comprehensive score for the same is working out to be 3.21. This indicates that the investors agree that the speculation has been reduced to some extent.

Table No: 1.1 Investors' Perception towards the Reforms of the Market

Sl. No.	Statement	Weightage	Urban Investors (0.5)	Semi-urban Investors (0.167)	Rural Investors (0.333)	Value for the aspect	Weighted Value
1	Repeal of CCI and establishment of SEBI contributed the most for growth of the market	0.35	3.953	3.92	3.66	3.8500	1.3475
2	Dematerialization and depositories solved many problems of investors	0.20	2.813	2.68	2.69	2.7500	0.5500
3	Introduction of derivatives increased for better profits with lower risks	0.10	2.960	2.86	3.01	2.9600	0.2960
4	Corporatisation of Stock Exch anges for better performance and accountability	0.05	3.153	3.22	3.24	3.1930	0.1597
5	Free pricing of issues and book building have provided for price discovery	0.10	2.247	2.34	2.43	2.3230	0.2323
6	Segregation of clients' accounts led to transparency and minimized misuse of clients' funds	0.05	3.167	2.94	3.01	3.0770	0.1539
7	Revised carry forward system controlled speculation to a great extent	0.10	3.267	3.10	3.17	3.2070	0.3207
8	Establishment of Central Listing Authority has made listing easier & provi ded for better control	0.05	3.047	2.62	2.77	2.8830	0.1442
	Total	1.00					3.2043

Source: Primary Data through Questionnaire.

The other factor was Establishment of Central Listing Authority to make listing easier and provide for better control. When asked about the same urban investors are slightly above neutral level, where as the semi-urban and rural investors are below the neutral level. In general it appears that the investors do not feel any additional benefits because of Central Listing Authority as the score is 2.9.

The weighted average score of all the factors is working out to be 3.2. This indicates that investors are slightly positive about the reforms that have taken place over the period of time.

Table No: 1.2 Intermediaries' Perception towards the Reforms of the Market

Sl. No.	Statement	Weightage	Value for the aspect	Weighted Value
1	Repeal of CCI and establishment of SEBI contributed the most for growth of the market	0.35	3.98	1.393
2	Dematerialization and depositories solved many probl ems of investors	0.20	3.20	0.640
3	Introduction of derivatives increased for better profits with lower risks	0.10	2.76	0.276
4	Corporatisation of Stock Exchanges for better performance and accountability	0.05	3.20	0.160
5	Free pricing of issues and book building have provided for price discovery	0.10	3.02	0.302
6	Segregation of clients' accounts led to transparency and minimized misuse of clients' funds	0.05	2.40	0.120
7	Revised carry forward system controlled speculation to a great extent	0.10	3.14	0.314
8	Establishment of Central Listing Authority has made listing easier & provided for better control	0.05	2.80	0.140
	Total	1.00		3.345

Source: Primary Data through Questionnaire.

The responses of intermediaries relating to the reforms of the market are given in table no. 1.2. They expressed that repeal of CCI and establishment of SEBI as the most positive contributor to the growth of the market with a score of 3.98, indicating the strong impact made by SEBI. The perception of the investors is also same for this factor. Dematerialization and establishment of depositories, Corporatisation of Stock Exchanges, Revised Carry forward system and Free pricing of issues and Book building process are viewed slightly positive towards the reforms of the market with a score of 3.2 on an average. Establishment of Central Listing Authority, introduction of derivatives and segregation of clients accounts are felt to be of little importance. The score for them is around 2.5. The weighted average score of all the factors is 3.35, indicating a moderate level of agreement with the processes of reforms. In all it is found that there is not much of difference in perception between investors and intermediaries towards the reforms of the market.

ANOVA for Reforms of the Market

Regarding the reforms process the respondents are asked to rate their perception on 8 major reforms and the score is calculated for a maximum of 40 and tabulated below.

Table No: 1.3 Respondents' Perception Scores regarding Reforms of the Market

Urban Investors						Semi-urban Investors		Rural Investors			
Code	Score	Code	Score	Code	Score	Code	Score	Code	Score	Code	Score
1	24	51	22	101	26	1	28	1	24	51	34
2	25	52	15	102	27	2	26	2	24	52	14
3	24	53	35	103	21	3	25	3	16	53	24
4	28	54	21	104	22	4	29	4	25	54	25
5	25	55	23	105	19	5	22	5	28	55	31
6	27	56	27	106	30	6	26	6	22	56	22
7	21	57	24	107	23	7	21	7	27	57	23
8	25	58	24	108	24	8	18	8	18	58	26
9	27	59	29	109	26	9	25	9	25	59	27
10	24	60	27	110	19	10	20	10	22	60	22
11	29	61	23	111	23	11	35	11	24	61	22
12	27	62	25	112	21	12	18	12	21	62	20
13	30	63	23	113	25	13	24	13	28	63	22
14	20	64	30	114	19	14	21	14	26	64	28
15	28	65	27	115	31	15	22	15	27	65	22
16	24	66	26	116	19	16	25	16	25	66	22
17	23	67	23	117	30	17	22	17	23	67	26
18	33	68	24	118	16	18	25	18	31	68	17
19	25	69	17	119	26	19	26	19	25	69	28
20	26	70	25	120	23	20	25	20	26	70	26
21	25	71	26	121	20	21	21	21	19	71	26
22	26	72	20	122	23	22	23	22	24	72	21
23	26	73	22	123	30	23	20	23	31	73	24
24	20	74	26	124	20	24	24	24	29	74	31
25	27	75	22	125	23	25	24	25	24	75	19
26	25	76	27	126	22	26	25	26	18	76	24
27	21	77	32	127	21	27	19	27	26	77	22
28	24	78	24	128	24	28	24	28	23	78	24
29	27	79	23	129	22	29	23	29	23	79	21
30	27	80	29	130	24	30	23	30	25	80	27
31	32	81	26	131	31	31	22	31	28	81	25
32	20	82	21	132	23	32	23	32	24	82	19
33	25	83	22	133	23	33	26	33	24	83	26
34	20	84	23	134	26	34	24	34	23	84	26
35	33	85	26	135	32	35	24	35	26	85	24
36	26	86	24	136	16	36	23	36	20	86	24
37	18	87	26	137	23	37	27	37	27	87	19
38	23	88	26	138	25	38	21	38	17	88	27
39	29	89	25	139	23	39	24	39	21	89	25
40	29	90	21	140	32	40	24	40	25	90	18
41	24	91	29	141	21	41	29	41	29	91	22
42	21	92	21	142	26	42	22	42	23	92	20
43	20	93	25	143	20	43	27	43	26	93	26
44	30	94	25	144	32	44	23	44	27	94	21
45	24	95	25	145	21	45	22	45	25	95	28
46	26	96	28	146	20	46	21	46	25	96	20
47	24	97	28	147	26	47	22	47	23	97	23
48	20	98	20	148	24	48	28	48	22	98	23
49	31	99	24	149	28	49	17	49	23	99	26
50	25	100	26	150	22	50	26	50	26	100	23

				Intermediaries					
Code	Score	Code	Score	Code	Score	Cod e	Score	Code	Score
1	27	11	25	21	21	30	22	41	30
2	30	12	29	22	18	32	18	42	28
3	19	13	25	23	27	33	19	43	22
4	30	14	27	24	29	34	31	44	19
5	22	15	21	25	22	35	23	45	23
6	22	16	22	26	22	36	21	46	33
7	26	17	26	27	22	37	22	47	18
8	23	18	21	28	30	38	31	48	31
9	25	19	22	29	30	39	21	49	23
10	26	20	25	30	25	40	22	50	29

H_0 (Null Hypothesis): There is no significant difference in the perception of among investors and intermediaries relating to reforms of the market.

H_1 (Alternate Hypothesis): There is a significant difference in the perception of among investors and intermediaries relating to reforms of the market.

F calculated (1.0931) is less than F critical (2.631), hence null hypothesis is accepted. And it is concluded that there is no significant difference in the perception of among investors and intermediaries relating to reforms of the market.

Anova: Single Factor

SUMMARY *Groups*	*Count*	*Sum*	*Average*	*Variance*
Urban Investors	150	3688	24.58667	13.94881
Semi -urban Investors	50	1184	23.68	10.18122
Rural Investors	100	2398	23.98	12.18141
Intermediaries	50	1225	24.5	16.45918

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P- value*	*F crit*
Between Groups	43.50095	3	14.50032	1.093121	0.352033	2.630716
Within Groups	4589.713	346	13.26507			
Total	4633.214	349				

Conclusion

From this study it becomes evident that the investors and intermediaries have a positive outlook towards the reforms of the market. This will be a good test to measure the confidence level of the investors, because the first generation reforms that are initiated have changed the very structure of the market and provided for the platform to make our security markets comparable to that of international market. This has become evident from the study conducted by SEBI-NCEAR. In their study they found that more number of retail investors started investing in the security market. The reforms such as repeal of CCI and establishment of SEBI contributed the most to the growth of the market, corporatisation of Stock Exchanges for better performance and accountability, revised carry forward system controlled speculation to a great extent, segregation of clients' accounts led to transparency and minimized misuse of clients' funds; these are the most significant reforms of the market by both investors and intermediaries. The other factors are not given much importance by both investors and intermediaries. From ANOVA it has become very clear that there is no significant difference in the perception of among investors and intermediaries relating to reforms of the market. When we look at the scores of investors from different areas, it becomes very evident that the scores of each of the attributes and their perception is almost the same for all investors. Only in case of intermediaries a little higher variance is observed in the perception towards market reforms.

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BENCHMARKING HR PRACTICES

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Abstract: *Today more than ever before, business is not just about making new products / process and selling them in the market. The definition has enhanced to such a huge level that it is essential to ensure the right quality and the right quantity. For the efficiency of an organization it is essential to possess the right type of human resources. It is equally important for an organization to have the right kind of HR practices. There is fierce competition among various MNCs as to prove themselves in the global market in all respects, be it the right product or the right people. Without a way to measure relevant indicators, the management is more often relying on educated guesswork. But, there is an alternative to good guessing: benchmarking - a strategic management tool that helps evaluate effectiveness and fosters goal-setting. Essentially, benchmarking provides a snapshot of the performance of your business and helps you understand where you are in relation to a particular standard. Benchmarking should not be considered a one-off exercise. To be effective, it must become an ongoing, integral part of an ongoing improvement process with the goal of keeping abreast of ever-improving best practice. Comprehensive human resources measurement policy enables the management to collect consistent information about the employees. It also aids the decision-making process and ensures that management and development activities remain relevant with overall business strategy. With a sound HR metrics program, HR management can make business decisions that are based on facts rather than "gut feeling", and use the exact figures to back up business cases and requests for resource. This paper aims at understanding the process of benchmarking, the types of benchmarking and the HR Metrics which can facilitate the process of benchmarking.*

Key words: *Benchmarking, HRM Practices, HR metrics, management tool*

1. Introduction:

Benchmarking is the process of identifying "best practice" in relation to both products and the processes by which those products are created and delivered. The search for "best practice" can take place both inside a particular industry, and also in other industries. The objective of benchmarking is to comprehend and appraise the current position of a business or organisation in relation to "best practice" and to identify areas and means of performance improvement as well as performance enhancement.

2. The Benchmarking Process

Benchmarking involves looking outward (outside a particular business, organisation, industry, region or country) to examine how others achieve their performance levels and to understand the processes they use. In this way benchmarking helps explain the processes behind excellent performance. When the lessons learnt from a benchmarking exercise are applied appropriately, they make possible improved performance in critical functions within an organisation or in key areas relevant to the business environment.

Application of benchmarking involves four key steps:

(1) Understanding the existing business processes in detail

(2) Analyse the business processes of others who are best in the industry

(3) Compare own business performance with that of others analysed

(4) Implement the steps necessary to close the performance gap

3. Types of Benchmarking

There are a number of different types of benchmarking, as summarised below:

Strategic Benchmarking: Where businesses need to improve overall performance by examining the long-term strategies and general approaches that have enabled high-performers to succeed. It involves considering high level aspects such as core competencies, developing new products and services

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and improving capabilities for dealing with changes in the external environment. Changes resulting from this type of benchmarking may be difficult to implement and take a long time to materialise. It is essential to re-align business strategies that have become inappropriate.

Performance or Competitive Benchmarking: Businesses consider their position in relation to performance characteristics of key products and services. Benchmarking partners are drawn from the same sector. This type of analysis is often undertaken through trade associations or third parties to protect confidentiality. It is essential to assess the relative level of performance in key areas or activities in comparison with others in the same sector and find ways to close gaps in performance

Process Benchmarking: Focuses on improving specific critical processes and operations. Benchmarking partners are sought from best practice organisations that perform similar work or deliver similar services. Process benchmarking invariably involves producing process maps to facilitate comparison and analysis. This type of benchmarking often results in short term benefits.

Functional Benchmarking: Businesses look to benchmark with partners drawn from different business sectors or areas of activity to find ways of improving similar functions or work processes. This sort of benchmarking can lead to innovation and dramatic improvements. - Improving activities or services for which counterparts do not exist.

