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**ECONOMIC ANALYSIS OF SAFFRON PRODUCTION IN IRAN**

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**ABSTRACT**

*The purpose of this paper is to analyse the economics of saffron production in Iran. It is based on primary data collected from 350 saffron growers - 175 in Torbat Heydarieh and 175 in Ghaen Counties – selected on the basis of multistage random sampling technique. Apart from computing the per-hectare costs, returns and profits in saffron cultivation, the economic viability of saffron cultivation was worked out by working out: (1) pay back period (2) benefit-cost ratio (3) net present value and (4) internal rate of return. The economic analysis indicated that the saffron crop in Iran is economically viable and profitable. The study revealed that saffron cultivation is highly remunerative and it has ample scope for employment generation and income enhancement for Iranian farmers. Saffron cultivation is found to be a lucrative proposition for all the categories of farmers in two counties because of substantially large element of profit in the cultivation of this high value crop. The economic analysis in terms of cost and returns, NPV, BCR, payback period, IRR, indicated that the crop is economically viable and profitable. Another important aspect of this high value crop is its international competitiveness. Iranian saffron is highly competitive in the world market (Kheirandish, 2010). Hence, Iranian saffron also has the potential of becoming an important source of foreign exchange provided the Iranian Government takes effective measures to increase saffron production, productivity and marketing through rigorous research, development and extension education.*

**KEYWORDS**

Iran, Saffron, Cost of Cultivation, Returns, Profits, NPV, BCR, payback period, IRR.

**INTRODUCTION**

Agriculture plays an important role in the Iranian economy. Among the different products cultivated in Iran, saffron is a special and traditional product. It has a specific role in non-oil product range because of its high price. It also has a higher rank in the agricultural economy of Iran due to the importance of its production, cultivated area, job potentialities and export developing abilities. Iran accounts for 95 percent of world production, 90 percent of cultivated lands and nearly 200 tons of saffron. It ranks first among the saffron producers in the world and the countries in the 2<sup>nd</sup> and further lower ranks are far below Iran, producing altogether not more than 20 tons and accounting for less than 4 percent of the world's saffron production.

Saffron is the most popular and expensive spice in the world. It is in demand the world over because of its great aroma, coloring capacity and proven medicinal properties and also because it involves heavily labour-intensive production and processing. The history of saffron cultivation dates back to more than 3,000 years. Ancient Persians cultivated Persian saffron in Isfahan and Khorasan provinces by the 10th century BC (Wikipedia). Due to long experience of Iran in cultivation, and the transfer of methods of growing and harvesting from person to person and or generation to generation, Iranian saffron has managed to keep its distinctive qualities in comparison with that produced in other regions of the world with exceptional recognition for its fragrance, flavor and color at the international markets (saffron gold 2006).

As saffron does not need great amount of water, its cultivated area and production have increased in recent years substantially so that many farmers completely depend on saffron. As a large amount of this product is exported. It fetches considerable amount of foreign exchange. So, in view of the economic, historic and social importance and due to the special situation of Iranian saffron in the world it is important to pay attention to the economic aspects of production and exporting of saffron in order to enhance its place in the world market.

**METHODOLOGY**

For the purpose economic analysis of saffron cultivation in Iran, multistage random sampling technique was used to draw the ultimate study sample. Torbat Heydarieh and Ghaen Counties of Khorasan Provinces (Razavi & Southern) were purposively selected since they have the largest area and production of saffron. The cultivated area owned by the growers was classified into eight age-groups on the basis of the age of the crop, i.e. 1 year old, 2 year old ..... 8 year old. In all 350 saffron growers consisting of 175 in Torbat Heydarieh and 175 in Ghaen Counties, and also size group small, medium and large were selected (Table 1). Economic viability of saffron cultivation was worked out by determining: (1) pay back period (2) benefit-cost ratio (3) net present value and (4) internal rate of return.

TABLE 1: CROP AGE WISE DISTRIBUTION OF SELECTED FARMERS IN TORBAT HEYDARIEH AND GHAEN COUNTIES

Production Year	Torbat Heydariéh			Ghaen				Total
	Small (up to 1 ha)	Medium (1-2 ha)	Large (2 ha & above)	Small (up to 1 ha)	Medium (1-2 ha)	Large (2 ha & above)		
1 <sup>st</sup> year	4	8	3	15	7	8	2	17
2 <sup>nd</sup> year	6	14	2	22	10	11	3	24
3 <sup>rd</sup> year	5	13	4	22	9	8	2	19
4 <sup>th</sup> year	13	8	2	23	11	7	2	20
5 <sup>th</sup> year	15	14	3	32	12	6	3	21
6 <sup>th</sup> year	9	9	4	22	17	8	2	27
7 <sup>th</sup> year	6	10	5	21	14	9	2	25
8 <sup>th</sup> year	4	12	2	18	16	4	2	22
<b>Total</b>	<b>62</b>	<b>88</b>	<b>25</b>	<b>175</b>	<b>96</b>	<b>61</b>	<b>18</b>	<b>175</b>

**FINANCIAL FEASIBILITY ANALYSIS**

Financial feasibility of investment in saffron plantation was assessed using the methods like Net Present Value (NPV), Benefit-Cost Ratio (BCR), Pay Bank Period (PBP) and Internal Rate of Return (IRR).

**NET PRESENT VALUE (NPV)**

This is considered to be a more meaningful measure of appraising the long-term investment proposal and is useful in comparing the different investment proposals. It is the difference between the present value of net benefits and initial investments. If the appraisal shows NPV greater than zero, the project is economically viable, as it can generate returns in excess of all the costs. The general mathematical formula for NPV is given below

$$NPV = \sum_{i=1}^n [B_i (1+r)^{-i}] - [I] \tag{1}$$

i = 1

Where,

B<sub>i</sub> = Benefits in each year

I = Initial investment

n = Number of years

r = Discount rate

**BENEFIT-COST RATIO (BCR)**

It is the ratio of the present value of net benefits to the present value of all costs. For an investment to be worthwhile, the BCR must be more than unity.

$$BCR = \frac{\sum \text{Discounted Net Returns}}{\sum \text{Discounted costs}} \tag{2}$$

**INTERNAL RATE OF RETURN (IRR)**

The rate of return that equates the discounted flow of annual returns with the discounted flow of annual cost is the IRR and it renders the NPV to zero. It indicates the average earning capacity of an investment over the economic life span of an investment.

$$IRR = \left\{ \begin{array}{l} \text{Lower} \\ \text{discount} \end{array} \right\} + \left\{ \begin{array}{l} \text{Difference between} \\ \text{the two discount} \end{array} \right\} \left\{ \begin{array}{l} \text{NPV of the cash flows of} \\ \text{lower discount rate} \\ \text{-----} \end{array} \right\}$$

**PAY BACK PERIOD (PBP)**

The pay back period is the length of time in years required to liquidate the investment estimated by summing up all the discounted net returns over the years to make up the initial investment.

**COST OF CULTIVATION**

Data on cost of cultivation of saffron per hectare in two major counties and different size groups are presented in Table 2. The major item of cost incurred in saffron cultivation by all the three size groups of grower, was the cost of human labour. The establishment costs during the first year of cultivation worked out to Rial 253,373,605, Rial 239,608,132 and Rial 238,446,368 in Torbat Heydariéh and Rial 235,946,721, 226,234,555 and 222,740,896 in Ghaen for first, second and a third size group respectively. This means that 22-24 percent of the total costs are incurred during first year of saffron cultivation. The cost incurred on seed corms formed the major component. It was 65.23 percent, 63.96 percent and 62.69 percent respectively of the establishment cost in the first, second and third size groups in Torbat Heydariéh, while it was 56.64 percent, 53.91 percent and 52.94 percent respectively in Ghaen. The total cost of cultivation was higher for the first size group followed by the second and third size groups in Torbat Heydariéh compare to Ghaen County. Thus there is an inverse relationship between the size of the saffron farm and the per-hectare cost of seed corms.

The cost incurred on hired human labour and share of the family labour was higher for size group 1st followed by 2nd, and 3rd size groups in all areas. Similar trend was observed in the case of female labour utilization. The employment of more number of family members on small farms as compared to medium and large farms is due to the fact that as the size of the farm increased, the number of hired labourers also increased. Thus, the results indicated that the percentage of hired human labour increased with the increase in farm size. The expenses on manures, fertilizers, irrigation, plant protection measures and machine power, etc formed the other cost components. The total fixed cost ranged from 34 to 37 percent of the total cost of cultivation over the period of eight years of the crop cycle. The cost of cultivation in the eighth year also included expenses on the digging-out of the aged saffron corms and their cleaning etc, an operation usually taken up in the July of every year. Picking, separation of stigmas and drying are very important operations in the cultivation of saffron. The total cost of cultivation was higher for the first size group followed by second and third size groups. This was also due to the higher per unit overhead charges on smaller farms. Thus, the existence of economies of scale in the cultivation of saffron crop was evident.

Year-wise analysis indicated that the cost of cultivation was higher during the first year of establishment; it declined from the second year onwards in all the three size groups, due to saving in the use of variable inputs. The results indicated that saffron is a highly labour intensive crop. Since no effective method of mechanized harvesting can be followed, this operation essentially carried out manually, hence resulting in high labour requirement.

The cost of cultivation of saffron was further studied by using all various costs together. The break-up of the total costs was attempted for each size group in both counties under study. Different income/profitability measures are derived using cost concepts. The results have been presented in Tables 3.



TABLE 2: YEAR-WISE TOTAL COST OF CULTIVATION OF SAFFRON IN TORBAT HEYDARIEH AND GHAEN COUNTIES (in Iranian Rials)

Crop year	Torbat Heydarieh			Ghaen		
	Size Group-I	Size Group-II	Size Group-III	Size Group-I	Size Group-II	Size Group-III
	1	57,909,963	57,128,356	56,275,105	50,847,429	49,084,397
2	15,453,646	13,437,953	14,286,037	15,759,615	13,941,520	13,604,348
3	26,419,041	24,358,865	24,055,463	22,897,531	19,836,364	21,040,714
4	34,741,570	34,005,934	34,516,185	29,724,684	29,134,615	29,616,541
5	35,406,714	33,131,129	32,787,075	35,345,455	32,210,526	31,289,720
6	34,871,278	32,450,199	31,887,254	33,145,833	32,177,528	29,831,250
7	25,547,036	23,963,107	23,117,454	24,670,545	24,084,036	23,738,851
8	23,024,356	21,132,589	21,521,795	24,831,692	25,765,568	26,085,818
Total	253,373,605	239,608,132	238,446,368	237,222,784	226,234,555	222,740,896

It is observed from Table 2 the cost was highest during the initial year of establishment of the crop and lowest during the second year, in all the three size groups with in Counties.

The results of analysis of returns revealed that returns were negative during the first year of cultivation across all the three size groups. The net returns turned positive from the second year onwards. The returns were highest during the fifth year of cultivation and declined there after in each size group. The highest gross returns during the eighth year of cultivation were on account of yield of daughter corms.

#### RETURNS FROM SAFFRON

The returns from saffron include the returns from the main product, by-product and daughter corms. The yield from saffron during the first year remains very low and it increases considerably from the second year onwards. The yield from daughter corms is realised at the end of the crop cycle in the eighth year. The results of the returns analysis are presented in Tables 3 and 4 for Torbat Heydarieh and Ghaen.

Tables 3 and 4, indicate that saffron yield per hectare was found to be higher for smaller farms and medium farms as compared to large farms. The higher productivity of saffron per hectare for small and medium farmers as compared to their large counterparts might be due to more personnel attention and use of more family labour in farm activities. The gross returns were lowest during the first year and highest during the fifth year of the crop cycle, and thereafter declined. The net returns were negative during the first year and increased sharply up to fifth year and declined gradually afterwards, in all the three size groups. Saraf (2006) reported the similar results.

It may be noted that the returns during eighth year were high on account of yield of daughter corms after the completion of the crop cycle; otherwise saffron yields were lowest during that year. The same trend was observed in all the three size groups. The net returns per hectare were negative in the first year, obviously due to high expenditure on seed corms and labour, and lower yield of saffron. The gross returns from saffron also included income from by product. The results are in accordance with the findings of Ghorbani (2008). The cost of production of saffron main product and by product per Mesghal (4.6875 gm) was evaluated and the results indicated that cost of production was highest during the first year, due to low yield and high cost, in all the three size groups of areas. In the calculation of cost of production, the value of seed corms has been taken into account. The cost of production of saffron also included the marketing charges borne by the grower.

#### ECONOMIC VIABILITY OF SAFFRON CULTIVATION

Economic viability of saffron cultivation was worked out by determining: (1) pay back period (2) benefit-cost ratio (3) net present value and (4) internal rate of return. The results are presented in Table 5.

The economic viability of saffron enterprise was examined for the crop cycle of eight years. The results indicated that PBP was around 4 years for all the three size groups. This means that the time required to fully recover the cost incurred in saffron cultivation is the fourth year of cultivation. The NPV was worked out discounting both the costs as well as returns at 12 percent rate of interest. The average NPV for Torbat Heydarieh was reasonably higher than for Ghaen, which was calculated as Rial 176,756,485 and Rial 165,790,114 at 12 percent respectively.

The net present value for Torbat Heydarieh at 12 percent discounting rate was higher at Rial 186,956,547 for the first size group, Rial 174,619,001 for the second size group and Rial 168,693,907 for the third size group. The net present value for Ghaen at 12 percent discounting rate was calculated at Rial 174,640,907, Rial 165,348,284 and Rial 157,381,151 for the first, second and third size groups respectively. The investment in saffron cultivation showed positive net present values and reasonably higher returns at 12 percent discounting rate.

The benefit-cost ratios for different size groups were estimated as 2.14, 2.12 and 2.09 at 12 percent discounting rate, for the first, second and third size groups respectively in Torbat Heydarieh. The BCR's at 12 percent discounting rate estimated for Ghaen were 2.16, 2.15 and 2.11 for the first, second and third size groups respectively. The undiscounted benefit-cost ratios were found to be 2.51, 2.50 and 2.46 for the first, second and third size groups respectively in Torbat Heydarieh, while for Ghaen they were as 2.58, 2.57 and 2.52 for the first, second and third size groups respectively.

Benefit cost ratios on an average in two counties were estimated at 2.12 percent and 2.14 respectively. This indicated that at the prevailing rate of interest, an investment of Rial 10.00 fetched a return of Rial 2.12 and 2.14 at 12 percent discounting rate. The undiscounted average BCR was calculated at 2.49 and 2.56 for Torbat Heydarieh and Ghaen respectively. Since the BCR was greater than one, it showed that the investment in saffron cultivation was economically viable. Thus, all the indicators measured showed that saffron cultivation was economically viable in the study area.

To find the IRR, the values were discounted till the difference between the sums of discounted streams of returns and costs got reduced either to zero or to a lowest minimum. It was found that the internal rate of return in Torbat Heydarieh was 75 percent which has more than in Ghaen with 66 percent.

The internal rates of return were estimated at 77 percent, 74 percent and 73 percent for the first, second and third size groups of Torbat Heydarieh saffron farms respectively and the average internal rate of return (IRR) was calculated as 75 percent. It was found that for Ghaen the internal rates of return at 12 percent discounting rate were 66 percent, 66 percent and 65 percent for the first, second and third size groups, the average working out to 66 percent.

Any enterprise to be economically viable must have benefit-cost ratio (BCR) more than unity, a positive net present value (NPV) and a short pay back period. It is obvious from the results that all these conditions were fulfilled in saffron cultivation and hence it could be inferred that saffron cultivation in Iran is economically viable.

TABLE 5: MEASURE OF ECONOMIC VIABILITY OF SAFFRON CULTIVATION IN TORBAT HEYDARIEH AND GHAEN (per hectare)

Economic Viability in Saffron Cultivation in Torbat Heydariye					
Sl. No.	Particulars	Size Group-I	Size Group-II	Size Group-III	Average
A)	Benefit- Cost Ratio				
i	At 12% Discount Rate	2.14	2.12	2.09	2.12
ii	Un Discounted Rate	2.51	2.50	2.46	2.49
B)	Net Present Value (Rial)				
	At 12% Discount Rate	186,956,547	174,619,001	168,693,907	176,756,485
C)	Pay Back Period (year)	4th	4th	4th	4th
D)	Internal Rate of Return	77%	74%	73%	75%
Economic Viability in Saffron Cultivation in Ghaen					
A)	Benefit- Cost Ratio				
i	At 12% Discount Rate	2.16	2.15	2.11	2.14
ii	Un Discounted Rate	2.58	2.57	2.52	2.56
B)	Net Present Value (Rial)				
	At 12% Discount Rate	174,640,907	165,348,284	157,381,151	165,790,114
C)	Pay Back Period (year)	4th	4th	4th	4th
D)	Internal Rate of Return	66%	66%	65%	66%

**CONCLUSION**

The study revealed that saffron cultivation is highly remunerative and it has ample scope for employment generation and income enhancement for Iranian farmers. Saffron cultivation is found to be a lucrative proposition for all the categories of farmers in two counties because of substantially large element of profit in the cultivation of this high value crop. The economic analysis in terms of cost and returns, NPV, BCR, payback period, IRR, indicated that the crop is economically viable and profitable.

Another important aspect of this high value crop is its international competitiveness. Iranian saffron is highly competitive in the world market (Kheirandish, 2010). Hence, Iranian saffron also has the potential of becoming an important source of foreign exchange provided the Iranian Government takes effective measures to increase saffron production, productivity and marketing through rigorous research, development and extension education.

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**TABLES**

TABLE 3: YEAR-WISE TOTAL COST OF CULTIVATION, GROSS RETURNS, AND NET RETURNS FROM SAFFRON IN TORBAT HEYDARIEH COUNTY

Year of Planting	Size Group-I			Size Group-II			Size Group-III		
	Total Cost of Cultivation	Gross Returns	Net Returns/loss	Total Cost of Cultivation	Gross Returns	Net Returns/loss	Total Cost of Cultivation	Gross Returns	Net Returns/loss
y1	57,909,963	5,074,627	-52,835,336	57,128,356	4,716,763	-52,411,593	56,275,105	4,238,227	-52,036,878
y2	15,453,646	36,428,571	20,974,926	13,437,953	32,771,084	19,333,131	14,286,037	35,214,286	20,928,249
y3	26,419,041	70,649,351	44,230,310	24,358,865	68,971,429	44,612,564	24,055,463	66,470,588	42,415,126
y4	34,741,570	98,550,725	63,809,154	34,005,934	89,226,519	55,220,585	34,516,185	86,140,940	51,624,755
y5	35,406,714	112,515,042	77,108,328	33,131,129	108,639,053	75,507,924	32,787,075	104,132,841	71,345,766
y6	34,871,278	105,731,707	70,860,429	32,450,199	99,142,367	66,692,168	31,887,254	96,373,239	64,485,985
y7	25,547,036	66,341,463	40,794,427	23,963,107	61,920,530	37,957,423	23,117,454	61,928,571	38,811,118
y8	23,024,356	140,060,606	117,036,250	21,132,589	133,420,561	112,287,972	21,521,795	132,352,174	110,830,379
<b>Total</b>	<b>253,373,605</b>	<b>635,352,092</b>	<b>381,978,488</b>	<b>239,608,132</b>	<b>598,808,306</b>	<b>359,200,174</b>	<b>238,446,368</b>	<b>586,850,867</b>	<b>348,404,499</b>

TABLE 4: YEAR-WISE TOTAL COST OF CULTIVATION, GROSS RETURNS, AND NET RETURNS FROM SAFFRON IN GHAEN COUNTY

Year of Planting	Size Group-I			Size Group-II			Size Group-III		
	Total Cost of Cultivation	Gross Returns	Net Returns/loss	Total Cost of Cultivation	Gross Returns	Net Returns/loss	Total Cost of Cultivation	Gross Returns	Net Returns/loss
y1	50,847,429	1,821,429	-49,026,000	49,084,397	1,687,943	-47,396,454	47,533,654	1,603,774	-45,929,880
y2	15,759,615	20,487,179	4,727,564	13,941,520	19,783,626	5,842,105	13,604,348	18,961,538	5,357,191
y3	22,897,531	56,325,301	33,427,770	19,836,364	52,389,937	32,553,573	21,040,714	51,764,706	30,723,992
y4	29,724,684	80,526,316	50,801,632	29,134,615	77,448,747	48,314,132	29,616,541	76,367,188	46,750,646
y5	35,345,455	114,050,633	78,705,178	32,210,526	105,649,718	73,439,191	31,289,720	102,037,792	70,748,072
y6	33,145,833	110,270,270	77,124,437	32,177,528	100,280,899	68,103,371	29,831,250	96,030,534	66,199,284
y7	24,670,545	84,185,304	59,514,758	24,084,036	81,479,290	57,395,254	23,738,851	75,215,827	51,476,976
y8	24,831,692	143,460,606	118,628,914	25,765,568	142,126,941	116,361,372	26,085,818	138,918,182	112,832,364
<b>Total</b>	<b>237,222,784</b>	<b>611,127,038</b>	<b>373,904,254</b>	<b>226,234,555</b>	<b>580,847,100</b>	<b>354,612,545</b>	<b>222,740,896</b>	<b>560,899,541</b>	<b>338,158,644</b>

## WHY CONSISTENCY OF ACCOUNTING STANDARDS MATTERS: A CONTRIBUTION TO THE PRINCIPLES – VERSUS - RULES DEBATE IN FINANCIAL REPORTING

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### ABSTRACT

Currently, the International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB) are undertaking a project to develop a common conceptual framework that ...is both complete and internally consistent. Such a framework would provide a sound foundation for developing future accounting standards and is essential to fulfilling the Boards' goal of developing standards that principles-based, internally consistent, internationally converged, and that lead to financial reporting that provides the information needed for investment, credit, and similar decisions. That framework, which will deal with a wide range of issues, will build on the existing IASB and FASB frameworks and consider developments since they issued their original frameworks. An overview of the importance of the Framework, why the existing Framework does not fully meet the needs of the IASB, FASB, and other accounting standard setters, and the need to revisit document are discussed in Bullen and Crook (2005) and Johnson (2004a. b. and 2005).. As explained in these IASB and FASB staff papers, several gaps in the Framework need to be fulfilled and a number of areas need to be updated. A cross-firm consistent application of accounting standards is sought in all major accounting systems. Since many transactions and events are only vaguely or not explicitly addressed in the standards managers must often use judgment when applying accounting standards to particular transactions or events. This analysis concludes that a consistent application of accounting standards can only be ensured if the accounting standards themselves are internally consistent. By contrast, inconsistent standards— in the absence of clear guidance—permit managers to (more or less arbitrarily) choose between different accounting methods. Moreover, it is found that a consistent application presupposes the existence of specific guidance ('rules') in order to frame management's judgment. It is argued that the reliance on principles only—as requested by many in the accounting literature—fails to ensure a consistent application because it allows management to exert judgment differently in identical cases. The assessment includes arguments and propositions from the international discussion in the accounting literature and also refers to other related fields of research, such as legal theory.

### KEYWORDS

Conceptual framework; Accounting Choices; Principles vs. Rules Debate; Standard Setting.

### 1. INTRODUCTION

Ever since the occurrence of accounting scandals such as Enron in the beginning of the millennium, the principles-versus-rules debate has been on top of the agenda of securities regulators, especially of the U.S. Securities and Exchange Commission (SEC), and of national and international standard setters and accountancy bodies, such as the U.S. Financial Accounting Standards Board (FASB), the International Accounting Standards Board (IASB).and the Institution of Chartered Accountants of India (FASB,2002,2004; Tweedie, 2002, 2005, SEC, 2003; ICAI, 2006). The topic has been controversial in national and international journals.

The origins of the discussion go back to the early twentieth century. Until then, practitioners in the U.S. and elsewhere failed to implement uniform accounting standards. They argued that the choice of accounting methods, which appropriately reflect the economic substance of specific transactions and events, requires the use of professional judgment (Previts and Merino, 1998, p. 163). That is, 'the application of relevant knowledge and experience, within the context provided by... accounting standards... in reaching decisions where a choice must be made between alternative possible courses of action' (Mason and Gibbins, 1988). However, with the proliferation of different opinions about the proper accounting methods and the crash of the U.S. stock market in 1929, there was a call for the establishment of uniform accounting standards which would limit management's use of professional judgment and enhance the comparability of financial statements (Previts and Merino, 1998, pp. 161 et seq.). Since then it has been widely accepted that 'by articulating the best thinking about the issues, accounting standards will produce better financial reporting, at least on the average, than would exist in their absence' (Mason and Gibbins, 1991, p. 21). In the U.S. the call for comparability has, amongst other things, led to what may be called an excessive overregulation. As a consequence of the corporate accounting scandals some of the accounting literature expresses concerns with rules-based accounting and there are increasingly calls for a principles-based approach to standard setting (FASB, 2002, 2004; SEC, 2003).

Another topic that plays a major role in the planned reformation of the world's prevailing accounting systems—IFRS and U.S. GAAP—is the elimination of inconsistencies and thus the quest for internal consistency of the respective systems (IASB, 2008, P4, BC2.46). The accounting literature distinguishes between two notions of consistency: on the one hand internal consistency of accounting standards, and on the other hand consistency in the application of those standards. While internal consistency requires that 'any individual standard adopted should be consistent with the existing system of standards', consistency in the application 'refers to use of the same accounting policies and procedures, either from period to period within an entity or in a single period across entities' (IASB, 2008, QC16).

Internal consistency as well as application consistency across companies has traditionally been sought in all major accounting systems. Interestingly, the reasons for the pursuit of this objective are quite different in different systems. FASB Concepts Statement No. 2 proposes that the U.S. Conceptual Framework 'is a coherent system of interrelated objectives and fundamentals that is expected to lead to consistent standards' and emphasizes the need for a cross-firm consistent choice of accounting policies by stating that 'the public is naturally skeptical about the reliability of financial reporting if two enterprises account differently for the same economic phenomena' (CON 2.16). It explains the need for consistency in relation to comparability: 'Comparability between enterprises and consistency in the application of methods over time increases the informational value of comparisons of relative economic opportunities or performance' (CON 2.111). In their draft for a revised conceptual framework the FASB and the IASB similarly point out that 'although a single economic phenomenon can be faithfully represented in multiple ways, permitting alternative accounting methods for the same economic phenomenon diminishes comparability and, therefore, may be undesirable' (IASB, 2008, QC19).

One can observe that the different notions of consistency are related in such a way that consistency in the application of accounting standards across companies can only be achieved if the standards are internally consistent. In a system that provides clear rules for each and every accounting issue and in which the application of the rules does not require the use of any judgment, internal consistency between the rules would not be required because consistency in the application across companies would be achieved anyway (AAA FASC, 2003, p. 74). However, such a system does not exist. The continuous issuance of new accounting standards and interpretations in rules-based systems, such as U.S. GAAP reveals that there are always issues not covered by any existing rule as well as rules the application of which requires management to use judgment (Penno, 2008, p. 339). In more principles-based systems, like IFRS, the application of high-level principles to specific accounting issues demands the exertion of judgment in many cases.

In particular judgment is necessary either if a transaction or event is not covered by any accounting standard or if it is only addressed by rather broad principles. In such cases management shall, according to IFRS, develop an accounting policy or interpret the principle by reference to the requirements and guidance in

standards dealing with similar and related issues. If the standards addressing similar transactions or events are not consistent with each other, different companies may make different interpretations and choices and thus apply different accounting policies to identical cases. Researchers supporting principles-based accounting standards argue that the restriction of management's judgment that follows from the objective to achieve a consistent application may sometimes impair the relevance of financial reporting information, which they regard to be more important than consistency and comparability (Alexander and Jermakowicz, 2006, p. 150).

Obviously, the rule-versus-principles debate and the discussion on consistency are related. Our article contributes to this debate by addressing two major issues. Initially, the traditional quest for consistency in the application of accounting standards is a given and the analysis considers how the current IFRS system would have to be changed with regard to internal consistency of accounting standards as well as to the relationship between principles and rules in order to achieve consistent application. The emphasis then is on present and possible future IFRS, but U.S.GAAP is relied on also because most of the arguments brought forward in the comprehensive U.S. accounting literature equally apply to IFRS. IFRS and U.S.GAAP are paradigmatic for accounting systems under which the accounting regulation is developed by private standard-setting institutions and do not have immediate legal status.

The second major research question addressed is whether the benefits of principles-based accounting standards, such as an increase in relevance, outweigh the loss of consistency in the application. For this discussion, the previous assumption of consistent application of accounting standards by all companies is relaxed, enabling critical discussion of the advantages and disadvantages of principles-based and rules-based accounting standards. For reasons of comparability, enforceability and objectivity of financial reporting information, it is concluded to be important to have specific (internally consistent) accounting requirements that limit management judgment in the application of accounting standards to ideally only one possible accounting method. We acknowledge, however, that this may, in some situations, lead to an impaired relevance of financial reporting information.

#### **TOWARDS CONSISTENCY IN NORMATIVE ACCOUNTING FRAMEWORKS**

The quest for internal consistency is shown here to have developed in different accounting systems. We conclude that a consistent application of accounting standards does not only presuppose the existence of internal consistency of high-level concepts and principles, but also that the rule maker (and managers in the absence of specific guidance) applies the concepts and principles consistently to all comparable accounting issues. This implies that in an internally consistent accounting system there is, in principle, for each transaction and event only one accounting method that accords to the high-level principles as well as to the specific guidance relating to comparable accounting issues and thus consistently fits into the entire 'system' of norms.

U.S. GAAP, and also IFRS all require the use of judgment in the application of accounting standards/norms. Board members and managers under U.S. GAAP and IFRS are supposed to balance between and apply the general concepts to specific cases according to their personal professional judgment, which may differ from case to case. This implies that for some issues there may be several different accounting methods that are all in compliance with the Framework and between which the Board members or management may hence choose.

Consistent application implies that comparable issues are accounted for in the same way across companies (Schipper, 2003, p. 62). We argue that this can only be achieved if standard setters (and managers in the absence of clear guidance) trade-off between and apply the general concepts, such as relevance and reliability, as well as the general recognition and measurement principles consistently to all comparable cases. In an internally consistent accounting system there can be hence for each accounting issue only one accounting method that accords to the high-level concepts principles as well as to the specific guidance relating to comparable accounting issues.

#### **IMPOSSIBILITY OF CONSISTENCIES**

Alexander and Alexander and Jermakowicz (2006) point out that accounting 'is most certainly not a pure science' and conclude that 'internal consistency, as an absolute, is simply not possible'. In another article Alexander (2006) claims that companies' indifferent countries will apply IFRS inconsistently in identical cases and that the enforcement of accounting regulation must accept this. We agree that accounting is not a 'pure science' (see above) and that absolute consistency of all accounting principles is not achievable. Indisputably, one can also agree with Alexander's assumption that IFRS will never be interpreted and applied fully consistently by all companies. However, as in the case of other ideals, such as justice, equality and freedom, the impossibility of achieving absolute internal consistency does not, from a normative perspective, imply that consistency between accounting norms and their consistent application is not to be desired. Nor does it imply that on a comparative basis there cannot be more consistent and less consistent accounting norms.

#### **THE ROLE OF CONSISTENCY IN THE IFRS SYSTEM**

We now turn to exploring how far internal consistency is achieved in the IFRS system. The IASB Framework is shown to contain contradictory objectives and qualitative characteristics as well as conflicting general concepts and principles. As a result, Standards and Interpretations dealing with similar and related issues are partly inconsistent. From this finding one can infer that a consistent application of IFRS is currently not ensured. Finally, the IASB's efforts towards the elimination of the described inconsistencies are presented.

#### **THE QUALITATIVE CHARACTERISTICS 'RELEVANCE' AND 'RELIABILITY'**

It is clear the IASB strives for consistency of its standards. According to the Preface to International Financial Reporting Standards 'the objective of the Framework is to facilitate the consistent and logical formulation of IFRSs' (Para. 8). Moreover, in their proposal of a revised conceptual framework the FASB and the IASB note that 'internal consistency of accounting standards is desirable and that it should naturally result from developing standards that are consistent with the same conceptual framework' (IASB, 2008, BC2.46). Consistent with the U.S. Conceptual Framework the IASB Framework (1989) points out that the Board members in the standard setting process and managers when developing accounting policies for unregulated issues need to trade-off between qualitative characteristics, especially relevance and reliability (FW.45). However, at present, there is no unanimous agreement on what constitutes relevant and reliable information or on how to trade-off adequately between the two qualitative characteristics (Johnson, 2005, p. 1). And more recently, the question of whether such a trade-off should exist has been raised. Whether an accounting method provides relevant information depends, amongst other things, on the objective of financial statements and the underlying explicit or implicit accounting theory. If, as according to Sprouse and Moonitz (1962), the objective of financial statements is to provide information about the financial position and changes in the financial position of an enterprise, information about the enterprise's wealth as indicated by its resources (assets) and obligations (liabilities) is considered as relevant (assets/liabilities view). If, as according to Paton and Littleton (1940: 1965), the objective of financial statements is to provide information about the performance of an enterprise, information about the enterprise's efficiency in obtaining inputs to produce and sell outputs as indicated by net periodic profit is regarded as relevant (revenue/expense view). The differences of the two objectives and the related accounting theories as well as, arguably, the impossibility to pursue both at the same time has been evidenced in the Anglo-American literature on accounting theory since the 1920s and lately Ronen (2008, p. 184-5) are examples in the Anglo-American literature.

The existing IASB Framework contains both opposing and inconsistent objectives (FW.15; IAS 1.7). As a consequence, standards contain recognition and measurement principles that reflect different accounting theories and are thus sometimes inconsistent. The following example illustrates the resulting inconsistencies: The IASB has given priority to the revenue/expense view in the recognition of government grants, since the corresponding income shall be allocated over the periods necessary to match them with the related costs (IAS 20.12). By contrast, in the case of biological assets the IASB has given priority to the assets/liabilities view because income shall be recognized independently from the incurrence of the costs when an increase in wealth (indicated by an increase in the asset's fair value) has taken place (IAS 41.12, 41.26).

Furthermore, the existing IASB Framework does not 'convey ... the meaning of reliability clear enough to avoid misunderstandings' (IASB, 2008, BC2.11). The IASB (2005a) notes that 'for many [Board members], the meaning seems to be verifiability, for some its precision, for some, it may be faithful representation, for a few perhaps all of those plus neutrality. Among constituents, the differences in meaning are much greater.

In cases where the qualitative characteristics 'Relevance' and 'Reliability' suggest different accounting policies, the IASB in the standard setting process and managers in the development of accounting policies when no IFRS addresses the particular transaction or event, need to trade-off between the two qualitative characteristics (FW.45). The IASB Framework does not provide guidance on how to balance relevance and reliability, but rather requires managers to find an appropriate balance between the characteristics by using their professional judgment (FW.45). In the absence of legal liability this may be tolerable. Given the threat of different assessments in court this imposes an undesirable risk on management even if assessment and application are done in good faith.

The FASB points out that 'no consensus can be expected about their relative importance in a specific situation because different users have or perceive themselves to have different needs and, therefore, have different preferences' (CON2.45). The diverging opinions about the relative importance of relevance and reliability in the accounting literature confirm this statement. For example, Ernst & Young (2005) regard reliability as 'a necessary precondition that must be met for information to be relevant' (p. 2). By contrast, Chambers (1996) argues in the context of measurement that the qualitative characteristics are mutually exclusive and that a trade-off results in information that is neither relevant nor neutral (reliable) (p. 127).

Joyee et al. (1982) evidence the low agreement on the meaning and relative importance of the qualitative characteristics by means of an experiment which they claim results in users choosing different accounting policies in identical situations. According to them, 'this casts doubt on the ability of the qualitative characteristics... to facilitate accounting policy making'. One may conclude from these findings that the qualitative characteristics of relevance and reliability do not enable Board members as well as managers in the absence of clear guidance to consistently exercise their professional judgment in the development and application of accounting policies relating to comparable issues.

#### **THE GENERAL DEFINITIONS, RECOGNITION CRITERIA AND MEASUREMENT CONCEPTS**

Solomon's (1986, pp. 120–1) and Dopuch and Sunder (1980, pp. 6–7) demonstrate by reference to pension obligations and deferred taxes that the liability definition under U.S. GAAP is too broad to be helpful in choosing between different accounting policies. This criticism also applies to the largely comparable liability definition and other financial statement elements definitions in the IASB Framework (FW.60). For example, according to FW.70 (a) income arises from inflows or increases of assets or decreases of liabilities. However, only some increases of assets, such as increases in the fair value of certain financial instruments (IAS 39.55(a)) and biological assets (IAS 41.26), give rise to income, while others, such as increases in the fair value of available-for-sale financial assets (IAS 39.55(b)) and increases in the carrying amount of property, plant and equipment (IAS 16.39) and intangible assets (IAS 38.85) resulting from a revaluation, are credited directly to equity and thus do not give rise to income. The fact that the IASB has more or less arbitrarily drawn the line between unrealized increases in assets that are recognized through profit and loss and unrealized asset increases excluded from income (IASB, 2005a, p. 11) reveals that the income definition in the IASB Framework is too broad to limit (arbitrary) choices in the development of accounting policies, either by the Board or by preparers.

The same can be said about the general recognition criteria in the IASB Framework, the probable inflow of future economic benefits associated with an item and its reliable measurement (FW.83). The IASB Framework does not provide any threshold that must be met for the inflow of economic benefits to be regarded as probable. In view of the vagueness of the probability criterion, it is not surprising that the IASB has set different probability requirements for different accounting issues, as evidenced below for the recognition of revenue from the sale of goods and construction contracts. As regards the reliable measurement criterion, the IASB (2005a) has observed that the 'accounting standards have different (inconsistent?) hurdles for sufficiently reliable measurement and different (inconsistent?) treatments for insufficiently reliable measurement' (p. 11). It follows that the general recognition criteria in the IASB Framework do not provide a suitable basis for the consistent deduction of accounting policies in the absence of an IFRS.

Instead of providing guidance on how to find an appropriate measurement attribute in a specific situation, the IASB Framework only lists several measurement bases that are used in the accounting practice (FW.100) (IASB, 2005d, p. 20). Due to the 'lack of an agreed, coherent measurement theory', inconsistencies in the measurement of financial statement elements exist in several IFRS, such as in IAS 39, which is deemed to 'reflect more or less arbitrary mixed measurement compromises spending resolution of conflicting views on appropriate measurement bases' (IASB, 2005d, p. 20). This suggests that the required reference to the Framework's measurement concepts in the absence of an IFRS dealing with a specific issue or with related issues does not adequately guide managers' judgment in the choice of a measurement attribute.

#### **STANDARDS AND INTERPRETATIONS DEALING WITH SIMILAR AND RELATED ISSUES**

Since the IASB has not applied the IASB Framework's general recognition and measurement principles consistently to similar issues, some IFRS are inconsistent. For example, revenue from the sale of goods shall not be recognized until the seller has transferred the significant risks and rewards of ownership to the buyer (IAS 18.14 (a)). This typically occurs with the transfer of legal title or the passing of possession to the buyer (IAS 18.15). If the 'risks and rewards criterion' were also to be applied to construction contracts, revenue would generally have to be recognized when construction is complete. It has been argued that in the case of long-term construction contracts, the 'completed contract method' would not appropriately reflect the enterprise's performance during the periods of construction (Paton and Littleton, 1940: 1965, p. 50; IFRIC, 2006, p. 4). Therefore, the IASB makes an exception from the risks and rewards criterion in the case of construction contracts. If the outcome of the contract is reliably measurable IAS 11.22 requires revenue from construction contracts to be recognized according to the stage of completion of contract activity at each balance sheet date, even if the enterprise has not yet transferred legal title or possession to the customer.

#### **THE IASB'S EFFORTS TOWARDS THE ELIMINATION OF INCONSISTENCIES**

Having recognized that the objectives, concepts and principles in the existing IASB Framework are partly ambiguous and internally inconsistent, the IASB and the FASB began a joint project on the revision and convergence of their conceptual frameworks in 2004. The objective of the project is to develop a common conceptual framework that is 'sound, comprehensive, and internally consistent' and thus constitutes an adequate foundation for the development of consistent, principles-based accounting standards (Bullen and Crook, 2005, p. 1; IASB, 2008, P4). This project is expected to last for many years.

One measure that the Boards plan to undertake in respect of the existence of conflicting objectives and accounting theories is to place greater emphasis on providing information on an enterprise's financial position and thus the assets/liabilities view (Dichev 2008, p. 458; Whittington, 2008, pp. 149–50). According to chapter 1 of the Exposure Draft of an improved Conceptual Framework for Financial Reporting the objective of financial statements shall 'only' be to 'provide information about the liabilities and equity', that is, its financial position (IASB, 2008, OB6). The draft conceptual framework further states that information about an entity's financial performance is also essential (IASB, 2008, OB18, OB22). However, since the term 'performance' is planned to be defined in terms of changes in the entity's financial position, it appears as if the depiction of an enterprise's performance in the original sense (e.g., according to Paton and Littleton, 1940: 1965) shall no longer be a distinct objective of IFRS financial statements, from which consequential recognition and measurement criteria (such as the stage-of-completion method in IAS 11) are developed (similarly Bonham et al., 2009, p. 141).

Apart from this, the Boards intend to replace the term 'reliability' with the term 'faithful representation' in order to clarify its meaning (IASB, 2008, QC16, BC2.12–BC2.15). While this replacement is only supposed to be a clarification, some argue that the change in the wording also brings about a change in the meaning (Whittington, 2008, p. 146–7; see also Walton, 2006, p. 340; Lennard, 2007, paras 3.22–3.23). The currently required trade-off between relevance and reliability shall be substituted by a flow process (IASB, 2005b, paras 3–4), in which the standard setter or, in the absence of an IFRS, managers should first identify the economic phenomena that are relevant in making economic decisions and then choose the recognition and measurement methods the application of which provides the most relevant information (IASB, 2005c, paras 9–22, 2008, QC12) and then assess whether the chosen accounting method is a sufficiently faithful representation of the respective economic phenomena (IASB, 2008, QC13). Apparently, the draft conceptual framework prioritizes 'relevance' over 'faithful representation' (Whittington, 2008, p. 146; Gebhardt and Dean, 2008, p. 222). That is because one will have to choose the most relevant accounting method if the representation of the item is sufficiently faithful, even if there are other (less) relevant methods that would more faithfully represent the item.

In order to remove existing measurement inconsistencies the IASB is currently undertaking a project on measurement objectives. In line with the SEC's notion that the adoption of principles-based standards will probably lead to an increasing employment of fair value (SEC, 2003, III.1.i) the IASB tentatively concluded that fair value is the most desirable measurement basis on initial recognition (IASB, 2005d, p. 13). In theory, the adoption of fair value as a single measurement attribute would lead to consistency since 'the fair value of any particular asset or liability is the same for every entity' (Barth, 2006, p. 275; see also Barlev and Haddad, 2007, p. 502; Barth, 2007, p. 11; Bromwich, 2007, p. 57). However, in practice the use of valuation methods in the absence of market prices which require managers to make estimates renders it most unlikely that companies calculate the same values in identical circumstances. This implies that internal consistency of accounting standards, for example as regards measurement, does not automatically guarantee a consistent application of the respective standards. Notably, Benston et al. (2006) argue that standard setters need to provide 'very detailed rules for calculating' fair values (p.173). The April 2009 changes to SFAS 157 Fair Value Measurements confirm this. It is, however, not in line with the current trend in standard setting to move from rules-based to more principles-based accounting standards on the one hand. On the other hand it also needs to be considered that providing rules does not automatically

create consistency. For example, IAS 39 provides extensive guidance on how to calculate fair values in the absence of market prices. Nevertheless, a consistent valuation of financial instruments is currently not achieved (Financial Stability Forum, 2008, pp. 28 et seq.).

#### CLARIFICATION OF THE MEANING OF 'RULES' AND 'PRINCIPLES'

The link is now made between the consistency issue and the rules-versus-principles debate in the accounting literature. The definitions and distinctive characteristics of rules and principles are identified based on the legal and accounting literatures. It is concluded that the removal of many deficiencies currently perceived in relation to the rules under U.S. GAAP and IFRS does not require a complete elimination of rules, but could also be achieved by a removal of present inconsistencies. Moreover it is demonstrated that a consistent application accounting standards does not only presuppose internal consistency of the accounting standards, but also the pro-vision of rules in the form of specific recognition and measurement requirements.

#### THE DEFINITION OF 'RULES' AND 'PRINCIPLES' IN THE ACCOUNTING LITERATURE

The accounting literature distinguishes between rules and principles by reference to their specificity and the degree of judgment that is required in their application: While the SEC, the Institute of Chartered Accountants of Scotland (ICAS) and most researchers characterize rule as being highly detailed and unambiguously prescribing specific accounting methods (SEC, 2003, I.D.; Kivi et al., 2004, p. 11; ICAS, 2006b, pp. 8, 10; see also Mason and Gibbins, 1991, p. 22), principles are typically described as broad guidelines that, instead of providing detailed implementation guidance, require preparers to exercise judgment in applying the principles to specific transactions and events (Tweedie, 2002, 2005, pp. 33–4, 2007, p. 7; DiPiazza, Jr., 2008, p. 7; Tsakumis et al., 2009, pp. 6–7; see also SEC, 2003, para. I.C.; Psaros, 2007, p. 528).

Tweedie (2002, 2007, p.7) points out that in an accounting system that is based on principles only, many individual transactions and events are not explicitly dealt within any standard. In such cases, managers are supposed to select and apply appropriate accounting policies by exercising professional judgment. Dickey and Scanlon (2006) further note that in a principles-based system enforcing agencies are only allowed to second-guess managers' professional judgment if the selected accounting policies are not in conformity with the high-level principles or if the judgment was not made 'in good faith' (pp. 16–17; see also Ng, 2004, p. 20; Tweedie, 2007, p. 8; Bonham et al., 2009, p. 73). They conclude that 'the principles-based approach theoretically permits public companies to have differing accounting judgments within the framework of these broad principles' (Dickey and Scanlon, 2006, p. 13).

We hold that many of the problems related to rules under U.S. GAAP and IFRS, such as scope exceptions and excessive implementation guidance, do not require the elimination of all specific guidance as requested by some in the accounting literature. We argue that they may also be resolved by eliminating the inconsistencies within the respective accounting systems. For example, if IAS 39 would require measurement of all financial instruments by reference to a consistent measurement basis the standard would (automatically) contain much less specific guidance.

#### IMPACT OF THE LEVEL OF DETAIL OF ACCOUNTING STANDARDS ON CONSISTENCY IN THEIR APPLICATION

As shown above, principles-based standards may, even if internally consistent, be applied differently to identical issues by different companies and thus do not ensure consistency in the application of the accounting standards. That is because principles alone do not provide a sufficient structure to limit managers' judgments in the application of the principles to specific transactions and events. This means that if consistency as regards the application of accounting standards is strived for, rules, which are consistently developed on the basis of the high-level principles, need to be provided.

Foe exposition consider: A revenue recognition principle could be that revenue should be recognized when the inflow of economic benefits is probable. Since it depends on managers' judgment when the inflow of economic benefits is regarded as probable, it may happen that in the case of an identical sales contract one company recognizes revenue at contract conclusion while another company recognizes revenue with the receipt of cash. If consistency in the application of accounting standards shall be ensured consistent rules for different types of revenue-generating transactions need to be provided. A rule for the sale of goods could be that revenue shall be recognized when the good is handed over to the customer and no significant additional obligations remain to be fulfilled (more specific [consistent] guidance for additional obligations, such as warranties, may be provided). Since the risk that the sold product does not conform to the contractually agreed specifications is higher in construction contracts than in sales contracts a consistent revenue recognition rule for construction contracts would require the customer's acceptance of the finished product for revenue to be recognized.

## 2. DISCUSSION

The following loosens our previous assumption that a consistent application of accounting standards by all companies is required. The advantages and disadvantages of principles-based and rules-based accounting standards are examined, leading to the conclusion that, for reasons of comparability, enforceability and objectivity of financial reporting information, it is important to have specific (internally consistent) accounting requirements that limit managers' judgments in the application of accounting standards to ideally only one possible accounting method. It is acknowledged, however, that this may, in some situations, lead to an impaired relevance of financial reporting information.

#### RULES-BASED STANDARDS INCREASE THE COMPARABILITY OF FINANCIAL REPORTING INFORMATION

Raz (1972) and others consider rules to lead 'more easily to uniform and predictable application' and thus to create consistency and comparability (p. 841; McBarnet and Whelan, 1991, pp. 848–9; ICAS, 2006b, pp. 10–11). By contrast, principles, according to Dickey and Scanlon (2006), may be applied differently to identical cases across companies due to differences in the use of judgment thereby leading to a lack of comparability and consistency in the application of accounting standards (p. 13).

Its recourse by many over several decades suggests that comparability is a desirable characteristic of financial reporting: Especially in the U.S. accounting literature many authors, such as Schipper (2003), emphasize the need for comparability of financial statements (pp. 62–3). In the 1960s discussion by the 'Golden Age' theorists, including Chambers (1966) and Moonitz (1961), comparability was a major postulate underpinning their ideas. Furthermore, it is demanded and much valued by investors (Choi and McCarthy, 2003, p. 7, referring to a letter issued by the Association for Investment Management and Research in 2000), it is one of the very reasons for the existence of accounting standards (Previts and Merino, 1998, pp. 228–34; Schipper, 2003, p. 62) and it underpins the EU's requirement for listed companies to apply uniform accounting standards in the form of IFRS in their consolidated accounts (Article 1 IAS Regulation).

However, cross-firm comparability of financial statements, imply that a company showing high income at the end of the accounting period is economically better off than other companies with a lower income number, is not achievable, not even by means of uniform accounting standards. One reason noted by Alexander and Jermakowicz (2006) is that the application of specific rules may require economically different situations to be accounted for identically and thus create a pseudo-comparability (Alexander and Jermakowicz, 2006, p. 150).

#### PRINCIPLES-BASED ACCOUNTING STANDARDS INCREASE THE RELEVANCE OF FINANCIAL REPORTING INFORMATION

Apart from the creation of a 'pseudo-comparability' in some cases, rules are criticized for failing to capture the particularities of individual cases (Bratton, 2003, p.1037) and for allowing preparers to 'structure transactions round the prescriptions, thereby circumventing the intent and spirit of the standards' (Cunningham, 2007, p. 11). Principles, by contrast, are regarded as being hardly susceptible to an evasion of their intended purpose (Broshko and Li, 2006, p.5) and, due to their flexibility and the required use of professional judgment, as having the capacity to give consideration to the particularities of individual cases (Bratton, 2003, p. 1037; Cunningham, 2007, p. 11).

Another reason why many, for example, Alexander and Jermakowicz (2006), argue that principles provide more relevant information than rules is that managers' best know the economic reality and how to account for it (p. 150). Others, for example, Bagnoli and Watts (2005), furthermore highlight the positive influence of the existence of implicit accounting choices on the relevance of financial reporting information by providing evidence that managers' accounting policy choices allow the market to infer managers' private information about the firm's economic situation ('signalling effect') (p.798).

However, downside of the flexibility of principles is, according to Beechy (2005), that managers may not always choose the most relevant accounting method since managers are always biased—even if they do not have fraudulent intentions (p.199). Guenther (2005) attributes this, amongst other things, to the pressure to present good results in the short term, especially when the personal income is bound to the achieved results (pp. 6, 12–13). Rentfro and Hooks (2004) additionally remark that the recent corporate scandals, such as the case of Enron, indicate anecdotally that managers do not always apply accounting standards

in good faith (p. 89; for the possibility of abuse of imprecise accounting standards see Clarke and Dean, 1992, 1993, 2007). Principles-based accounting standards are hence criticized for providing increased potential for earnings management (Beechy, 2005, pp. 199–200; Benston et al., 2006, p. 173).

In conformity with this, Ewert and Wagenhofer (2005) find that tighter accounting standards reduce earnings management. However, they also find evidence that tighter accounting standards increase real earnings management, that is, a change in the structure of transactions or events in order to avoid the consequences specified by an accounting standard.

Laux and Leuz (2009, pp. 830-1) provide an example that will illustrate the above stated conflict between the relevance of managers' flexibility and the risk of earnings management: Since the measurement of fair value by reference to market prices is—if contagion effects exist—not appropriate, managers must deviate from market prices and determine fair value by means of valuation models in order to provide relevant information. However, it is often not clear under which circumstances market prices are misleading. Laux and Leuz conclude that 'managers have an information advantage over the gatekeeper (e.g., auditors or the SEC) and, as a result, it is difficult to write FVA standards that provide the flexibility when it is needed and constrain managers' behaviour when it is not needed' (p. 831).

#### **RULES-BASED STANDARDS INCREASE THE ENFORCEABILITY OF FINANCIAL REPORTING STANDARDS**

Since in the case of rules actors know without ambiguity what to do in order to obey rules, the advantage is seen to be in their contribution to certainty and enforceability (ICAS, 2006b, pp. 10–11). On the other hand principles, due to their vagueness, are regarded to be difficult to enforce and thus to create uncertainty (Cunningham, 2007, p. 11).

As stated above, in the case of principles-based standards enforcing agencies have to accept that there will be circumstances where managers of companies account for identical transactions differently. Consequently, the agencies shall only be allowed to second guess managers' professional judgments if the selected accounting policies are not in conformity with the high-level principles or if the judgments were not made 'in good faith'. But, since principles-based standards allow differing interpretations of the broad principles often it will be—especially in the absence of specific guidance—difficult to judge whether an adopted accounting policy conforms to the principles and whether the judgment was made in good faith (Kivi et al., 2004, p. 12). Some therefore doubt that regulators in litigious environments, such as the U.S., will be willing to accept different applications of the same principles (Taub, 2004). Dickey and Scanlon (2006) observe that in this case, preparers would be exposed to a higher risk of litigation because enforcing agencies may allege violation even if the required professional judgment was exerted in good faith (p. 16).

#### **RULES-BASED STANDARDS INCREASE THE ENFORCEABILITY OF FINANCIAL REPORTING STANDARDS**

In the accounting literature the quest for consistency as regards the application of accounting principles is mostly premised on the desire to achieve output comparability in the form of financial statements (see, e.g., Schipper, 2003, p. 62). Some believe that there is another equally important reason. Apart from providing decision-useful information, accounting is also frequently used for stewardship/contracting purposes, for instance its use in employment contracts and debt covenants, in order to calculate annual bonuses or to limit future debt levels (Watts and Zimmerman, 1986, p. 196). Those other functions—stewardship and accountability—have a long history (Edwards et al., 2009). Guenther (2005), for example, points out those accounting-based contracts only efficiently balance the interests of the contracting parties if there is agreement on how the relevant accounting numbers are calculated (pp. 5–8). As stated above, principles-based accounting standards some-times permit managers to choose between several different accounting methods. With regard to debt covenants, principles-based standards thus enable managers to circumvent covenant restrictions by (voluntarily) changing to a more favorable accounting method (Healy and Palepu, 1990, p. 97, referring to accounting choice under U.S. GAAP). Indeed, many researches, for example, Smith and Warner (1979), have provided sound empirical evidence that managers make use of this flexibility in order to avoid costly violations of the contract.

Watts and Zimmerman (1990) argued that flexibility in the choice of accounting policies increases costs and thus decreases contract efficiency (p. 135). That is because lenders either price-protect themselves against managers' 'creative accounting' or they restrict the number of available accounting methods by using fixed GAAP provisions, which are costly to negotiate and monitor for the lender and costly for the borrower because he needs to prepare an extra set of financial statements for contracting purposes. According to Leftwich (1983) another downside of vague principles from a contracting perspective of financial reporting is that they create uncertainty about the terms of the contract and increase the risk of litigation between the contracting parties (pp. 28–9).

From a contracting perspective of financial reporting, it is essential to restrict managers' judgment in the absence of clear guidance to only one possible accounting method. Principles-based accounting standards have been shown not to ensure this since they often permit managers to choose between different accounting methods. A purported advantage of rules-based accounting standards (not necessarily containing bright-line tests that allow managers to circumvent the rules' purpose) is that they provide clear guidance and, through this, limit managers' ability to influence the relevant accounting numbers. Anyhow, if the rules are not internally consistent, managers may, in the absence of concrete guidance, arbitrarily choose between several even opposing accounting policies. From a contracting perspective, specific accounting standards are therefore only effective if they are internally consistent.

It becomes obvious that when discussing whether rules or principles are favorable the possibility of a trade-off between relevance on the one hand and comparability, enforceability and objectivity on the other hand must be considered. The AAA FASC (p. 74) makes the point by providing an example similar to the following one: A rule prescribing that certain assets shall be depreciated over ten years would most probably be applied consistently by all companies, it would create comparability and it would be easily enforceable. However, the rule does not necessarily provide useful information because it fails to reflect the 'real' decline in the asset's economic value. A principle stating that all assets shall be depreciated according to the decline of their economic value in the respective accounting period may provide more relevant information, but it is unlikely that all companies would make identical estimates with regard to the 'real' economic value of a certain asset, that is, the principle would not be applied consistently to identical events by all companies. Furthermore, the estimation of an asset's economic value opens potential for earnings management and it is difficult to judge whether it was made in good faith and thus should not be second-guessed.

### **3. CONCLUSION AND SUGGESTIONS**

For reasons of comparability, enforceability and objectivity it is particularly important to limit managers' judgments in the application of accounting standards to one possible accounting method and thus to provide for a cross-firm consistent application of accounting standards. According to that analysis, the present IFRS system fails, for a large part, to ensure this. That is because the inconsistencies between the objectives, qualitative characteristics and general recognition and measurement criteria in the IASB Framework as well as between the requirements and guidance in certain Standards and Interpretations permit managers to (sometimes arbitrarily) choose between different accounting policies in the absence of clear guidance. This led to the conclusion that consistency in the application of accounting standards requires at least consistency between the accounting standards themselves.

When exploring the differences of principles-based and rules-based accounting standards we found that internal consistency alone cannot sufficiently ensure a coherent application of accounting standards. That is because principles do not provide a sufficient structure to limit managers' judgment in the application of the principles to specific transactions and events. Thus, accounting systems should be based on principles, but should not consist of principles only. There should be a set of high-level principles from which more concrete accounting rules are consistently derived. Due to the consistency between rules addressing comparable issues managers' flexibility in applying accounting standards would be much more limited than under present U.S. GAAP and IFRS.

A normative analysis of the research question focuses on why consistency of accounting standards matters. Further research is required to test empirically or analytically whether internally consistent accounting rules limit managers' judgments in the application of accounting standards. Further research could work out how such a system could be put into practice and what the content of IFRS would have to be.

Finally, it is important to note that we developed our arguments for internal consistency in a normative way, agreeing with Alexander and Jermakowicz's (2006) objection that the 'absolute' consistency of all accounting principles is not achievable (p. 150). However, just as in the case of other ideals, such as justice, equality and freedom, the impossibility to achieve internal consistency in absolute terms, from a normative perspective, does not negate its desirability nor that it should be sought.

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## EVALUATING THE FINANCIAL SOUNDNESS OF SELECTED COMMERCIAL BANKS IN SRI LANKA: AN APPLICATION OF BANKOMETER MODEL

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### ABSTRACT

*Financial system of a country is broadly the mechanism in the financial market which deals with the business or transactions in money. The banking sector is moving towards the goal of integrated financial services because of the strong competition and quick changes of technology. In developing countries like Sri Lanka, banking sector provides fund for other organizational developments. Economic development of the economy is reflected through the soundness of the banking system. Therefore, the present study is initiated for evaluating financial soundness of selected commercial banks in Sri Lanka during from 2006 to 2010 (05years). The study concluded that state banks are in sound position in comparison to private banks. Bankometer will help the banks internal management to avoid insolvency issues with a proper control over their operations. For improving financial position, therefore, the necessity of qualified trained and experienced management personnel; Government realistic measure, following participative management, supply of adequate working capital, setting realistic goals, fixation of accountability and motivation for achievement of performance and penalisation for non-achievement of the same etc must be ensured in the sample selected listed companies*

### KEYWORDS

Financial Soundness, Commercial Banks, Bankometer model.

### BACKGROUND AND STATEMENT OF THE PROBLEM

The increasing competition in the national and international banking markets, the change over towards monetary unions and the new technological innovations herald major changes in banking environment, and challenge all banks to make timely preparations in order to enter into new competitive financial environment (Velnamby & Nimalathasan, 2010).

Managers, stockholders, lenders and employees are concerned about their firm's financial condition. The job security of managers and employees is not assured should their firms struggle financially. According to the Mingo (2000) stockholders' equity position and lenders' claims are also not guaranteed. Government, as a regulator in a competitive market, has concerns about the consequences of financial distress for firms, and it controls capital adequacy through the regulatory capital requirement. The banking sector is one of the most important instruments of the national development, occupies a unique place in a nation's economy. Economic development of the economy is reflected through the soundness of the banking system (Gaur, Sukhija & Julee, 2012).

The improvement in the performance of has been achieved despite several hurdles appearing on the way, such as temporary slowdown in the economic activity. Therefore any issue relating to banks directly impacts the well being of the economy. Sound financial health of the banks is the guarantee not only to its depositors but is equally significant for the shareholders, employees and the whole economy as well. The tightening liquidity situation and changes in regulations. Davies (2010) stated that banking system soundness matters because it gives some indication of how the financial problems would be transmitted to the real economy. Financial soundness (solvency) of the bank means the ability of the bank to meet its long term fixed expenses and accomplishing long term expansion and growth plans. The better the banks solvency position, the better it is financially.

### OBJECTIVES

The study covers the following objectives as stated below

1. To measure and evaluate the financial soundness of the state and private sector banks in Sri Lanka.
2. To compare the state and private sector banks on the basis of their financial soundness.
3. To suggest some line of actions for solving problems.

### REVIEW OF LITERATURE AND HYPOTHESES DEVELOPMENT

Bhattacharya (1997) found that during the post liberalisation ear efficiency of public sector banks declined whereas that of private and foreign banks has improved overtime. Maria, Silva and Thannassoulis (2003) evaluated the Japanese banks and concluded that major problem of failed banks was not the inefficiency of management but the below standard capital adequacy ratio and considerable problem in their asset quality.

According to Kumbhakar and Sarkar (2003) revealed that the performance of private sector banks but not the public sector banks have improved in response to deregulation measures. Das and Ghosh (2006) found a close relationship is observed between efficiency and soundness of banks as determined by capital adequacy ratio. The study of Kumar and Gulati (2008) exhibited that the overall technical inefficiency of Indian commercial banks was due to both poor input utilization and failure to operate at most productive scale size.

Wu and Zhang (2005) found that industry factors and the corporate size played a great role in affecting the financial distress: cost of financial distress became great when enterprise in financial distress stood in a poor business environment, and asset size of enterprises had a positive relationship with financial distress cost.

Zhang C, Zhang YP, Zhang YC Chen, and Wan (2006) selected 15 financial indicators to forecast EPS: equity per share, dividend pay-out ratio, dividend per share return on net assets, retained earnings ratio, current ratio, quick ratio, total debt to total assets, long-term debt to total assets, sales to accounts receivable, sales to inventory, gross margin ratio, net income to sales, return on investment and return on equity. According to the Nimalathasan (2008), it is evident from the discussion that average financial position of selected listed manufacturing companies was not sound during the period under study. Moreover, test of the soundness as revealed by Z score (Altman Model) showed that the selected companies were on verge of failure.