Internal Benchmarking: involves benchmarking businesses or operations from within the same organisation (e.g. business units in different countries). The main advantages of internal benchmarking is that access to sensitive data and information is easier; standardised data is often readily available; and, usually less time and resources are needed. There may be fewer barriers to implementation as practices may be relatively easy to transfer across the same organisation. However, real innovation may be lacking and best in class performance is more likely to be found through external benchmarking. Several business units within the same organisation exemplify good practice and management want to spread this expertise quickly, throughout the organisation

External Benchmarking: involves analysing outside organisations that are known to be best in class. External benchmarking provides opportunities of learning from those who are at the "leading edge". This type of benchmarking can take up significant time and resource to ensure the comparability of data and information, the credibility of the findings and the development of sound recommendations: Where examples of good practices can be found in other organisations and there is a lack of good practices within internal business units International Benchmarking: Best practitioners are identified and analysed elsewhere in the world, perhaps because there are too few benchmarking partners within the same country to produce valid results. Globalisation and advances in information technology are increasing opportunities for international projects. However, these can take more time and resources to set up and implement and the results may need careful analysis due to national differences. Where the aim is to achieve world class status or simply because there are insufficient"national" businesses against which to benchmark.

Review of literature - Benchmarking

- The application of this concept to industry and service sector started in a noticeable way only in the mid 1980s. The contribution in the form of technical papers on general aspects of benchmarking was more during 1992 – 1995. This was due to the initial curiosity and interest generated by the topic. Often it is mentioned that benchmarking concepts were initiated during 1989, after Xerox popularised it. At this point it is important to note that attempts to use this concept were first made in the year 1983-1984 as indicated by Brisley (1983).
- In terms of its application in industry, Guilmetle and Carlene (1984) explored the utility of benchmarking in employee training whereas Lowis and Albert (1985) illustrate this concept as a viable tool for computer performance evaluation during 1985.
- Glanz E F et. al (1992), derives five principles of effective HRM and looks at how United technologies Corporation benchmarked HR services with respect to its internal customers
- The paper by Guimaraes and Langley (1994) speaks about the relationship between overall company innovativeness and company performance.
- Holt B (1994) presents a list of the quantitative measures used, linked with qualitative drivers such as organizational change, support to line managers, HRs aim to look after its employees and so on.

- The paper by O'Dell et. al (1999) mentions the applicability of benchmarking in analyzing how organizations seek to incorporate various knowledge management approaches into their business.
- IPMA HR (2006) conducted a benchmarking survey on recruitment and selection practices followed in public sector companies.
- Sameer Prasad, Jasmine Tata (2006), derived a prescriptive element which helps to benchmark countries to different information services as a function of their information globally, by taking advantage of the relative differences among countries.
- Ooi Keng Boon, Veeri Arumugam et. al (2007), revealed that teamwork, empowerment, rewards and recognition, and communication are positively associated with employees' job involvement within the context of the Malaysian semiconductor sector.
- NASSCOM, the chamber of commerce and "voice" of the IT software and services industry in India, today released findings of a survey conducted to identify 'Top 15 Exciting Emerging Companies to Work for' in IT-BPO sector in India. This is a first such survey by NASSCOM, and also the first of its kind across any industry by far, for the emerging companies segment specifically. The survey was conducted in partnership with Grow Talent, a strategic HR consultancy firm. They considered 5 practices such as training and development, Career management, constant effective communication, documentation and climate surveys.
- Faizul et. al (2008), have presented a paper on lessons learned from benchmarking experiences. Based on the French experience with the benchmarking process, the critical success factors in benchmarking were identified
- Kara D Rutowski (2009), have implied in their paper that benchmarking organizational commitment allows management to adjust practices to improve and retain employees.
- Many recent articles, books, and studies argue that HR needs to become a strategic partner (e.g., Jamrog & Overholt, 2004). Recent research suggests, however, that HR is not making much progress toward becoming a strategic partner despite the belief by HR professionals that it should (Lawler & Mohrman, 2003a: 2003b).
- With the growing importance of human capital in determining organizational effectiveness, HR can play a key role in developing and implementing corporate strategy and become a high-value-added part of organizations (Lawler, 2003). HR can play an important role in strategy development and implementation because of the importance of human capital. Generally HR is not considered a strategic partner because HR lacks the type of analytic and data-based decision-making capability which is required to influence business strategy. One of the reasons for this may well be because it lacks the right metrics and analytic models. In comparison to Finance and Marketing, for example, HR often falls short when it comes to providing metrics that assess HR processes and practices from a strategic perspective. It also lacks analytic models that show the relationship between HR practices and the effectiveness of the organization.
- A strong case can be made that HR needs to develop better metrics and analytics if it is ever to become a true strategic partner in most organizations. Lawler and Mohrman (2003b) identity the use of metrics as one of four characteristics that lead HR to become a strategic partner.
- Boudreau and Ramstad (2003) distinguish between providing more HR measures and providing better logic and analytics for making decisions about talent. Organizations can collect three different kinds of metrics in order to better understand and evaluate the impact of HR activities and to influence business strategy and business performance. They are efficiency, effectiveness, and impact (Boudreau & Ramstad, 2003).

4. Objectives:

- To understand the role of benchmarking in the HR processes
- To suggest the HR practices that can be benchmarked.
- To derive the HR metrics which could help in the assessment of human capital.

5. Evaluation of the HR Department:

The evaluation of HR Department can have four levels of perspective.

1. **Strategic Perspective** — the results of strategic initiatives managed by the HR group.

The strategic perspective focuses on the measurement of the effectiveness of major strategy-linked people goals. For instance, the business strategy calls for a major organizational change programs if the business is through a major restructuring or the post merger and acquisition situation. In this context, the organization's change management capability will be a key factor in the success or failure of its execution. Therefore, measuring the ability of the business to manage change effectively is the core measure of the effectiveness of HR and will be a key strategic contribution to the future success of the business. The examples here can be of the following types: -change management capability of the organization, organization compensation and benefit package with respect market rate, organization culture survey etc.

2. **Operational Perspective —** This perspective relates to the operational tasks at which HR must excel. The Balanced Scorecard provides answers to queries about the effectiveness and efficiency in running HR processes that are vital to the organization. Examples include measuring HR processes in terms of cost, quality and cycle time such as time to fill vacancies. Examples here include - time taken to fill vacancies, cost per recruitment promotions, absenteeism by job category, accident costs, accident safety, training cost per employee, training hours per employee, average employee tenure in the company, lost time due to injuries, no. of recruiting advertising programs, attrition rate and so on.

3. **Financial Perspective —** This perspective tries to answer questions relating to the financial measures that demonstrate how people and the HR function add value to the organization. This might include arriving at the value of the human assets and total people expenses for the company. Examples which are relevant here include compensation and benefits per employee, sales per employee, profit per employee, cost of injuries, HR expenses per employee and so on.

4. **Customer Perspective —** This focuses on the effectiveness of HR from the internal customer viewpoint. It helps in assessing the customers of HR satisfied with their service; are service level agreements met; do the customers think they can get better service elsewhere? Conducting an HR customer survey might typically arrive at this. The various issues which can be discussed here are employee perception of the HRM, employee perception of the company, as an employer, customer/market perception of the company, as an employer and so on

What is HR Metrics?

HR activity is generally expressed in qualitative terms and it was felt that there was a need to quantify the HR activities. Hence HR metrics provided a base or a foundation to bring in numbers into the gamut of HR activity. HR measurements have significant implications for all areas of the business performance. For example, employee attitudes and employee turnover metrics are reported to have a significant implication on the decision making process. HR functions often collect data on their efficiency, but not on the business impact of their programs and practices. This is a crucial point because HR organizations that collect effectiveness data are more likely to be strategic partners. If HR wants to play a strategic role in organizations it needs to develop its ability to measure how human capital decisions affect the business and how business decisions affect human capital.

Typically, HR metrics are classified in three key categories: historical, real-time and forward-looking. HR strategy should specify the starting point of business development in order to assess the motivation and future impact of the changes in the HR profile and general business structure. To evaluate the business development, the HR can either use its own historical data or benchmark its organization against other similarly sized businesses or utilize the best practices of other sectors which can be relevant to their own.

The table below gives some of the important HR Metrics and the relevant formulae:

Sl. No.	HR Metric	Formula	Description and its utility
1	Absence Rate	[No. of days absent in a month ÷ Average no. of employees during a month × No. of working days] × 100	This metric helps in analysing the rate of absenteeism in the organization. It further helps in designing an appropriate attendance policy and implementing the same in organizations.
2	Cost per hire	Advertising fees + Agency fees* + Employee referrals cost* + Recruiters fees and travel expenses (Can include all the expenses borne on the candidate) ÷ No. of hires	This measurement can be used to calculate the average cost involved per hire. The analysis of this metric will help in determining how the recruitment cost can be reduced. It will help the HR department in designing a suitable recruitment policy.
3	Time required to fill a vacancy	Total no. of days taken to fill a vacancy ÷ No. hired.	This metric largely speaks about the efficiency of the recruiting function. It is also a process measurement
4	Vacancy Costs	Total No. of vacant positions today ÷ Total no. of positions as of today × 100	This metric gives the expenditure with respect to an vacancy which could occur in the organization due to various issues
5	Yield ratio	Percentage of applicants from a recruitment source who are eligible to attend the next step	Most of the times the brand name indicates the number of applicants. But most of times all the application may not satisfy an organizations requirement. Hence this ratio will help the organization in understanding the actual number of resumes which can be acceptable
6	Success Ratio	Percentage of the eligible applicants to the no. actually selected for a particular job	This number would indicate the number of successful applicants who are selected for the final placement
7	Training/development hours	Sum of total training hours ÷ Total No. of employees	This metric has been lucidly described by Snell and Bohlander in their book titled, Human Resource Mangement. This metric would help in analysing the average training hours.
8	Training investment	Total training cost ÷ No. of employees actually trained	This metric would help in analysing the training cost per employee.
9	Percent of performance goals met or exceeded	No. of performance goals met or exceeded ÷ total No. of performance goals	This metric would assist the performance appraisal process. It will also aid the MBO process.
10	Training (ROI)	Total benefit – Total costs	This metric is generally used by the organizations to understand the total gain from a particular training program. The costs will include both direct and indirect ones such as the trainer's fee, cost s incurred in developing the training module and so on. It would also help us in understanding the effectiveness of a training program

11	Turnover (annual)	No. of employees exiting the job during 12 month period ÷ Average actual No. of employees during the same period	This number would help the organization in largely understanding the attrition rate. If the number is on the higher side then the management can devise strategies to reduce the same.
12	Turnover costs	Total costs of separation + vacancy + replacement + training	This is the total cost to the organization when an individual exits.
13	Human capital ROI	Revenue – Operating expense ÷ Total No. of Full time employees (FTE)	Revenue here will mean the total earning of the organization and the operating expense will include the compensation paid to the employees. This figure will help the organization in evaluating the ROI on the human assets. It will also help the organization in optimising the expenditure with respect to HR practices such as re cruitment, selection, training and development.
14	Tenure	Average No. of years of service at the organization across all employees	The stability of the organization can ascertained with this metric.
15	Utilization percent	Total number of employees utilizing a program/ service / benefit ÷ Total number of employees eligible to utilize a program/ service /benefit	This metric can be used to assess the level of utilization with respect to a particular program or a service or a benefit. It can also be used to measure the effectiveness of welfare measures and other benefits given by the organization.

The above table can be an indicative of various practices of HR which can be easily benchmarked. Benchmarking would also be more relevant as the practices can be judged quantitatively more than the qualitative aspect. The metrics when compared would suggest the areas of improvement. The above metrics can largely assist the management in critical decision making activities. HR measurements have significant implications for all areas of the business performance.

By establishing the full extent of the costs involved, organizations will be able to define a break even point for a typical employee, representing the moment in time when they start to add net value to the organization rather than being a net cost. From a financial perspective, its research demonstrated that this point typically arises after around one year's salary has been spent. This breakdown provides a meaningful context for line managers to weigh up the implications of attrition in their department, reflecting the true cost of losing employees at different stages in their first year of employment. Over time, if it were broken down into job types (e.g. for senior managers or call centre employees) it would provide even more detailed insight at a local level. As such, it's a practical example of how HR metrics can be presented in a way that's meaningful for departmental managers.

The organizational leadership may benefit from periodical HR assessment if it employs HR methodology to identify the main areas of improvement in its human capital. For instance, tracking absenteeism can help increase productivity, or measuring diversity can help save a company from costly discrimination awards. Besides, HR data may be used in creating financial reports in order to link human resources measurements to investment return.

Organizations need employees to apply the knowledge they have to activities that add value to the company. In planning and applying human capital measures, managers should use both retrospective (lagging) and prospective (leading) indicators. Lagging indicators are those that tell the company what it has accomplished. Leading indicators are forecasts that help an organization see where it is headed. Leading indicators include employee learning and growth indices.On the whole, HR measurements transform human resources capabilities to measurable strategic value, which provides for better accessibility and readability of HR data, and improves HR interconnection with leadership across the organization.