Based on the literatures, various studies have done in the context of financial position or performance; however, there are no sufficient studies for evaluating the financial soundness of commercial banks in Sri Lanka. Hence, in attempt to fill this research gap, the present study is initiated on evaluating the financial soundness of commercial banks in Sri Lanka using bankometer parameters.

**RESEARCH METHODOLOGY**

These describe data sources and sampling design, period of the study, reliability and validity of the data, and tool of mode of analysis.

**DATA SOURCES AND SAMPLING DESIGN**

To accomplish the above mentioned research objectives and hypotheses, the data for this study are gathered from the bank’s financial statements as published by state banks [BOC (Bank of Ceylon) and PB (Peoples’ Bank)] and private bank (Commercial Bank of Ceylon Plc (CBC) and Hatton National Bank Plc. (HNB). In addition, another source of data was through reference to the review of different articles, papers, and relevant previous studies.

**PERIOD OF THE STUDY**

All branches are taken for the study representing the period of 2006 to 2010.

**RELIABILITY AND VALIDITY OF THE DATA**

Secondary data for the study are drawn from audit accounts (i.e., income statement and balance sheet) of the concerned bank; therefore, these data may be considered reliable for the purpose of the study. Necessary checking and cross checking were done while scanning information and data from the secondary sources. All these efforts were made in order to generate validity data for the present study. Hence researcher satisfied content validity.

**TOOL OF DATA ANALYSIS**

Bankometer ratios are derived from both the CAMELS and CLSA stress test parameters with some modifications. The changes in the selected ratios are made only to synthesize the measurement of banks soundness. Following IMF (2000) recommendations, we used the procedure of Bankometer to measure the state and private sector bank in Sri Lanka. This procedure has the quality of minimum number of parameters with maximum accurate results.

**BANKOMETER PARAMETERS**

- Capital Adequacy Ratio :  $40\% \leq CAR \leq 08\%$
- Capital to Assets Ratio - Capital / Asset :  $\geq 04\%$
- Equity to total Assets - Equity / Asset :  $\geq 02\%$
- NPLs to Loans - NPLs / Loans :  $\leq 15\%$
- Cost to Income ratio - Cost / Income :  $\leq 40\%$
- Loans to Assets - Loan / Asset :  $\leq 65\%$

**These percentages explain a bank that;**

- has capital adequacy ratio between 8% to 40%,
- has more than 4% capital to assets ratio,
- has equity to assets ratio greater than 2%,
- has controlled non-performing loans (NPLs) ratio below 15% and
- has maintained liquidity by controlling loans to assets ratio below 40%,

It is therefore important for management to focus more on trying to predict the banks that are vulnerable to financial distress in near future using bankometer ratio, which is:

$$S = 1.5 * CA + 1.2 * EA + 3.5 * CAR + 0.6 * NPL + 0.3 * CI + 0.4 * LA$$

Where ‘S’ stands for solvency

CAR stands for capital adequacy ratio

CA stands for capital assets ratio

EA stands for equity to assets

NPL stands for non performing loans to loans

CI stands for cost to income

LA stands for loans to assets

and  $50 < S < 70$

According to the Altman (1968) stated that all banks having 'S' value greater than 70 are solvent and termed as super sound banks, while those banks having 'S' value below 50 are not solvent. The area between 50 and 70 is defined as gray area because of the susceptibility to error classification.

**DATA ANALYSIS AND FINDINGS**

The financial soundness of banks has been measured by using the Bankometer procedure which is discussed in Table-1.

**TABLE - 1: RESULTS OF THE BANKOMETER**

Variables	CAR	CA	EA	NPL	CI	LA	S	
Percentage	$40\% \leq CAR \leq 08\%$	$\geq 04\%$	$\geq 02\%$	$\leq 15\%$	$\leq 40\%$	$\leq 65\%$	Max 70 % & Min. 50 %	
Name of the Bank								
State Banks	BOC	13.49	0.01	0.05	0.05	64.54	0.57	69.00
	PB	12.92	0.03	0.09	0.07	54.20	0.06	61.90
Private Banks	CBC PLC	9.84	0.00	0.04	6.30	59.74	0.62	58.68
	HNB PLC	12.12	0.02	0.08	0.08	55.70	0.62	61.80

It is evident from the table-1; the results of solvency revealed that all the banks have sound financial position as all of them having Solvency Score 50-70 percentage (i.e., bankometer procedure).

BOC (69.00) stood at the first position followed by PB (61.90) and HNB PLC Bank (61.80). CBC PLC (58.68) placed at last position. On the basis of the Bankometer results it is found that state banks are in sounder solvency position in comparison to private sector banks. Bankometer will help the banks internal management

to avoid insolvency issues with a proper control over their operations. This new procedure will help the banks to gauge the solvency problems and to eradicate the shortcomings through a proper channel.

### CONCLUDING REMARKS

For improving financial position, therefore, the necessity of qualified trained and experienced management personnel; Government realistic measure, following participative management, supply of adequate working capital, setting realistic goals, fixation of accountability and motivation for achievement of performance and penalization for non-achievement of the same etc must be ensured in the selected banking sector. The study concluded that state banks are in sound position in comparison to private banks. Bankometer will help the banks internal management to avoid insolvency issues with a proper control over their operations.

This new procedure will help the banks to gauge the solvency problems and to eradicate the shortcomings through a proper channel. The study suggests that the private banks required taking some corrective measures to improve their respective ratios performance to compete with private banks.

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## A STUDY ON FDI IN SULTANATE OF OMAN

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## ABSTRACT

Foreign direct investment (FDI) plays an extraordinary and growing role in global business. FDI in Sultanate of Oman has played an important role in the development of the Omani economy. One of the main objectives of the seventh Five year Development plan of Sultanate of Oman (2006-2010) is to encourage the domestic and foreign private sectors' investments in the economic growth. The research work is to study the general look of FDI in Sultanate of Oman. Further the study to analyze FDI by country of origin and elucidate FDI by industry wise contribution in Oman. For all data interpretation were made by tabulation, growth rate and trend analysis through Linear trend, growth percentage and relative share percentage. On the basis of the data and analysis of the study conclude that the general performance of FDI in Oman is highly commendable.

## KEYWORDS

FDI by country of origin, FDI by industry and Foreign Direct investment (FDI).

## INTRODUCTION

Foreign Direct investment is one of the most important growth mechanisms in the global economy today. Many countries have given the special concentration to monitor developments and changes in this area. The Foreign Investment Survey Report (2005-2008) conducted by the Directorate of General of Economic Statistics at the Ministry of National Economy [in cooperation with Ministry of Commerce and Industry and Central Bank of Oman] has classified the Oman Foreign investment into four major categories viz. Foreign Direct investment (FDI), Foreign Portfolio Investment (FPI), Financial Derivatives (FD) and Other Foreign Investment (OFI). In further the report states that FDI is an investment a long term relationship and lasting interest of a resident entity from one economy in an entity in an economy other than that of the investor. A ratio of 10% or more of equity ownership is applied to qualify investment as an FDI<sup>1</sup>.

The International Monetary Fund's Balance of Payments manual defined FDI as 'an investment that is made to acquire a lasting interest in an enterprise operating in an enterprise operating in an economy other than that of the investor the investor's purpose being to have an effective voice in the management of the enterprise'<sup>2</sup>. FDI has to play a major role in the internationalization of business, is defined as a company from one country making a physical investment in to building a factory in another country. FDI is the process whereby residents of one country (the source country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country)<sup>3</sup>.

The term FDI is a wide term focused by all organization and has given the meaning for it. The United Nations 1999 World Investment Report (UNCTAD, 1999) defines FDI as 'an investment involving a long term relationship and reflecting a lasting interest and control of a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise, affiliate enterpriser foreign affiliate)<sup>4</sup>. A foreign direct investment, net inflows (% of GDP) in Oman was 3.22 as of 2009. Its highest value over the past 39 years was 7.95 in 2007, while its lowest value was - 3.71 in 1974.

## TYPES OF FOREIGN DIRECT INVESTMENT

The foreign direct investment may be classified on the basis of direction, target and motive.

**Direction:** The classification is based on the flow of FDI, when foreign capital investment in local resources is called inward FDI. On the other hand, when local capital is invested in foreign resources is called outward FDI. Sometimes Forward FDI is called as direct investment abroad.

**Target:** Under this classification the intention of the investment is considered as a basis. Investment in the same industry abroad as a firm operates in at home is called horizontal FDI, where an industry abroad sells the outputs of a firm's domestic production process is called vertical FDI. The forward vertical FDI means an industry abroad sells the outputs of a firm's domestic production.

**Motive:** FDI can also be categorized based on the motive behind the investment from the perspective of the investing firm. Resource seeking FDI is an investment which seeks to acquire factor of production that are more efficient than those obtainable in the home economy of the firm. In some cases, these resources may not be available in the home economy at all (e.g. cheap labor and natural resources). Market seeking FDI aims at either penetrating new markets or maintaining existing ones, it is argued that business are more likely to be pursued towards this type of investment out of fear of losing a market rather than discovering a new one. Efficiency seeking FDI is investment which forms hope will increase their efficiency by exploiting the benefits of economies of scale and scope, and also those of common ownership. It is suggested that this type of FDI come after either resource or market seeking investments have been realized, with the expectation that it further increase the profitability of the firm. Typically, this type of FDI is mostly widely practiced between developed economies; especially those within closely integrated markets. Strategic asset seeking FDI is a tactical investment to prevent the loss of resources to a competitor it is easily compared to that of the oil producers, whom may not need the oil present, but look to prevent their competitors from having it.

## IMPORTANCE OF FDI

Many economies believe that FDI is good for an economy, as it provides jobs and increase domestic capital. Critics point out that profits from FDI usually leave the country and go to the foreign company. Encouraging FDI is a major part of some IMF restructuring programs<sup>5</sup>. FDI has given the opportunity for small and medium sized enterprises to become more actively involved in international business activities. Many governments, especially in industrialized and developed nations pay very keen construction to FDI for the reason the investment flows into and out of their economies can have a significant impact.

The most profound effect has been seen in developing countries, where yearly foreign direct investment flows have increased from an average of less than \$10 billion in the 1970's to a yearly average of less than \$20billion in the 1980's, to explode in the 1990s from \$26.7 billion in 1990 to \$ 179 billion in 1998 and \$

<sup>1</sup> Ministry of National Economy (2010), "Statistic Bulletin" Directorate General of Economic Statistics, Sultanate of Oman

<sup>2</sup> International Monetary Fund (1993): Balance of Payment Manuals, Fifth edition, viewed on December, 2010, <http://www.imf.org/external/np/sta/bop/bopman5.htm>

<sup>3</sup> Imad A. Moosa (2002), "Foreign Direct investment – theory and evidence and practice." Houndmills, New York.

<sup>4</sup> United Nations(1999) "World Investment Report 1999" paper presented at the United Nations Conference on Trade and Development, New York, ISBN 92-1-112440-9

<sup>5</sup> The Free Dictionary by Farlex, "Foreign Direct Investment", viewed on December 2011 <http://financial-dictionary.thefreedictionary.com/FDI>

208 billion 1999 and now comprise a large portion of global FDI<sup>6</sup>. FDI plays an extraordinary and growing role in global business and internationalization of business. It can provide a firm with new markets and marketing channels, cheaper production facilities, access to new technology, products, skills and financing. For a host country or the foreign firm which receives the investment, it can provide a source of new technologies, capital, processes, products, organizational technologies and management skills, and as such can provide a strong impetus to economic development<sup>7</sup>.

FDI in Oman has played an important role in the development of the Omani economy. One of the main objectives of the Seventh Five Year Development plan of Sultanate of Oman (2006-2010) is to encourage the domestic and foreign private sectors' investment as per the significant role if these investments in the economic growth. The government pursues the amending of fiscal and commercial regulations and legislations to ensure attraction of these investments to the Sultanate. As a result of this continuous effort and support the Omani economy witnessed a steady growth in foreign investments in the different economical sectors in such a way that these investments become a stimulator for growth and creation of employment opportunities for young Omanis<sup>8</sup>. The statistical report clearly indicates that the foreign investment as a percentage of GDP is 47.9 in 2008. On the same time the FDI contribution was as a percentage of GDP is 18.8. It further noticed that the number of employees in foreign investment enterprises is 207,990 during the same year.

## REVIEW OF LITERATURE

The Ideas (1999), on line magazine has published the article titled as "Intra-Asia trade and FDI". The article reconsiders the patterns of intra-Asia trade and the linkage with foreign direct investment in this region. The article concluded with some brief policy recommendations on how to avoid a recurrence of the Asian crisis in the 21<sup>st</sup> century. Foreign direct investment theory and evidence and practice (2002), Imad A Moosa's book express capital budgeting techniques, the techniques of setting transfer prices, and management of political risk, all of which are functions that are performed by multinationals. The World Bank (2000) in its series policy research –working paper series with number 2349, has published the article as "Trade, FDI and international technology transfer a survey" the article found that the local policy often makes there FDI infeasible, so foreign firms choose licensing or joint ventures. University Library of Munich, Germany (2008), in its series MRPA paper with number 15093, has published an article, "FDI a bid for progress". The article that FDI not a unique explanation for growth and progress, but is one of the more useful indicators of the open opportunities. Indiana University, Kelly School of Business department (2010), in its working paper has published the article titled as, "Do additional bilateral investment treaties boos FDI?" this paper finds that the stock of bilateral investment treaties (BIT) subject of diminishing returns measured in terms of FDI flows. This may suggest either stronger property-rights protection or greater latitude to use the host country as an export platform. Saidik and Bolbol (2001) investigate the effect of FDI through technology spillovers on overall total factor productivity for Egypt, Jordan, Morocco, Oman, Saudi Arabia and Tunisia over a 20 year period. They find that FDI has not had any manifest positive spillovers on technology and productivity over and above those of other types of capital formation. On the contrary, there are some indicators that the effect of FDI on total factor productivity has been lower than domestic investments in some of the countries over the period studied, indicating a possibly dominating negative crowding out effect. Most studies generally indicate that the effect of FDI on growth depends on other actors such as the degree of complementarity and substitution between domestic investment and FDI, and other country specific characteristics.

## STATEMENT OF THE PROBLEM

FDI occupies a predominant role in the development of the economy. The government policy and plan are directly and indirectly motivates the FDI in Oman. The source of FDI for Oman is arising from 58 countries in the world. And it invested in to various major industries like oil and gas exploitation, manufacturing, real estate, renting business activities, construction, trade etc. FDI determines the economic growth of the country. Therefore a study of FDI in Oman is an important research area that needs to be explored.

## OBJECTIVES OF THE STUDY

The overall objectives of the research work is to study the general outlook of FDI in Sultanate of Oman for the financial periods of 2005-2008, the specific objectives of the study are to analyze FDI by country of origin and elucidate FDI by industry wise contribution.

## HYPOTHESIS

Hypothesis has been set up to indicate the direction in which the research study should proceed. The hypotheses of the study are;

1. A negative trend and growth rate of FDI in Oman.
2. A negative growth percentage of FDI by country of origin.

## METHODOLOGY

The present study is based on the secondary sources of information; the secondary data were collected from the statistical bulletin of Ministry of National Economy, annual reports of the Central Bank of Oman, review of different books, articles and papers. For all data interpretations were made by the tabulation, Growth rate and Trend analysis through Linear Trend, Growth percentage and relative share percentage. The tools have been used to support discussions related to findings, finally conclusion were made accordingly.

## RESULTS AND DISCUSSION

### GROWTH RATE AND TREND OF FDI

The FDI statistics and data are evident of the emergence of Oman as both a potential investment market and investing country. An attempt is made to find out the Trend and growth rate of FDI in Oman. The amount of FDI and its trend are presented in table 1.

TABLE 1: GROWTH RATE AND TREND OF FDI (Amount in Million RO)

Year	FDI	Trend
2005	1588.9	1445.65
2006	2199.4	2448.22
2007	3518.8	3450.78
2008	4491.0	4453.35

Source: Statistics Bulletin, Ministry of National Economy, Directorate General of Economic Statistics and self computed

$$\text{Growth Rate (b)} = \frac{\sum xy}{\sum x^2} = 1002.57$$

$$\text{Trend (a + bx) where a} = \frac{\sum y}{n} = 2949.52$$

Growth rate and trend of FDI was performed to analyze the FDIs growth rate and trend for the study period. During the study period the FDI has been increased continuously, the growth rate and trend are 1002.57 and 2949.52 respectively and it is positive. The trend result for the study period is progressive and not

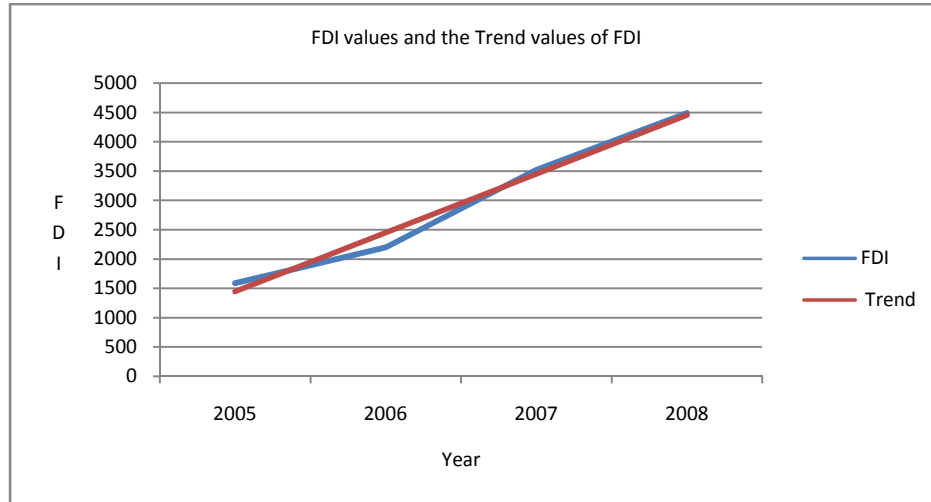
<sup>6</sup> United Nations(1999) "World Investment Report 1999" paper presented at the United Nations conference on Trade and Development, New York, ISBN 92-1-112440-9

<sup>7</sup> Jeffrey P.Graham and R.Barry Spaulding, (City Bank International portal) [http://www.going-global.com/articles/understanding\\_foreign\\_direct\\_investment.htm](http://www.going-global.com/articles/understanding_foreign_direct_investment.htm)

<sup>8</sup> Ministry of National Economy (2010), "Statistic Bulletin." Directorate General of Economic Statistics, Sultanate of Oman

accepting hypothesis 1 of this study. Thus according to this study the growth rate and trend of FDI in sultanate of Oman is positive. To probe further, the foreign direct investment and the calculated trend values are graphically plotted in figure 1

FIGURE 1: FDI VALUES AND THE TREND VALUES OF FDI



**FDI BY COUNTRY OF ORIGIN**

The sources of FDI arises from 58 countries, the major 9 countries were taken for analysis are UK, USA, Kuwait, India etc. the amount of foreign direct investment by country of origin and its growth percentage are presented in table 2.

TABLE 2: FDI BY COUNTRY OF ORIGIN AND ITS GROWTH PERCENTAGE (Amount in Million RO)

SN	Country	2005		2006		2007		2008	
		Amt	Growth %	Amt	Growth %	Amt	Growth %	Amt	Growth %
1	UK	536.9	20	648.8	30.2	845.6	50.86	1275.7	32.28
2	USA	114.2	150.79	286.4	119.06	627.4	40.80	883.4	12.23
3	UAE	214.1	65.06	353.4	86.36	658.6	25.72	828.0	-10.35
4	Kuwait	56.5	93.80	109.5	40.18	153.5	31.66	202.1	-17.07
5	India	111.4	6.046	118.6	37.27	161.8	16.15	189.1	-0.95
6	Qatar	64.5	32.56	85.5	36.61	116.8	48.80	173.8	-1.89
7	Netherlands	32.7	64.52	53.8	84.39	99.2	-14.3	85.0	0.47
8	Kingdom of Bahrain	14.2	65.49	23.5	180.85	66.0	24.24	82.0	32.3
9	Mauritius	0.3	1566.66	5.0	-80	1.01	97.47	39.6	162.12
10	Other	444.1	15.94	514.9	53.21	788.9	-7.17	732.3	10.89
Total		1588.9	38.42	2199.4	59.98	3518.8	27.63	4491.0	12.59

Source: Statistics Bulletin, Ministry of National Economy, Directorate General of Economic Statistics and self computed [2009 figures are provisional]

Growth percentage =  $\frac{\text{Following year amount} - \text{Current year amount}}{\text{Current Year amount}} \times 100$

This analysis shows that the growth percentage of FDI flow from different countries for the study period has positive growth, except for the year of 2008. The year 2008 Growth percentage is calculated on the basis of year 2009. The year 2009 amounts are provisional; due to this the above said period countries shows negative percentage. The analysis exclude the growth percentage of 2008 then no countries have negative growth except Netherland in the year 2007 and not accepting hypothesis 2 of this study. Thus according to this study the growth percentage of FDI by country of origin is positive.

**FDI BY INDUSTRY**

The major industries of Oman using FDI are oil and gas exploitation, manufacturing, financial intermediaries, construction, trade etc. The amount of foreign direct investment by industry and its relative share percentage are presented in table 3

TABLE 3: FDI BY INDUSTRY AND ITS RELATIVE SHARE PERCENTAGE

Type of industry	2005		2006		2007		2008	
	Amt	Relative Share %	Amt	Relative Share %	Amt	Relative Share %	Amt	Relative Share %
Oil and Gas exploitation	680.2	42.80	860.3	39.11	1443.0	41.00	2112.4	47.04
Manufacturing	283.0	17.81	382.8	17.40	629.6	17.89	765.5	17.04
Financial intermediaries	285.7	17.98	354.1	16.10	640.6	18.20	654.8	14.58
Real estate, renting activities	68.2	4.29	189.1	8.60	311.3	8.85	376.0	8.37
Construction	75.9	4.79	159.5	7.25	170.4	4.85	174.7	3.89
Trade	93.0	5.86	126.9	5.77	139.3	3.96	160.9	3.59
Transport, storage and communication	19.6	1.23	34.7	1.59	62.5	1.78	87.8	1.95
Electricity and water	58.3	3.67	57.4	2.61	51.7	1.47	66.8	1.49
Hotels and Restaurants	14.3	0.90	18.1	0.82	50.7	1.44	66.0	1.47
Other Industry	10.7	0.67	16.5	0.75	19.7	0.56	26.1	0.58
Total	1588.9	100	2199.4	100	3518.8	100	4491.0	100

Source: Statistics Bulletin, Ministry of National Economy, Directorate General of Economic Statistics and self computed.

The analysis shows that oil and gas exploitation, manufacturing industry, financial intermediaries and real estates and renting business activities occupies the dominant share percentage in FDI by industry during the study period. Hotels and restaurants industry receives the least percentage of shares in FDI during the study period.

**FINDINGS**

1. As per statistical information FI as a percentage of GDP is 47.9 in 2008. On the same time FDI as a percentage of GDP is 18.8. The number of employees in foreign investment enterprises is 207,990 during the same year.
2. The foreign investment of the Sultanate of Oman is classified into four categories are FDI, FPI, FD and OFI.
3. During the study period the FDI has been increased continuously. The trend of FDI for the study period has been increased continuously.
4. The growth rate and trend of FDI is 1002.57 and 2949.5 respectively and also it is positive.
5. The FDI has come to Oman by through specified industry viz. oil and gas exploitation, manufacturing, financial intermediaries, real estate-renting business activities, construction, trade, transport-storage and communication, electricity and water, hotels and restaurants
6. The oil and gas sector contributed 47.04 per cent of the total FDI in 2008, a sum of RO 2112.4 million. It was followed by manufacturing and financial intermediation sectors with 17.04 per cent respectively.
7. The contribution of FDI in all industries has been increased continuously from 2005 to 2008 except electricity and water industry.
8. The source country of FDI to the Oman is 58; the most important 9 countries are UK, USA, UAE, Kuwait, India, Qatar, Netherlands, Kingdom of Bahrain and Mauritius.
9. The UK was the major source country of FDI in 2008 with RO 1275.7 million, followed by USA with RO 883.3 million
10. The UAE is the third largest FDI source country in Oman, followed by Kuwait, India, Qatar and Netherlands. It further shows that all the countries have been increased the contribution of FDI to Oman every year except Netherlands in the year 2008.
11. Hotels and restaurants industry receives the least percentage of shares in FDI during the study period.

**CONCLUSION**

The study of foreign direct investment in Sultanate of Oman, it is clear that the country has done praiseworthy performance (Growth rate, trend and relative share) in the field of FDI, FDI by country and FDI by industry. The overall analysis of FDI in Sultanate of Oman is satisfactory and is positive trend. On the basis of the data and analysis rightly conclude that the general performance of FDI is highly creditable.

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**BOARD SIZE, CHIEF COMPLIANCE OFFICER AND FINANCIAL PERFORMANCE OF BANKS IN NIGERIA**

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**ABSTRACT**

*In Nigeria, the need for the practice of good corporate governance, especially in banks has been recognized. Codes were issued by the security and exchange commission in 2003 before the banking consolidation and another code was also issued after the consolidation, in 2006 by the Central Bank of Nigeria (CBN). A recent evaluation of the implementation of these codes by the Central Bank revealed that many banks were in breach of the provisions of the codes. As a result many banks were found to be unhealthy. The major objective of this study is to determine the relationship and impact of board size on the performance of banks considered healthy by the central bank of Nigeria. Furthermore, the study had also as an objective to establish whether such an impact was attributable to the existence of a corporate governance compliance officer. The 12 banks that emerged as healthy banks, made the sample of the study. Data covering the period 2006-2010 were extracted from their financial statements. The study employed two techniques (t-test and anova) to test for the three hypotheses formulated from the mathematical models outlined for the study; the multiple regression, was employed to establish the relationship between the variables. The independent samples t-test was used to concur with the impact revealed by the anova. Findings reveal, a large board size of 20 relates to profitability but does not significantly impact on financial performance.*

**KEYWORDS**

Board size, Chief Compliance Officer, Financial Performance.

**1. INTRODUCTION**

Developed countries and developing economies like Nigeria had brought to the front burner, the need for the practice of good corporate governance. The need arose as a result of sudden failure of major corporate institutions. Existing literature, has explained corporate governance as a system by which corporations are directed and managed with a view to increasing shareholder value and meeting the expectations of other stakeholders. In Nigeria, corporations are directed by regulatory organs like the Securities and Exchange Commission (SEC), the Central Bank of Nigeria (CBN) and managed by their board of directors. In directing corporations, it was discovered by SEC in 2003, that poor corporate governance was one of the major factors in virtually all known instances of financial institutions' distress in the country. Corporate governance was still at a rudimentary stage, as only about 40% of quoted companies, including banks, had recognized codes of corporate governance in place.

Consequently, in 2003, the Nigerian Securities and Exchange Commission (SEC) released a Code of Best Practices on Corporate Governance for public quoted companies. Banks had been expected to comply with its provisions. In addition to that, banks were further directed to comply with the Code of Corporate Governance for Banks and Other Financial Institutions approved earlier in the same year by the Bankers' Committee. However, in 2006, the consolidation of the banking industry necessitated a review of the existing code for the Nigerian Banks. The new code was therefore, developed to compliment the earlier ones and enhance their effectiveness for the Nigerian banking industry. Compliance with the provisions of the Code was mandatory.

One of the provisions of the code is a maximum board size of 20 directors. This position did not uphold the board size of 15 of the earlier code issued by the Securities and Exchange Commission (SEC) in 2003. Another provision in the code is that of banks' Chief Compliance Officer (CCO). The officer is expected, in addition to monitoring compliance with money laundering requirements; to monitor the implementation of the corporate governance code. The CCO is required to make monthly returns to the CBN on all whistle blowing reports and corporate governance related breaches. The CCO together with the CEO of each bank should at the end of each year certify to the CBN that they are (not apart from) aware of any other violation of the Corporate Governance Code. The corporate governance compliance status report should be included in the audited financial statements.

From the discussions above, these reforms carried out by the CBN in the banking sector, as well as the code issued by the SEC were to bring about optimised corporate governance practices in the industry, if banks do actually comply with these codes in their entirety. However, recent development in the banking industry has shown that, noncompliance with the code by some banks in the industry, affected the quality of their operations which resulted in their being classified as unhealthy by the Central Bank of Nigeria. From this view, the following can be deduced; when banks do actually work with these directives, especially in the areas of having the stipulated board size and the existence of a Chief Compliance Officer (CCO), there is the possibility of banks, optimising their potentials through best corporate governance practices.

It is in this context that the study seeks to address the following questions; to what extent does board size significantly relate and impact on financial performance (FP) of the 12 banks that were considered healthy by the CBN, and whether the relationship and impact are attributable to the fact that, the CCO exists to discharge his/her duties?

Besides seeking to address these questions, there is an attempt by the study to contribute to bridging the existing gap in the available literature on the impact of corporate governance on financial performance in financial institutions, with particular reference to board size, compliance efforts and profitability. This is influenced by the fact that, most studies conducted in Nigeria focused on relationship between corporate governance and firm performance in mostly non-financial institutions, like Adenikinju and Ayorinde, (2001); Sanda, Mikailu and Garba, (2005); Kajola, (2008); and Iyiegbuniwe and Oghojafor, (2011). This study is a mono-sector, the 12 banks considered healthy by the Central Bank of Nigeria form the sample for this study. The remaining part of this paper is structured into five sections, section one is the introduction including this paragraph. Section two, presents the literature in concepts, prior studies and theoretical review. Immediately after that is the methodology, presenting the model and how the study defined and measured its variables. Afterwards, is the discussion of findings and based on the findings the paper concludes and proffer recommendation in the last section of the paper.

2. LITERATURE REVIEW AND CONCEPTUAL FRAME WORK

2.1 BOARD SIZE

Board size is the dimension or the number of individuals, in terms of how large or small the representation of the board is. As earlier mentioned, the code emphasizes that, the number of non-executive directors should be more than that of executive directors subject to a maximum board size of 20 directors (CBN code, 2006) and 15 directors (SEC code, 2003). What this implies is that, large board sizes are emphasized by both codes.

Extant literature though not in prosperity, has revealed mixed positions regarding board size and firm performance. Some studies posit that the smaller the board size of 7-8, the higher the performance, (Lipton and Lorsch 1992; Jensen 1993 ;). It is on this basis that Jensen (1993:865) contends that “keeping boards small can help improve their performance”; when boards are large it becomes easier for the CEO to control them. On the other hand, some studies posit that, the higher the number of directors that sit on the board the better the performance (Belkhir, 2008; Adams and Mehran, 2010). Studies like those of Fich and Shivdasani (2006) and Adams and Mehran (2010) revealed that corporate performance can only deteriorate when busier directors serve on the board. But there are studies that are indifferent to the number of directors that make a board size but preoccupied their research on the link between board size and performance. Examples include the studies conducted by Yermack (1996) and Eisenberg et al, (1998); both studies found a negative relationship between board size and firm Performance. Larger boards make coordination of tasks more difficult and therefore make decision making less effective. Furthermore other studies find that the negative relationship between board size and performance is not strong to the difference in performance measure (Bhagat and Black 2002). Arguing differently, Mak and Li (2001) posit that, the sign and significance of the relationship between board size and performance is sensitive to the estimation method. They evidence that, board characteristics are endogenous and that failing to take endogeneity into account may reveal a significant relationship with performance that is not real.

3. METHODOLOGY

The objective of this study is to assess the relationship and impact of corporate governance (CG){board size} on corporate financial performance (FP){profitability} of the 12 banks that were considered healthy by the CBN, and to establish whether the impact and relationship is attributable to the fact that, the CCO exist.

To achieve this objective, content analysis was used to collect CG and FP data from the annual financial reports of 12 banks (Access, Fidelity, Guarantee trust, First, First city monument, Stanbic IBTC, Skye, Zenith, Sterling, Eco, Diamond, and UBA) for the period 2006-2010. The choice of this period is influenced by the fact that, the period covers five years immediately after the consolidation of the banking sector. The Nigerian government, through the Central Bank, undertook the consolidation of the banking sector with the aim of producing stronger and more virile banking system that will contribute to the development of the national economy. The study developed two models as the basis for testing the hypotheses formulated for this study. The study specified two accounting ratios (Profit before tax margin [PBTM] and Profit after tax margin [PATM]) as proxies for the dependent variable, corporate financial performance (FP). The choice of these proxies is based on the assertions that, they indicate whether or not the expenses of running a business are proportionate to the amount of trade. For the independent variable corporate governance (CG) {Board size [BS] and Chief Compliance Officer [CCO]} were used to represent it. The choice of these proxies is based on the objective of this study, which is to know whether the impact of GC on FP is attributable to it. SPSS version 17 was used to aid the analysis of data collected.

3.1 POPULATION AND SAMPLE OF THE STUDY

The population of the study is the 12 banks out of the 23 banks quoted on the Nigerian stock exchange. These 12 were considered healthy by the Central Bank of Nigeria after a stress test conducted on all the banks in the country. These banks are also the sample of this study. This implies n = N = 12. Where:

$n$  = Sample size

$N$  = Population size

Arising from the above, considering the period under review (2006-2010), a total of 60 annual reports and accounts of the following banks; First bank, Union bank, Guarantee trust bank, Sterling bank, Wema bank, FCM bank, Skye bank, Diamond bank, Eco bank, and Zenith bank were reviewed and required data extracted.

3.2 VARIABLE SPECIFICATION

Based on the objectives of this study, three hypotheses were formulated. For hypothesis one, the study specified two accounting ratios (Profit before tax margin [PBTM], Profit after tax margin [PATM]) as proxies for the dependent variable, financial performance (FP). The formula for the proxy, profit before tax margin is

$$\frac{\text{Profit before tax}}{\text{Gross earnings}} \times 100$$

The formula for the proxy, profit after tax margin is

$$\frac{\text{Profit after tax}}{\text{Gross earnings}} \times 100$$

The variables were specified to test the following null hypothesis:

**Ho<sub>1</sub>** Board size has no significant impact on profitability of healthy banks in Nigeria.

For hypothesis two and three, the proxies for the dependent variable (PBT & PAT) indices were used. While the independent variable proxies were treated as a dichotomous variable, i.e. binary number 1 was assigned to the years within the period under review, when the directives in the code for a board size of not more than 20 and the existence of a chief compliance officer are complied with, if other wise 0 was assigned. The following mathematical models: FP (Profitability {PBTM & PATM}) = F (BS) and

FP (Profitability {PBTM & PATM}) = F (CCO) was developed to test the following null hypotheses:

**Ho<sub>2</sub>** Board size is not significantly related to profitability of healthy banks in Nigeria.

**Ho<sub>3</sub>** The existence of a chief compliance officer does not significantly enhance profitability of healthy banks in Nigeria.

3.3 TECHNIQUES OF DATA ANALYSIS

The independent sample t-test was employed to analyse data gathered for hypothesis one. To achieve the independent samples for the study, the proxies for the dependent variable were grouped into 2 samples. Profit before tax was categorized as group one and it was assigned binary number 1. For group 2, profit after tax was assigned with binary number 2. Multiple Regressions (Analysis of variance [ANOVA]) was used to analyse hypothesis two and three.

4. DISCUSSION OF FINDINGS

Hypothesis were formulated to achieve the objective of this study, which is to determine whether board size significantly relates and impacts on profitability of banks considered healthy in Nigeria.

TABLE 4.1 a: GROUP STATISTICS

	Financial Performance (FP)	N	Mean	Std. Deviation	Std. Error Mean
Board Size (BS)	PBTM	5	21.7560	10.47358	4.68393
	PATM	5	15.8550	9.26951	4.63475

Source: spss out put listing 2012

In the table 4.1a above, the mean for group one (PBTM) is 21.7560 and that of group two (PATM) is 15.8550. The standard deviation for group one is 10.47358 with an error mean of 4.68393. For group two, the deviation is 9.26951 with an error of 4.63475. The result reveals the difference between the means of the two groups is not wide. This implies it is not significant.

TABLE 4.1 b: INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper	Lower
Corporate Governance (CG)	Equal variances assumed	.101	.759	.882	7	.407	5.90100	6.69167	-9.92230	21.72430	
	Equal variances not assumed			.896	6.877	.401	5.90100	6.58939	-9.73706	21.53906	

Source: spss out put listing 2012

In the table 4.1b above, the F value is at 0.10, this means the levene's test is not significant. This translates into the t value calculated with the pooled variance estimate (equal variance) to be appropriate. With a 2- Tail significant value (i.e. p-value) of 0.40, the difference between the mean is not significant. This implies, board size does not have an impact on profitability of banks. Based on these results the hypotheses which states:

**H<sub>0</sub>**, Board size has no significant impact on profitability of healthy banks in Nigeria, is accepted.

For the second hypothesis, tables' 4.2a-4.2b below were used to test the hypothesis.

In the anova table below, the F value is 5.358 with a significant level of 0.024. This implies the presence of a none genuine significant relationship between board size and profitability.

TABLE 4.2 a: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1470.784	1	1470.784	5.358	.024
Residual	15920.417	58	274.490		
Total	17391.201	59			

a. Predictors: (Constant), Board size

b. Dependent Variable: Profit before tax

Source: SPSS output listing 2012

In the ANOVA table 4.2b below, the F value of 7.112 with a significant level of 0.010 reveals an ungenue significant relationship between board size and profitability.

TABLE 4.2 b: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1179.802	1	1179.802	7.112	.010
Residual	9622.225	58	165.900		
Total	10802.026	59			

a. Predictors: (Constant), Board size

b. Dependent Variable: Profit after tax margin

Source: SPSS output listing 2012

In the anova table below, the F value of 0.244 with a significant level of 0.623 indicates the absence of a significant relationship.

TABLE 4.3 a: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	72.900	1	72.900	.244	.623
Residual	17318.301	58	298.591		
Total	17391.201	59			

a. Predictors: (Constant), Chief Compliance Officer

b. Dependent Variable: Profit before tax margin

Source: SPSS output listing 2012

In the anova table below, the F value of 0.450 with a significant level of 0.505 indicates the absence of a significant relationship.

Table 4.3b ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	83.117	1	83.117	.450	.505
Residual	10718.909	58	184.809		
Total	10802.026	59			

a. Predictors: (Constant), Chief Compliance Officer

b. Dependent Variable: Profit after tax

Source: SPSS output listing 2012

From the tables 4.2-4.3 above, the findings reveal a significant relationship between board size and profitability of banks. However, the relationship is not attributable to the existence of a compliance officer. This implies the acceptance of hypothesis two which states:

**H<sub>0</sub>**, Board size is not significantly related to profitability of healthy banks in Nigeria.

On the other hand, the third hypothesis:  $H_{03}$  the existence of a chief compliance officer does not significantly enhance profitability of healthy banks in Nigeria, was rejected.

## 5. CONCLUSIONS

In Nigeria, as earlier mention, the corporate governance code issued by the central bank of Nigeria (CBN) requires a maximum board size of 20 and also the existence of a Chief Compliance Officer (CCO). The officer is expected, in addition to monitoring compliance with money laundering requirements; monitor the implementation of the corporate governance code. The CCO is required to make monthly returns to the CBN on all whistle blowing reports and corporate governance related breaches. The CCO together with the CEO of each bank should certify each year to the CBN that they are (not apart from) aware of any other violation of the Corporate Governance Code. The corporate governance compliance status report should be included in the audited financial statements. Based on this premise, the study had, as an objective to determine the relationship and impact of Board size (BS) on Profitability of the twelve banks that were considered healthy by the central bank of Nigeria and to know whether the relationship and impact is attributable to the existence of a chief compliance officer. Based on the findings, the study concludes that board size has a non genuine significant relationship with profitability of banks and it is not attributable to the existence of a chief compliance officer. This is in line with the findings of Belkhir (2008) and Adams and Mehran (2010). Secondly, board size has been found to have no impact on profitability of banks.

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**A STUDY ON EMPLOYEE JOB SATISFACTION IN CONSTRUCTION COMPANIES IN VIETNAM**

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**ABSTRACT**

*Employee job satisfaction has not been extensively explored yet in Vietnamese companies and therefore, there has been still a big gap in academic research on this area in Vietnam. For this reason, this study attempted to investigate whether significant differences in the demographic characteristics of employees could have different impact on the level of job satisfaction. The sample was a total of 348 participants, who work for the construction companies in Vietnam. The Job Satisfaction Survey was used to measure the level of job satisfaction. The one-way Analysis of Variance indicated that the only significant difference in job satisfaction mean scores was found when age group was the independent variable.*

**KEYWORDS**

Construction companies, Job satisfaction, Vietnam.

**INTRODUCTION**

During the past few decades, job satisfaction has gained a great amount of attention among researchers in both developed and developing countries, especially in Western countries and the U.S. Job satisfaction has already become a very popular term in the business world. Many researchers agreed that the feeling of job satisfaction influenced positively on the achievements of employees, while dissatisfaction could negatively reflect on their performance. Job satisfaction was defined as the extent to which the work environment fulfills the requirement of the individual (Smith, Balzer, et. al., 1989). Agho and Mueller (1993) described that job satisfaction related to people's own evaluation of their job against those issues that were important to them. Adkins and Caldwell (2004) investigated the extent to which fit between individuals and their competency groups (person-group fit) and the organization (person-organization fit) were related to job satisfaction. These research results suggested that job satisfaction was positively associated with the degree to which employees fit into both the overall culture and subculture in which they worked. Scarpello and Campbell (1983) emphasized that only when employees were excited and satisfied by what they did, be business excellence achieved.

Since 1986, with innovation policy and economic reform, Vietnam has gradually integrated into the world economy. Events that Vietnam joined ASEAN in 1995 and became the official member of WTO in 2007 have brought Vietnamese organizations a lot of opportunities and new challenges. Since then, the concept of job satisfaction has introduced into Vietnam and become a hot topic, attracting the attention of numerous intellectuals, businesses and society. With increasing global and local competitiveness, it was crucial for any organization, and particularly for those in developing countries with limited resources, such as Vietnam, to ensure that it developed and retained skilled workforce on a consistent basis. In real life, a great number of employees did not enjoy the level of job satisfaction, and as a result, they opted for seeking alternative employment where they may be able to experience a higher level of job satisfaction.

**REVIEW OF LITERATURE**

The concept of job satisfaction has been defined in many ways. Smith, Kendall, and Hulin (1969) argued that "job satisfaction is a discrepancy between what is aspired to and what is currently received". They considered the different facets of job satisfaction: pay, promotion, coworker, supervision, the work itself and total satisfaction." Locke (1976) explained that we understand the job attitudes through job dimensions, which are complex and interrelated in nature. He mentioned the common dimensions of job satisfaction as "work, pay, promotions, recognition, benefits, working conditions, supervision, coworkers, company and management".

Hopkins (1983) defined it as "the fulfillment or gratification of certain needs of the individual that are associated with one's work". Spector (1997) stated that job satisfaction "can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job." Balzer (1997) defined job satisfaction as "the feelings a worker has about his or her job or job experiences in relation to previous experiences, current expectations, or available alternatives." Agho (1993) defined job satisfaction as "the extent to which employees like their job".

**AFFECT THEORY**

Among the theories of job satisfaction, probably the most widely-known is the Range of Affect Theory (Locke, 1976). The main premise of this theory is that a person's job satisfaction can depend on two factors: what one wants in a job and what one has in a job. The smaller the gap between these two, the more chances he is satisfied in his job. For example, a person may desire to manage others, yet his actual job tasks do not require such and thus, he is dissatisfied. The Affect Theory also states that a person prioritizes one aspect of the job more than the other aspects, and that certain aspect can affect how satisfied he is. For example, an employee prioritizes social connections with his coworkers, and when this factor is appropriately met, he may experience greater job satisfaction. When a person values a particular facet of a job, his satisfaction is more greatly affected both positively (when expectations are met) and negatively (when expectations are not met), compared to one who does not value that facet. Further, this theory states that too much of a particular facet will produce stronger feelings of dissatisfaction, the more a person values that facet. Therefore, employees may achieve different levels of job satisfaction when ones can value different facets.

**JOB CHARACTERISTICS MODEL**

Hackman and Oldham (1976) proposed the Job Characteristics Model, which is widely used as a framework to study how particular job characteristics impact on job outcomes, including job satisfaction. The Job Characteristics Model argues that jobs that contain intrinsically motivating characteristics will lead to higher levels of job satisfaction. Five core job characteristics define an intrinsically motivating job:

- (1) Task identity: degree to which one can see one's work from beginning to end;
- (2) Task significance: degree to which one's work is seen as important and significant;
- (3) Skill variety: extent to which job allows one to do different tasks;
- (4) Autonomy: degree to which one has control and discretion over how to conduct one's job;
- (5) Feedback: degree to which the work itself provides feedback for how one is performing the job.

According to the theory, jobs that are enriched to provide these core characteristics are likely to be more satisfying and motivating than jobs that do not provide these characteristics.

## HERZBERG'S TWO-FACTOR THEORY

In the early 1960s, Frederick Herzberg, an American psychologist proposed a motivation theory that came to be called the "two-factor theory" (Herzberg, 1966). He set out to determine the effect of attitude on motivation by asking people to describe situations where they felt good, and bad about their jobs. What he found was that people who felt good about their jobs gave very different responses from the people who felt bad. These results form the basis of Herzberg's Motivation-Hygiene Theory (sometimes known as Herzberg's Two-Factor Theory.) Published in his famous article "One More Time: How do You Motivate Employees", the conclusions he drew were extraordinarily influential, and still form the bedrock of good motivational practice nearly half a century later. The two-factor theory focused on the distinction between factors that can increase job satisfaction ("motivators") versus those that can prevent dissatisfaction but cannot increase satisfaction ("hygiene factors") (Herzberg, 1974).

- *Motivators* are "intrinsic" factors directly related to the doing a job, such as recognition, achievement, responsibility, nature of the work itself, and growth.

- *Hygiene factors* are "extrinsic" factors associated with conditions surrounding the job, such as supervision, compensation, working conditions, relations with co-workers, and benefits.

The conclusion he drew is that job satisfaction and job dissatisfaction are not opposites. Remedying the causes of dissatisfaction will not create satisfaction. Nor will adding the factors of job satisfaction eliminate job dissatisfaction. If you have a hostile work environment, giving someone a promotion will not make him or her satisfied. If you create a healthy work environment but do not provide members of your team with any of the satisfaction factors, the work they are doing will still not be satisfying.

According to Herzberg, the factors leading to job satisfaction are "separate and distinct from those that lead to job dissatisfaction." Therefore, if you set about eliminating dissatisfying job factors you may create peace, but not necessarily enhance performance. This placates your workforce instead of actually motivating them to improve performance. When these have been adequately, people will not be dissatisfied nor will they be satisfied. If you want to motivate your team, you then have to focus on satisfaction factors like achievement, recognition, and responsibility.

## MEASUREMENT OF JOB SATISFACTION

Researchers have developed several instruments to measure the levels of job satisfaction. Most researchers recognized that job satisfaction is a global concept that is comprised of various facets. The most typical categorization (Smith, et.al., 1969) considered five facets of job satisfaction: pay, promotions, coworkers, supervision, and the work itself. Locke (1976) added a few other facets: recognition, working conditions, and company and management. Furthermore, it is common for researchers to separate job satisfaction into intrinsic and extrinsic elements whereby pay and promotions are considered extrinsic factors and coworkers, supervision, and the work itself are considered intrinsic factors.

The Brayfield- Rothe Index (BRI) (Brayfield & Rothe, 1951) has 18 items to measure overall job satisfaction. Although several of these items have become obsolete over time, the instrument has been still very reliable and correlated highly with other job satisfaction measures.

The Minnesota Satisfaction Questionnaire (MSQ), developed by Weiss, Dawis, England, and Lofquist (1967), is used for determining a general job satisfaction score, an intrinsic job satisfaction score, and an extrinsic job satisfaction score. The MSQ has the advantage of versatility-long and short forms as well as faceted and overall measures.

The Job Descriptive Index (JDI), created by Smith, et. at. (1975, 1969), is a specific questionnaire of job satisfaction that has been widely used. They conducted a study in organizations within a variety of industries in order to investigate general job satisfaction as well as specific facets of job satisfaction. Their research study included every level of an organizational hierarchy from senior level management to entry-level workers. They attempted to do so by gauging how employees feel about specific aspects of their job such as their compensation, coworkers, or tasks of their job. Their study resulted in the creation of the Job Descriptive Index (JDI) used for to measure the five different facets of job satisfaction, which include work itself, coworkers, supervision, pay, and opportunities for promotion. The JDI is considered the best choice when survey participants are not good readers or attempt to finish quickly the questionnaire. The scale is very simple - participants just answer either yes, no, or cannot decide (indicated by '?') in response to whether given statements accurately describe one's job.

The Job Satisfaction Survey (JSS), designed by Spector (1994), is used for measuring the levels of job satisfaction of each study participant. The JSS is a 36 item, nine- facet scale to assess employee attitudes about the job and the aspects of the job. Each facet is assessed with four items, and a total score is computed from all items. The nine facets of job satisfaction are pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, coworkers, nature of work, and communication.

## PURPOSE OF THE STUDY

The aim of this study was to investigate whether differences in the demographic characteristics of employees could have different impact on the level of job satisfaction in Vietnamese construction companies. The demographic variables to be investigated included the respondent's current position, age, gender, and length of employment in the organization.

## RESEARCH QUESTIONS AND HYPOTHESES

Most studies on the topic have been conducted in Western settings. There has been no academic study exploring the effect of demographic variables on employee job satisfaction in Vietnamese construction companies. Thus, this study sought to enhance the understanding of employee job satisfaction in Vietnamese construction companies based on employee's current position, age, gender, and length of employment within the organization.

Current position, age, gender, and length of employment were some factors that could affect the level of job satisfaction. As usual, it is said that employees, who were older or who have worked in the organization for a longer time, might have a higher level of job satisfaction. However, this has no scientific basis and it needs to be verified in scientific way. Therefore, a study to examine how demographic variables could influence job satisfaction in Vietnamese construction companies was very necessary. Based on the information documented in this paper, the following question has been raised:

Question: *Are there significant differences in job satisfaction scores related to demographic variables?*

Null Hypotheses:

- H1. *There is no significant difference in job satisfaction scores based on current position.*
- H2. *There is no significant difference in job satisfaction scores based on age.*
- H3. *There is no significant difference in job satisfaction scores based on gender.*
- H4. *There is no significant difference in job satisfaction scores based on length of employment.*

## RESEARCH METHODOLOGY

Quantitative research (Sekaran, 2005; Creswell, 2003) was used to examine the relationship among variables. Participants were asked to complete two questionnaires: The Employee Demographic Survey (EDS) and the Job Satisfaction Survey (JSS). A one-way Analysis of Variance (ANOVA) was conducted to evaluate the relationships between the dependent variables and the independent variables (Ha, 2010).

## POPULATION AND SAMPLE

The population of this study consisted of full-time employees working for the construction companies in Vietnam. Such employees were construction engineers, site managers, project managers, and office staff. In order to participate in this study, the participant must have been employed in the construction companies. There were no restrictions regarding the participant's gender, religion, ethnicity, or level of education. The sample size for this study consisted of 348 employees within construction sector. Participants were randomly selected from the employee list by selecting even-numbered members. In order to ensure an adequate sample size, approx 1,200 survey packets were distributed to the employees and 348 valid ones were returned, for a response rate of 29.0%.

**INSTRUMENTATION**

The instruments used for this study were the Employee Demographic Survey (EDS) and the Job Satisfaction Survey (JSS). All instructions and questions were translated from English into Vietnamese in order to help all participants understand easily these surveys.

The EDS was designed by the researcher to collect demographic information from the population. The EDS consisted of four items about the respondent's current position, age, gender, and the length of employment within the organization. The respondent were asked to mark their appropriate response with an "X".

The JSS, designed by Spector (1994), was used for measuring the levels of job satisfaction of each study participant. The JSS is a 36 item, nine- facet scale to assess employee attitudes about the job and aspects of the job. A summated rating scale format is used, with six choices per item ranging from "strongly disagree" to "strongly agree". Negatively worded items are 2, 4, 6, 8, 10, 12, 14, 16, 18, 19, 21, 23, 24, 26, 29, 31, 32, 34, and 36. High scores on the scale represent job satisfaction, so the scores on the negatively worded items must be reversed before summing with the positively worded into facet or total scores. A score of 6 representing strongest agreement with a negatively worded item is considered equivalent to a score of 1 representing strongest disagreement on a positively worded item, allowing them to be combined meaningfully. Scores with a mean item response (after reverse scoring the negatively-worded items) of 4 or more represents satisfaction, whereas mean responses of 3 or less represents dissatisfaction. Mean scores between 3 and 4 are ambivalence. Translated into the summed scores, for the 36-item total where possible scores range from 36 to 216, the ranges are 36 to 108 for dissatisfaction, 144 to 216 for satisfaction, and between 108 and 144 for ambivalent.

In this study, however, overall job satisfaction was measured rather than as individual facets due to the specific purpose of the study.

**ANALYSIS AND INTERPRETATION OF DATA**

Data collected from the test instruments were entered into the Statistical Package for the Social Sciences (SPSS), version 16.0 software and Microsoft Excel to evaluate descriptive statistics and percentages and to provide analysis to answer the research question posed. The null hypotheses for this research study were tested at level of significant  $\alpha = 0.05$  for ANOVA.

Approx 1,200 survey packets were delivered to the participants and 348 completed packets were returned on time, for a response rate of 29.0%. A summary of demographic data is shown in Table 1.

**TABLE 1: A SUMMARY OF THE DEMOGRAPHIC DATA AND JS MEAN SCORES**

Variables	Number	Percent	JS mean scores
<b>Current position:</b>	348	100%	144.353
<input type="checkbox"/> Construction Engineer	133	38.22%	145.368
<input type="checkbox"/> Site/ Project Manager	67	19.25%	147.164
<input type="checkbox"/> Office Staff	148	42.53%	142.169
<b>Age:</b>	348	100%	144.353
<input type="checkbox"/> 18 – 30	151	43.39%	140.119
<input type="checkbox"/> 31 – 40	142	40.80%	146.781
<input type="checkbox"/> 41 and over	55	15.81%	149.709
<b>Gender:</b>	348	100%	144.353
<input type="checkbox"/> Female	88	25.29%	140.740
<input type="checkbox"/> Male	260	74.71%	145.580
<b>Length of employment:</b>	348	100%	144.353
<input type="checkbox"/> Less than 3 years	126	36.21%	144.603
<input type="checkbox"/> 4 to 7 years	149	42.82%	142.591
<input type="checkbox"/> 8 years or more	73	20.97%	147.521

**NULL HYPOTHESIS TESTING**

**H1. There is no significant difference in JS scores based on current position.**

The data collected from 348 repondents, including 133 (38.22%) Construction Engineers, 67 (19.25%) Site/ Project Managers, and 148 (42.53%) Office Staff, were used to conduct the analysis for H1.

**TABLE 2: JS DESCRIPTIVE STATISTICS AND ANOVA BASED ON CURRENT POSITION**

Single Factor	Job Satisfaction					
SUMMARY						
Groups	Count	Sum	Mean	Variance	SD	
Con. Engineer	133	19334	145.368	435.053	20.858	
Site/Project Manager	67	9860	147.164	808.624	28.436	
Office Staff	148	21041	142.169	1186.618	34.447	
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1372.61	2	686.304	0.830	0.437	3.022
Within Groups	285228.92	345	826.750			
Total	286601.53	347				

Table 2 displays JS Descriptive Statistics and ANOVA results by current position. In general, two groups (Construction Engineer & Site/ Project Manger) had mean scores more than 144, representing job satisfaction. Site/ Projest Manger group had the highest mean score ( M = 147.164 ), while Office Staff group had the lowest mean score (M = 142.169 ), representing ambivalence (mean scores between 108 and 144 are ambivalent).

The dependent variable was the JS mean scores and the independent variable was current position at three levels: Construction Engineer, Site/ Project Manager, and Office Staff. As shown in Table 2, F-computed (0.830) was less than F-critical (3.022) at  $\alpha = 0.05$ . Therefore, H1 could not be rejected at level of significant  $\alpha = 0.05$ .

**H2. There is no significant difference in JS scores based on age**

The data collected from 348 repondents were used to conduct the analysis for H2. Of 348 respondents, 151 (43.39%) respondents were '18 – 30' years of age, 142 (40.80%) respondents were '31 – 40' years of age, and 55 (15.81%) respondents were '41 and over' years of age.

Table 3 displays JS Descriptive Statistics and ANOVA results by age group. In general, '31-40' & '41 and over' groups had JS mean scores more than 144, representing job satisfaction. '41 and over' group had the highest mean score ( M = 149.709 ), while '18-30' group had the lowest mean score (M = 140.119), representing ambivalence (mean scores between 108 and 144 are ambivalent).

TABLE 3: JS DESCRIPTIVE STATISTICS AND ANOVA BASED ON AGE

Single Factor	Job Satisfaction					
SUMMARY						
Groups	Count	Sum	Mean	Variance	SD	
18-30	151	21158	140.119	811.652	28.489	
31-40	142	20843	146.781	779.306	27.916	
41 and over	55	8234	149.709	923.136	30.383	
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	5122.09	2	2561.047	3.138	0.044	3.022
Within Groups	281479.43	345	815.882			
Total	286601.52	347				

The dependent variable was the JS mean scores and the independent variable was age group at three levels: '18-30', '31-40', and '41 and over'. As shown in Table 3, F-computed (3.138) was more than F-critical (3.022) and P-value = 0.044 < α = 0.05. Therefore, null hypothesis H2 could be rejected at significant level α = 0.05.

**H3. There is no significant difference in JS scores based on gender.**

The data collected from 348 respondents, including 88 (25.29%) female and 260 (74.71%) male, were used to conduct the analysis for H3.

TABLE 4: JS DESCRIPTIVE STATISTICS AND ANOVA BASED ON GENDER

Single Factor	Job Satisfaction					
SUMMARY						
Groups	Count	Sum	Mean	Variance	SD	
Female	88	12385	140.74	819.78	28.63	
Male	260	37850	145.58	825.26	28.73	
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	1539.1	1	1539.08	1.868	0.173	3.868
Within Groups	285062.5	346	823.88			
Total	286601.6	347				

Table 4 displays JS Descriptive Statistics and ANOVA results by gender. Male group had JS mean score (M = 145,58), representing job satisfaction, while Female group had lower mean score (M = 140,74), representing ambivalence (mean scores between 108 and 144 are ambivalent).

The dependent variable was the JS mean scores and the independent variable was gender at two levels: Female and Male. As shown in Table 4, F-computed (1.868) was less than F-critical (3.868) at α = 0.05. Therefore, H3 could not be rejected at significant level α = 0.05.

**H4. There is no significant difference in JS scores based on length of employment.**

As to the length of employment, the respondents consisted of three groups: 126 (36.21%) 'less than 3 years', 149 (42.82%) '4 to 7 years', and 73 (20.97%) '8 years or more'. The data collected from 348 respondents, who indicated the length of employment in the construction companies, were used to conduct the analysis for H4.

Table 5 displays JS Descriptive Statistics and ANOVA results by length of employment. In general, 'less than 3 years' & '8 years or more' groups had JS mean score more than 144, representing job satisfaction. '8 years or more' group had the highest mean score (M = 147.52), while '4 to 7 years' group had the lowest mean score (M = 142.59), representing ambivalence (mean scores between 108 and 144 are ambivalent).

The dependent variable was the JS mean scores and the independent variable was length of employment at three levels: 'less than 3 years', '4 to 7 years', and '8 years or more'. As shown in Table 5, F-computed (0.727) was less than F-critical (3.022) and P-value = 0.484 > α = 0.05. Therefore, H4 could not be rejected at level of significant α = 0.05.

TABLE 5: JS DESCRIPTIVE STATISTICS AND ANOVA BASED ON LENGTH OF EMPLOYMENT

Single Factor	Job Satisfaction					
SUMMARY						
Groups	Count	Sum	Mean	Variance	SD	
Less 3 years	126	18220	144.60	820.05	28.64	
4 to 7 years	149	21246	142.59	782.07	27.97	
8 years or more	73	10769	147.52	932.59	30.54	
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	1203.1	2	601.56	0.727	0.484	3.022
Within Groups	285398.4	345	827.24			
Total	286601.5	347				

**CONCLUSION AND DISCUSSION**

The results obtained from analyzing the JS mean scores provided useful information about the levels of job satisfaction of the respondents who were classified by demographic characteristics in this study. In particular, four subgroups: Office Staff, '18-30' years of age, Female, and '4-7' years of length of employment had JS mean score less than 144, representing low levels of job satisfaction, while seven remaining subgroups had JS mean scores more than 144, representing high levels of job satisfaction. Interestingly, '41 and over' years of age and '8 years or more' of length of employment were two of the highest levels of job satisfaction subgroups. Therefore, this leads to the conclusion that employees, who are older or who have been employed for a longer time, have a higher level of job satisfaction in Vietnamese construction companies. However, the only statistically significant difference in JS mean scores was found in age group.

Understanding the level of job satisfaction has implications for leaders within the organization. Based upon the results of this study, leaders may understand how and why their employees have dissatisfied or how to motivate employees in the workplace. The leaders can create a working environment that encourages employees to work better and achieve personal, professional, and organizational goals, and minimizes all costs related to job dissatisfaction, such as employee turnover, absenteeism, and reduced productivity (Cranny, C.J., Smith, P.C., & Stone, E.F.,1992).

Conclusions from this study were consistent with the previous research findings conducted in other countries. This study extended the concept of job satisfaction beyond the borders of Western countries and the United States. It could also apply to the Eastern settings such as in Vietnam.

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APPENDIX

JOB SATISFACTION SURVEY

	Paul E. Spector Department of Psychology University of South Florida Copyright Paul E. Spector 1994, All rights reserved.	
	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.	Disagree very much Disagree moderately Disagree slightly Agree slightly Agree moderately Agree very much
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6
19	I feel unappreciated by the organization when I think about what they pay me.	1 2 3 4 5 6
20	People get ahead as fast here as they do in other places.	1 2 3 4 5 6
21	My supervisor shows too little interest in the feelings of subordinates.	1 2 3 4 5 6
22	The benefit package we have is equitable.	1 2 3 4 5 6
23	There are few rewards for those who work here.	1 2 3 4 5 6
24	I have too much to do at work.	1 2 3 4 5 6
25	I enjoy my coworkers.	1 2 3 4 5 6
26	I often feel that I do not know what is going on with the organization.	1 2 3 4 5 6
27	I feel a sense of pride in doing my job.	1 2 3 4 5 6
28	I feel satisfied with my chances for salary increases.	1 2 3 4 5 6
29	There are benefits we do not have which we should have.	1 2 3 4 5 6
30	I like my supervisor.	1 2 3 4 5 6
31	I have too much paperwork.	1 2 3 4 5 6
32	I don't feel my efforts are rewarded the way they should be.	1 2 3 4 5 6
33	I am satisfied with my chances for promotion.	1 2 3 4 5 6
34	There is too much bickering and fighting at work.	1 2 3 4 5 6
35	My job is enjoyable.	1 2 3 4 5 6
36	Work assignments are not fully explained.	1 2 3 4 5 6

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**FACTORS INFLUENCE FINANCIAL DECISIONS UNDER THE PYRAMID OF NATURAL CONSTRAINTS**

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**ABSTRACT**

*In the present world decision is most important phenomena. Decision is sacrifice of one thing for the other for the best future benefits, So while making decisions we have to keep different things in mind. Decisions are influenced by different type of factors (i.e. Imitation, trust, Cognitive dissonance, time preference, Emotions) under the pyramid of natural constraints (i.e. duality, Perception, inter-determinacy). Keeping this in view, this paper shows how different type of factors (i.e. Imitation, trust, Cognitive dissonance, time preference, Emotions) influencing the decision making under the pyramid of natural constraints(i.e. duality, Perception, inter-determinacy). By considering this study a decision maker can take a good and successful decision for the best future outcomes and benefits.*

**KEYWORDS**

financial decisions, finance.