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THE STRATEGIC ROLE OF ETHICAL LEADERSHIP IN SUSTAINING THE ORGANIZATIONAL CULTURE-A THEORETICAL FRAMEWORK FROM THE PERSPECTIVES OF SOCIETY AND ORGANIZATION

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Abstract; *Organizational culture can be perceived as the sum total of individual cultural elements of an organization.The cultural gap amongst individuals is obvious in any organization. Since the leadership of a organization has to manage a diverse cultural entities, it is imperative that he knows the particular dimension operating in the organization; and thereafter has to learn to influence. The influences of globalization have pervaded all Indian organizations in general and indian business organizations in particular. It has also brought a discernable change in the work ethics. The relative increase in the affluence and relative shift towards individualism, from a sense of collectivism, has brought forth daunting challenges to the organizational leaderships of India. Is it the extrinsic reward or intrinsic reward that shapes work ethic?.How can a leader bring meaning to 5P's of individual ethical power, viz. Purpose, Pride, Patience, Persistence, and Perspective? This paper tries to assess the strategic role of ethical leadership in sustaining the organizational culture.*

KEY WORDS: *Ethics, Leadership, Organizational culture, Collectivism, Individualism*

One of the major issues that is debated along with other issues of globalization effect is 'work force reduction"-a challenge that the organizational leadership has to take on.The compelling emphasis on economic return and equally compelling emphasis on social obligations -have put the leader between the proverbial "scylla and the Charybdis". Related to the above issue of economical and social obligation is a comparative study of socio-centric level of individual's psychological existence (Clare w Graves,1970)

Culture and leadership are the two faces of an organization, in that , the leaders first create culture when they create groups and organizations(Edgar Schein). In the changing (meant to indicate declining)"work ethic" values how can a leader stop the downfall? Are there any specific traits and behaviours he possesses and exhibits? What are the values that he should espouse in the changed circumstances? Though all the dimensions of cultural values do contribute to 'work ethics', major ones are related to work orientation/leisure orientation, urgent time orientation/casual time orientation and long term orientation/short term orientation

In the days of globalization, challenges are many for organizations, irrespective of the country of origin or country of their operation. In the Indian context, the organization (both business and non business) which were hitherto protected by the government,can no longer expect such protection and hence should gear up to meet the challenges which are not only daunting but also keep on becoming stringent and hard. Then how does the organizational leadership perceive these challenges and how do they translate these challenges into tasks, for their organization members?

Can the workforce stick on to the same work ethics with which once it was comfortable? No doubt work ethics are at the core of any work performance. If the work performance (or task performance) has to change, then work ethics also have to change. An individual derives ethical power for Purpose, Pride, patience, Persistence and Perspective (1). However for a leader , ethical power is for deriving all these; as ultimately these constitute influencing power, which is at the core of leadership. Hence an employee in an organization should also derive ethical power from the above 5 p's. It is here that the organizational leadership helps its employees. Translated into HR practices, this would amount that a leader should motivate his employees,

Motivational factors include, a desire for adventure, a pioneering spirit, a desire to increase one's chances

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for promotion and opportunity to improve one's economic status (2) Promotion and economic status being easily perceivable as they can be considered as extrinsic rewards, it is the pioneering spirit and desire for adventure- the two important aspects, which need the active role of organizational leadership, as they are considered as intrinsic rewards.

The importance of talented human resource in any organization needs no elaboration. The human resource directed towards goal achievement is equivalent to 'directed 'organization itself.

"People are considered to be as important as or more important than the organization itself" (3).The enormity and the complex nature of challenges itself require the manager to be a leader first and manager next. In a protected, constant and simple environment, a manager role would have sufficed. Human resource needs to be co-operated with appropriate balancing and integration, which are the essential constituents of coordination also; and in this case it is the coordination of human resources.

"Leadership is goal oriented cooperation development" (4)

The leadership should move from the culture of production to culture of community. i.e. leadership should move from professional competence to social competence; employees to human beings; trade unions to fellow human beings and hierarchy to organic mutual dependence(5)With the widening and lengthening of operation across the world, a manager meets people as human beings first and employees as next. In a domestic market, the manager mostly manages with his professional competence, which no longer suffices in the days of globalization. His move should be towards social competence.

In the context of globalization, the process and techniques of organization and development have become more significant than ever. M/S China steel in an attempt to gear up for challenges, developed a "Corporate leadership, which was able to display its concern for the staff members to set examples and to nurture among the staff, a sense of corporate altruism and identity, by deflating the self and strengthening concern for others; whilst appealing to the moralistic support of the subordinate(6).The continued but unanswered question of deflation of 'self' vis-a vis others, would thus lead to a sense of culturist in the leader. Creating a sense of altruism, deflation of the sense of self are few such leadership challenges

It is argued by some authors that value based management is at the core of development. They vehemently argue for value based management espoused by socially conscious managers, whose major concern is "Values" and major imperative is "social" (7). Creating a sense of altruism and deflation of the sense of self can definitely be considered as the core values of manager or a leader if one wishes to label so.

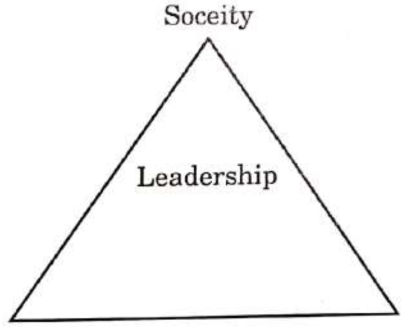
A comparison of Eastern and Western views about business would also indicate the core values of such leaders."Traditional western view of corporation assumes that the business of business is business and that good society comes from effective, economic goal oriented activities of government, corporation and consumers. A new view is required to balance the traditional one and repair some of the damage already done to system complexity and nature"(8)Then the movement from the culture of production to the culture of community is in itself an answer to challenges thrown open by the process of globalization.

Another imperative for the organizational leadership is the change in perception. It is not the set of activities which create a value for the organization and thereby the society. But it is action. Accordingly the perception should be revised to 'Actions'. Following is the list of such desired changes.

Existing perception	Revised Perception
Activity	Action
Individualistic approach	Collaborative approach
Fear of failure in reaching goals	Joy of scaling new heights
Hard work	Wise work
Imposing order	Enlisting co-operation
Organizational productivity	Social productivity
Non conformity	Conformity
Organization profit	Beneficiary profit

The revised perception is essential not only for the economic prosperity but also for moral prosperity. When there is high degree of fit, both cognitively and experimentally, between high moral standards and economic prosperity, life has a substantial degree of moral continuity (9)

It is argued that morals or ethics, while taking the view of distributive justice would ensure equitable distribution of benefits. Benefits though include both tangible and non tangible elements, can be conveniently equated with economic benefits also, which is one of the primary reasons for the existence of business. The revised perception would also fit the utilitarian theory of ethics viz. the principle that every one should act to generate the greatest benefits for the largest number of people. Hence it can be argued that high moral standards and economic property are not only complimentary (or fit) to each other but high moral standards are supplementary to economic prosperity also. Just as a person acts to achieve his own greatest good to advance his rational ends, why should not a society act on the same principle applied to group (10).A group can be conveniently construed as an organization. The leadership which emerges as an offshoot of organization, which in turn operates in a society, are in fact shaping the organizational culture through the organizational members' i.e employees. Pictorially when depicted it would result in a triangle with individual (employee), organization and society at the three apices and leadership having a central pivotal place



Many economists believe that market exchange is to be promoted in all earnestness since this ensures social productivity. The "Personal liberty" view of ethics espouses that there shall be primacy of single value liberty and every one should act to ensure greater freedom of choice, for, this promotes market exchange, which is essential for social productivity (11). According to" Personal liberty" view of ethics, moral standards and economic prosperity can be complimentary, so that "life has a substantial degree of moral continuity"

The organization leadership, it is said, should encourage Non conformist attitude, as this may have a telling effect on the work ethics as well as work place ethics."Non-conformists are always a minority and therefore are not usually helpful for any commonly accepted organizational purposes. Hence it is not welcome that non-conformists grow in number in any organization (12)

In cultures whether on the eastern or the western hemisphere, such organizations which support individualism, non conformity as value, is cherished. Where as an organization which supports collectivism, on conformity gets declined. Since organization in itself connotes collectivism, on conformist attitude at work place is undesirable. However non-conformity and conformity have a meaning limited to conformity to time tested processes and procedures only.

At the core of any study on organizational culture, there lies the ethic. Work ethics is something that stems from factors internal to and factors external to an employee. Any great organization is an organization of more leaders and less followers. Citrin et al have identified six common characteristics of 50 top performing companies. viz.

1. Focus on strategy
2. Lead by example
3. Build a great team
4. Inspire employees to greatness
5. Create a flexible organization
6. Arrange management and compensation to support there among (13)

Culture gets embedded over a time. Unless the members of an organization retain their loyalty, culture gets weakened and thereby it vanishes. "Loyalty" is indeed a criterion, which denotes the unbreakable bond between employer and employee or leader and follower; Loyalty is not one way relationship. Work ethics as such includes the loyalty aspect also."Loyalty to the organization and the people who work there-a value, which has indeed strong roots in companies like Shell, has become the hall mark of morality(14).Thus it can be inferred loyalty is not something towards people or organization, but loyalty towards certain values cherished by all the parties concerned. It is not the company, say in terms of its market image or market position that matters for loyalty, but the values of the company

One necessary question that arises in one's mind is that "will ethic pays?" The answer depends on what one considers as "Pay". In a very broad sense pay refers to that aspect of business which we normally call "Profit". Philip Holder proposes a model of 5C Network wherein 5C's denote Conscience, Culture, Customer relations, Commitment and Corporate reputation -which in fact contributes to the profit. (15) It can be conveniently argued that all the above 5C's are the constituents of work ethics also. For example commitment being intangible to measure, the long hours (than generally expected) that an employee spends in achieving the business goal, should contribute to production and thereby profit also. Hence work ethics is not something that one should adopt for non business purposes. It can be applied to all types of business, including the organization, community and society.

Organizational leadership while influencing work ethic not only appeals to emotive aspects of employees, but also to the intellectual aspects of employees." Intellectually stimulating leaders are willing and able to show their employees new ways of looking at problems to be resolved and emphasize rational solutions. Such a leader was Lorenz Iverson, former president of the Mesten Machine company, who said to his employees –We got this job because you are the best mechanics in the World"(16).It is implied that organization leadership while aiming necessarily at business ethics, in general would be aiming at work ethic also.

What are the sources of such ethical power for the organizational leadership? "Purpose, Pride, Patience, Persistence and Perspective" (17) - They are in fact the means and ends of work ethics also. For example, persistence is a trait, which ensures the productivity - an important contributor to the profit objective of business organization.

One important issue that is debated in the context of globalization is "work force reduction". A good fit between individual and organization, benefits both; human beings find meaningful and satisfying work and organizations get the human talent and energy they need(18).The good fit at the tangible level depends on economic returns that the organization expects out of its operation. Any fall in the returns is to be understood as the misfit and hence a possible employee force reduction. Employee force reduction seems anathema to the loyalty factor of organization culture. Any organization practising pluralistic values will necessarily resist such changes. A study by Thomas Weil on hospital work.force downsizing states that American pluralistic values have serious repercussions for health executives and often present serious barriers (19).

The 'work value' which is an important determinant of work ethics can be examined with respect to Grave's model of Psychological existence[1970].Of the eight levels of psychological existence proposed ,in the socio centric level "Cooperation" stands are more valued than" competition"; "Social acceptance" gains importance than narrow views of "self interest". The individual at this level shows preference for sensitivity as against objectivity; taste as against wealth; respectability as against power; consumer good as against organizational profit; and participation as against authoritarianism. The organizational leadership has the challenge to move the individuals from lower levels of psychological existence to these socio-centric levels.

Conclusion

Thus it can be argued that leaders first create culture when groups or organizations are formed. Culture being a cluster of beliefs and values is a different manifestation of ethics also. Irrespective of the components of ethics as also the components of culture they are both cause and effect simultaneously. It is the ethical leadership which can not only create but sustain the organizational culture, covering many intrinsic properties. The frame work provided in this article takes the perspectives of society and also the organization of its operation

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THE IMPACT OF AGE ON ROLE EFFICACY AND ORGANIZATIONAL ROLE STRESS: BPO WOMEN EMPLOYEES

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ABSTRACT: *Our study explores the influence of age on role efficacy and organizational role stress and the relationship between role efficacy and stress among women BPO employees in Bangalore. The present study aimed (1) to understand the influence of age on role efficacy (2) to understand the influence of age on organizational role stress and (3) to study the inter relationship between role efficacy and organizational role stress. The study was conducted in Bangalore, India with a sample of 236 women BPO employees. The sample selection was done by simple random sampling technique method. The data collected were analyzed using descriptive one-way analysis of variance and Pearson's correlation test. Results showed that the women BPO employees have high role making among role efficacy dimensions. It also proved that role erosion and role overload dimensions are seen more among stress dimensions. This study also reveals that there is a strong relationship between Role efficacy and organizational role stress.*

Keywords: *Age, Role Efficacy and Organizational Role Stress.*

INTRODUCTION

Stress is a subject which is hard to avoid. The term is discussed not only in our everyday conversations but has become enough of a public issue to attract widespread media attention from different areas like radio, television, newspapers, magazines etc. Different people have different views about it as stress can be experienced from a variety of sources.