**INTRODUCTION**

Decision is dilemma for all human kinds. Under Behavioral finance, Decisions become paradigm which have some constraints and factors that influence the decision. Human used different heuristics and phenomena for taking any decision. In traditional finance decisions depend on fundamentals and techniques to get maximum benefits as expressed by peltone et al (2009) but Abarbanell and bernard (1992) said sometimes these decisions goes failed however we consider all fundamentals and techniques. Decision is consider as paradigm in behavioral finance as mention by Olsen (2010). In Behavioral finance decisions are influenced by different type of factors (i.e. Imitation, trust, Cognitive dissonance, time preference) under pyramid of natural constraints (i.e. duality, Perception, inter-determinacy) showed by Olsen (2010).

Olsen (2010) explained that Imitation influences the decision in such way that the decision maker not taking decision on his own but take decision on group behavior and trust influences the decision in such case when decision maker make the decision on herd behavior than there should be trust on that information on which basis he is going to take the decision, and cognitive dissonance also influence decision because it create dilemma in mind whether we go for this option or this, and time preference is the experience of the decision maker under the same condition in which he is suffering now for decision what was the decision before when decision maker is take the same decision in the same conditions whether he made successful decision or bad decision so time preference influencing the decision in this way. Jekaterina Kuzmina (2010) also mention emotion has also a significant impact on decision making. As mention by Olsen (2010) certain factors must also include which can be linked with decision and emotion is most important ingredient for decision showed by Jekaterina Kuzmina (2010). An extensive work has been done on decision making in behavioral finance and its factors and its constraints but a little research has been done on all different factors combine which are essential for decision which influencing the decision making under the constraint pyramid (Olsen 2010).

The purpose of this study is to provide a plate form for the decision maker while making any decision, they should consider the different factors which influence significantly ( i.e Imitation, Trust, Cognitive dissonance, Time preference, emotion), So they can take a best decision which provide fruitful and beneficial results. This paper investigates different factors combination for the decision and how these factors influencing the decision under the pyramid of natural constraints. How decisions are restricted due to certain constraints but yet factors influencing the decision making process.

**THEORETICAL FRAMEWORK**

Decision is the most important phenomena in this world. In every field of life we are taking different type of decision all the time and success of any thing depend upon the good and fruitful decisions, and decision is influenced by many factors (i.e. Imitation, trust, Cognitive dissonance, time preference, Emotions) under some natural constraints (i.e. duality, Perception, inter-determinacy).

Most of the people use coordinated behavior while making decision (Ridley, 1996; Axelrod, 1997; Nooteboom, 2000; Skyrms, 2004; Richerson and Boyd, 2005), and this behavior causes imitation or herding and it become most common and robust in decision making (Dugatin, 2000). Most of the investors uses this kind of behavior for decision and the adopt this kind of behavior because they think the other have some more important information which they don't have in their account.(Olsen, 1996; Dennis and Strickland, 2002; Karceski, 2002; Sias, 2004; Cooper et al., 2005). So, imitation become an important factor which influence the decision making.

Cognitive dissonance is influences the decision making and When a person have two type of cognition about a decision than he is in tension and this type of state of mind is known as cognitive dissonance (Plous, 1993). Under the cognitive dissonance a person have belief alteration and this tension create positive feed back and we should select under this situation the feeling not the logic (Burton, 2008). By cognitive dissonance in a decision it create different kind of biasness i.e framing, overconfidence, hindsight (Olsen, 2010), so cognitive dissonance is an important factor which influence the decision making.

Time preferences is also an important factor that influence the decision making and it depend on the situation (Payne and Bettman, 1993; Weber and Baron, 2001; Lichtenstein and Slovic, 2006). By the passage of time a decision maker is more able to take good decision because by passing time he getting the experience and learn from that time and involve that time in the decision making process and take a best and fruitful decision for the future.

Olsen (2010) reveal that trust is essential component in decision making and success of any decision depend on the trust of the information on which the decision maker is going to take the decision, and trust is depend on two component one consist on cognitive and other one on affective. Affective part of the trust depend on the feeling and perception of mutual commitments (Sztompka, 1999; Heimer, 2001; Urslaner, 2002). Where as the

cognitive part of trust depend on the training and competence, also have experience factor of decision maker about the reliability of information on which basis by which we going to make the decision (Siegrist and Cvetkovich, 2000a, b; Frowe, 2005). And a decision maker give more weight to affective part rather than that cognitive part of the trust because cognitive part is more complex than the affective part (Olsen, 2010).

Emotions play an important role in perception process to make a decision and emotion show a negative impact on the decision making as consider in the traditional finance paradigm. Emotional investors made investment decision on the basis of their emotions and different heuristic approaches (Jekaterina Kuzmina, 2010). Emotions become bottom line for destruction of rational behavior of investor and have negative impact on different fundamental models for investment (Smith, 1759 : Peters and Slovic, 2000). Investment decisions made only on fundamentals not take into account the original heuristics-and-biases went to failure and not get its expected outcome as mention by Kahneman and Tversky (1979). So emotional investors take decision on their emotions, feelings & affective reaction and it also depend on their personality traits (Jekaterina Kuzmina, 2010). Affective reaction play an important role for investment decision (Epstein, 1994; Lowenstein, Weber, Hsee and Welch, 2001; Slovic, Finucane, Peters and MacGregor, 2002). Emotional investors while making investment decision attached an affective reaction means develop different feeling about the alternatives which are available for investment decision as mention by Slovic et al. (2002); Peters (2006).

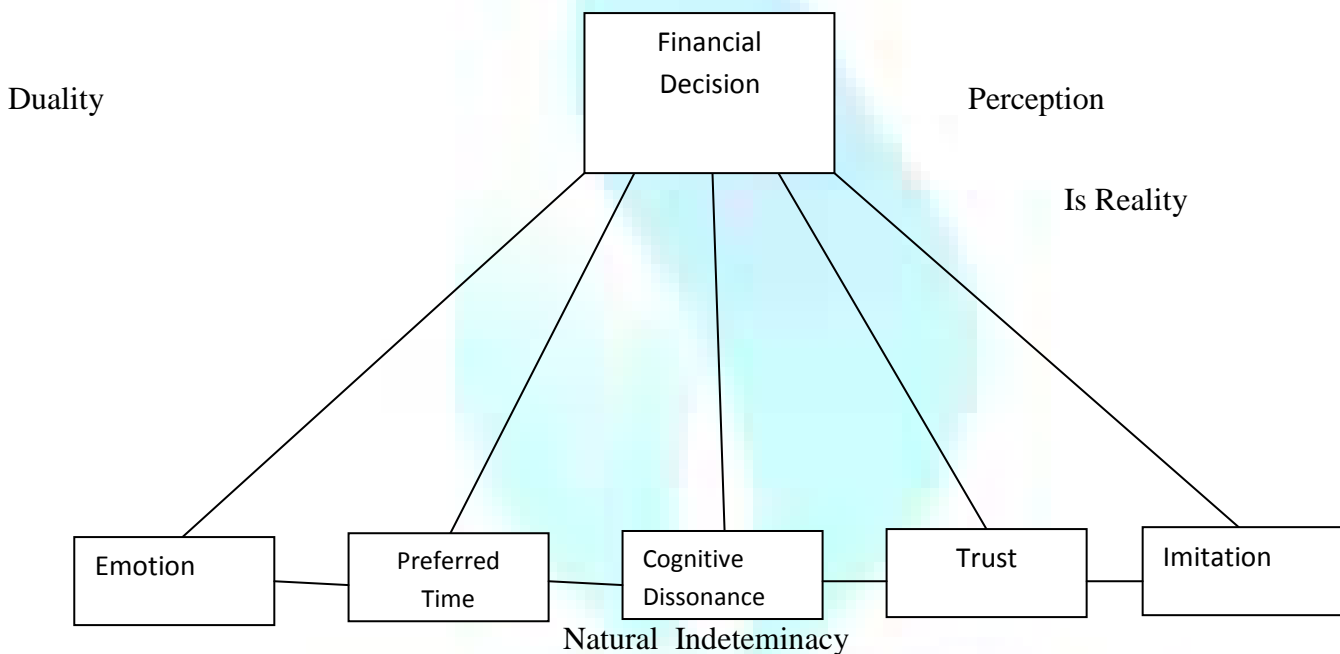
Indeterminacy is the constraint for the decision making and it occur cause there is risk always attached with any decision, and every human try to keep himself away from the risk and in behavioral finance it is known as "negativity bias" or "loss aversion" under which every human being try to avoid the loss by keep himself away from the risk in the decision (Beckoff, 2002; Heinrich and Boyd, 2004; Olsen, 2009a, b). so indeterminacy include in the pyramid of constraints for decision. (Olsen, 2010).

Perception and sensation are distinct and the mind imposes meaning on data and it become also a constraint for decision making(Olsen, 2010). Humans decisions are perception based because our brain translate the real world in to us and humans are mostly survive on the basis of their perception. And most of the decision made by humans is govern by the behavior of real world which is perception of the real world (Olsen, 2010).

Olsen (2010) described that Duality is also a constraint for the decision making process and it depend on two things i.e. "experiential or associative" which is affective in nature and "rule based or rational" which based on formal logic.

By considering above literature review our proposed model is given below:

FIGURE 1: PROPOSED MODEL



**DISCUSSION AND PRACTICAL IMPLICATIONS**

Olsen (2010) expressed a person having well ordered preferences set and an analytical ability about numbers to analyze the alternatives and maximize the choices, consider as idealized economic man. The idealized economic man is a person who has deep and intimate familiarity with his environment, a well-ordered set of preferences and a numerical ability to evaluate different alternatives and optimize his choices. In decision making the context of decision situation causes the sequence of preferences for the decision which is suitable for the best interest gain.

With the changing in the environment of human decision making is also effected and these are associated with each other (Cashdan, 1990; Gaulin, 2001; Blumberg, 2005; Geary, 2005; Jablonka and Lamb, 2005; Linden, 2007). And now decision is effected with a lot of factor some are given above under the pyramid of natural constraints.

All the above factors (i.e. Imitation, trust, Cognitive dissonance, time preference, Emotions) not only influence the decision but also interlinked with each other (Olsen, 2010). Research on Neuro science has shown the relationship among emotion and cognition, so finance become behavioral finance and show a connection between emotion and cognition in decision making. (Berthoz, 2006; Glimcher and Camerer, 2008; Lehrer, 2009).

Imitation/herding also influences the decision and it is interlinked with trust in such way that if we have trust on information than we go for the group behavior (Olsen, 2010).

Olsen (2010) explain the pyramid of natural constraint as Natural indeterminacy which means optimization of a decision is unattainable, Perception is reality which means that ecological rationality focused on adaptation, and Duality which means that Decisions always reflect both affective and cognitive influences under which decision is influenced by the different factors.

This study has a practical implication in a sense that every one living in this modern era and have to decide at any time at any place for their future benefits. And our proposed model have different factors in it which show that how these factors influences the decision making and how we can take best decision by controlling these factor in our decision making under the pyramid of the natural constraints.

**CONCLUSION AND DIRECTION FOR FURTHER STUDY**

In this modern environment, decisions are most significant for success or failure of any things. Good decisions lead toward success where as bad decisions lead toward failure. Every one try their best to get maximum fruitful benefits from decision and make every possible effort for good decision. There are certain restrictions by the nature under which different factors influencing the decisions if we can control and take into under consideration while decision making than we can take a best decision for us and over business. Further study can be conducted on influence of more factors on decision which are strongly interlinked with it.

**LIMITATION OF THE STUDY**

This study has a limitation that it not involve all the factors which influences the decision. Only some factors which are most important and practical implication are consider.

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**A STUDY ON UNPRINCIPLED SELLING PRACTICES TOWARDS THE PHARMACEUTICAL INDUSTRY IN INDIA**

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**ABSTRACT**

*One side of the coin Indian pharmaceutical industry is well performing. The other side of the coin there are lot of conflicts related to violating the medical council of India guidelines from top management to medical representatives. Pharmaceutical companies are practicing unprincipled marketing tactics to get a new customers (Doctors) or for retaining the existing one. There is strong unethical alliance between doctors and pharmaceutical companies. In this article how pharmaceutical companies are influencing doctors to prescribe their brands. If this is controlled by the MCI how this is benefited to industry, patients and society are covered.*

**KEYWORDS**

Pharmaceutical industry, Doctors, promotional inputs, unprincipled sales, medical representatives, Medical Council of India (MCI) guidelines.

**1. INTRODUCTION**

Pharmaceutical industry is one of the growing and well performing industries in India. Pharmaceutical companies' main focus is on Doctors because they are the main customers who prescribe the medicine to patients (consumers).

A few decades back there were medical representatives who used to convert doctors by effective detailing of the product and with their product knowledge. Doctors used to wait for medical representatives to get aware about the new medicine and doctors used to give lot of time for representatives for detailing of the product. Present days doctors are not giving adequate time to representatives for detailing because of many reasons such as inefficiency in representative, already committed to other brands or other companies, being updated with internet, expecting something rather than product knowledge and many representatives from many companies at a time.

When a medical representative joins for a pharmaceutical company he or she has to undergone for training. In the training representative is trained in the different aspects like product knowledge, soft skills, and sales skills. But when the representative enters into the field the real scenario is completely different. Doctors ask what do you give and want do you want or vice versa. It is completely a business or profit sharing between doctors and pharmaceutical companies.

In the simple terms pharmaceutical companies are investing lot of money for hiring or influencing the doctor rather than research and development. It leads to unprincipled business in the industry it leads to medicine costlier and patients are suffered ultimately.

**2. REVIEW OF LITERATURE**

Nobhojit Roy et al (2007) in their article, Drug promotional practices in Mumbai: a qualitative study, they observed that the study findings indicate the institutionalization of unethical and illegal drug promotional practices – at the cost of the consumer -- by drug companies, chemists and doctors, with a role played by medical representatives. We suggest that effective action against such practices must involve better regulation of the industry, as well as involvement of all the stakeholders -- doctors, chemists, manufacturers and consumers. However, the various associations have not shown any inclination towards self regulation.

In fact, many of them are themselves mired in controversy. There is limited organized consumer action against spurious drugs and unethical promotional practices in the pharmaceutical industry.

Birendra Kumar Mandal et al (2012) in their study Relationship between Doctors and Pharmaceutical Industry: An Ethical Perspective: Observed that Interactions between physicians with pharmaceutical industry were found to have several negative outcomes that will diminish patient's best interests. Such interactions are gifts, samples, industry-paid meals, funding for travel or lodging to attend educational symposia, CME (continuous medical education) sponsorship, honoraria, research funding, and employment. Government need to stringent regulation in order to prevent the unethical alliance between doctors with pharmaceutical industry. Cooperation and coordination are needed between many elements such as government, pharmaceutical industry, and professional organizations or associations to solve this unethical business alliance of physicians and pharmaceutical industry by creating comprehensive ethical guidelines. Each element should have commitment with the ethical guidelines. Patients also need education about benefits of generic drugs which more affordable and give the results as well as patent drugs.

Medical Council of India Amendment Notification, New Delhi, the 10th December, 2009 No.MCI-211(1)/2009(Ethics)/55667

In exercise of the powers conferred by Section 33 of the Indian Medical Council Act, 1956 (102 of 1956), the Medical Council of India with the previous sanction of the Central Government, Hereby makes the following Regulations to amend the "Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002: -

1. (i) These Regulations may be called the "Indian Medical Council (Professional Conduct, Etiquette and Ethics) (Amendment) Regulations, 2009 - Part-I".
- (ii) They shall come into force from the date of their publication in the Official Gazette.

2. In the "Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002", the following additions/modifications/deletions/ substitutions, shall be, as indicated therein: -

3 The following clause shall be added after clause 6.7:-

"6.8 Code of conduct for doctors and professional association of doctors in their relationship with pharmaceutical and allied health sector industry.

6.8.1 In dealing with Pharmaceutical and allied health sector industry, a medical practitioner shall follow and adhere

4. to the stipulations given below:-

- a) Gifts: A medical practitioner shall not receive any gift from any pharmaceutical or allied health care industry and their sales people or representatives.
- b) Travel facilities: A medical practitioner shall not accept any travel facility inside the country or outside, including rail, air, ship, cruise tickets, paid vacations etc. from any pharmaceutical or allied healthcare industry or their representatives for self and family members for vacation or for attending conferences, seminars, workshops, CME programmed etc as a delegate.
- c) Hospitality: A medical practitioner shall not accept individually any hospitality like hotel accommodation for self and family members under any pretext.
- d) Cash or monetary grants: A medical practitioner shall not receive any cash or monetary grants from any Pharmaceutical and allied healthcare industry for individual purpose in individual capacity under any pretext. Funding for medical research, study etc. can only be received through approved institutions by modalities laid down by law / rules / guidelines adopted by such approved institutions, in a transparent manner. It shall always be fully disclosed.
- e) Medical Research: A medical practitioner may carry out, participate in, work in research projects funded by pharmaceutical and allied healthcare industries. A medical practitioner is obliged to know that the fulfillment of the following items (i) to (vii) will be an imperative for undertaking any research assignment / project funded by industry – for being proper and ethical. Thus, in accepting such a position a medical practitioner shall:-
  - (i) Ensure that the particular research proposal(s) has the due permission from the competent concerned Authorities.
  - (ii) Ensure that such a research project(s) has the clearance of national/ state / institutional ethics committees/bodies.
  - (iii) Ensure that it fulfils all the legal requirements prescribed for medical research.
  - (iv) Ensure that the source and amount of funding is publicly disclosed at the beginning itself.
  - (v) Ensure that proper care and facilities are provided to human volunteers, if they are necessary for the research project(s).
  - (vi) Ensure that undue animal experimentations are not done and when these are necessary they are done in a scientific and a humane way.
  - (vii) Ensure that while accepting such an assignment a medical practitioner shall have the freedom to publish the results of the research in the greater interest of the society by inserting such a clause in the MoU or any other document / agreement for any such assignment.
- f) Maintaining Professional Autonomy: In dealing with pharmaceutical and allied healthcare industry a medical practitioner shall always ensure that there shall never be any compromise either with his / her own professional autonomy and / or with the autonomy and freedom of the medical institution.
- g) Affiliation: A medical practitioner may work for pharmaceutical and allied healthcare industries in advisory capacities, as consultants, as researchers, as treating doctors or in any other professional capacity. In doing so, a medical practitioner shall always:
  - (i) Ensure that his professional integrity and freedom are maintained.
  - (ii) Ensure that patient's interests are not compromised in any way.
  - (iii) Ensure that such affiliations are within the law.
  - (iv) Ensure that such affiliations / employments are fully transparent and disclosed.
- h) Endorsement: A medical practitioner shall not endorse any drug or product of the industry publically. Any study conducted on the efficacy or otherwise of such products shall be presented to and / or through appropriate scientific bodies or published in appropriate scientific journals in a proper way". (Lt. Col. (Retd.) Dr. A.R.N. Setalvad)

### 3. OBJECTIVES OF THE STUDY

- To study unprincipled selling practices towards the pharmaceutical industry in India.
- To discuss the impacts of unprincipled alliance between pharmaceutical industry and doctors.
- To study the advantages when doctors and industry are ethical.

### 4. RESEARCH METHODOLOGY

This study is based on secondary data. Secondary data was collected through magazines, government and private journals, newspapers, internet, medical council of India, government web sites, etc.

### 5. LIMITATIONS OF THE STUDY

- This study restricted to pharmaceutical industry in India.
- The study is restricted to secondary data only.
- The study confined only unprincipled sales practices in pharmaceutical companies in India.

### 6. CONCEPTUAL AND DISCUSSIONS OF THE STUDY

#### HIGH COMPETITION

Competition between pharmaceutical companies is very high and it is increasing drastically. One molecule is promoted by several companies. In order to increase their sale pharmaceutical companies are preparing effective sales strategy and implementing through aggressive medical representatives and front line managers.

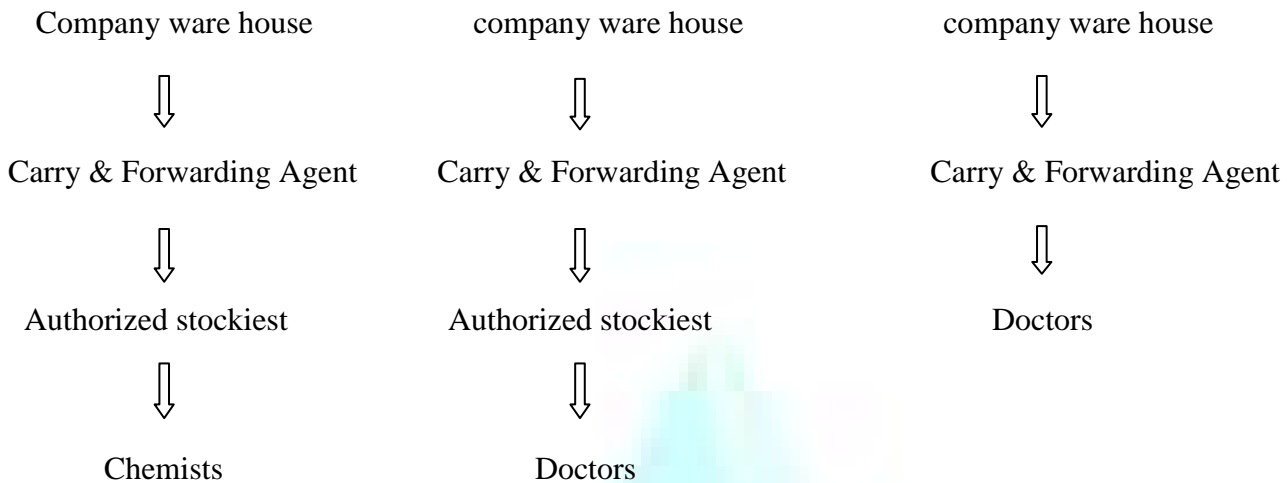
For special attention doctors are categorized into single visit doctors, core doctors and super core doctors based upon their potential. Single visit doctors are visited once in month, core doctors twice or three times in month and super core doctors three times in month or weekly once.

Gifts and promotional inputs are also divided for single visit doctors, core doctors and super core doctors. Companies are preparing code of conduct on their records and not being implemented. Companies are focusing at sale but they are not focusing how they are getting.

#### DISTRIBUTION CHANNEL

For effective distribution channel management CFAs (carry & forwarding agents), authorized stockiest are appointed by pharmaceutical companies. CFAs and authorized stockiest are worked for commission base on the sale of the products.

## DISTRIBUTION CHANNELS ADAPTED BY PHARMACEUTICAL COMPANIES

**Roles and responsibilities of medical representative:**

- RCPA (Retail Chemist Prescription Audit) from chemists.
- Make the products available at chemist level.
- Based upon RCPA selecting doctors.
- Preparing the doctors list.
- Dividing doctors as single visit doctors, core, and super core doctors.
- Preparing monthly tour plan.
- Preparing monthly doctors visit plan.
- Inputs or samples distribution plan.
- Preparing plan for achieving monthly, quarterly and annual sales budget.
- Achieving the sales targets primary and secondary.
- Monitoring the stocks at stockiest and chemist level regularly.

**Process of ethical sales call:**

- Representative has to take appointment of the doctor.
- Opening the sales call by wishing the doctor.
- Detailing of the focusing products (brands).
- Objection handling.
- Convincing the doctor by detailing of features and benefits of the product.
- Giving brand reminders (LBLs and any research data about that molecule).
- Closing the call with requesting for a prescription.

**Offerings of pharmaceutical companies to doctors:**

- Paid meals in star hotels along with family.
- Gimmicks and incentive schemes based on number of prescriptions.
- Funding for travel and lodging to attend international symposia, CME (continuous medical education), sponsorship, honoraria, research funding and employment.
- Week end parties along with family.
- Bulk quantity of samples.
- Gifts such as gold coins, electronic gadgets (air coolers, refrigerators, mobile phones, personal computers, laptops, etc).
- Free health check up coupons.
- Some companies directly offering equipment in the hospital and cash cheques.

**Pushing the stock:**

- Most of medical representatives from most pharmaceutical companies including top multinational companies push the stock in the month ending. They give some money directly to stockiest from their pocket to get extra order (for primary sale) due to high pressure from management. In most of the companies this type of sale is being done by the medical representatives. In the industry it is called pushing or lifting the stock.
- By offering costly gifts to doctors and chemists they push stock into the market. By showing this secondary sale they get primary order from stockiest.

**Negative impacts of the unprincipled business alliance between doctors and industry:**

- Inability to identify wrong claims about medications.
- Positive attitude towards medical representatives, preference and rapid prescribing of new drugs.
- Making formulary requests for medication that rarely held important advantages over existing ones.
- Non rational prescribing behavior.
- Increasing prescription rate.
- Prescribing fewer generic drugs but more expensive.
- Newer medications at no demonstrated advantage.
- Selling samples in rural areas.

**7. FINDINGS**

- In rural areas medical practitioners are selling samples like hot cakes.
- Most of doctors are prescribing drugs which are expensive with no demonstrated advantages.
- Most of medical practitioners are increasing prescription rate for incentive.
- Most of doctors are accepting incentives, gifts and violating rules and regulations of MCI.
- Doctors are not bothering about patients they are prescribing drugs which give good profits.
- Most of medical representatives are also encouraging this unethical selling by offering money or incentives to stockiest and chemists.
- There are unqualified doctors practicing in India. Government and patients should aware of them.

## 8. SUGGESTIONS

- ❖ Coordination is needed between government, pharmaceutical industry and professional organizations to solve this unethical alliance between doctors and pharmaceutical companies.
- ❖ Medical representative unions should spread awareness among them about MCI guidelines.
- ❖ Government should educate patients about the generic drugs because these drugs are cheaper as compare to patent drugs.
- ❖ Code of medical ethics and code of drug promotion practice should have a legal body.
- ❖ Discourage acceptance of all kinds of gifts and promotional items other than text books and medical journals.

## 9. CONCLUSION

Unprincipled selling practices leads to high investments in pharmaceutical industry. It leads to medicine costlier. Patients have to purchase medicine irrespective of the price of the medicine. Profits are being distributed among pharmaceutical companies, doctors, stockiests and chemists. None of these are thinking about patients or public. When this unprincipled selling practices are controlled by MCI, government and other professional organizations, patients will get better quality medicine at affordable prices.

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**JOB STRESS & EMPLOYEE BURNOUT: AN OVERVIEW****DEEPIKA SHARMA****ASST. PROFESSOR****RELIABLE INSTITUTE OF MANAGEMENT & TECHNOLOGY  
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MEERUT****ABSTRACT**

*Stress is a state of tension experienced by individuals facing extraordinary demands, constraints or opportunities. Job stress can lead to poor performance on the job, excessive use of alcohol or drugs, poor attendance or overall poor health. This paper focuses on the current strategies adopted by the companies to overcome stress and what should company do to make the workplace stress-free. The paper also looks at the issue of employee burnout and the techniques to tackle the same.*

**KEYWORDS**

Stress, Burnout, Employee, Stressor.

**INTRODUCTION**

In today's challenging environment stress has become a pre condition for an employee to accomplish a challenging and more demanding job. Tight Schedules, high standard of performance, getting his expectations and aspirations fulfilled he is forced to have a stressful and hectic lifestyle. Stress may affect an employee at any stage of his career, the man or women on the shop floor is just as vulnerable as the man or women on the board of directors. What is stressful to one may not be so to another person. So far as routine and usual matters are concerned, he can solve and tackle them without any difficulty. But in other situations, he may experience the gap between excessive demand of the situation on the one hand and resources position, capacity and time and other requirements on the other. In such a situation, if he fails to meet demand he experiences stress and other psychological problems.

The first step towards stress management is to identify the sources (Stressors) from which stress arises. Stressor can be anything that causes stress. Efforts have to be made to identify the cause for stress so as to reduce or eliminate such stressors. Till date many studies have been carried out on different aspects of stress in different professions. Chandriah et al(2003) identified role overload, role ambiguity, role conflict, unreasonable groups and political pressures, powerlessness, intrinsic impoverishment, low status work and strenuous working conditions as sources of stress among different age groups of managers working in different large scale industrial settings. Cooper and Marshall have identified six sources of stress for the people at work. These include:

- 1) Factors intrinsic to the job,
- 2) Role in the organization,
- 3) Relationship at work,
- 4) Career development,
- 5) Organizational structure and climate;
- 6) Extra organizational sources.

It is evident that the various causes of stress discussed above may be either related to the demands of the situation, or his resources position. Thus, to measure the total amount of stress experienced by an individual in a given situation, the net effect of the above stressors is determined.

**CAUSES OF JOB STRESS**

Most of the time, it's the major sources of stress that lead to job burnout and health problems. Job stress can affect your home life too. Here are some common sources of major job stress:

1. Lack of control. Feeling as if you have no control over your work or job duties is the biggest cause of job stress. People who feel like they have no control at work are most likely to get stress-related illnesses.
2. Increased responsibility. Taking on extra duties in your job is stressful. You can get more stressed if you have too much work to do and you can't say no to new tasks.
3. Job satisfaction and performance. Do you take pride in your job? If your job isn't meaningful, you may find it stressful. Are you worried about doing well at work? Feeling insecure about job performance is a major source of stress for many people.
4. Uncertainty about work roles. Being unsure about your duties, how your job might be changing, or the goals of your department or company can lead to stress. If you report to more than one boss, juggling the demands of different managers can also be stressful.
5. Poor communication. Tension on the job often comes from poor communication. Being unable to talk about your needs, concerns, and frustrations can create stress.
6. Lack of support. Lack of support from your boss or coworkers makes it harder to solve other problems at work that are causing stress for you.
7. Poor working conditions. Unpleasant or dangerous physical conditions, such as crowding, noise, or ergonomic problems, can cause stress.

According to Swami Nikhilananda, the answer to stress can be found in every letter of the word "stress" which is as under:

**STRESS****S** = Strength, physical and mental**T** = Traffic control in mind (thoughts)**R** = Re-design lifestyle**E** = Erase anger, fear and ego**S** = Sharing knowledge, workload, experience and sorrow**S** = Surrender to the lord

**STRENGTH**

To cope with stress one has to develop physical, emotional, intellectual and spiritual strength. A strong healthy body and mind are developed through proper diet, exercise and pranayam. Through 'satsangs' and other learning's the mind can be strengthened.

**TRAFFIC CONTROL**

To reduce the degree of stress we need to regulate and control our thoughts. This is because orderly and methodical thoughts help in minimizing stress. For this purpose one should live for the moment, which means eat while eating, work while working, and leave the home at home and the office in office.

**REDESIGNING LIFESTYLE**

Usually, we tend to view life and ourselves through our own philosophy. We have to readjust and re-orient it as per the needs of the situation. It would enhance our capacity to bear a heavier load.

**ERASING NEGATIVITY**

To gain mental strength, one has to erase ego, anger, fear and jealousy. By doing so, negative emotions will be controlled and increased mental strength may be channelised to combat stress.

**SHARING**

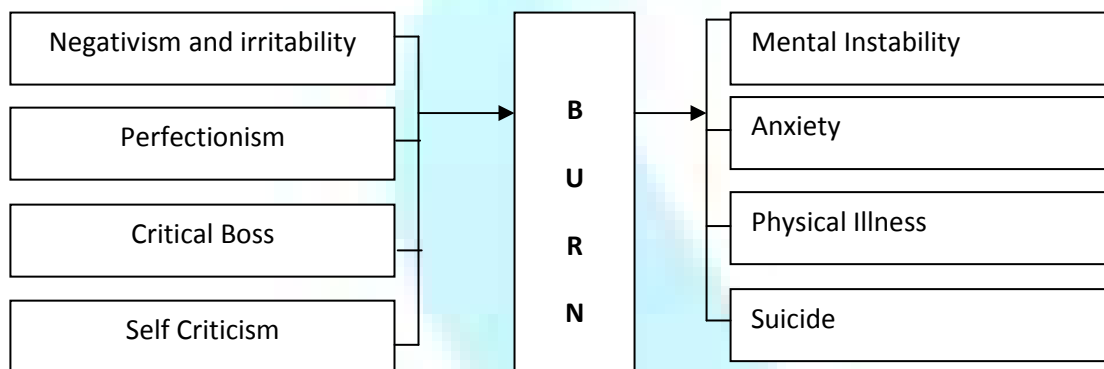
By sharing, exchanging and delegating experience, workload, sorrow and situation one can reduce stress and bring it to a moderate level.

**SURRENDER TO THE LORD**

The last but most effective strategy to cope with stress is to surrender to the Lord. One should free his mind from the burden of worries and become instruments in the hands of the Lord. This kind of attitude which is difficult to develop may ensure efficiency, success and freedom from stress.

**BURNOUT**

In the words of Herbert J. Freudenberger, Burnout is a state of fatigue to produce the expected reward. It may be defined as the total depletion of physical and mental resources caused by excessive striving to reach an unrealistic work-related goal.



**Without work, all life goes rotten, but when work is soulless, life tifies and dies.**

**CURRENT STATUS OF JOB STRESS IN INDIAN ARMY**

As per reports appearing in the press, the Indian Army lost 333 soldiers due to suicides and 75 soldiers to fratricide during the period 2004 to 2006. A number of studies have been carried out to identify reasons for unacceptable levels of stress felt by Indian soldiers.

Stresses faced by soldiers are entirely different from those faced by civilians, both in nature and intensity. Some of the major peculiarities are as follows:-

- Whereas stresses faced by civilians generally relate to material and societal issues, soldiers face both physical (threat to life) and emotional stresses. Civilians have their families with them to share their concerns unlike a soldier who has to bear it all alone
- Military's highly disciplined, hierarchal and restrictive environment deters giving vent to or sharing pent up frustrations. Howsoever disturbed a soldier may be he has to put up a façade of bravado. Bottled up discontentment with no escape valve results in a 'pressure cooker effect'.
- Serving in isolated, lonely and oxygen-starved high altitude areas of the Himalayas affects physiology and psychology of soldiers.
- Inability to be with parents and family in times of domestic emergencies weighs heavily on the minds of many soldiers.
- The search for recognition is one of the pursuits which all human beings indulge in and continuously strive for. The same is equally applicable to soldiers. They draw strength to face privations from the love and respect that their countrymen extend to them. They wonder if the nation recognizes their services and values them.

**CURRENT STATUS OF JOB STRESS IN BPO's**

BPO Companies are now making efforts to help their employees cope with stress because it is an occupational hazard. For example, night shifts are rotated on a regular basis. However deadlines cannot be controlled.

Most of the BPO's arrange feel good activities like an indoor picnic or an official dinner once in every three months. This helps the employees speak to their senior management in an informal manner. Employees are also given recognition by being designated as "Employee of the week" or "employee of the month".

BPO's like Stream have appointed "Fun managers" whose job is to arrange for a party or a movie for the entire office once in a month. Similarly ICICI Onesource has an executive who is required to spend at least 2 hours daily at the shop floor daily talking to the employees about their daily life.

Another BPO, 3Global organize sports events like cricket tournaments to ensure their employees are engaged in physical activities.

**CURRENT STATUS OF JOB STRESS**

We all know that stress is bad. As an investor, it is very important to stay balanced while trading because Monday - Friday you are in the game whether you like it or not. So how do you fight stress?

- Use stop loss orders.
- Don't watch your streamer live all day every day.
- Refresh your portfolio balance only once a day
- Have a investment strategy
- Eat healthy foods
- Get enough sleep each night
- Don't surround yourself with stressed individuals
- Stay calm in intense situations: stop, think, then act

Stress balls are one such instrument which helps in reducing the stress levels amongst the traders while trading or in bullish scenario.

**CURRENT STATUS OF JOB STRESS IN OTHER CORPORATE SECTORS**

American Express, Gillette, Reliance and Maruti, Lucent Technologies and other companies have tied up with Apollo's master health check up. Some organizations have also started help lines.

ITC organizes regular Yoga sessions for its employees. These regular Yoga sessions have helped the employees to overcome stress and work with greater efficiency and productivity.

**COPING STRATEGIES USED BY MNC's ARE****1) Stress Reduction and stress management programmes**

Stress reduction programmes aim to identify relevant organizational stressors and to reduce their effects by redesigning jobs, reallocating workloads, improvising supervisory skills, providing more autonomy and job variety. Stress management schemes usually focus on training individual employees, or their workgroups, to manage their stress symptoms in more effective ways. Stress control systems usually combine stress reduction (stressor control) with stress management (individual stress control).

**2) Job redesign**

Jobs may be a source of stress to many individuals. Properly designed jobs and work schedules can help ease stress in the individuals and the organization.

**3) Collateral Programmes**

A collateral stress programme is an organizational programme specifically created to help employees deal with stress. Organizations have adopted stress handling programmes, health promotional programmes, career development programmes, and other kinds of programmes for this purpose.

**4) Counseling**

Counseling is discussion of a problem with an employee with a view to helping the employee cope with it better. Counseling seeks to improve employee's mental health by the release of emotional tension which is also known as emotional catharsis. People will get an emotional release from their frustrations and other problems whenever they have an opportunity to tell someone about them.

**5) Meditation**

Another way to reduce stress is meditation. Meditation involves quiet, concentrated inner thoughts in order to rest the body physically and emotionally. It helps remove a person from a stressful world temporarily.

**6) Yoga**

Nowadays Yoga is acknowledged as one of the important devices for reducing stress, both in personal life and the workplace. Through regular practice of yogic exercises the nervous system is stimulated, neuromuscular coordination is strengthened and various glands are activated.

**7) Bio-feedback**

Bio feedback is also being used as an important device for reducing and controlling stress. This technique of changing undesirable physiological responses by doing some physical exercise. In this technique, electronic instruments are used for recording undesirable changes caused by stress. In order to bring it back to normal, a state of relaxation is induced. The tendency to relax is voluntary on the part of the individual. By measuring bodily changes caused by stress one can learn to respond to such changes as effectively as possible.

**8) Informal Organization**

Modern managers strongly believe in encouraging the formation and growth of an informal organization within a formal one. It is because informal relations which are personal and social in nature not only fulfill social needs but also provide a more humane and relaxed environment to employees.

**CONCLUSION**

Job Stress is a condition arising from the interaction of the people and their jobs, and characterized by changes within people that force them to deviate from their normal functioning. Stress may be understood as a state of tension experienced by individuals facing extraordinary demands, constraints and opportunities. However stress is not always unpleasant. To be alive means to respond to the stress of achievement and the excitement of a challenge.

Thus to conclude we may say, Stress is the spice of life and the absence of stress makes life dull, monotonous and spiritless. There is infact growing evidence that people need a certain amount of simulation and that monotony can bring on some of the same problems as over-work.

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**THE CONSUMER BEHAVIOR TOWARDS PACKAGE OF COSMETICS**

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**ABSTRACT**

*Package is the most important element or important attribute of a product. In the shelves of outlet the packages are one which distinguishes brand. Packages have lot many functions to do than mere protection but, the inference of consumer behavior towards the cosmetics package can provide a hint for cosmetic marketers to include package as an integral feature of product. This article provides the focus on the meaning of package to cosmetic consumers where, the factor analysis technique has been used to locate the exact opinion of consumers.*

**KEYWORDS**

Consumer behavior, cosmetics, package.

**INTRODUCTION**

One are the days of Caveat emptor and caveat vendor, today's market is characterized by the description of consumers, where consumers are king in the market. Marketers have tough challenge in front of them. Anything produced unlikely olden days will not be accepted by consumers. Only by satisfying consumers it is possible to sell products in turn, it is possible to survive.

Indian consumers no more lack sophisticated products, the days of booking and waiting for years together for buying a product are defunct, whatever they want can be bought if they have money. This is possible because, today we have many companies selling the same product, especially after globalization many multinational corporations have entered and started having competition, as a reason consumers have many alternative brands to buy, with improved quality and reduced price. Today's consumerism demands clearly emphasized social responsibility of business towards consumer and the need for consumer protection in the market place, as a reason marketers need to study the consumers to the micro aspects. In this direction an effort is made to study what package means to cosmetic consumers.

**LITERATURE REVIEW****CONSUMER BEHAVIOR**

The consumers buying behaviour has been always a popular marketing topic, extensively studied and debated over the last decades while no contemporary marketing textbook is complete without a chapter dedicated to this subject. (Eftymios Constantinides 2004) Most academics and practitioners agree that demographic, social, economic, cultural, psychological and other personal factors, largely beyond the control and influence of the marketer, have a major effect on consumer behaviour and purchasing decisions (Harrell and Frazier, 1999; Czinkota et al., 2000; Czinkota and Kotabe; 2001; Dibb et al., 2001; Jobber, 2001; Boyd et al., 2002; Solomon and Stuart, 2003). Despite their incapacity to exercise any substantial influence on the above factors, marketers can have some bearing on the outcome of the buying process by engaging different marketing tools, the most prominent being the 4Ps – product, price, place and promotion – also known as the marketing mix (Borden, 1964; McCarthy, 1964). While the value and current standing of the mix as a marketing toolkit is frequently disputed (Dixon and Blois, 1983; Groenroos, 1994; Gummesson, 1997; Goldsmith, 1999) marketing practitioners nonetheless widely deem the 4Ps as the tools that can influence the consumer's behaviour and the final outcome of the buyer-seller interaction (Kotler and Armstrong, 2001; Kotler, 2003; Brassington and Pettitt, 2003). While research in consumer behavior is a top priority for marketers both in the Third World (Albaum and Peterson, 1984; Kanwar, 1993) and in eastern Europe (Kaynak and Samli, 1986), most researchers have studied only selected aspects of consumer behaviour in one or a few cultures.

**PACKAGE**

A product requires packaging decisions to create benefits such as protection, economy, convenience, and promotion; it also requires labelling for identification and possible grading, description, and promotion of the product (Kotler, Philip, 1994). Packaging is presented as part of the buying and consuming process, but often it is not directly related to the ingredients that are essential for the product to function (Underwood, 2003).

In marketing literature, packaging is considered to form part of the product and the brand. The view that Zeithaml (1972) sustains lies halfway between these two positions. He considers packaging to be both an extrinsic and intrinsic attribute (an intrinsic attribute is one that cannot be changed without altering the physical composition of the product). For example, if we refer to the non-drip top, packaging is an intrinsic attribute; but if we refer to the information that appears on the label, packaging is an extrinsic attribute. How a package is perceived can significantly influence a brand's competitiveness and sales. However, the difficulty lies in measuring or projecting the marketplace impact of a particular design system (Scott Young).

According to Evans and Berman (1992) packaging is a product property or characteristic, whereas for Olson and Jacoby (1972) packaging is an extrinsic element of the product, that is to say, it is attribute that is related to the product but that does not form part of the physical product itself. Keller (1998) also considers packaging to be an attribute that is not related to the product. For him it is one of the five elements of the brand together with the name, the logo and/or graphic symbol, the personality and the slogans. From the consumer perspective, packaging also plays a major role when products are purchased: packaging is crucial, given that it is the first thing that the public sees before making the final decision to buy (Vidales Giovanni, 1995).

From the managerial point of view, in order for packaging to suitably develop its functions, the structural and graphic design of the packaging and even the optimum size of the pack will be subject to market research undertaken by the company and the positioning that the company wants the product to occupy in the market (Ivan~ez Gimeno, 2000). So, packaging is, without doubt, specifically related to the strategic decisions of the marketing mix (Underwood, 2003) and, therefore, to positioning decisions. This is how packaging has been called the "silent salesman", as it informs us of the qualities and benefits that we are going to obtain if we consume a certain product (Vidales Giovanni, 1995).

**NEED OF THE STUDY**

Developing a right package is most important aspect to the cosmetic companies because, package act as self-advertisement of the product in the shelf of the outlet, and helps in attracting the eyes of the consumers on the product. But that is not all, as today's marketing characteristics are diverse and dynamic in nature, due to changing consumer behavior it is important to know the perceptions of cosmetics consumer behavior towards package.

**OBJECTIVES**

The objective of this research is as follows-

1. To understand the importance of the cosmetics package to consumers.
2. To understand the meaning of the cosmetics packing to consumers.
3. To understand the important element of the package mix.

**RESEARCH METHODOLOGY**

The study uses both exploratory and descriptive research design to get clarity of research problem. The research tool used is Likert Scale and the statistical tool used is Factor Analysis. The sample size was finalized using the formula  $n = \frac{z^2 \sigma^2}{H^2}$  with 95% confidence level and 0.05 level of significance. The sample size finally obtained was 1024 and area is Davangere, Karnataka (state), and India. The sampling technique used was *probabilistic Cluster Sampling (two stage cluster sampling) using systematic random sampling method*. The primary data was collected with the help of a questionnaire from the woman of Davangere. A total of 1200 women from different areas were contacted and aptly filled questionnaires were obtained. The respondents were given a list of statements that measured their extent of agreement towards the variables. The items were measured on a 5 point Likert scale with 1 representing low score (Strongly dis agree) and 5 representing a high score (strongly agree). These statements were selected after three rounds of pilot testing with the factor loadings above 0.70. For the reliability of the research tool *Crown Basch alpha test* was performed, and obtained the alpha value of 0.78, this shows the tool is reliable.

**ANALYSIS AND INTERPRETATION**

The factor analysis was performed on the data collected with respect to *package*. KMO and Bartlett's test, communalities, total variance explained and component matrix table are obtained as a result of factor analysis. The details of the analysis are presented below.

**TABLE 4.61: KMO AND BARTLETT'S TEST FOR PACKAGE**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.822
Bartlett's Test of Sphericity	Approx. Chi-Square	765.267
	d f	36
	Sig.	.000

The suitability of data can be checked from the above KMO and Bartlett's Test table. In the above table, for the variable package KMO measure for sampling adequacy are above 0.5.

**TABLE 4.62: COMMUNALITIES FOR PACKAGE**

	Initial	Extraction
Cosmetic Package attracts consumers	1.000	.522
Cosmetic Package develops dependability on the product	1.000	.600
Cosmetic packages are prestigious to customers	1.000	.582
Cosmetic label should contain name of the product	1.000	.632
Cosmetic label should contain the company address	1.000	.637
Cosmetic label should contain usage instruction	1.000	.597
Cosmetic label should contain cautions	1.000	.655
Cosmetic label should contain unit price	1.000	.642
Label promotes the Cosmetic sales	1.000	.626

Extraction Method: Principal Component Analysis.

From the above table it can be understood that after fifteen factors are extracted from *package* variables; the communality is 0.522 for item 1, 0.600 for item 2, 0.582 for item 3, 0.632 for the item 4, 0.637 for the item 5, 0.597 for the item6, 0.655 for the item 7, 0.642 for the item 8, 0.626 for the item 9. It means 52% of variance of item 1, 60% of variance of item 2, 58% of variance of item 3, 63% of variance of item 4, 63% of variance of item 5, 59% of variance of item 6, 65% of variance of item 7, 64% of variance of item 8, 62% of variance of item 9 are captured for framing factors. These large communalities indicate that a large number of variance has been accounted for by the factor solution.

**TABLE 4.63: TOTAL VARIANCE EXPLAINED FOR PACKAGE**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
dimension01	3.329	36.986	36.986	3.329	36.986	36.986
	2.134	23.605	49.591	1.134	12.605	49.591
	1.031	11.454	61.046	1.031	11.454	61.046
	4.719	7.988	69.034			
	5.695	7.726	76.760			
	6.593	6.588	83.348			
	7.550	6.111	89.459			
	8.479	5.323	94.782			
	9.470	5.218	100.000			

Extraction Method: Principal Component Analysis.

The above table explains the total variance explained for marketing mix element *product*. From the table we can find that all the three factors have Eigen values more than 1 for the influence of package. The Eigen values for three factors were 3.329, 1.134 and 1.031 for the factor 1, factor 2, and factor 3 respectively. What the variables together presents can be understood by the percentage of the total variance. The index for the present solution accounts for 61% of total variance for choosing influence of *package*. It is pretty good extraction as it can economize on a number of factors while we have lost 39% of information content for factors in choosing the variable from *package*. The first factor of *package* explains 36 percentage of variance, Second factor *package* explains 49 percentage of variance and third factor of *package* explains variance of 61 percentage of variance.

TABLE 4.64: ROTATED COMPONENT MATRIX<sup>A</sup> FOR PACKAGE

	Component		
	1	2	3
Cosmetic Package attracts consumers	.146	.086	.703
Cosmetic Package develops dependability on the product	.159	.156	.742
Cosmetic packages are prestigious to customers	.130	.137	.739
Cosmetic label should contain name of the product	.245	.749	.108
Cosmetic label should contain the company address	.209	.769	.042
Cosmetic label should contain usage instruction	.677	.344	.145
Cosmetic label should contain cautions	.775	.164	.166
Cosmetic label should contain unit price	.785	.052	.154
Label promotes the Cosmetic sales	.009	.700	.368
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			

From the above table the loading of the factors can be observed. Anything above 0.44 could be considered salient and the increased loading becomes more vital in determining factor.

The summarized package factor analysis is shown in below table.

TABLE 4.65: CONSOLIDATED FACTOR ANALYSIS FOR PACKAGE

Factor	Factor interpretation	Loading	Variables included in the factors
Clarity of labeling	This factor explains 36% of variance	0.677	Cosmetic label should contain usage instruction.
		0.775	Cosmetic label should contain cautions.
		0.785	Cosmetic label should contain unit price.
Cosmetics label promotion medium	This factor explains 12% of variance	0.700	Label promotes the Cosmetic sales.
		0.749	Cosmetic label should contain name of the product.
		0.769	Cosmetic label should contain the company address
Importance of cosmetics package	This factor explains 11% of variance	0.703	Cosmetic Package attracts consumers.
		0.742	Cosmetic Package develops dependability on the product.
		0.739	Cosmetic packages are prestigious to customers

## FINDINGS

"Cosmetic package attracts consumers," "cosmetic package develops dependability on the product," "cosmetic packages are prestigious to customers" are the key items obtained through factor analysis of importance of cosmetics package. The three items explain a cumulative variance of 11% of the total variance of the factor 'importance of cosmetics package.' It can be understood that consumers are of the opinion that 'cosmetic package attracts consumers, cosmetic package develops dependability on the product, and cosmetic packages are prestigious to consumers'.

## CONCLUSION

Package is a most vital element of the product, package not only gives protection but it has many other functions also. How consumers pursue package for cosmetics is being studied in this research. According to the consumers amongst all the aspects of package labeling is most important because it acts as promotion and they express that label should contain usage instruction, caution, unit price, Name of the company and company address. Consumers are of the opinion that cosmetic package attracts consumers, cosmetic package develops dependability on the product, and cosmetic packages are prestigious to customers.

## SCOPE FOR FURTHER RESEARCH

As the survey conducted was only confined to Davangere region, results may substantially vary if research is conducted in other cities. As the research was conducted in Semi-urban area, the result may not be the same if the survey is conducted in an urban area. Further study with other multivariate statistical testing may extend many meaningful interpretations.

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**NPA MANAGEMENT IN PUBLIC SECTOR BANKS: A STUDY OF CANARA BANK AND STATE BANK OF INDIA**

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**ABSTRACT**

*Non performing assets (NPA) pose major challenge for banking sector which affect adversely the financial performance of banks. The accumulation of huge non-performing assets in banks has assumed great importance and now NPAs is a matter of concern to the entire banking industry to focus on non performing assets management. It has been found that Non performing assets do result as a failure on the part of monitoring and effective control measures. The banks and financial institutions have to take the initiative to reduce NPAs in a time bound strategic approach. Management of NPAs has become central performance area for all banks both public sector and private sector. Public sector banks figure prominently in the debate not only because they dominate the banking industry, but also since they have much larger NPAs compared with the private sector banks. Gross NPA reflects the quality of the loans made by banks while Net NPA shows the actual burden to banks. In order to help the management of NPA, non performing assets are classified based on the period for which the asset has remained nonperforming and the realisability of the dues as standard assets, sub-standard assets, doubtful assets and loss assets. The passing of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act 2002; Debt Recovery Tribunals (DRTs); Lok Adalats (public courts); Corporate Debt Restructuring mechanism have been suggested to address the problem of NPA recovery.*

**KEYWORDS**

Doubtful assets, Loss assets, Non performing assets, Public sector banks, and Sub-standard assets.

**INTRODUCTION**

 NPA means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the productivity of bank decreases not only by the amount of NPA but NPA lead to opportunity cost also as that much of profit invested in some return earning project/asset. So NPAs not only affect current profit but also future stream of profits, which may lead to loss of some long-term beneficial opportunity.

In India, the NPAs that are considered to be at higher levels than those in other countries have of late, attracted the attention of public. The Indian banking system had acquired a large quantum of NPAs, which can be termed as legacy NPAs. It was in early 1990s the problem of bad debts was first realised. The magnitude of NPAs in banks and financial institutions is over Rs.150,000 crores during the period of 2009-10. NPA management is a most important aspect of banks performance irrespective of the fact whether it is public sector or private sector. It is generally felt that NPAs reduce the profitability of banks, weaken their financial health and erode their solvency. For the recovery of NPAs a broad framework was evolved for the management of NPAs under which several options are provided for debt recovery and restructuring. Banks and Financial institutions have the freedom to design and implement their own policies for recovery and write-off incorporating compromise and negotiated settlements.

An asset is to be treated as Non-performing under the following circumstances:

- (i) when it ceases to generate any income for the bank
- (ii) Interest and/or installment of principal remains overdue for a period of more than 90 days in respect of a Term Loan.
- (iii) The account remains 'Out of Order' for a period of more than 90 days, in respect of an Overdraft/ Cash Credit (OD/CC).
- (iv) The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted.
- (v) Interest and/or installment of principal remains overdue for two harvest (crop) seasons but for a period not exceeding one crop season in the case of an advance granted for agricultural purpose, and
- (vi) Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.
- (vii) Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.
- (viii) Any amount due to the bank under any credit facility, if not paid by the due date fixed by the bank becomes overdue.

An account should be treated as 'out of order' if the outstanding balance remains continuously in excess of the sanctioned limit/drawing power. In cases where the outstanding balance in the principal operating account is less than the sanctioned limit/drawing power, but there are no credits continuously for 90 days or credits are not enough to cover the interest debited during the same period, these accounts should be treated as 'out of order'.

**TYPES OF NPA**

Gross NPAs are the sum total of all loan assets that are classified as NPAs as per RBI guidelines as on Balance Sheet date. Gross NPA reflects the quality of the loans made by banks. It consists of all the non-standard assets like as sub-standard, doubtful, and loss assets. Gross NPA ratio is calculated with the help of following ratio.

Gross NPA Ratio = Gross NPAs / Gross Advances

Net NPAs are those type of NPAs in which the bank has deducted the provision regarding NPAs. Net NPA shows the actual burden of banks. Since in India, bank balance sheets contain a huge amount of NPAs and the process of recovery and write off of loans is very time consuming, the provisions the banks have to make against the NPAs according to the central bank guidelines, are quite significant. That is why the difference between gross and net NPAs is quite high. Net NPA ratio is calculated by following.

Net NPA = Gross NPAs – Provisions / Gross Advances – Provisions

**TREATMENT OF ACCOUNTS AS NPAs****Record of Recovery**

The treatment of an asset as NPA should be based on the record of recovery. Banks should not treat an advance as NPA merely due to existence of some deficiencies which are temporary in nature such as non-availability of adequate drawing power, balance outstanding exceeding the limit, non-submission of



stock statements and the non-renewal of the limits on the due date, etc. Where there is a threat of loss, or the recoverability of the advances is in doubt, the asset should be treated as NPA.

A credit facility should be treated as NPA as per norms given. However, where the accounts of the borrowers have been regularized by repayment of overdue amounts through genuine sources (not by sanction of additional facilities or transfer of funds between accounts), the accounts need not be treated as NPAs. In such cases, it should, however, be ensured that the accounts remain in order subsequently and a solitary credit entry made in an account on or before the balance sheet date which extinguishes the overdue amount of interest or installment of principal is not reckoned as the sole criteria for treatment the account as a standard asset

**Treatment of NPAs – Borrower-wise and not Facility-wise**

In respect of a borrower having more than one facility with a bank, all the facilities granted by the bank will have to be treated as NPA and not the particular facility or part thereof which has become irregular. However, in respect of consortium advances or financing under multiple banking arrangements, each bank may classify the borrower accounts according to its own record of recovery and other aspects having a bearing on the recoverability of the advances. Identification of assets as NPAs should be done on an ongoing basis.

The system should ensure that identification of NPAs is done on an on-going basis and doubts in asset classification due to any reason are settled through specified internal channels within one month from the date on which the account would have been classified as NPA as per prescribed norms. Banks should also make provisions for NPAs as at the end of each calendar quarter i.e. as at the end of March/ June/ September/ December, so that the income and expenditure account for the respective quarters as well as the P&L account and balance sheet for the year end reflects the provision made for NPAs.

The impact of priority sector advances on NPAs and the incidence of NPAs in priority sector is much higher in view of the fact that priority sector advances constitute 30-32 per cent of the gross bank credit (Department of Banking Supervision 1999). To reduce the extent of NPAs, Non-performance assets of the various banks and various strategies are to be employed by the banks for which RBI should induce certain new policies/strategies to prevent NPAs (Kaveri 2001). The problem of NPAs is related to several internal and external factors confronting the borrowers (Muniappan, 2002). The internal factors are diversion of funds for expansion/diversification/modernization, taking up new projects, helping/promoting associate concerns, time/cost overruns during the project implementation stage, business (product, marketing, etc.) failure, inefficient management, strained labor relations, inappropriate technology/technical problems, product obsolescence, etc., while external factors are recession, non-payment in other countries, inputs/power shortage, price escalation, accidents and natural calamities.

An assessment on the causes and consequences of NPAs of commercial banks has revealed that a strong political will only be able to find satisfactory solution to the problem of mounting NPAs (Rajesham and Rajender 2007). The commercial banks under national priorities has been providing financial assistance the priority sector lending in the post reform period and suggested for a balanced approach as development agent and sustainability of directed lending's keeping in view the quantum of NPA in priority sector advances ( Sooden and Kumar 2007).

Management of NPAs has become central performance area for all nationalised banks. Lot of strategies is worked out to combat this phenomenon as when the circumstances demand. The following are the broad reasons for assets turning non-performance Tardy judicial process, Internal and external diversions of loan funds by the promoters, Time and cost overruns in project implementation, Shortage of raw materials and Power shortage, Change in Government policies like liberalized imports with lesser incidence of custom duties, Poor recovery of receivables especially by SSI units with respect to the dues from public sector/public limited unit, Industrial recession, Excess capacities created on non-economic costs, National calamities like floods, cyclones, Failure of Corporates to raise debt/Equity forms the market, to support bank debt, Business failure, Inefficient / Dishonest management, Political compulsions and corruption, Total disregard of fundamentals of bank lending, Speculative lending to real estate and capital market segments.

On the analysis of the above said reasons it clearly indicates deficiencies on both sides namely Banks and Promoters. Many of the reasons for increase of NPAs may not be under the control of both parties. But a sizable reasons for NPAs may be attributable to Banks such as poor appraisal of the proposals for grant of loans at the initial stage, monitoring of the execution of proposals by promoters at frequent stages especially when the stage of disbursement of loan etc.

On the part of the promoter's reasons attributable is the ineffective assessment of growth of their industry while asking for loans, diversion of loan amount sanctioned to other areas, management practices and set up, excess capacities created on non- economic costs etc. Both sides should put their heads together to contain reasons under their control for reducing the proportion of NPAs. At frequent intervals mutual discussion without blaming the other side will go a long way to contain the proportion of NPAs.

Bank Managers must be very attentive and fairly impartial in examining the proposal in such a way that the Bank may not fail to realise the debts. No doubt Indian Banking system is relatively more disciplined in observing basic lending norms. Due to that discipline only the disaster experienced in Japan and South Asian Countries are avoided in India in 1998.

"Loan Melas" were very common in eighties Ministers and politicians used to reveal in Melas as if they are parting with their money for social benefits. No doubt social sector has to be looked after by banks. But that spread-lending ways can not be allowed to go out of hand as the money comes from-investing public. Interference from political big wigs in Banking industry has to be avoided considerably, if not fully.

## ASSET CLASSIFICATION AND PROVISIONING

As per prudential norms on Asset Classification and provisioning and Banks are required to classify nonperforming assets further into the following three categories based on the period for which the asset has remained nonperforming and the realisability of the dues.

**Standard Assets** are those assets which do not carry more than the normal credit risk attached to business. As such, all performing assets could be classified as standard assets.

**Sub-standard Assets:** are those assets that remains a Non performing for a period not exceeding 18 months with effect from the year ended March 2001. However, the period of 18 months has been reduced to 12 months by Reserve Bank of India with effect from March 31, 2005. An asset would be classified as sub-standard with effect from March 31, 2005 if it remained NPA for a period less than or equal to 12 months. In such cases, the current net worth of the borrowers/ guarantors or the current market value of the security charged is not enough to ensure recovery of the dues to the banks in full. In other words, such assets will have well defined credit weaknesses that jeopardize the liquidation of the debt and are characterized by the distinct possibility that the banks will sustain some loss, if deficiencies are not corrected.

An asset where the terms of the loan agreement regarding interest and principal have been re-negotiated or rescheduled after commencement of production, should be classified as sub-standard and should remain in such category for at least 12 months of satisfactory performance under the re-negotiated or rescheduled terms. In other words, the classification of an asset should not be upgraded merely as a result of rescheduling, unless there is satisfactory compliance of this condition.

**Doubtful Assets** are those assets classified as a Doubtful asset if it remains as Non performing for a period exceeding 18 months w.e.f 01.04.2000. From 31.3.2005 onwards the period of 18 months have been reduced to 12 months. An asset is required to be classified as doubtful, with effect from March 31, 2005 if it has remained NPA for more than 12 months. For Tier I banks, the 12-month period of classification of a substandard asset in doubtful category will be effective from April 1, 2009. As in the case of sub-standard assets, rescheduling does not entitle the bank to upgrade the quality of an advance automatically. A loan classified as doubtful has all the weaknesses inherent as that classified as sub-standard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently known facts, conditions and values, highly questionable and improbable.