The concept of stress was first introduced in the life sciences by Hans Selye in 1936. It is a concept borrowed from the natural sciences. The word Stress is derived from the Latin word 'Stringere', stress was popularly used in the seventeenth century to mean hardship, strain, adversity or affliction (Pestonjee, 1999). Many Indian Scholars (Pestonjee, 1987a, Singh, 1987) agreed that tolerable stress levels helps the organization to grow and also helps in creating healthy competition.

Today women have joined hands with men as part of the workforce in the organization. By taking up employment, women have to play a dual role as housewife and earner (Hemalatha and Suryanarayana, 1983). The consequent outcome is that modern women live in two systems and need to perform both familial as well as professional roles.

The study on stress becomes inevitable in today's modern organization and particularly on women due to their dual roles played by them in home and in organization.

Pareek has defined role as set of functions that an individual performs in response to the expectations of others and his/her own expectations about the role. He has also defined role efficacy as the potential effectiveness of an individual occupying a particular role in an organization. Stress in a role is experienced when there are inherent problems in the performance of a role. If a person does not have the potential effectiveness to handle the role he/she is occupying in an organization, will start experiencing problems in handling that role. This study is mainly focused on role efficacy and organizational role stress particularly on women BPO employees in Bangalore.

THE CONCEPTS OF ROLE EFFICACY AND ROLE STRESS:

(a) Role efficacy:

Every person in an organization has got a role and both the organization and the individuals. Organizations have to deal with this situation by keeping the role occupant's plan for his/ her own role. Anirudh (1997) says the process of enriching one's

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role in an organization is called 'Role Efficacy'. In other words role efficacy is the potential effectiveness of an individual occupying a particular role in an organization.

There are three main dimensions in role efficacy scale. They are role making (role occupant tries to make his/her role according to their likings), role centering (reeling of centeredness in the role) and role linking (Interrelationship in a role).There are 10 dimensions in role efficacy under these three main dimensions to check the potential effectiveness of a role.

The ten dimensions are: Integration, Pro activity, Creativity, Confrontation, Centrality, Influence, Growth, Inter role linkage, helping relationship, Super ordination etc. Each dimension has two questions and totally there are 20 items in the role efficacy questionnaire. Three options are there for each question and allotted varied scores. Marks like 2 = High, 1 = Medium (-1) = Low is awarded for the answers. Maximum Score will be 20 * 2 = 40 and Minimum Score will be 20 * (-1) = -20. To have role efficacy index, conversion of -20 into 0 and 40 into 100 is done. Hence Maximum Score of Role Efficacy Index is 100 and Minimum Score is 0.

Organizational Role Stress (ORS):

Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) were the first to describe organizational stress in general and role stress in particular. Katz and Kahn (1966) continued this research and suggested that an organization can be defined as a system of roles and they used three categories to define role stress: role ambiguity, role conflict and role overload. Pareek (1976) organizational role stress model expands on and is linked to Kahn's (1973) views of conflict, ambiguity and overload by exploring inter-role relationships.

Pareek (1983a) has defined role as any position a person holds in a system (organization) as defined by the expectations of various significant persons, including himself/herself have from that position. The definition of role indicates that there are multiple problems in the performance of a role and, therefore, stress becomes inevitable. To study this role stress particularly targeting on organization context, organizational role stress (ORS) scale was administered by Pareek in 1983.

ORS scale is a five point Likert scale, indicating how true a particular statement is for the role. Thus, the scores for each role stress range from minimum 0 to a maximum of 20. ORS Scale has 50 items. The score of each role stress may range from 0 to 20, and the total organizational role stress score may range from 0 to 200. A high score close to 20, on a particular dimension indicates that more role stress is being experienced in that area.

Pareek in 1993 felt that from the point of view of an individual, two role systems are important: role space and role set. Role space, thus, can be defined as 'the dynamic interrelationship both between the self and the various roles an individual occupies, and amongst these roles'. Inter role distance (IRD), Role stagnation (RS), Self-Role Distance (SRD) dimensions in ORS scale, form Role Space. The individual's role in the organization is defined by the expectations of other significant roles, and those of the individual himself/herself. The Role set is thus 'the pattern of relationship between the role being considered and other roles'. Role ambiguity (RA, Role expectation conflict (REC), Role overload (Ro), Role erosion (RE), Resource inadequacy (RIn), Personal inadequacy (PI), Role isolation (RI) forms Role Set in ORS Scale.

The ten stressors in detail:

- Inter-role distance (IRD): It is experienced when there is a conflict between organizational and non-organizational roles.
- Role stagnation (RS): It is the feeling of being stuck in the same role. Such a type of stress results in perception that there is no opportunity for the furthering or progress of one's career.
- Role expectation conflicts (REC): This type of stress is generated by different expectations by different significant persons, i.e. superiors, subordinates and peers to a role occupant.
- Role erosion (RE): This type of role stress increases in a role occupant when he/she feels that some functions which should properly belong to his/her role are transferred to/or performed by some other role.
- Role overload (RO): When the role occupant feels that there are too many expectations from the significant roles in his/her role set, he/she experience role overload.
- Role isolation (RI): This type of role stress refers to the psychological distance between the occupant's role and other roles in the same role set.
- Personal inadequacy (PI): It arises when the role

occupant feels that he/she does not have the necessary skills and training for effective performance of the functions expected from his/her role.

- Self-role distance (SRD): When the role a person occupies goes against his/her self-concept, then he/she feels self-role distance type of stress.
- Role ambiguity (RA): It refers to the lack of clarity about the expectations regarding the role which may arise out of lack of information or understanding.
- Resource inadequacy (RIn): This type of stress is evident when the role occupant feels that he/she is not provided with adequate resources for performing the functions expected from his/her role. RIn occurs when there is a lack of supplies, personnel, information, historical data, and a lack of knowledge, education, or experience among the employees.

Review of literature

a) Role Efficacy:

- Sayeed (1985) found that personal attributes like age, gender and marital status and job demographics like experience and job type were found to have impact on role efficacy.
- Das (1984) found role efficacy as having moderating impact on purposeful job behavior and independent variables, such as organizational climate and role stress. Increased work-related tension was found to have overall negative relationship with role efficacy.
- Pestonjee (1992) said that role efficacy reduces role stress.

b) Role Stress:

- Sen. *(1981)* studied the background variables in relation to role stress. They were age, sex, education, income, family type, marital status, residence, distance from residence to place of work, work experience etc. Some of the conclusions drawn from the studies were that role stagnation decreases as people advance in age, age is negatively related with role stress. He also pointed out that Women experience more role stress as compared to men, unmarried experienced more stress than married.
- Levinson (1973) and Constandse (1972) stated that many middle-aged, middle-management managers suffer from fear and disappointment and in silent isolation which leads to role stagnation.
- People do not enjoy the feeling of underutilized which is highlighted in role erosion (Beukel & Molleman, 2002).
- Kahn and Quinn (1970) suggested some conditions under which role overload is likely to occur: (i) in the absence of role integration, (ii) in the absence of role power, (ii) when large variations exist in expected output, and (iv) when duties cannot be delegated. Marchall and Cooper (1979) categorized overload into quantitative and qualitative. Quantitative refers to having too much to do, and qualitative refers to work that is too difficult.
- Kahn et al. (1964) and French and Caplan (1970) found that mistrust of coworkers is positively related to high role isolation and low job satisfaction.
- McMurray (1973) identified the executive neurosis: that is, an over-promoted manager who becomes grossly overworked in the attempt to keep the job attempts to hide the sense of insecurity and feelings of personal inadequacy.
- Srivastav (1997) said that ORS was experienced differently cross the age groups, management levels, qualification and functional groups among PSU Employees.
- Achla Pareek and Manju Mehta (1999) said that self role distance is seen more among gazette women officers.
- Sen (1982) studied that there is a negative correlation between role efficacy and Organizational Role Stress.
- Sayeed (1895) said that negative correlation prevails between work load tension and role efficacy.
- Das (1984) proved that there is a negative correlation between role efficacy and some dimensions in ORS.
- Mathur (1997) said that there is a negative correlation between role efficacy and most of the dimensions of ORS.

Research Methodology:

Today women play a vital role in Indian BPO sector. According to survey (Ezine articles about women employees, Dec 22, 2009) out of 400 million of workforce in India, around 30-40 percent is females. They are one of the driving forces behind the success of call center industry in India. But due to their dual career both at home and organization, they experience more stress than men. So women need to understand the importance of understanding the role and role efficacy concept. Less understanding of these concepts leads to a number of stresses among working women.

This research mainly focuses on role efficacy and different role stresses experienced by women employees. Though the available research covers various issues concerning stress, role efficacy and coping among employees in general, there is lack of evidence on role efficacy relationship with stress particularly on women employees in BPO industry. Based on these factors, our study was aimed (1) to understand the influence of age on role efficacy (2) to understand the influence of age on organizational role stress (3) to study the inter relationship between role efficacy and organizational role stress.

The hypotheses of the study are:

1) There is a significant variation between age and role efficacy dimensions.
2) There is a significant variation between Age and Organizational Role Stress dimensions.
3) There is a negative correlation between Role efficacy and Organizational role stress.

Research Design: The main study was carried out at IT/ITES hub located at Bangalore. BPO Companies list was obtained from the sites BPOINDIA and BPOWATCH. Totally 162 companies was considered and by simple random sampling method, 35 BPO Companies were targeted. Women employees who have 2 years and above experience in the industry were screened to issue the questionnaires from the selected 35 companies. Though the questionnaires were issued to more than 400 women employees, the researcher received only 239 at the end. 3 questionnaires were not completed and thus the researcher arrived to 236 as sample.

The purpose of the study and the need of the study were explained to these women employees and were given enough time periods to fill up the questionnaire. The primary data (the respondent's opinion about their role efficacy and role stress) were collected by two methods: (1) Through Internet and (2) Through personal interview method. The tools used were role efficacy scale and organizational role stress scale developed by Dr. Udai Pareek. Statistical Package SPSS was used to interpret the data. ANOVA, Correlation and Mean Scores were used to analyse the data.

Results & Discussions:

Results are discussed in two parts. First part explains the influence of age on role efficacy with both mean scores and ANOVA and the second part explains about the influence of age on organizational role stress.

Part 1: Age and role efficacy (Mean score, ANOVA results)

Objective 1: To understand the influence of age on role efficacy

Descriptive statistics of Age and Role Efficacy are given in the table 1. 68% of women employees fall in the cadre 20-25 years and remaining 32% of women employees are in the age group 26-30 years and above. Role making is high in the age group 26-30 &above years with mean score value of 8.44 in comparison with the group 20-25 years (mean score value- 8.10). Role Centering is high in the age group 26-30 years & above 30 years with mean score value of 5.28 and comparatively low at 20-25 years with mean value of 4.16. Role linking is seen more again in the age group 26-30 years & above. On the whole, total mean score wise, role making is high (8.21) among role efficacy dimensions and role efficacy index score wise 26-30 years and above BPO women employees have role efficacy comparatively well than others with respect to age.

Hypothesis 1: There is a significant variation between age and Role Efficacy dimensions.

The result of ANOVA Test revealed that there is a significant variation in role centering experienced by women BPO Employees based on age since the P-Value (0.00) is significant at 1% level. F Value is 8.21.

The result also reveals that there is no significant variation with respect to role making and role linking. Role efficacy Index reveals that there is no significant variation across age groups with respect to role efficacy. Table 3 shows the result obtained. The above said results and analysis is similar to the findings of Sayeed (1985). He found that personal attributes like age have impact on role efficacy.

Summarization of result:

Role Efficacy and Persona l variable (age)				
Variables (Personal/RE)	**Role Efficacy Index**	**Role Making**	**Role Centering**	**Role Linking**
Age	Not Proved (F value: 2.83, Sig: 0.55)	Not Proved (F value: 0.36, Sig: 0.55)	Fully Proved (F value: 8.21, Sig: 0.00)	Not Proved (F value: 0.25, Sig: 0.62)

Part 2: Age and organizational role stress (Mean score, ANOVA results)

Objective 2: To understand the influence of age on organizational role stress dimensions.

Role erosion and role overload is high in mean score (10.06) among 20-25 years age groups. Role Stagnation is seen more among 26-30 years and above group of employees (mean score-8.97). Total score wise, again role erosion ranks high with mean score 9.68 and ORS_Mean score total is 8.98 for all the variables and corresponding row score wise 20-25 years have more organizational role stress (mean score- 9.22) than 26 years and above (mean score- 8.51). Table 4 shows the result of mean scores.

Role erosion stressor is ranked high among all the age groups. This result negatively correlates with role centeredness feeling variations among different age group. Role erosion happens when employees do not feel the importance in their role. This result clearly highlights the point that BPO women employees in Bangalore have the role erosion feeling in them which in turn is affecting their role centeredness' efficacy level.

The total role stress mean score ranks role overload as the second stressor among women BPO employees in Bangalore. Kahn and Quinn (1970) suggested conditions under which role overload is likely to occur. One of the conditions is the absence of role integration. According to the role efficacy result most of the employees are marching themselves towards their role they have occupied in the organization. It means that they are trying to integrate themselves with their organizational role. In the process of integration, role overload stress increases. This is proven in the above results.