**Loss Assets** are those assets where loss has been identified by the bank or internal or external auditors or by the Co-operation Department or by the Reserve Bank of India inspection but the amount has not been written off, wholly or partly. In other words, such an asset is considered un-collectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value. Only those advances would be classified here, where no security is available. Accounts where any security/ECGC/DICGC cover is available are not to be reported under loss category.

In order to assure better NPA management in the banking sector Provisioning requirements are to be adhered by every bank. Namely

**STANDARD ASSETS**

Monetary and Credit Policy Measures have instructed that Banks have to make a general provision on standard assets of a minimum of 0.25% on Direct Agriculture & SME Loans & 0.40% on General Accounts from the year ending 31<sup>st</sup> March 2000.

**SUB-STANDARD ASSETS**

A flat provision of 10% has to be made on the outstanding of the amount borrowed if the security value as a percent of total exposure is greater than 10% or 20% of the Outstanding, only if security value as a percent of total exposure is less than 10%.

**DOUBTFUL ASSETS**

For the computation of the provision requirements in respect of doubtful assets, the doubtful assets are sub classified as D1, D2 and D3 according to the age of NPA and provision is calculated as follows:

Category	Age of NPA	Provision requirement
D1	A/c which have not completed More than one year in Doubtful Category	20% on the secured portion
D2	A/c which have completed More than one year but less than Three years in the doubtful category	30% on the secured portion
D3	A/c which have completed Three years in the doubtful category	100% on the secured portion

If the outstanding not fully covered by security and DICGC/ECGC cover, 100% provision has to be made on the balance unsecured portion.

**LOSS ASSETS**

In respect of loss assets, as there will be no security available, 100% provision has to be made on the net outstanding after deduction DICGC/ECGC cover if available. If substantial security is available, which is considered realizable, the credit facility should be treated as doubtful. However, if realizable/salvage value of the security is negligible, then the account after deducting the salvage value. For example, the due to the bank is Rs.1 lac and the account is identified as loss asset. If the salvage value of the security is Rs 0.01 lac, the provision should be made for Rs.0.99 lac.

Banks should establish appropriate internal systems to eliminate the tendency to delay or postpone the identification of NPAs, especially in respect of high value accounts. The banks may fix a minimum cut-off point to decide what would constitute a high value account depending upon their respective business levels. The cut-off point should be valid for the entire accounting year.

Responsibility and validation levels for ensuring proper asset classification may be fixed by the bank. The system should ensure that doubts in asset classification due to any reason are settled through specified internal channels within one month from the date on which the account would have been classified as NPA as per extant guidelines. RBI would continue to identify the divergences arising due to non-compliance, for fixing accountability. Where there is willful non-compliance by the official responsible for classification and is well documented, RBI would initiate deterrent action including imposition of monetary penalties. NPAs are largely fallout of banks' activities with regard to advances, both at the management and implementation levels (including overall controls by the top management), the credit appraisal system, monitoring of end-usage of funds and recovery procedures. It also depends on the overall economic environment, the business cycle and the legal environment for recovery of defaulted loans. Since the overall environment is more or less same for all banks, non-performing loans of individual banks are mainly a result of management controls and systems. A bank with an efficient credit appraisal and loan recovery system will grow stronger over the years. Such banks have good management control and also inherent strengths in terms of a highly motivated staff, good checks and balances, which are further enhanced by a regulatory and supervisory system.

As the growth in advances is largely determined by the economic and business environment, such banks will be able to push their credit portfolio aggressively, especially when the economy is booming. Also, as such banks have a diversified credit portfolio; it would act as a cushion during economic downturns. This will result in lower NPAs, allowing them to grow stronger and even adopt a more aggressive growth strategy and, thereby, withstand marginally higher incidences of default.

However, a bank without inherent strengths will not be able to push their credit portfolio the way they want to. They are characterized by poor management control, inadequate credit appraisal and even low levels of motivation among the staff. When such banks push their advances portfolio, chances of their asset quality deteriorating are higher. Since asset quality will be visible only after credit disbursement, which itself depends on the regulatory definition of NPAs, any deterioration will be reflected after a time lag. Thus, banks without inherent strength will have higher NPA levels, especially when they are seen above average credit growth.

**FACTORS AFFECTING NPAs**

General environmental factors: These include business cycles, the legal framework, ethical standards, the regulatory and supervisory system, and the political environment.

Bank specific factors: The credit appraisal system; credit recovery procedures; controls, checks and balances adopted by the top management; the risk management system in place; and the motivation level of staff.

Thus, for both healthy and not-so-healthy banks, asset quality after an above average credit growth has a major effect on NPAs. One way to capture the effect of deterioration in the asset quality is to consider cumulative growth rates of credit, which also captures the time-lag effect of credit migration.

**VEHICLES FOR NPA RECOVERY**

Several institutional mechanisms have been developed in India to deal with NPAs such as tightening of legal provisions; the passing of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act 2002; introduction of Debt Recovery Tribunals (DRTs); Lok Adalats (public courts); Corporate Debt Restructuring (CDR) mechanism for large advances to corporate borrowers; etc. have been suggested to address the problem of NPA recovery. Among these are:

Debt Settlement Tribunals: Since the DRT has to function in the normal frame of judiciary machinery and hence suffers from the delays due to judicial processes, it is desirable to think of some alternative agencies to expedite recovery of bank dues. The Debt Settlement Tribunal may provide a good opening for banks to get these recoveries fast as the system provides for an appointment of a Recovery Officer by the bank itself who will issue the demand notice and pass the award. The defaulter may apply to the Debt Settlement Tribunal for settlement of the debt suggesting the terms on which he wants to settle. The Tribunal may hear both the parties and pass the final award which will be binding on both the parties.

Lok Adalats: For recovery of smaller loans the Lok Adalat have proved a very good agency for quick justice and settlement of dues. The Gujarat State Legal Service Authority and the DRT, Ahmedabad have nominated and appointed Conciliators to deal with the cases before the Lok Adalat comprising of retired High Court Judge and two members from Senior Advocates/ Industrialists/Executives of the banks. These Adalats in the State of Gujarat have been found to be useful as a supplement to the efforts of recovery by the DRTs. Such agencies should be established in all the states.

Asset Reconstruction Company: The setting up of Asset Reconstruction Company may be another channel to transfer the NPAs of the banks to such an agency and developing the process of securitization of banks' loan assets for providing liquidity. Perhaps, secondary market of derivatives based on securitized assets could also be developed as in developed countries.

Amendment to banking related laws: The necessary changes in the legal framework i.e., B.R. Act and other bank related Acts may be expedited providing therein repossession of the collateral, foreclosure and bankruptcy procedures for defaulting borrowers. In absence of any reliable credit investigation/ information agency in India, amendment to related banking laws for publishing names of borrowers who have settled their dues either through compromise or court wherein sacrifice by the bank was of substantial amount say, Rs. 25 lakhs or more should also be considered to deny further facilities by other banks to such borrowers, at least, for certain period.

Revenue Recovery Act: In some states Revenue Recovery Act has been made applicable to banks. Since this is also an expeditious process of adjudicating claims, banks may be notified to be covered under the Act by states having such Act. Devising Policies with a long term perspective the Government and other

authorities should devise policies having a bearing on the industrial sector, agriculture and trade with a long term perspective to avoid sickness in the industry and adverse impact on borrowers because of sudden shift in the policy.

#### RESTRUCTURING / RESCHEDULING OF LOANS

A standard asset where the terms of the loan agreement regarding interest and principal have been renegotiated or rescheduled after comparative analysis on NPA of Private & Public sector Banks commencement of production should be classified as sub-standard and should remain in such category for at least one year of satisfactory performance under the renegotiated or rescheduled terms. In the case of sub-standard and doubtful assets also, rescheduling does not entitle a bank to upgrade the quality of advance automatically unless there is satisfactory performance under the rescheduled /renegotiated terms. Following representations from banks that the foregoing stipulations deter the banks from restructuring of standard and sub-standard loan assets even though the modification of terms might not jeopardize the assurance of repayment of dues from the borrower, the norms relating to restructuring of standard and sub-standard assets were reviewed in March 2001. In the context of restructuring of the accounts, the following stages at which the restructuring / rescheduling / renegotiation of the terms of loan agreement could take place, can be identified: Before commencement of commercial production; After commencement of commercial production but before the asset has been classified as sub standard, After commencement of commercial production and after the asset has been classified as sub standard. In each of the foregoing three stages, the rescheduling, etc., of principal and/or of interest could take place, with or without sacrifice, as part of the restructuring package evolved.

**Liquidity:** Money is getting blocked, decreased profit lead to lack of enough cash at hand which lead to borrowing money for shorter period of time which lead to additional cost to the company. Difficulty in operating the functions of bank is another cause of NPA due to lack of money. Routine payments and dues also get affected.

**Involvement of management:** Time and efforts of management is another indirect cost which bank has to bear due to NPA. Time and efforts of management in handling and managing NPA would have diverted to some fruitful activities, which would have given good returns. Now day's banks have special employees to deal and handle NPAs, which is additional cost to the bank.

**Credit loss:** Bank is facing problem of NPA then it adversely affects the value of bank in terms of market credit. It will lose its goodwill and brand image and credit which have negative impact to the people who are putting their money in the banks To sum up, NPAs in banks need tackling promptly through a double pronged approach viz. preventive and creative measures by banks at macro and micro levels. This may include a well structured NPA management policy, formulating risk rating system, introducing pre-disbursement audit and credit audit system for large advances, and also systems to tackle potential problem loans well in time. Further, maximizing recovery through transparent compromise proposals, setting up of internal committees at different levels in the bank for quick disposal of settlement proposals and forming of special recovery/NPA cells at controlling offices will accelerate the pace of recovery. Actions such as making accountable the concerned staff for recovery, opening up of specialized rehabilitation branches for providing focused attention to cases marked for recovery through legal means may also help in this regard. Upgradation of information technology will facilitate better credit administration and help sharing vital information between branches as also between banks and FIs and this should be the priority area for bank managements. The bank should also start playing the role of friend, philosopher and guide by counseling corporate borrowers to sell out assets not necessary for their core area of production/competence. All these measures are necessary in order to improve the bottom lines of the banks and shore up their image, particularly in the context of the opening up of the economy and the major Indian banks starting to look for overseas expansion. Since credit risk is by far the major risk the banks take in their working, elimination of NPAs altogether is not possible. The efficiency of a bank depends on its ability in judicious risk taking, effective monitoring of the portfolio, identifying potential non-performance early, expeditious remedies/ foreclosure to minimize the NPAs and ensuring that the effect of the NPAs on its financials is minimum. Management of NPA is need of the hour. To be effective, NPA management has to be an exercise pervading the entire bank from the Board down the last level. Time is of prime essence in NPA management. The course open to the banker is to ensure that an asset does not become NPA. If it does, he should take steps for early recovery failing which the profitability of the bank will be eroded. That can trigger other problems to undermine the bank's financial condition.

An asset is to be treated as Non-performing when it ceases to generate any income for the bank and if interest or installment remains past due for two or more quarter as on the Balance Sheet date.

In other words for classifying an advance as standard asset, there should not be more than one quarter installment or interest remaining past due as on Balance sheet date.

Canara Bank was founded by Shri Ammembal Subba Rao Pai, a great visionary and philanthropist, in July 1906, at Mangalore, then a small port town in Karnataka. The Bank has gone through the various phases of its growth trajectory over hundred years of its existence. Growth of Canara Bank was phenomenal, especially after nationalization in the year 1969, attaining the status of a national level player in terms of geographical reach and clientele segments. Eighties was characterized by business diversification for the Bank. In June 2006, the Bank completed a century of operation in the Indian banking industry. Today, Canara Bank occupies a premier position in the comity of Indian banks Widely known for customer centricity with an unbroken record of profits since its inception, Canara Bank has several firsts to its credit.

**State Bank of India (SBI)** is the largest banking and financial services company in India by revenue, assets and market capitalisation. It is a state-owned corporation with its headquarters in Mumbai, Maharashtra. The bank traces its ancestry to British India, through the Imperial Bank of India, to the founding in 1806 of the Bank of Calcutta, making it the oldest commercial bank in the Indian Subcontinent. Bank of Madras merged into the other two presidency banks—Bank of Calcutta and Bank of Bombay—to form the Imperial Bank of India, which in turn became the State Bank of India. SBI is ranked No. 292 globally in Fortune Global 500 list in 2011 SBI is a regional banking behemoth and is one of the largest financial institutions in the world. It has a market share among Indian commercial banks of about 20% in deposits and loans. The State Bank of India is the 29th most reputed company in the world according to *Forbes*. Also, SBI is the only bank featured in the coveted "top 10 brands of India" list in an annual survey conducted by Brand Finance and The Economic Times in 2010.

**TABLE 1.1: GROSS NPAs (Rs. In Crores)**

Year	Canara Bank	SBI
2000-01	2242.89	15874.97
2001-02	2112.44	15485.85
2002-03	2474.78	13506.07
2003-04	3126.84	12667.21
2004-05	2370.55	12455.73
2005-06	1792.61	9628.14
2006-07	1493.43	9998.22
2007-08	1272.62	12837.34
2008-09	2167.97	15714.00
2009-10	2590.31	19534.89

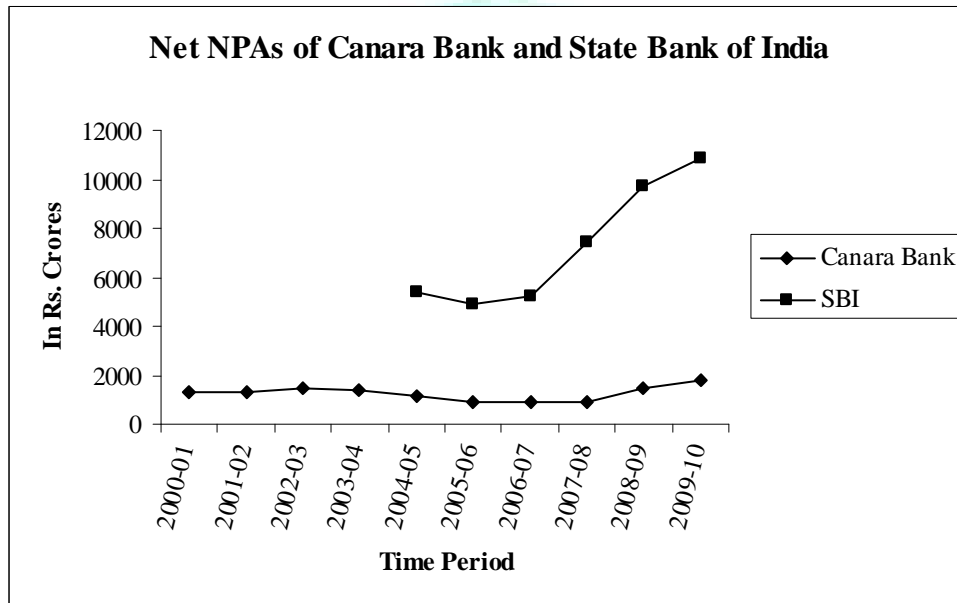
Source: Respective Annual Reports

TABLE 1.2: NET NPAs (Rs .In Crores)

Year	Canara Bank	SBI
2000-01	1345.99	6856.26
2001-02	1288.39	6810.20
2002-03	1453.88	6183.00
2003-04	1378.31	5442.00
2004-05	1125.28	5348.89
2005-06	879.18	4911.41
2006-07	926.97	5257.72
2007-08	899.03	7424.33
2008-09	1507.25	9677.42
2009-10	1799.70	10870.17

Source: Respective Annual Reports

FIGURE 1.1: NPAs OF CANARA BANK AND SBI



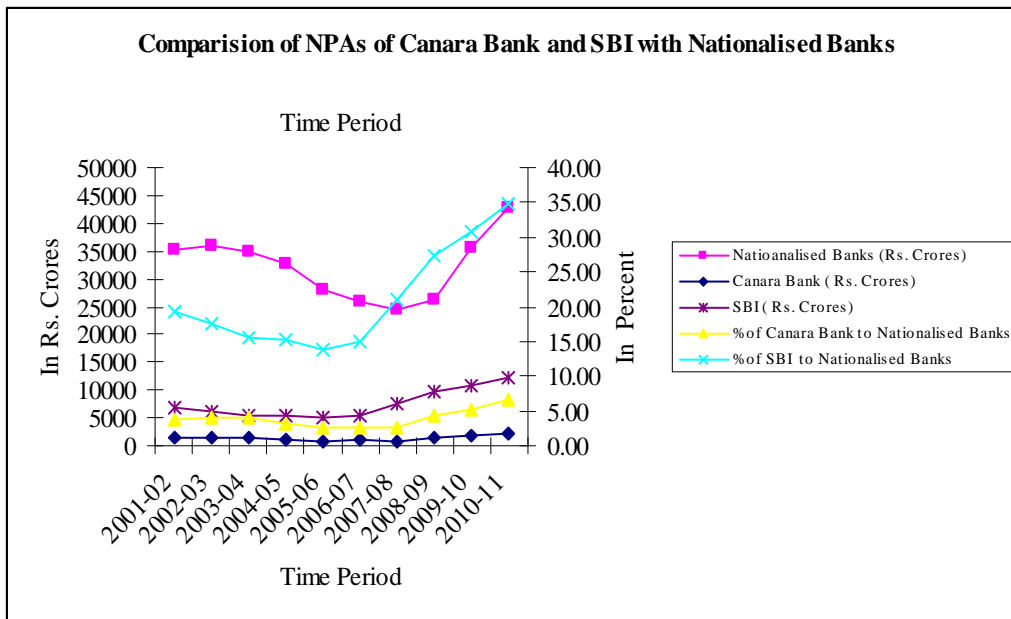
From the above analysis of table 1.1, table 1.2 and figure 1.1 it is observed that Canara Bank is showing fluctuating trend for the years 2000-01, 2001-02, 2006-07 and 2007-08. while period from 2003-04 to 2005-06 has shown a decrease in trend indicating improvement in its asset quality and performing well on settlements and recovery front and periods 2008-09 and 2009-10 has shown an increase in trend. Canara Bank with its unrelenting focus on quality assets, backed up by a prudent risk management mechanism, has enabled the Bank to progressively improve its asset quality during the period 2005-06 has shown an excellent recovery of advances where in recorded lowest Net NPA of Rs 879.18 crores under the period under consideration. SBI has been focusing on restructuring of impaired Standard Assets as well as viable non-performing assets, both under CDR mechanism as well as under Bank's own scheme, have been given top priority for arresting new additions and reducing the existing level of NPAs has shown a consistent downward trend for the period 2000-01 to 2005-06 and an upward trend for the period 2006-07 to 2009-10. During the year 2008-09 the bank has reported fresh slippages of standard assets to NPA category Rs 11,015 crores.

TABLE 1.3: COMPARISON OF NPAs OF CANARA BANK AND SBI WITH NATIONALISED BANKS

Time Period	Nationalised Banks (Rs. Crores)	Canara Bank (Rs. Crores)	SBI (Rs. Crores)	% of Canara Bank to Nationalised Banks	% of SBI to Nationalised Banks
2001-02	35328	1288.39	6810.20	3.65	19.28
2002-03	35849	1453.88	6183.00	4.12	17.50
2003-04	34990	1378.31	5442.00	3.90	15.40
2004-05	32888	1125.28	5348.89	3.19	15.14
2005-06	28185	879.18	4911.41	2.49	13.90
2006-07	26046	926.97	5257.72	2.62	14.88
2007-08	24528	899.03	7424.33	2.54	21.02
2008-09	26169	1507.25	9677.42	4.27	27.39
2009-10	35470	1799.70	10870.17	5.09	30.77
2010-11	42907	2329.91	12346.90	6.60	34.95

Source: Compiled from Department of Banking Supervision, RBI 2010-2011

FIGURE 1.2: COMPARISON OF NPAs OF CANARA BANK AND SBI WITH NATIONALISED BANKS



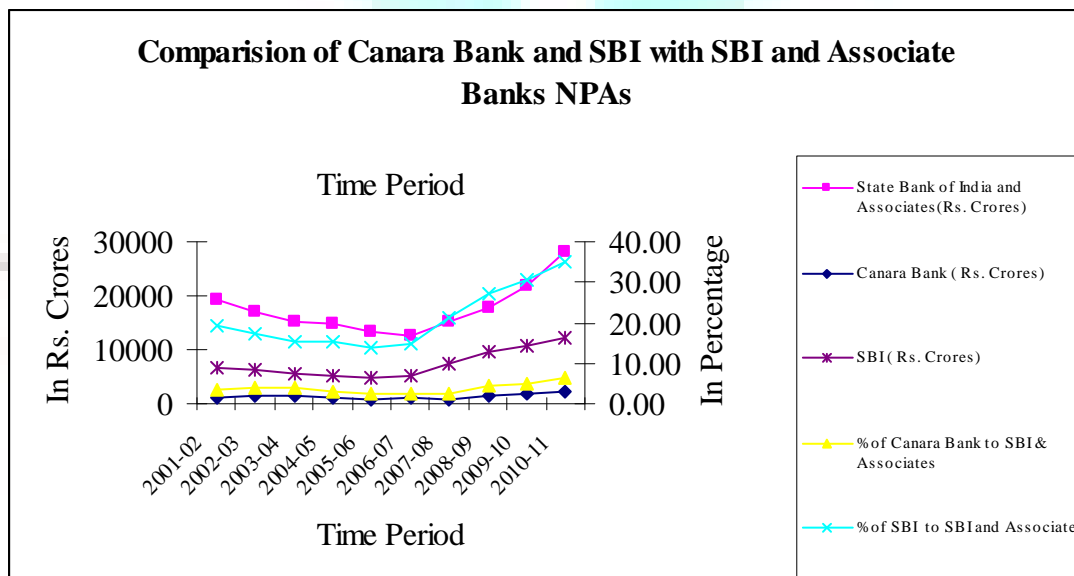
From the above analysis of table 1.3 and figure 1.2 it is observed that the Canara Bank's share in NPAs of nationalised banks in percentage terms has shown a fluctuating trend from 2001-02 to 2007-08. Further during the period of 2008-09 to 2010-11 it has shown an increasing trend and it has been found that the NPAs of nationalised banks were also showing the same trend. The SBI's contribution to NPAs of nationalised banks has shown a decreasing trend from 2002-03 to 2005-06 and has shown an increasing trend during the remaining period of study i.e., 2006-07 to 2010-11.

TABLE 1.4: COMPARISON OF CANARA BANK AND SBI WITH SBI AND ASSOCIATE BANKS NPAs

Time Period	State Bank of India and Associates (Rs. Crores)	Canara Bank (Rs. Crores)	SBI (Rs. Crores)	% of Canara Bank to SBI & Associates	% of SBI to SBI and Associates
2001-02	19095	1288.39	6810.20	3.65	19.28
2002-03	16958	1453.88	6183.00	4.12	17.50
2003-04	15159	1378.31	5442.00	3.90	15.40
2004-05	14808	1125.28	5348.89	3.19	15.14
2005-06	13193	879.18	4911.41	2.49	13.90
2006-07	12556	926.97	5257.72	2.62	14.88
2007-08	15220	899.03	7424.33	2.54	21.02
2008-09	17874	1507.25	9677.42	4.27	27.39
2009-10	21831	1799.70	10870.17	5.09	30.77
2010-11	28140	2329.91	12346.90	6.60	34.95

Source: Compiled from Department of Banking Supervision, RBI 2010-2011

FIGURE 1.3: COMPARISON OF CANARA BANK AND SBI WITH SBI AND ASSOCIATE BANKS NPAs



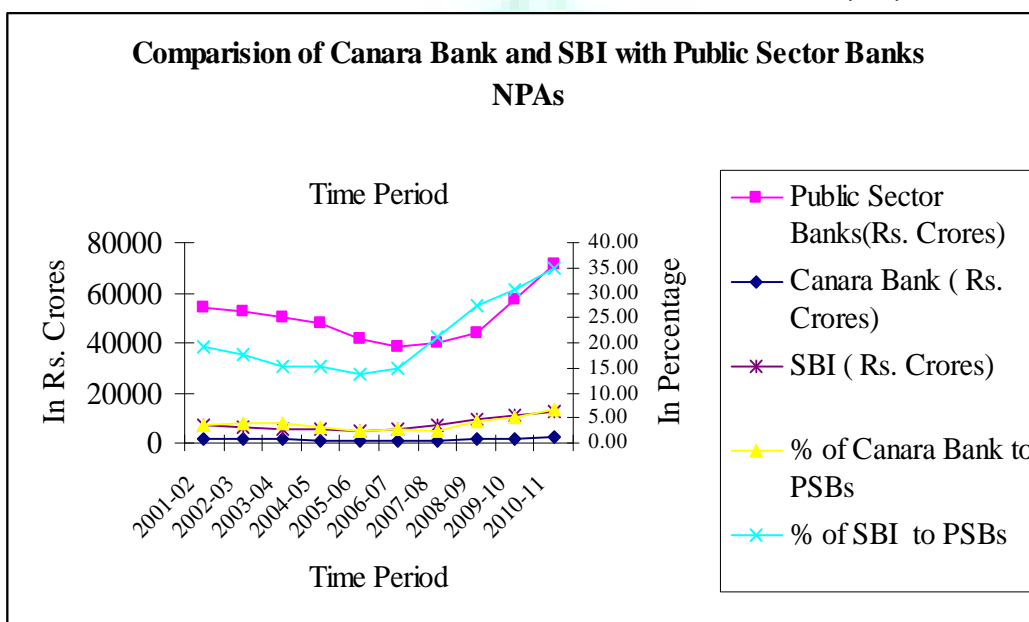
From the above analysis of table 1.4 and figure 1.3 it is observed that the Canara Bank's share in NPAs of SBI and its associated banks has shown a fluctuating trend through out the study period. The SBI was showing an increase in trend during the period 2003-04 to 2008-09 while for the period 2009-10 and 2010-11 showing a decrease in trend.

TABLE 1.5: COMPARISON OF CANARA BANK AND SBI WITH PUBLIC SECTOR BANKS (PSBs) NPAs

Time Period	Public Sector Banks(Rs. Crores)	Canara Bank (Rs. Crores)	SBI (Rs. Crores)	% of Canara Bank to PSBs	% of SBI to PSBs
2001-02	54423	1288.39	6810.20	2.37	12.51
2002-03	52807	1453.88	6183.00	2.75	11.71
2003-04	50148	1378.31	5442.00	2.75	10.85
2004-05	47696	1125.28	5348.89	2.36	11.21
2005-06	41378	879.18	4911.41	2.12	11.87
2006-07	38602	926.97	5257.72	2.40	13.62
2007-08	39749	899.03	7424.33	2.26	18.68
2008-09	44042	1507.25	9677.42	3.42	21.97
2009-10	57301	1799.70	10870.17	3.14	18.97
2010-11	71047	2329.91	12346.90	3.28	17.38

Source: Compiled from Department of Banking Supervision, RBI 2010-2011

FIGURE 1.4: COMPARISON OF CANARA BANK AND SBI WITH PUBLIC SECTOR BANKS (PSBs) NPAs



From the above analysis of table 1.5 and figure 1.4 it is observed that percentage of Canara Bank's NPAs to PSBs NPAs is showing fluctuating trend throughout the study period i.e., during the year 2001-02 percentage of Canara bank to PSBs was 2.37 and shown an increase to 2.75 in the period 2002-03 and while two consecutive years i.e., 2004-05 and 2005-06 has shown a decline percentage. It has been observed that the Canara Bank's NPAs to PSBs NPAs during the period 2008-09 to 2010-11 has increased. Further the percentage of SBI's contribution to PSBs has shown a decreasing trend for the period 2001-02 to 2003-04 i.e., 12.51% to 10.85%. The period from 2004-05 to 2008-09 has shown an increase in trend while the period from 2009-10 and 2010-11 has shown a decreasing trend compared to the year 2008-09.

## CONCLUSION

Public Sector Banks are playing an important role in developing the economy. The Indian Banking sector is the prominent contributor in service sector towards achieving the socio economic objectives. NPAs are the biggest challenge to the public sector banks and it has proven to be the most important bench mark in evaluating the financial performance of banks. Today the major challenge for public sector banks is problem of non performing assets. If the proper management of the NPAs is not undertaken it would be hampers the business of the banks. The NPAs would affect business cycles, legal framework, ethical standards, regulatory and supervisory system and bank specific factors like credit appraisal system, credit recovery procedures risk management system and the motivational level of employees. The selected banks i.e., Canara Bank and State Bank of India has shown during the period 2000-01 to 2009-10 a consistent downtrend in Gross NPAs and NPAs. The analysis of the banks for the period under consideration has indicated that the banks have established appropriate systems internally to eliminate at the earliest failure to identify NPAs, adherence to the classification norms of Reserve Bank of India and by utilising effectively in the management of NPAs Debt recovery and corporate debt restructuring more specifically for corporate large advances.

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## A STUDY ON CONSUMERS PERCEPTION TOWARDS GREEN PACKAGING INITIATIVES WITH REFERENCE TO CONSUMERS IN PUDUKKOTTAI DISTRICT

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### ABSTRACT

*Mass marketing has occupied the centre stage in the era of globalization. Marketing policies, practices and prospects are at a new helm than ever before. On the other side the problems and side effects have also grown up in the same proportion. Today marketers are not only working to achieve a fat bottom line but they are also working towards ensuring the sustainability of the bottom line. This led to the development of new avenue of marketing called "The Green marketing". Among the 4P's of Green Marketing, green packaging assumes great significance. Various steps taken till date to ensure green packaging were very minimal, when compared to the magnitude of environmental threats faced. Also the manners in which people are accepting and reacting to this step are debatable. Paying sufficient attention to green packaging will pay rich dividend in ensuring the sustainability of the environment. The present study is undertaken to gauge the environmental awareness of the respondents, average number of non green packages used by them, the reason attributed for using, and to understand their perceptions about green packaging initiatives. Descriptive study was carried out by using a questionnaire and the collected data were analysed by using percentage analysis and Chi square test. The study reveals that reasons for using non green packages are easy availability, product protection and convenience. And it highlights that those who are having higher environmental awareness are appreciating the green packaging initiatives in the right sense.*

### KEYWORDS

Green Marketing, Green Packaging, Green Packaging Initiatives, Green Packaging Strategies, Non-Green Packages.

### INTRODUCTION

In the last three decades the world of marketing has witnessed phenomenal change. It is no longer confined to smaller territories. Today economies of large scale are no longer an option, but it is a compulsion. Mass marketing has occupied the centre stage in the era of globalization. Sachet marketing has paved the way to make inroads into unexplored rural markets. Micro marketing has redefined the working dimensions and individualistic appeals of modern marketers. Internet marketing, social media marketing and search engine optimization enhanced the marketer's ability to go boundary less.

Aptly supported by the changed dimensions of global trade, policies and politics, attributable to globalization, and strengthened by the new wave of advances made in technology, today marketing policies, practices and prospects are at a new helm than ever before. On the other side of this growth story, the problems and side effects have also grown up in the same proportion as the prospects.

Every year medical practitioners are encountering the birth of new unnamed diseases. Environmental degradation and depletion of natural resources are growing as the single most challenge for the mankind for his survival on the earth. These issues are attracting the attention of all stake holders of the planet, and marketers cannot be alien to it.

Today marketers are not only working to achieve a fat bottom line but they are also working towards ensuring the sustainability of the bottom line. This led to the development of new avenue of marketing called "The Green marketing"

### GREEN MARKETING

According to Polonsky (1994), "Green or environmental marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment". Today, consumers are paying more attention to the environmental efforts of businesses and support companies that excel with their green marketing.