Hypothesis 2: There is a significant variation between Age and Organizational Role Stress dimensions.

The result of ANOVA reveals that both role erosion and role overload have significant variation (P= 0.03) at 5% significance level among various age. The result of ANOVA reveals that both role erosion and role overload have significant variation (p = 0.03) at 5% significance level among age groups. F Value is 4.90 and 4.69 respectively. There is no significant variation in overall organizational role stress mean score (Reference Table 5).

The result also reveals that there is no significant variation with respect to other dimensions of ORS. This shows that different age group employees have different experience towards role erosion stress and role overload stress which has a major impact on overall organizational role stress.

The above said result goes hand-in-hand with the findings obtained by Srivastav in 1999 on PSU Employees, India. He said that ORS was experienced differently cross the age groups, among PSU Employees.

Summarization of result:

Variables	Inter Role Distance	Role Stagnation	Role Expectation Conflict	Role Erosion	Role overload	
Age	Not Proved	Not Proved	Not Proved	Partially proved (F value: 4.90, Sig: 0.03)	Partially proved (F value: 4.69, Sig: 0.03)	
	Role Isolation	**Personal Inadequacy**	**Self Role Distance**	**Role Ambiguity**	**Resource Inadequacy**	**ORS-Mean Score**
	Not Proved	Not Proved	Not Proved	Not Proved	Not Proved	Not Proved

Objective 3: To study the inter relationship between role efficacy and Organizational role stress:

Hypothesis 3: There is a negative correlation between Role efficacy and Organizational role stress.

All the dimensions of role efficacy have negative correlation with Role stress dimensions. Role efficacy index has significant negative correlation with the role stress dimension particularly in role overload (-14.8%) and role ambiguity (- 13.3%) at 5% significance dimensions level. The result shown in the table 06 clearly proves that once the role efficacy decreases among the women BPO Employees, their organizational role stress increases. Particularly their stress dimensions role overload and role ambiguity increases when they are experiencing less role efficacy. As these women employees are in the process of making their role according to their likings, they need to learn more and need to get clear knowledge about various work related aspects. This makes them to feel they are overloaded and less ambiguity in their roles.

Conclusion:

Role efficacy is seen more among 26-30 years and above age group employees. Particularly role making is seen more among this group. In case of role stress 20-25 years experience more role stress than 26-30 years and above. Particularly role erosion stress is seen more among this age group. There is a significant variation in role erosion which means indirectly role stress experienced by age group 20-25 years is very significant compared with other age groups. This might have inversely affected the efficacy level of employees in this age group (it is evident from the role efficacy results that efficacy level is less in this age group).

Training has to be given to the employees to identify the strengths and challenges in their role. This positive approach enriches an individual and reduces the role erosion as role erosion is very prominent in the age group 20-25 years. Organizations can also enrich the roles of the age group by identifying the best employees in this age group and assigning the tasks similar to the functions performed by the experienced employees. This can eradicate role erosion stress in this age group.

Thus we conclude that women BPO employees in Bangalore experience considerable level of role efficacy and role stress. Implementations of the above said suggestions can surely be helpful for the BPO companies in their productivity. The findings also reveals that if these employees feel low role efficacy then it has got high impact on their stress level which is very alarming for the sustenance of any company.

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Tables:

Table 1: Age- wise respondent's distribution. (N= 236)

Age	Frequency	Percentage
20-25 yrs	160	67.8
26-30 yrs and above	76	32.2

Table 2: Age and Role Efficacy (Mean Score). N= 236.

	Age								
	20-25 yrs			26-30 yrs & above			Total		
Dimensions of RE	Count	Mean	SD	Count	Mean	SD	Count	Mean	SD
REI	160	64.27	10.89	76	**67.00**	12.65	236	65.17	11.54
Role Making	160	8.10	3.85	76	**8.44**	4.16	236	**8.21**	3.95
Role centering	160	4.16	2.71	76	**5.28**	2.88	236	4.53	2.81
Role Linking	160	6.27	3.20	76	**6.51**	3.43	236	6.35	3.27

SD: Standard Deviation

REI: Role Efficacy Index

Table 3: Age and Role Efficacy (ANOVA)

One Way ANOVA on Role Efficacy Index by Age									
	Level	Statistics							
Dependent Variables	Age	N	Mean	Std. Dev.	Test of Homogeneity of Variances	F Value	Sig.	Robust Tests of Equality of Means	Assumptions on Variance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Role Making	20-25 yrs	153	8.10	3.85	0.52	0.36	0.55	0.56	Equal
	26-30 yrs	75	8.44	4.16					
Role Centering	20-25 yrs	153	4.16	2.71	0.44	8.21	0.00	0.01	Equal
	26-30 yrs	75	5.28	2.88					
Role Linking	20-25 yrs	153	6.27	3.20	0.25	0.25	0.62	0.62	Equal
	26-30 yrs	75	6.51	3.43					
Role Efficacy Index	20-25 yrs	153	64.27	10.89	0.02	2.83	0.09	0.11	Unequal
	26-30 yrs	75	67.00	12.65					

Sig. Test @ Level	
0.001	Sig <1%
0.04	Sig <5%
0.06	>5% Non Sig (NS)

Table 4: Age and Organizational Role stress (Mean Score). N= 236.

Age Groups	20-25 yrs			26-30 yrs & above			Total		
Dimensions of ORS	Count	Mean	SD	Count	Mean	SD	Count	Mean	SD
INTER ROLE DISTANCE	160	8.87	3.80	76	8.29	3.86	236	8.68	3.82
ROLE STAGNATION	160	9.66	3.65	76	**8.97**	3.88	236	9.43	3.73
ROLE EXPECTATION CONFLICT	160	8.82	4.16	76	8.28	3.97	236	8.64	4.10
ROLE EROSION	160	**10.06**	3.68	76	8.91	3.72	236	**9.68**	3.72
ROLE OVERLOAD	160	**10.06**	4.02	76	8.79	4.47	236	9.64	4.20
ROLE ISOLATION	160	9.12	3.89	76	8.11	4.12	236	8.79	3.99
PERSONAL INADEQUACY	160	9.30	4.12	76	8.57	4.11	236	9.06	4.12
SELF ROLE DISTANCE	160	9.41	3.92	76	8.80	4.23	236	9.21	4.02
ROLE AMBIGUITY	160	8.61	4.57	76	7.99	4.35	236	8.41	4.50
RESOURCE INADEQUACY	160	8.51	4.06	76	8.32	4.33	236	8.44	4.14
ORS_Mean Score	160	**9.22**	3.40	76	8.51	3.62	236	8.98	3.48

Table 5: Age and Organizational role stress (ANOVA)

One Way ANOVA on ORS by Age									
Dependent Variables	Level	Statistics							
	Age	N	Mean	Std. Dev.	Test of Homogeneity of Variances	F Value	Sig.	Robust Tests of Equality of Means	Assumptions on Variance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Inter Role Distance	20-25 yrs	153	8.87	3.80	0.39	1.15	0.29	0.29	Equal
	26-30 yrs	75	8.29	3.86					
Role Stagnation	20-25 yrs	152	9.66	3.65	0.26	1.69	0.19	0.20	Equal
	26-30 yrs	75	8.97	3.88					
Role Expectation	20-25 yrs	153	8.82	4.16	0.64	0.86	0.35	0.35	Equal
	26-30 yrs	75	8.28	3.97					
Role Erosion	20-25 yrs	152	10.06	3.68	0.38	4.90	0.03	0.03	Equal
	26-30 yrs	75	8.91	3.72					
Role Overload	20-25 yrs	153	10.06	4.02	0.19	4.69	0.03	0.04	Equal
	26-30 yrs	75	8.79	4.47					
Role Isolation	20-25 yrs	153	9.12	3.89	0.68	3.31	0.07	0.08	Equal
	26-30 yrs	75	8.11	4.12					
Role Inadequacy	20-25 yrs	152	9.30	4.12	0.57	1.55	0.22	0.22	Equal
	26-30 yrs	75	8.57	4.11					
Self Role Distance	20-25 yrs	151	9.41	3.92	0.22	1.15	0.28	0.30	Equal
	26-30 yrs	75	8.80	4.23					
Role Ambiguity	20-25 yrs	148	8.61	4.57	0.67	0.94	0.33	0.33	Equal
	26-30 yrs	71	7.99	4.35					
Resource Inadequacy	20-25 yrs	152	8.51	4.06	0.34	0.10	0.75	0.76	Equal
	26-30 yrs	75	8.32	4.33					
ORS_Mean Score	20-25 yrs	153	9.22	3.40	0.22	2.07	0.15	0.16	Equal
	26-30 yrs	75	8.51	3.62					

Sig Test @ Level	
0.001	Sig <1%
0.04	Sig <5%
0.06	>5% Non Sig (NS)

Table 06: Correlation analysis - Role efficacy and Organizational role stress.

Dimensions (Organizational Role Stress)	Role Efficacy Index	Significance
	Pearson Correlation	Sig. (1-tailed)
INTER ROLE DISTANCE	-0.092	0.165
ROLE STAGNATION	-0.013	0.848
ROLE EXPECTATION CONFLICT	-0.124	0.060*
ROLE EROSION	-0.119	0.070*
ROLE OVERLOAD	-0.148	0.02**
ROLE ISOLATION	-0.074	0.262
ROLE INADEQUACY	-0.124	0.060*
SELF ROLE DISTANCE	-0.123	0.06*
ROLE AMBIGUITY	-0.133	0.04**
RESOURCE INADEQUACY	-0.088	0.185
ORS_Mean Score	-0.123	0.06*

Note: * -> 10% significance level ; **-> 5% significance level

AN APPROACH TO IMPLEMENT TQM EFFECTIVELY IN AN ORGANIZATION

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Abstract: *TQM is a very useful tool in developing any organization. But its successful implementation is not a simple task. Implementation of TQM has to face resistance from different levels in organizations. The purpose of this paper is to outline key aspects of implementation of large organizational change which may enable an organization to thoughtfully and successfully implement TQM. Sources of resistance to change and ways of dealing with them are also discussed. Next, a model of implementation is presented, including a discussion of key principles. Visionary leadership is offered as an overriding perspective for someone instituting TQM. Implementation principles will be followed by a review of steps in managing the transition to the new system and ways of helping institutionalize the process as part of the organization's culture.*

KEY WORDS: *TQM, Organizational development, Change.*

An approach to implement TQM effectively in an Organization

1. Introduction

In today's complex, fast-paced and shifting environments, focus on quality is the most important factor for any profit making organization. There are different ways by which quality is managed in the organization. Traditionally, quality improvement was considered to be the process, which can be achieved through improvements only in the products or services of the organization. But these methods by themselves can not help achieve excellence. An enhancement in the techniques and systems becomes necessary to meet the global competition. A continuous improvement can lead to the changing of the culture of the organization, which in turn can lead to Total Quality Management (TQM). According to British standard, TQM is defined as a Management Philosophy embracing all activities through which the needs and expectations of the customers and the community, and the objectives of the organizations, are satisfied in the most efficient and cost effective way by maximizing the potential of all employees in a continuing drive for improvement6. This definition gives emphasis on the maximization of the potential of all employees. TQM is also defined as both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organization2. It is the application of quantitative methods and human resources to improve all the processes within an organization and exceed customer needs now and in the future. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a disciplined approach7.

2. TQM and Organizational Transformation

Implementation of TQM will change technological, cultural and political system of the organization. In the human services, changes are affected, in the way clients are processed, the service delivery methods applied to clients, and in ancillary organizational processes such as paperwork, procurement processes, and other procedures. TQM is also a change in an organization's culture including norms, values, and belief systems with respect to organizational functioning. And finally, it is a change in an organization's political system into decision making processes and power bases. For substantive change to occur, changes in these three dimensions must be aligned. TQM as a technological change will not be successful unless cultural and political dimensions are attended to as well.

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It is important to note that TQM results in a radical change in the culture and the way of work in an organization. A fundamental factor is leadership, including philosophy, style, and behavior. These must be congruent as they are presented by a leader. Many so called enlightened leaders of today espouse a participative style which is not, in fact, practised to any appreciable degree. Any manager serious about embarking on a culture change such as TQM should reflect seriously on how he/she feels and behaves regarding these factors.

For effective implementation of TQM, it is necessary to align various organizational systems. As an example, information technology systems will need to redesign to measure and track new things such as service quality, information transfer time, coordination among all functional departments etc. Changes are also required in other systems in organization. Human resource systems, including job design, selection processes, compensation and rewards, performance appraisal, and training and development must align with and support the new TQM culture. Financial management processes may also need attention through the realignment of budgeting and resource allocation systems. Organizational structure and design will be different under TQM. Layers of management may be reduced and organizational roles will certainly change. In particular, middle management and first line supervisors will be operating in new ways. Instead of acting as monitors, agents and ordergivers, they will serve as boundary managers and coordinators who assist line workers in getting their jobs done. To deal with fears of layoffs, all employees should be assured that no one will lose employment as a result of TQM changes: jobs may change, perhaps radically, but no one will be laid off.

TQM must be purpose oriented. It should be used because an organization's leaders feel a need to make the organization more effective. It should be driven by results and not be seen as an end in itself. If TQM is introduced without consideration of real organizational needs and conditions, it will be met by skepticism on the part of both managers and workers.

3. Resistance to TQM implementation

TQM changes the organizational system, so resistance may come from all the levels of employees. Employees at lower and middle levels may consider management as only concerned about the product, not staff needs. Management initiatives focused on concerns such as budget or cost will not resonate with beleaguered line workers. Furthermore, staff may see quality as not needing attention. They may believe that their services are already excellent or that quality is a peripheral concern in these days of cutbacks and multi problem clients. Partly because of heavy service demands, and partly because of professional training of human service workers, which places heavy value on direct service activities with clients, there may be a lack of interest on the part of many line workers in efficiency or even effectiveness and finally on outcomes. This challenge should be addressed by top management.

Implementation of large-scale change such as TQM will inevitably face resistance, which should be addressed directly by change agents. A key element of TQM is working with customers. At another level, management resistance to employee empowerment is possible. They may see decision making authority in zero sum terms, i.e. if employees have more involvement in decision making, managers will have less. So, managers will spend less time on control and more on facilitation. For traditional managers, this transition will require teaching/training, introspection(self reflection), and time.

Resistance in other parts of the organization will show up if TQM is introduced on a pilot basis or only in particular programs. Kanter5 (1983) has referred to this perspective as segmentalism, each unit or program sees itself as separate and unique, with nothing to learn from others and no need to collaborate with them. This shows up in the "not invented here" syndrome, those not involved in the initial development of an idea feel no sense of ownership for it10.

4. Strategies to Mitigate Resistance

There are several strategies, which help in dealing with resistance to TQM implementation. Generally, strategies have to do with acknowledging legitimate resistance and changing implementation plans based on it, using effective leadership to involve employees in the vision of TQM, and by using employee participation. To mitigate resistance, the first step is to know the causes of resistance. A useful technique to identify areas of resistance is force field analysis. This technique was originally developed by Kurt Lewin as an assessment tool for organizational change. It involves creating a force field of driving forces, which promotes change or at least triggers it ; and restraining forces, which are points of resistance or things getting in the way of change. Start by identifying the revised goal, in this case, implementation of TQM. Represent this by drawing a line down the middle of a piece of paper. Slightly to its left, draw a parallel line which represents the current state of the organization. The change process involves moving from the current state to the ideal future state, an organization effectively using TQM. To the left of the second line (the current state), list all forces (individuals, key groups, or conditions) which may assist in the implementation of TQM. These may include environmental pressures leading to reduced funds, staff who may like to be more involved in agency decision making, and the successful applications of TQM elsewhere. On the other side, list restraining forces which will make the change implementation more difficult. Examples may be middle management fear of loss of control, lack of time for line workers to take for TQM meetings, and skepticism based on the organization's poor track record regarding change. Arrows from both sides touching the "current state" line represent the constellation of forces10. Each force is then assessed in two ways, its strength, and its amenability to change. Stronger forces will need greater attention.

It is also important to note and validate any points of resistance which are, in fact, legitimate, such as the limited amount of staff time available for TQM meetings. Klein encouraged change agents to validate the role of the "defender" of the status quo and respond to legitimate concerns raised. This will allow appropriate adaptations of the TQM process to account for unique organizational circumstances. Sell TQM based on the organization's real needs, note legitimate risks and negatives, and allow improvements in present organizational procedures. This should enhance organization's credibility and show its openness to critically looking at the process.

Another way to address resistance is to get all employees on the same side, in matching goals of organization and employees. Leadership is the mechanism for this, and specific models known as transformational or visionary leadership is most effective. Research on change implementation has identified four methods. The first, "intervention," involves a key executive justifying the need for change, monitoring the process, defining acceptable performance, and demonstrating how improvements can be made. This was found to be more successful than "participation," in which representatives of different interest groups determine the features of the change. Participation was found to be more successful than "persuasion" (experts attempting to sell changes they have devised) or "edict," the least successful. Transformational or visionary leadership, the approach suggested here, is an example of the intervention approach. This would involve a leader articulating a compelling vision of an ideal organization and how TQM would help the vision is actualized.

A powerful way to decrease resistance to change is to increase the participation of employees in making decisions about various aspects of the process. There are actually two rationales for employee participation. The more common reason is to increase employee commitment to the resultant outcomes, as they will feel a greater stake or sense of ownership in what is decided. A second rationale is that employees have a great deal of knowledge and skill relevant to the issue at hand (in this case, increasing quality, identifying problems, and improving work processes), and their input should lead to higher quality decisions. A manager should consider any decision area as a possibility for employee participation, with the understanding that participation is not always appropriate. Employees or their representatives may be involved in decision areas ranging from the scope and overall approach of the TQM process to teams engaging in quality analysis and suggestions for improvements. Employees may also be involved in ancillary areas such as redesign of the organization's structure, information system, or reward system. Involvement of formal employee groups such as unions is a special consideration which may also greatly aid TQM implementation.

5. Implementation of TQM

Implementation of TQM involves three important factors viz. Understanding Status Quo and Preconditions, Role of a leader, and managing the Transition Process discussed as under:

5.1 Understanding Status Quo

First step in TQM implementation is to assess the organization's current reality: relevant preconditions have to do with the organization's history, its current needs, precipitating events leading to TQM, and the existing employees' quality of working life. If the current reality does not include important preconditions, TQM implementation should be delayed until the organization is in a state in which TQM is likely to succeed. If an organization has a track record of effective responsiveness to the environment, and if it has been able to successfully change the way it operates when needed, TQM will be easier to implement. If an organization has been historically reactive and has no skill at improving its operating systems, there will be both employee skepticism and a lack of skilled change agents. If this condition prevails, a comprehensive program of management and leadership development may be instituted. A management audit is a good assessment tool to identify current levels of organizational functioning and areas in need of change. An organization should be basically healthy before beginning TQM. If it has significant problems such as a very unstable funding base, weak administrative systems, lack of managerial skill, or poor employee morale, TQM would not be appropriate.

However, a certain level of stress is probably desirable to initiate TQM. Kanter addresses this phenomenon by describing building blocks which are present in effective organizational change. These forces include departures from tradition, a crisis or galvanizing event, strategic decisions, individual "prime movers," and action vehicles. Departures from tradition are activities, usually at lower levels of the organization, which occur when entrepreneurs move outside the normal ways of operating to solve a problem. A leader may become a prime mover, who takes charge in championing the new idea and showing others how it will help them get where they want to go. Finally, action vehicles are needed: mechanisms or structures to enable the change to occur and become institutionalized. TQM processes and models of employee participation are such mechanisms.

Essential or desirable preconditions may be identified in two areas: broad and narrow. Broad factors include those which are concerned with issues such as leadership, resources, and the surrounding infrastructure. Narrow issues have to do with internal issues such as employee training and empowerment and organizational processes such as quality assurance.

Several key factors related to successful TQM. First, as many researchers have noted, top management support is necessary. This is typically represented partly through strategic planning regarding TQM. Second, a customer focus is an important precondition, since TQM often involves improving quality from a customer's point of view. Employees or their representatives must be involved early, particularly in addressing employee training and recognition and employee empowerment and teamwork issues. Attention to these issues is important in changing the organization's culture in the direction of teamwork and a customer and quality focus. The measurement and analysis of products, processes and quality assurance are final elements which need attention. Budgeting and Resource Allocation Systems will need to be realigned to fit with the TQM culture. TQM cannot be used as a mechanism to simply cut costs or rationalize cutbacks. The same is true for human resource management systems; work may be redesigned to implement self-directed work teams, performance appraisal and compensation systems may be changed to reward team based performance, and massive training for managers, supervisors, and workers will be necessary. Finally, thoughtful attention needs to be paid to the ways in which customer feedback is used.

5.2 Role of a Leader

With these principles and preconditions in mind, the following implementation steps will be discussed: using leadership to articulate a vision of the future for the organization and how TQM fits into it, designing a comprehensive change process, implementing TQM and related new systems, and ensuring institutionalization.

As was emphasized earlier, leadership is a key element in successful implementation of large-scale change: the leader shows the need and sets the vision, defining the basic purpose, goals, and parameters or requirements of TQM. The leader needs to take a long term perspective, and must be able to motivate others to stick with the process during early stages when resistance and obstacles may seem insurmountable. The preferred leadership style would be a participative one, so that staff may be involved in the design of the specific system elements. This may seem in contradiction to the earlier stated preference for an "intervention" approach as opposed to traditional participative decision making. In the former, the leader is, in fact directive regarding the big picture and overall goals, i.e., establishing PDM. Once that strategic direction has been determined, a participative style may be used on implementation details. Prior to this decision, of course, the manger should study TQM, talk to others who have used it, and perhaps attend a preliminary training session. This is important in order for the manager to accurately assess the fit between TQM and her/his style. This will be necessary in establishing an organizational culture which is compatible with TQM, nurturing and reinforcing continuous quality improvement.

In designing a comprehensive change process, the leader must acknowledge the existing organizational culture to ensure a good fit. TQM also needs to be congruent with or aligned with other organizational processes, including reward systems, financial and information systems, and training systems.

5.3 Managing the Transition Process

The basic steps in managing a transition to a new system such as TQM are identifying tasks to be done, creating necessary management structures, developing strategies for building commitment, designing mechanisms to communicate the change, and assigning resources.

Task identification would include a study of present conditions (assessing current reality, as described above); assessing readiness, such as through a force field analysis; creating a model of the desired state, in this case, implementation of TQM; announcing the change goals to the organization; and assigning responsibilities and resources. This final step would include securing outside consultation and training and assigning someone within the organization to oversee the effort. This should be a responsibility of top management. In fact, the next step, designing transition management structures, is also a responsibility of top management. In fact, management must be heavily involved as leaders rather than relying on a separate staff person or function to shepherd the effort. An organization wide steering committee to oversee the effort may be appropriate.

To communicate the change, mechanisms beyond existing processes will need to be developed. Special all staff meetings attended by executives, sometimes designed as input or dialogue sessions, may be used to kick off the process, and TQM newsletters may be an effective ongoing communication tool to keep employees aware of activities and accomplishments.

Management of resources for the change effort is important with TQM, because outside consultants will almost always be required. Choose consultants based on their prior relevant experience and their commitment to adapting the process to fit unique organizational needs. While consultants will be invaluable with initial training of staff and TQM system design, employees (management and others) should be actively involved in TQM implementation, perhaps after receiving training in change management which they can then pass on to other employees. A collaborative relationship with consultants and clear role definitions and specification of activities must be established.

6. Conclusion

Total Quality Management (TQM) can be viewed as an organization wide philosophy requiring all employees at every level of an organization to focus their efforts to help improve each business activity of the organization. For successful implementation of TQM, first assess status quo of the organization to make sure the need for change is clear and that TQM is an appropriate strategy. Leadership styles and organizational culture must be congruent with TQM. If they are not, this should be worked on or TQM implementation should be avoided or delayed until favorable conditions exist. It is important to note that this will be a difficult, comprehensive, and long term process. Leaders must maintain their commitment, keep the process visible, provide necessary support, and hold people accountable for results. Use input from stakeholder (clients, referring agencies, funding sources, etc.) as possible; and, of course, maximize employee involvement in design of the system. Always keep in mind that TQM should be purpose driven. Be clear on the organization's vision for the future and stay focused on it. TQM can be a powerful technique for unleashing employee creativity and potential, reducing bureaucracy and costs, and improving service to clients and the community.

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DIVIDEND ANNOUNCEMENT EFFECTS ON STOCK RETURNS: A SECTOR WISE COMPARISON OF FREQUENTLY TRADED COMPANIES AT NSE INDIA

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Abstract : *Investors generally resort to investing in stocks of banking, information technology, telecom and retail companies. This is observed if we randomly check the trading frequency of these stocks at stock exchanges. The stock prices react to announcements made over the stock exchanges on daily, monthly, quarterly and yearly basis. The magnitude of variation, however, varies with the type of news, company, industry, stock etc. The present study is focused on the year 2008-09 to find out over all significant change in abnormal stock returns due to announcement of dividends by sample companies which are frequently traded and listed with NSE India. Event study methodology using daily returns along with the constant mean return model has been used. The study strives to empirically investigate the declaration of dividend announcement effect on abnormal stock returns by applying z-test and t-test.*

keywords : Investor Stock returns, dirudid announcement

Introductions :

Investment as a term is related to several closely related meanings from the field of finance, economics and business management associated with savings and consumption. Investing is actively redirecting the resources from being consumed today to creating benefits in future i.e. use of assets to generate income or profit for tomorrow. There are various investment options available which are helpful in developing risk-return trade off. One of the most important forms is equity shares. The two key determinants for the performance of a security/share are risk and return. Return refers to the motivating force inspiring the investor in the form of rewards for undertaking the investment. Returns on investment do not come for free. They are always surrounded by probabilities of losses. This probability of losing possible income from the investment is technically known as risk. If an investor makes investment his income will be of two types: fixed regular income and capital gain. It is generally said that shareholders are not interested in fixed regular income i.e. dividends, rather they are more keen on capital gains. But, empirical studies have proved that dividend announcements have significant impact on share prices. Thus, this paper has incorporated dividend announcement both in pre announcement and post announcement phase as the main variable.

Dividend declaration depends upon the existing rate of growth and rate of return of the particular company. The declaration of dividend by every company undergoes a formal process. There are three important dates involved in the process: declaration date, date of record and payment date. The declaration date signifies the intention of the board of directors of the company to pay dividends to its shareholders. The date of record also referred to as ex-dividend date which refers to record of owner of the share before this date. The dividend will be provided to the shareholder who holds the share before this due date. It means that if the share is sold after ex-dividend date, dividend will still be available with the previous owner of the share. The payment date refers to the date of disbursement or actual payment of the dividend. Thus, ex-dividend date is the real base for studying the impact of dividend declared. The present study focuses upon finding out dividend announcement effects on stock returns of the companies in various segments of the Indian economy. The stocks from four different sectors frequently traded at National Stock Exchange in India have been taken and their respective stock prices are included in the total sample size to find out the impact of dividend announcements on abnormal stock returns.

REVIEW OF LITERATURE

The researchers and academicians in India as well as abroad have made contribution in their researches on dividend policies and announcement effect of dividends on stock prices. Al-Obaidan Abdullah M. (2008) contributed in major a great deal with quantitative and relevant measures of the information content of dividends in banks located in emerging markets. Brown Lawrence D. (2008)

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related the informativeness of earnings and dividend announcements to their timing relative to the fiscal quarter end to which the earnings pertain. Eriotis Nikolaos (2007) discovered that existence of a long term dividend policy stood partly unaffected by the level of current period earnings. Hazak Aaro (2007) presented a theoretical model on dividend policy for distributed profit taxation which is the corporate taxation regime of Estonia. Henry Elaine (2006) examined market reactions to firm's earnings announcements. The study extended the examination to include a broad range of concurrent disclosure contained in earnings press releases, the financial disclosures captured as accounting ratios and verbal components of disclosure which were captured using elementary computer based content analysis. Hochberg Yael V. (2003) examined the effects of venture capital backing on the corporate governance of the firm following the IPO. The study conducted three independent sets of tests which examined effectively how governance and monitoring differed for venture and non-venture backed firms. How Janice C. Y. (2007) observed that in a relatively less litigious environment like Australia it was common to find IPO firms that voluntarily provided forecasts in their prospectus. 158 Australian industrial IPOs listed from 1991 to 1997 were used in the study to examine the impact of the disclosure and accuracy of earnings and dividend forecasts on equity pricing. Hribar Paul (2004) examined how institutional investors respond to accounting restatements. The study showed that transient institutional investors defined as institutions with shorter investment horizons and higher portfolio turnover significantly reduced their holding in a restating firm at least one quarter prior to the quarter of the restatement. Jegadeesh Narasimhan (2002) examined the relation between revenue surprises and future stock returns. The study investigated how analysts updated their earnings forecasts followed by announcements of revenue and earnings surprises. The results indicated that the stock price reaction on the earnings announcement date was significantly related to both revenue surprises and earnings surprises. Kanniainen Juho (2007) examined stochasticity of stock return volatility by questioning the assumption that the conditional expectations of future dividends react to the same new information. The stochastic evolutions of conditional dividend expectations were characterized by extending the information process to dividend paying stocks. Kanwal Anil (2008) observed that profitability has always been considered as a primary indicator of dividend payout ratio. Apart from profitability, numerous other factors like cash flows, corporate tax, sales growth and market to book value ratio were also considered rampant. Koerniadi Hardjo (2008) examined in their study whether managers deliberately used accruals to convey information regarding firm future profitability. The contemporaneous earnings and dividend announcement data was used as research setting as it reduced the possibility of opportunistic income smoothing by managers and hence increased the validity of the inference on the accrual signaling hypothesis. Kumar Praveen (2006) derived a conditional CAPM in a general equilibrium model where investors faced estimation risk on mean returns and learnt from information of uncertain quality or precision. In equilibrium, the loading on market risk augmented the standard beta with the random or information dependent conditional covariance matrix of the unknown mean returns. Minnick Kristina L. (2004) examined the cross sectional determinants of the decision to take write offs. A hand collected dataset on write-offs was used that was much more comprehensive than existing write-off datasets. It was found that quality of governance was positively related to write-off decisions in the cross section. The results also suggested that poor governance companies waited to take write-offs until it became inevitable while well-monitored companies took write-offs sooner. Narayanamoorthy Ganapathi (2003) identified previously undocumented source of predictable cross-sectional variation in Standardized Unexpected Earnings' autocorrelations viz. the sign of the most recent earnings realization and presented evidence that the market ignored this variation (loss effect). It was possible to earn returns higher than from the Bernard and Thomas strategy by incorporating this feature. Padgett Carol (2007) tested the signaling and free cash flow hypotheses of the information content of share repurchases using UK open market share repurchases between January 1999 and December 2004. The five day mean announcement abnormal return of the sample was low at 1.28% but it was statistically significant at the 5% level. Rees Lynn (2001) examined the importance attached to revenue forecasts by firms and the market and whether these forecasts were value-relevant conditional on earnings forecasts. The study was divided into parts. First, it examined whether the capital market reaction to earnings and revenue announcements had an association with revenue forecast errors conditional on earnings forecast errors. Second, it investigated existence of differential valuation effects associated with meeting or exceeding analysts' revenue expectations over and above meeting/exceeding analysts' earnings expectations. Sadka Ronnie (2005) investigated the components of liquidity risk that were important for asset pricing anomalies. Firm-level liquidity was decomposed into variable and fixed price effects and was estimated using intraday data for the period

1983-2001. The unexpected systematic variations of the variable component rather than the fixed component of liquidity were shown to be priced within the context of momentum and post earnings announcement drift portfolio returns. Servaes Henri (2008) studied responses of industry when another firm in the same industry was put to a hostile takeover attempt. The study documented two major responses: first the industry peers cut their capital expenses, free cash flows, cash holdings, increased their leverage and payouts to shareholders. Second, they increased the quality of financial reporting. After the control threat, there was an evidence of less earnings management, more timely loss recognition and more value relevance of accounting earnings. Shu Tao (2008) analyzed the impact of trader composition i.e., the fraction of total trading volume of a stock accounted for by institutional trading on the cross section of stock returns. The study found that trader composition had significant effects on stock returns beyond institutional ownership. Specifically, major stock market anomalies such as return momentum, post earnings-announcement drift, value premium and investment effect were much stronger in stocks with lower fraction of institutional trading volume. Subramani Mani R. (2002) examined the returns to e-commerce events in the period from 1999 to 2000 which employed a set of short time windows (1 day, 5 days, 10 days bracketing the event) as well as a set of long event windows (6 months, 9 months and 1 year from the event). The results reflected little consistency between abnormal returns in short 1 day, 5 days and 10 days event windows. In contrast, the abnormal returns observed in 6, 9 and 12 months windows were reasonably consistent. Zhu PengCheng (2008) examined the short term stock performance of a sample of Indian firms who acquired U.S. firms in the period 1999-2005. The event study showed that Indian stock market reacted positively to the acquisition announcement. Authors found out that the positive abnormal return lasted for only three days after which the returns became negative.

The research work carried so far related to announcement effects has not stressed upon any key sector of the economy. Moreover, significant results as to the relationship between announcements and their impact on stock returns have not been discovered. Dividend announcements in particular have been studied by various eminent scholars; yet they have not brought in a common conclusion in relation to the impact of dividend announcements on stock returns or stock volatility before and after declaration of dividends. Also, sector wise study for dividend announcements has not been carried over in particular till now. Thus, the present study contributes towards the impact of dividend announcements on stock returns vis a vis analysis of stock price variations before and after dividend declaration.

OBJECTIVES OF THE STUDY

1. To investigate the impact of dividend announcements of sample companies frequently traded at NSE India.
2. To analyse significance of dividend announcements on abnormal stock returns in the pre and post period announcement of dividends.
3. To analyse the performance of a company within and among the various sample sectors.

RESEARCH METHODOLOGY

The study has focused on four sectors of the Indian economy; Banking, Information Technology, Telecom and Retail to analyse the performance of stock in these sectors over dividend announcements. Stratified sampling technique has been used for selecting the sample in the study by dividing the whole sample into four subgroups. Each stratum consisted of top 7 companies at random with highest trading volume in the respective sector. In total, 28 companies had been selected on the basis of trading volume, i.e., 7 companies for each stratum.

The hypothesis in the present study assumed that there can be a significant impact of the dividends declared on the abnormal stock returns of the respective companies' stocks. The information about dividends announced reaches the common investors over the stock exchanges. Thus, like other normal and abnormal announcements there can be variations in the investors' expectations on account of announcement of dividends. This is due to the fact that dividends form an important component of investors' earnings from the equity stocks along with capital appreciation. Due to change in investors' confidence and expectations from a particular stock there can be changes in expected returns of the same stock and hence can impact its abnormal stock returns. The hypothesis has been tested in the present study with the help of t-test and z-test.

The present study addresses its objectives and testable hypotheses by using event study methodology. Event study is concerned with measuring the effects of takeovers, restructuring transactions and other events on the firm. An event study is concerned with the impact of a particular firm-specific corporate event on company security prices. This methodology to study the impact of event is extended for the present study. The relevant event here is dividend announcements. This event is taken as the base for conducting an event study to find out the impact of dividend announcements. The dividends declared by the sample companies in the financial year 2008-09 are taken as the main event to the study.

Event window refers to the total time period revolving around the event which is taken as the main time frame to study the impact of the respective event. The present study has taken an event window of 61 days in total including the event date, i.e., the date on which dividends were announced for the respective sample stocks of the companies. So, the total event window was broken into two parts. First part was composed of stock prices before the dividend was announced and the second part was composed of stock prices after the dividend was announced. The event date, i.e., the date when dividend was announced was termed as t=0, middle of the event window. First part of the event window was composed of 30 days stock prices (-30) and the second part of the event window was also composed of 30 days stock prices (+30). Thus, the total event window was (-30) – t – (+30) where -30 represented pre announcement phase, t represented the event date and +30 represented post announcement phase.

The event study has been used to find out the impact of dividends announcements on the respective stock prices of the sample companies. The present study here has focused on daily stock prices of the sample companies stocks. The daily stock prices of all the 28 companies included in the sample are taken from the NSE website (www.nseindia.com) for further processing. The returns are further calculated in detail with normal, average, abnormal and cumulative returns. The normal returns of all the sample stocks are calculated as:

Rit= (Pt – Pt-1)/Pt-1,

where, Rit= Current Day Normal Return, Pt= Current Day Stock Price, Pt-1= Previous Day Stock Price.

The abnormal returns for all the stocks have been calculated using the constant mean return model.

After obtaining the mean returns for all the sample stocks the abnormal returns had been calculated with the help of following formula:

ARit= Rit - E (Rit),

where, ARit= Current Day Abnormal Return, Rit= Current Day Normal Return, E (Rit)= Expected Return (mean return).

The abnormal returns calculated are further converted into cumulative abnormal returns for application of statistical techniques with the help of constant mean return model. The cumulative abnormal returns are calculated for both before and after the event date. The mean CAR is calculated as:

$$\text{Mean CAR} = \frac{\sum_{1}^{n} CAR_i}{n}$$

where, mean CAR= Mean of Cumulative Abnormal Returns, CARi= Cumulative Abnormal Returns, n= number of days.

The standard deviations for all the stocks had been calculated for pre and post announcement event to find out the magnitudinal change in the stock returns. It is calculated as:

$$\sqrt{} CAR/n$$

Where, CAR= Cumulative Abnormal Returns, n= number of days.

STATISTICAL TECHNIQUES USED

In consonance to the objectives of the study and for testing the hypothesis t-test and z-test has been applied. t-test has been applied to test the impact of dividend announcement on abnormal stock returns of the sample companies both in pre announcement and post announcement of dividend. The total event window of 61 days stood 30 days prior to the announcement and 30 days after the announcement of dividends excluding the event date. The t-values are calculated with the formula given below:

$$t = \frac{\overline{CAR}}{\left(\frac{\sigma_{\overline{CAR}}}{\sqrt{N}}\right)}$$

The t-values were further compared with the table values at 1%, 2% and 5% level of significance to test the significance of the results.

z-test has been applied for all the sample companies to analyse the results of the four sectors taken as a sample in the study. The z-values are calculated comprehensively for the total event window of 61 days to study the impact on stock returns among the different sectors in the sample companies. The significance of z-values were tested at 1%, 2% and 5% level of significance.

EMPIRICAL RESULTS

The empirical results for the study were interpreted with the help of mainly 4 tools i.e. mean CAR, Standard Deviation, t-value and z-value. Mean CAR in two periods i.e before and after dividend announcement has been compared with the other sample companies within the sector to find out that which company has maximum mean abnormal returns. Standard Deviations are similarly compared in the same sector to locate the company with maximum variation in abnormal stock returns. The significance of the stocks of the different sample companies i.e. Banking, Information Technology, Telecom and Retail has further been tested with the help of t-values. The z-values have been computed for the complete event window of each sample company to anaylse the performance of a company within the sector company and to evaluate the companies among the sector companies. The significance of t-values and z-values have been interpreted at 1%, 2% and 5% levels of significance.

BANKING SECTOR

The mean CAR, standard deviation and t-values before and after declaration of the dividend and z-values for the whole window of Banking sector comprising of 4 public sector banks and 3 scheduled commercial banks has been tabulated in Table 1.

Table 1: Banking Sector

Name of the Bank	Punjab National Bank	IDBI Bank	Union Bank of India	State Bank of India	Axis Bank	HDFC Bank	ICICI Bank
Mean CAR Before	- 5.88	- 13.71	- 6.07	8.47	20.15^	8.50	- 9.54
S.D. Before	7.16	8.50	8.51	4.12	10.41^	3.55	8.16
Mean CAR After	- 10.86	- 0.89	- 11.59	- 6.09	14.12^	- 0.01	- 4.38
S.D. After	6.04	9.69	10.21	5.72	6.15	4.10	12.49^
t- value Before	- 4.49	- 8.83	- 3.91	11.24*	10.60*	13.11*	- 6.40
t- value After.	- 9.84	- 0.50	- 6.22	- 5.83	12.57*	- 0.01	- 1.92
z- value	- 9.38	- 5.27	- 7.06	1.07	15.02*	5.85*	- 5.17

Note: 1. *, **, *** significant at 1%, 2% and 5% level of significance.
2. ^ indicates maximum value.

The analysis of Table 1 signifies that the maximum CAR was observed for Axis Bank in both the pre announcement and post announcement period. It may be due to the fact that the private sector banks were offering better returns as compared to public sector banks in the time period of study. The mean CAR value of HDFC Bank and SBI was also observed positive before the announcement of dividends. These two banks have shown better performance as compared to the other sample banks before the announcement of dividends. The mean CAR value of all the other banks except Axis Bank after the announcement of the dividend was observed negative. This indicates that the stockholders of these banks were not satisfied with the abnormal returns after the declaration of dividends. The maximum standard deviation was observed in case of Union Bank of India in the pre announcement period followed by ICICI Bank. In the post period of declaration of dividend high value of standard deviation was observed in case of ICICI Bank. The high value of standard deviation in case of ICICI Bank may be due to its not having good reputation in the market during this period as the bank could had gone for bankruptcy due to the effect of US recession and failure of Lehman Brothers Bank at US. The t-values in case of Axis Bank, HDFC Bank and SBI were found significant at 1% level of significance in the pre-announcement period of dividend, but in the post announcement period of dividend only the Axis Bank was observed significant at 1% level of significance. It is obvious that the CAR value of the Axis Bank was positive and highest in the post announcement period of dividend. The results of the z-values for the complete event window for sample banks shows that only Axis Bank and HDFC Bank were found significant at 1% level of significance. The remaining banks did not show any significance with the exception that the z-value of SBI was positive. This shows that the SBI's performance was better among the public sector banks.

INFORMATION TECHNOLOGY SECTOR

Table 2: Information Technology Sector

Name of the Co.	TCS	WIPRO	Infosys	HCL	Tech M	PCS	MphasiS
Mean CAR Before	- 2.37	1.01	-4. 74	6.27^	- 12.84	4.06	- 6.81
S.D. Before	3.53	2.61	6.70	7.24	12.13^	3.19	4.31
Mean CAR After	- 5.54	- 8.34	- 4.97	2.28^	- 19.43	0.04	- 12.01
S.D. After	4.46	6.47	4.71	9.01	9.24^	5.02	5.35
t- value Before	- 3.68	2.12*	- 3.87	4.75*	- 5.80	6.98*	- 8.65
t- value After	- 6.81	- 7.06	- 5.78	1.39	- 11.53	0.04	- 12.28
z- value	- 7.14	- 4.29	- 6.72	4.08*	- 11.31	3.51*	- 13.54

Note: 1. *, **, *** significant at 1%, 2% and 5% level of significance.
2. ^ indicates maximum value.

The analysis of companies in Information Technology sector observed maximum mean CAR for HCL Technologies in both pre announcement and post announcement period. It may be due to announcement of net profit of Rs 373.3 crore for the second quarter ending December 2008, an increase of 12.1% compared with the same quarter in 2007-08 and an increase of 4.8% sequentially. The company's revenues growth y-o-y is better than that of the top three IT companies – TCS, Infosys and Wipro. Patni Computer Systems has also shown mean CAR 4.06. This shows that the performance of the company is better among the analysed companies in Information Technology sector. The standard deviation among all the Information Technology analysed companies was highest for Tech Mahindra in both pre announcement and post announcement period. This could be due to the reason that the stock returns for Tech Mahindra were calculated at a time period when there was an announcement by US agency for stocks which were under pressure in IT sector and this stock was not listed among the top gainers. The standard deviation for the HCL Technologies Ltd. was also observed high showing fluctuations in the stock values. In case of Patni Computer Systems the standard deviation was not showing consistency in stock prices. This indicates that Patni Computer Systems abnormal stock returns had shown consistency as compared to other companies under study. The results for t-values were found significant for WIPRO, HCL Technologies and Patni Computer Systems at 1% level of significance in the pre-announcement period. The significance of t-values in case of HCL Technologies Ltd., Patni Computer Systems and WIPRO have got support from the mean CAR as these values were observed positive. The t-values were not found significant for any company in the post-announcement period. Only HCL Technologies Ltd. and Patni Computer Systems from IT sector have shown positive t-values and the other five companies have shown negative t-values. This depicts that the IT sector has been influenced because of world depression. The z-values were found significant for HCL Technologies and Patni Computer Systems at 1% level of significance. It reflects that only 2 companies depicted significant results for dividend announced over the abnormal stock returns over the entire event window out of 7 companies.

TELECOM SECTOR

Table 3: Telecom Sector

Name of the Co.	Reliance Comm.	Bharti Airtel Ltd.	MTNL	IDEA Cellular Ltd.	Tata Tele.	AVAYA	BPL Ltd.
Mean CAR Before	5.19	- 6.08	5.14	7.63	- 12.30	4. 05	24.55^
S.D. Before	3.96	5.37	1.98	5.05	7.97	12.35^	10.39
Mean CAR After	- 2.20	0.23	- 6.25	5.71	- 1.38	- 0.47	27.33^
S.D. After	11.01	2.39	9.22	18.01^	4.45	7.23	12.07
t- value Before	7.17*	- 6.20	14.18*	8.28*	- 8.46	1.80	12.94*
t- value After	- 1.09	0.52	-3 .71	1.73	- 1.70	- 0.35	12.40*
z- value	1.44	- 4.38	- 0.42	4.03*	- 6.37	1.54	17.98*

Note: 1. *, **, *** significant at 1%, 2% and 5% level of significance.
2. ^ indicates maximum value.

The Telecom sector has been studied and analysed by taking 7 companies being traded frequently. The mean CAR value of abnormal stock returns of Telecom sector reveals maximum mean CAR for BPL Ltd. for both pre announcement and post announcement dividend period. It may be due to the announcement of Deutsche Bank to pick up stake in BPL Ltd. which built up the investor's confidence in this stock to a significant extent. The standard deviation among all the companies was highest for AVAYA Global Connect Ltd. in pre announcement period. This could be due to the reason that the profit before interest and depreciation for this company had fallen more than to a double rate i.e. from 84.05 crore to 34.4 crore, thus decreasing the confidence in this stock. In the post announcement period, the maximum standard deviation was observed for IDEA Cellular Ltd. This could be due to the reason that in this period it had launched new tariff plans for its customers like "per second calling" but these were not very beneficial because the company offered these plans after Airtel and Vodafone. As Airtel and Vodafone had already launched these types of plans, in the absence of competitive strategies and the investors may not be very keen to invest in IDEA Cellular Ltd. The t-value results were found significant at 1% level of significance for Reliance Communications Ltd., MTNL, IDEA Cellular Ltd. and BPL Ltd. in the pre-announcement period. The MTNL had depicted the maximum value, it may be because it is the only company in Telecom sector which is functioning in India right from the beginning and the people have faith in this organization. Moreover, the mean CAR in case of MTNL was positive with very less standard deviation before the announcement of dividend showing consistency in its stock returns. The results also depicted that at this time the Telecom sector had not much influence on its stock prices due to world depression especially in case of existing companies having better performance in service sector. The t-values surprisingly were found significant only for BPL Ltd. at 1% level of significance after the dividend was announced. This shows that although the depression in the world had not much influenced this sector of industry but it forced the stock returns to give a thought to their stocks. The z-values were found significant only for IDEA Cellular Ltd. and BPL Ltd. at 1% level of significance for dividend announced over the abnormal stock returns.

RETAIL SECTOR

Table 4: Retail Sector

Name of the Co.	TRENT	Titan Industries	Raymond	Koutons	Provogue	Pantalon	Zodiac Clothing Co. Ltd.
Mean CAR Before	-6.19	-8.20	2.35	2.26	47.27^	-15.82	1.54
S.D. Before	4.52	4.72	3.79	2.56	29.98^	9.06	5.68
Mean CAR After	-2.09	-3.02	-2.24	-4.38	3.62	-6.79	6.98^
S.D. After	3.62	6.93	2.42	4.49	13.07^	7.45	3.06
t-value Before	-7.50	-9.51	3.39*	4.82*	8.64*	-9.55	1.49
t-value After	-3.18	-2.39	-5.08	-5.34	1.52	-4.99	12.50
z-value	-7.22	-6.94	0.41	-1.67	6.28*	-9.40	6.43*

Note: 1. *, **, *** significant at 1%, 2% and 5% level of significance.
2. ^ indicates maximum value.

In the retail sector, the maximum mean CAR of abnormal stock returns was seen for Provogue Retail (India) Ltd. in the pre announcement dividend period. It may be due to the announcement of expansion plans by this company during this period wherein it mentioned its proposal to open 50 new retail stores in the country. Thus, investors must have taken it as a good announcement and returns went high. In the post announcement period, the mean CAR was highest for Zodiac Clothing Company Ltd. It could be due to that the net profit almost doubled to 510 crore in September 2008 as compared to 279 crore in September 2007. The mean CAR value of only 4 companies i.e. Raymond, Koutons, Provogue Retail (India) Ltd. and Zodiac Clothing Company Ltd. was observed positive and the value of the other 3 companies i.e. TRENT, Titan Industries and Pantaloon Retail (India) Ltd. was negative in the pre announcement period. The standard deviation among all the companies was highest for Provogue Retail (India) Ltd. in both pre announcement and post announcement period. This could be due to the reason that on one hand it announced its expansion plans but at the same time came the news for stock split 5 for 1 which was later on not done. The t-value results of retail sector in the pre-announcement period were found significant for Raymond, Koutons and Provogue Retail (India) Ltd. at 1% level of significance. The t-value in case of Provogue Retail (India) Ltd. was observed highest. The t-value results in the post-announcement period were found significant only for Zodiac Clothing Company Ltd. at 1% level of significance. The 3 companies i.e. Raymond, Koutons and Provogue Retail (India) Ltd. which were significant in the pre announcement dividend period did not turn out to be significant. It is because of the mean CAR value which declined significantly in the post announcement dividend period due to severe competition in this industry. The z-value result was found significant only for Provogue Retail (India) Ltd. and Zodiac Clothing Company Ltd. at 1% level of significance.

While comparing sectors among themselves, the analysis reveals that no single sector can be taken as a complete indicator for dividend announcement impact on abnormal stock returns. In both the cases, before and after announcement sample stocks did not give a concrete conclusion in major to accept the hypothesis. There were cases of significant results in a few sample stocks but they were not sufficient to conclude for all the sample companies. This indicates that the individual company matters in performance as compared to the whole sector.

CONCLUSION

Indian share market offers extensive investment opportunities to its investors. The most popular among these options are shares. Equity shares provide the investor with returns and ownership in the respective company. The returns from equity shares are in the form of dividends and capital appreciation. The latter refers to the increase in the value of a share while the former refers to the time to time distribution of profits by the company to its investors. These dividends are the most awaited item for the shareholders of any company and thus can have an impact on the returns of a particular stock. In line with this logic the present study has been performed. The empirical studies had witnessed that the DPS has a positive significant impact on the determinants of share prices.

It may be interpreted from the results that we cannot generalize that there is impact of dividend announcements on the stock returns on the sector of companies as a whole as few of the sample companies of a sector which got changes in stock returns during dividend announcement phase may be out of chance factor. The core reason for the same could be that all companies in general declare almost a constant dividend every year on the face value of the share. So, the dividend values are in general already known to the shareholders. On account of this, stock returns did not get a drastic changeover at the stock exchanges. But the amount of profit of the company and retained earnings after declaring the dividend do affect the stock prices. Since, the empirical studies have demonstrated that the dividend per share and book value (retained earnings) do have the positive significant correlation with the market price of the share. That is why some of the companies have shown significant t-values. Because of this however some of the stock prices experienced fluctuations due to capital appreciation in them. The swings as observed and depicted graphically already in the stock prices may also be due to change in other factors than the dividend announcements. The analysis also reveals that it cannot be generalized performance of economy on the sector on a whole. The performance of a company matters rather than a sector.

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