### GREEN PACKAGING

Among the 4P's of Green Marketing, green packaging assumes great significance because, once when some products are put to use, the packages will be thrown out as environmental waste and thereby it pollutes the environment. Hence paying sufficient attention to green packaging will pay rich dividend in ensuring the sustainability of the environment.

The Sustainable Packaging Coalition® (SPC), is a project of GreenBlue, It envisions a world where all packaging is sourced responsibly, designed to be effective and safe throughout its life cycle, meets market criteria for performance and cost, is made entirely using renewable energy, and once used, is recycled efficiently to provide a valuable resource for subsequent generations

Accordingly, Sustainable packaging:

- A. Is beneficial, safe & healthy for individuals and communities throughout its life cycle
  - B. Meets market criteria for performance and cost
  - C. Is sourced, manufactured, transported, and recycled using renewable energy
  - D. Optimizes the use of renewable or recycled source materials
  - E. Is manufactured using clean production technologies and best practices
  - F. Is made from materials healthy throughout the life cycle
  - G. Is physically designed to optimize materials and energy
  - H. Is effectively recovered and utilized in biological and/or industrial closed loop cycles
- These criteria outline a framework for specific actions.



## STATEMENT OF THE PROBLEM

In India, the share of plastic waste in total solid waste has risen from 0.6% in 1996 to 9.2% in 2005 (World Bank, 2008). Over 50% of this waste comprises used plastic bags and packaging (TERI, 2002). In the recent past, several efforts are taken by various entities like, the government, NGO's, environmental groups, manufacturers and retailers to promote green packaging.

In 2007 Nokia has launched a new phone, the 3110 Evolve, which the company says has "bio-covers" made from more than 50 percent renewable material. The device comes in new packaging made of 60 percent recycled content. Now many mobile manufacturers introduced green mobile packaging. They reduced the size of the carton.

The Government of Goa has enacted Goa Non- Biodegradable Garbage (Control) Act, 1996 and amended it in 2003. They banned varying, use and sale of non-biodegradable PET bottles and plastic carry bags in wildlife sanctuaries, beaches and heritage monuments.

The Tamilnadu State government has imposed a ban on the use of plastic carry bags made of virgin plastics or recycled plastics of less than 60 micron thickness and 8x12 inches size. While the bags of 8x12 inches size and 40 micron thickness would cost Rs.1.35, those of 60 micron thickness would cost nearly Rs.2.10.

Government of India banned the plastics packaging for gutka and tobacco products in the year 2009. The Supreme Court finalized the rules and fixed December 2010 as deadline to impose this ban. This was a ban on primary packaging.

But all these steps are very minimal, when compared to the environmental threats in front of us. Also all these efforts are tip of the ice berg. Regulations banning distribution of carry bags are surpassed by retailers using various means. Primary packaging, secondary packaging and shipping packaging are using non green materials. There are no restrictions to this effect. Also the manners in which people are accepting and reacting to this step are debatable.

## OBJECTIVES OF THE STUDY

- To study the level of environmental awareness among the respondents
- To analyse the average number of non green packages used by the respondents
- To study the reason for using non-green packages
- To study the respondents perception towards green packaging initiatives taken in Tamilnadu
- To study the respondents perception about who holds primary responsibility for green packaging activity
- To study the preferred method of green packaging strategy

## REVIEW OF LITERATURE

Renee Wever (2009)- "Thinking about the Box – A holistic approach to a sustainable design engineering of packing for Durable consumer goods " has presented the holistic way in which the total packing cost and its environmental impacts can be minimized.

Ina landau (2008) Studied about Gaining Competitive Advantage through Customer Satisfaction, Trust and Confidence in Consideration of the Influence of Green Marketing – The study indicated the relationship between eco orientation and companies performance. Accordingly, trust and confidence are important concepts in green marketing.

Tan Shwu Shyan (2010) studied the factors influencing Green purchase behaviour. The study reveals that social influence, environmental concern, green product knowledge (one dimension in environmental knowledge), specific environmental knowledge (one dimension in environmental knowledge), environmental label and income level are having significant impact to green purchase behaviour of green volunteers, in terms of their ranking of importance.

Soren Bohne and Rikke Thomson (2011) – Influencing consumer perception of and attitudes towards CO2 neutral and biodegradable carrier bags – has found that The general attitude towards environmentally labelled carrier bags is positive. Labelled plastic carrier bags are preferred to non-labelled, and Biodegradable bags are preferred to CO2 neutral.

Xiufeng Xing (2009), studied the ban on free plastic bags in China, and reported that Public awareness of environmental protection has been somewhat improved than before, customers or consumers come to accept the charge on plastic bags and bring their own carrying bags with them when shopping. But the market is the most difficult place to carry out the policy. Traders often have 2 kinds of plastic bag, one of which meets the national standard and is only used to cope with the inspection, while the other is thinner than 0.025 millimeters which should have been prohibited from providing to consumers. Compared with the supermarkets which offer standard plastic bags, it is the markets that provide consumers free Ultra-thin plastic bags that become the body of the "white pollution"

Subramanian Senthilkannan Muthu<sup>1</sup>, et.al. (2012), Studied the eco impact of plastic and paper shopping bags in China, India and Hong Kong. Accordingly, among different phases of a product's life cycle, disposal phase assumes greater significance as far as the eco-impact is concerned. They concluded that a higher percentage of reuse could significantly trim down the eco-impact of plastic and paper bags. Consumers' perceptions and usage behaviors in connection with respective government's policies and implementation of recycling systems could be highly decisive in reducing the eco-impact of plastic and paper shopping bags.

Kanupriya Gupta and Rohini Somanathan, (2011) studied the appropriate policies that could help control the use of plastic bags in Delhi. Their results showed a dilution in the efficacy of the ban on plastic bags imposed by Delhi Government within one year, due to widespread lack of enforcement. They concluded that in developing countries with little enforcement capacity, a blanket ban may not be the best possible solution. Instead, low cost information interventions, availability of substitutes to plastic bags, and subsidies (taxes) on the use of reusable bags (plastic bags) could constitute an important policy-mix.

## RESEARCH METHODOLOGY

### QUESTIONNAIRE DESIGN

The study is descriptive in nature. The researcher used questionnaire schedule to collect data from the samples. Questionnaire is divided into three parts. The first part contains questions related to demographic profile of the respondents. The second part is concerned with environmental awareness of the respondents and the last part discusses the respondents perception about green packaging initiatives..

### SAMPLING DESIGN AND STATISTICAL TOOLS

The study was confined to Pudukkottai District in Tamilnadu. The sample consists of 100 consumers Convenience sampling was used. The study was conducted during the month of July 2012. The collected data were tabulated and analyzed by using percentage, and chi square test.

## DATA ANALYSIS AND INTERPRETATION

The data collected from the respondents were systematically analyzed and presented under the following heads

- Section A: Deals with analysis of the data relating to respondents by using percentage analysis
- Section B: Collected data were analysed through Chi square test and Hypothesis tested

SECTION A

TABLE 1: RESPONDENTS DEMOGRAPHIC PROFILE

Gender	Percentage	Environmental Awareness	Percentage
Male	56	Very High	8
Female	44	High	33
Age	Percentage	Neutral	38
Less than 20 years	18	Low	20
21-40 yrs	34	Very low	1
41-60 yrs	28		
61 yrs and above	20		
Education	Percentage	Economic Status	Percentage
Plus 2 and below	16	Normal	26
UG or PG	61	Middle	48
Professional	23	Elite	26

Source: Primary data

INTERPRETATION

Majority (56%) of the respondents were male Majority (34%) of the respondents are in the age group of 21-40years. Majority (61%) of the respondents are having UG or PG education. Majority (48%) of the respondents are from the middle class. And majority of respondents (38%) are having neutral level of environmental awareness.

TABLE 2: RESPONDENTS PERCEPTION ABOUT GREEN PACKAGING INITIATIVES

Avg. no. of Non green packages used in a month	Percentage	Perception towards Green Packaging initiatives	Percentage
Less Than 5	4	Dissatisfied	14
6 to 15	42	Satisfied	30
16-30	40	Satisfied, but insufficient	56
More than 30	14		
Reason for using Non green packages	Percentage	Responsible Person	Percentage
Cheap	15	Government	8
Easy Availability	34	Environmental Organisations and NGO's	5
Protects the product	21	Manufacturers	41
Attractive	7	Distributors and Retailers	35
Convenient	23	Consumers	11
		Preferred Green Packaging Strategy	Percentage
		Reducing packages	9
		Reusing used packages	42
		Recycling packages	34
		Restricting Non green packages	15

Source: Primary data

INTERPRETATION

Majority (42%) of the respondents are using average of 6 to 15 non green packages in a month. Majority (34%) of the respondents are using the non green packages because they are easily available. Majority (56%) of the respondents are saying that they are satisfied to a limited extend with the steps taken. Majority (41%) of the respondents fix manufacturers as the primary person responsible for initiating green marketing activity. And majority of respondents (42%) are preferring the reuse strategy.

SECTION B

NULL HYPOTHESIS 1: (H<sub>0</sub>1)

The demographic factors of the respondent have no significant influence over the average number of non green packages used in a month.

TABLE 3: CHI-SQUARE ANALYSIS BETWEEN DEMOGRAPHIC FACTORS AND AVERAGE NUMBER OF NON-GREEN PACKAGES USED IN A MONTH

Demographic Variable	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)	Inference	Result
Gender	8.584	3	.035	P<0.05	Significant
Age	4.328	9	.889	P>0.05	Not Significant
Education	10.257	6	.114	P>0.05	Not Significant
Economic status	2.199	6	.900	P>0.05	Not Significant
Environmental awareness	19.019	12	.088	P>0.05	Not Significant

Source: Computed data

INTERPRETATION

Table 3 shows that Age, Education, Economic Status and Environmental awareness have no significant influence in over the average number of non green packages used in a month while gender of the respondent has significant influence over the average number of green packages used in a month. Hence the first hypothesis is partially accepted.

NULL HYPOTHESIS 2: (H<sub>0</sub>2)

The demographic factors of the respondent have no significant influence over the reason for using non green packages.

TABLE 4: CHI-SQUARE ANALYSIS BETWEEN DEMOGRAPHIC FACTORS AND REASON FOR USING NON-GREEN PACKAGES

Demographic Variable	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)	Inference	Result
Gender	10.700	4	.030	P<0.05	Significant
Age	15.575	12	.211	P>0.05	Not Significant
Education	8.136	8	.420	P>0.05	Not Significant
Economic status	16.528	8	.035	P<0.05	Significant
Environmental awareness	19.565	16	.240	P>0.05	Not Significant

Source: Computed data

INTERPRETATION

Table 4 shows that Age, Education, and Environmental Awareness have no significant influence over the reason for using non green packages while Gender and Economic Status of the respondent has significant influence over the reason for using non green packages. Hence the second hypothesis is partially accepted.

**NULL HYPOTHESIS 3: (H<sub>0</sub>3)**

The demographic factors of the respondent have no significant influence over the perception towards green packaging initiatives.

**TABLE 5: CHI-SQUARE ANALYSIS BETWEEN DEMOGRAPHIC FACTORS AND PERCEPTION TOWARDS GREEN PACKAGING INITIATIVES**

Demographic Variable	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)	Inference	Result
Gender	.486	2	.784	P>0.05	Not Significant
Age	1.525	6	.958	P>0.05	Not Significant
Education	7.637	4	.106	P>0.05	Not Significant
Economic status	1.358	4	.851	P>0.05	Not Significant
Environmental awareness	32.905	8	.000	P<0.05	Significant

Source: Computed data

**INTERPRETATION**

Table 5 shows that Gender, Age, Education, and Economic Status have no significant influence over the respondent's perception towards green packaging initiatives while Environmental awareness of the respondent has significant influence over the respondent's perception towards green packaging initiatives. Hence the third hypothesis is partially accepted.

**NULL HYPOTHESIS 4: (H<sub>0</sub>4)**

The demographic factors of the respondent have no significant influence over the perception towards person responsible for green packaging initiatives.

**TABLE 6: CHI-SQUARE ANALYSIS BETWEEN DEMOGRAPHIC FACTORS AND RESPONSIBLE PERSON FOR GREEN PACKAGING INITIATIVES**

Demographic Variable	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)	Inference	Result
Gender	.727	4	.948	P>0.05	Not Significant
Age	3.911	12	.985	P>0.05	Not Significant
Education	6.141	8	.631	P>0.05	Not Significant
Economic status	6.813	8	.557	P>0.05	Not Significant
Environmental awareness	27.829	16	.033	P<0.05	Significant

Source: Computed data

**INTERPRETATION**

Table 6 shows that Gender, Age, Education, and Economic Status have no significant influence over the respondent's perception towards person responsible for green packaging initiatives while Environmental awareness of the respondent has significant influence over the respondent's perception towards person responsible for green packaging initiatives. Hence the fourth hypothesis is partially accepted.

**NULL HYPOTHESIS 5: (H<sub>0</sub>5)**

The demographic factors of the respondent have no significant influence over the strategy preferred for green packaging.

**TABLE 7: CHI-SQUARE ANALYSIS BETWEEN DEMOGRAPHIC FACTORS AND GREEN PACKAGING STRATEGY PREFERRED**

Demographic Variable	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)	Inference	Result
Gender	.249	3	.969	P>0.05	Not Significant
Age	14.350	9	.110	P>0.05	Not Significant
Education	7.716	6	.260	P>0.05	Not Significant
Economic status	7.346	6	.290	P>0.05	Not Significant
Environmental awareness	7.868	12	.795	P>0.05	Not Significant

Source: Computed data

**INTERPRETATION**

Table 7 shows that Gender, Age, Education, Economic Status and Environmental awareness have no significant influence over the strategy preferred by the respondents for green packaging. Hence the fifth hypothesis is accepted.

**FINDINGS**

- ✓ Majority of respondents (38%) are having neutral level of environmental awareness. Only 1% of respondent are having very low environmental awareness and only 8% of respondents are having very high level of environmental awareness.
- ✓ Majority (34%) of the respondents are using the non green packages because they are easily available, it is followed by 23% of respondents who use it for convenience and another 21% of respondents are using it, since it protects the products quality.
- ✓ The average number of non green packages used in a month is significantly influenced by the gender of the respondent
- ✓ The reason attributed for using non green packages is significantly influenced by the gender and economic status of the respondents
- ✓ Perception about green packaging initiatives taken is varying significantly only on the basis of level of environmental awareness
- ✓ Perception about the responsibility for initiating green packaging initiative is also varying significantly only on the basis of level of environmental awareness
- ✓ Preference towards various green packaging strategies is not varying significantly on the basis of any of the demographic factors.

**SUGGESTIONS**

- Governments, Environmental organizations and NGO's should take sufficient steps to increase the level of environmental awareness among consumers. Consumers with higher level of environmental awareness are appreciating the problems and the steps taken in the right sense.
- Easy availability of non green packages should be curbed. Instead of pricing the non green packages at the retailers end, steps should be taken to reduce the manufacturing and distribution of non green packages on the whole.
- Import restrictions for non green raw materials, Excise duties and Quantity restrictions for manufacturing non green packages, Environmental tax for selling non green packages etc could be levied to restrict the import, manufacturing and distribution of non green packages.
- Suitable subsidies and assistance could be provided for manufacturing green packages.
- Ban on non green shopping packages should be strictly enforced. It should also be enlarged to include ban on primary and secondary non green packages.
- Manufacturers of retail goods, especially from FMCG segment should devote sufficient attention to R&D activities for replacing non green primary and secondary packages with green packages. New green packages should provide all the benefits available in non green packages like product protection, convenience etc.
- Till finding out suitable green alternatives, non green packages could not be eliminated completely. Hence all the green packaging strategies like recycling, reusing etc., should be used depending upon the situation.
- Consumers should be motivated to reuse used packages. Recycling should be carried out in large scale. When non green packages could not be eliminated immediately, reusing and recycling strategy will result in better environmental waste management.
- Whenever restriction on non green packaging and reduction of use of environmental resources for packaging are possible, it should be implemented. Restriction and reduction strategy should be implemented on various stages in a time bound manner.

**CONCLUSION**

Each and every economic activity is consuming sizeable amount of environmental resource. And now the time has ripened for giving back or at the least to stop exploiting the available natural resources which are scarce and which cannot be easily regenerated. Marketing starts and ends with the consumers. In the long run marketers can ensure the sustainability of profits only by ensuring the well being of the consumers and their environment.

Green marketing in general and green packaging in particular should not be viewed as a fashion statement given to fulfil Corporate Social Responsibility. Marketers should stop hiding behind the practice of green washing. Green packaging is the need of the hour to ensure sustainability of the earth and its ecosystem. Green marketers should understand the essence of green packaging in sum and substance and should implement it in its true spirit. Consumers, retailers, regulators, scientific community and environmental education groups should provide the necessary support for reviving, maintaining and safeguarding the earth's eco system.

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## THE EMPIRICAL EVIDENCES OF SLOWDOWN OF FDI INFLOW IN INDIA SINCE 2009

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### ABSTRACT

Foreign Direct Investment inflow in India has played a major role in the recent past. The fall of stock market in the month of May 2012 can be seen as a reason of the portfolio pull out of the FII's from the market. The paper is an attempt to gather the empirical evidences to see the slow down of the FDI investments in India since 2009. The statistics published by the Department of Industrial Policy and Promotion (DIPP) and Reserve bank of India manual reveals that the Foreign Direct Investment has moderated since 2009. The paper attempts to study this fallout in the light of the potential India has for the investment. This paper has tried to analyse the Direct investment and the Portfolio investment from 2009-12 and collect the evidences to prove the moderation in the FDI inflow in India. In 2010-11 the FDI inflow has been US \$ 32,901; which is a warning bell for the nation's economy. But so far 2011-12 is seeing again an increase in the FDI inflow compare to the previous year. By February 2012 the FDI inflow had been US \$ 41,891 million as compared to the US \$ 32,901 million last year till April 2011. This can be seen as a positive sign for the economy's growth. The reforms needed to attract the FDI inflow must be taken strongly and quickly; at a time when the world economy is experiencing the jitters of recession. The Indian economy has strong foundations and thus has the capacity to endure for a longer period any strong effects of external factors.

### KEYWORDS

Foreign Direct Investment, Direct Investment, Portfolio Investment.

### INTRODUCTION

India opened its doors for the FDI inflow in the year 1991 with the Government's liberalization and economic reforms programme which aimed at rapid and substantial economic growth and integration with the global economy in a harmonized manner. The industrial policy reforms reduced the industrial licensing requirements, removed restrictions on investment and expansion, and facilitated easy access to foreign technology and foreign direct investment. The role of Foreign Direct Investment in an economy goes beyond simply easing financial constraints. FDI inflows are associated with multiple benefits such as technology transfer, market access and organizational skills. Foreign Direct Investment (FDI) is considered as an important agent in the process of accelerated economic growth in the developing countries. FDI is more attractive in comparison to other forms of external finance since it is non-debt creating, non-volatile and the returns depend on the performances of the projects financed by the investors (Planning Commission, 2003). FDI can be defined as an investment made by a resident of one economy in another economy and it is of long term nature or of lasting interest. The second aspect of FDI investment is that the investor has a significant degree of influence on the management of the enterprise; thus managerial expertise and organizational skills are learnt. Since the reforms of 1991, the inflow of FDI in India has been growing and its impact can be seen on the growth of the economy on the whole. The government has defined two routes for attracting Foreign Direct Investment inflows in India.

### FDI ROUTES

FDI entry in India can be done through two routes:

#### i. Automatic Route

FDI up to 100 per cent is allowed under the automatic route in all activities/sectors except where the provisions of the consolidated FDI Policy, on 'Entry Routes for Investment' issued by the Government of India from time to time, are attracted. FDI is banned in the following sectors:

1. Retail Trading (except single brand product retailing);
2. Atomic Energy;
3. Lottery Business including Government / private lottery, online lotteries etc;
4. Gambling and Betting including casinos etc.;
5. Business of chit fund;
6. Nidhi Company;
7. Trading in Transferable Development Rights (TDRs);
8. Activities/sector not opened to private sector investment;
9. Agriculture (excluding Floriculture, Horticulture, Development of seeds, Animal Husbandry, Pisciculture and cultivation of vegetables, mushrooms etc. under controlled conditions and services related to agro and allied sectors) and Plantations (Other than Tea Plantations);
10. Real estate business, or construction of farm houses; Manufacturing of Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco or of tobacco substitutes.

FDI in sectors /activities to the extent permitted under the automatic route does not require any prior approval either of the Government or the Reserve Bank of India.

#### ii. Government Route

FDI in activities not covered under the automatic route requires prior approval of the Government which are considered by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, Ministry of Finance. Indian companies having foreign investment approval through FIPB route do not require any further clearance from the Reserve Bank of India for receiving inward remittance and for the issue of shares to the non-resident investors.

### NEED AND IMPORTANCE OF THE STUDY

India has been ranked at the second place in global foreign direct investments in 2010 and will continue to remain among the top five attractive destinations for international investors during 2010-12, according to United Nations Conference on Trade and Development (UNCTAD) in a report on world investment prospects titled, 'World Investment Prospects Survey 2009-2012'.

The 2010 survey of the Japan Bank for International Cooperation released in December 2010, conducted among Japanese investors, continues to rank India as the second most promising country for overseas business operations.

A report released in February 2010 by Leeds University Business School, commissioned by UK Trade & Investment (UKTI), ranks India among the top three countries where British companies can do better business during 2012-14.

India is ranked as the 4th most attractive foreign direct investment (FDI) destination in 2010, according to Ernst and Young's 2010 European Attractiveness Survey. However, it is ranked the 2nd most attractive destination following China in the next three years.

Moreover, according to the Asian Investment Intentions survey released by the Asia Pacific Foundation in Canada, more and more Canadian firms are now focusing on India as an investment destination. From 8 per cent in 2005, the percentage of Canadian companies showing interest in India has gone up to 13.4 per cent in 2010.

In the light of these facts the present study on the evidences of the FDI inflow moderation is of great importance as the nation needs to rethink and refocus its attention to the one of the best ways of developing the economy and developing competency in the market.

## STATEMENT OF THE PROBLEM

The Empirical Evidences Of Slowdown Of Foreign Direct Investment Inflow In India since 2009.

## OBJECTIVES OF THE STUDY

The objective of the study is to collect and analyse the statistical evidences for the slowdown of the Foreign Direct Investment inflow in India during the period 2010-11.

## HYPOTHESIS

The null hypothesis that the FDI inflow in India since 2009 has not moderated.

## RESEARCH METHODOLOGY

The data collected is of secondary in nature. The major statistical information will be collected from "The Handbook of Statistics on Indian Economy, RBI"(various issues), "Economic Survey , Government of India(various issues)"Department of Industrial Policy and Promotion(DIPP), Department of Commerce and Industry, Government of India(fact sheet on FDI ), issues of SIA newsletter, FDI India.com. A comparative study of the data of 2010 and 2011 will be done. Graphs and charts will be utilized to comparatively study.

## LITERATURE REVIEW

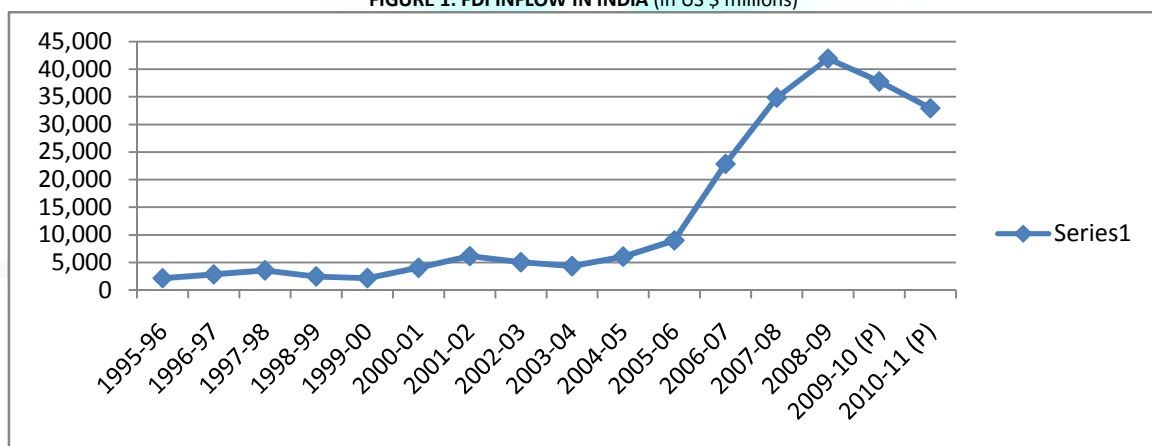
Despite serious debate over the concept of FDI particularly in respect of developing countries, it has been getting increasing importance in the developing countries in recent times. The basic reasoning behind the advocacy of FDI lies in the fact that these countries are lacking in domestic saving and investment, which leads to lower economic growth, lower income, consumption and low level of employment. Thus to bridge the gap between investment need of a country and its domestic savings, FDI is considered as an important tool. Moreover, FDI can compensate the need of investment deficiency complementing local savings and by supplying more effective management, marketing and technology to improve productivity (Moran, 1999). Besides, FDI helps transfer and update technology; improve skills and managerial capabilities; provide the competitive edge to country's exports; improve efficiency; provides quality services and goods and helps in creating additional jobs. The UNCTAD (1999) notes that transnational corporations (TNCs) can complement local development efforts by: (a) Increasing financial resources for development; (b) boosting export competitiveness; (c) generating employment and strengthening the skills base; (d) protecting the environment and social responsibility; and (e) enhancing technological capabilities (transfer, diffusion and generation of technology). Technology transfer operates via four related channels: (i) vertical (backward and forward) linkages with suppliers or purchasers in the host countries; (ii) horizontal linkages with competing or complementary companies in the same industry; (iii) migration skilled labour; and (iv) the internationalization of R&D (OECD, 2002,Chapter 1).

## THE FINDINGS & ANALYSIS

In 2008-09 the total FDI inflow was a US \$41,874 millions which was more than 2007-08 inflow. The increase in the FDI inflow in 2006-07 was 146% compared to the previous year, which was highest so far. But from the year 2009 there has seen a fall in the FDI inflows in the country. In 2010-11 the FDI inflow has been US \$ 32,901; which is a warning bell for the nation's economy.

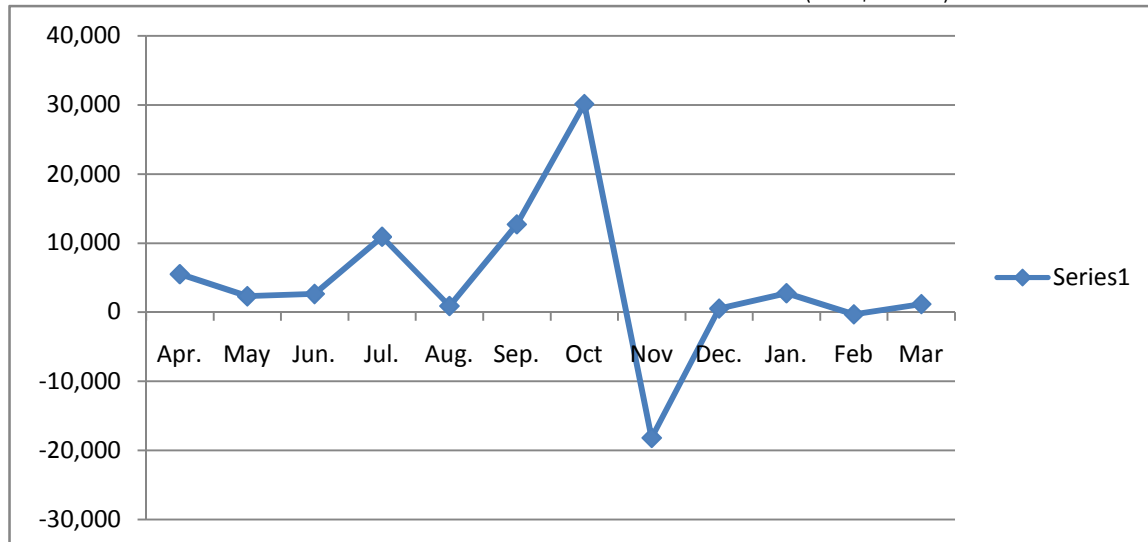
FDI inflows to India witnessed significant moderation in 2010-11 while other EMEs in Asia and Latin America received large inflows. This had raised concerns in the wake of widening current account deficit in India beyond the perceived sustainable level of 3.0 per cent of GDP during April-December 2010<sup>1</sup> But so far 2011-12 is seeing again an increase in the FDI inflow compare to the previous year. By February 2012 the FDI inflow had been US \$ 41,891 million as compared to the US \$ 32,901 million last year till April 2011. This can be seen as a positive sign for the economies growth. The reforms needed to attract the FDI inflow must be taken strongly and quickly; at a time when the world economy is experiencing the jitters of recession.

FIGURE 1: FDI INFLOW IN INDIA (in US \$ millions)



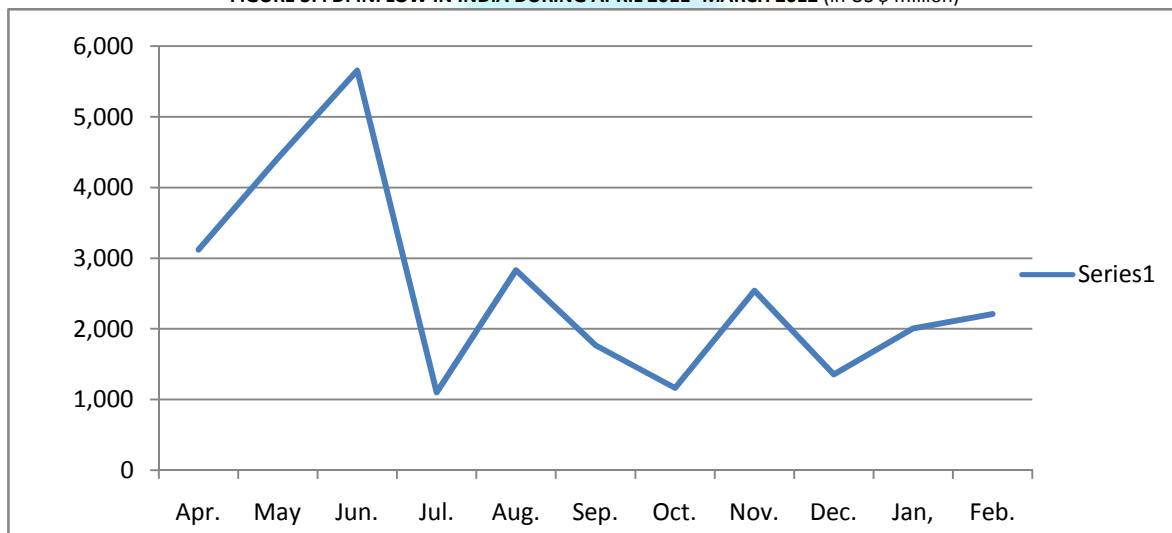
The breakup of the 2011 FDI inflow from April 2010 to March 2011 is given below:

FIGURE 2: FDI INFLOW IN INDIA DURING APRIL 2010-MARCH 2011 (in US \$ millions)



FDI inflow from April 2010 to March 2011 has shown tremendous volatility.

FIGURE 3: FDI INFLOW IN INDIA DURING APRIL 2011- MARCH 2012 (in US \$ million)



**DIRECT INVESTMENT**

Direct investment motive is to have a long term relationship with the foreign companies by investing sufficient financial capital in the equities of those companies to enable them to have a significant influence on their management. Direct investment in a foreign country is generally more difficult to liquidate quickly. FDI represents investments largely in wholly owned affiliates with capital locked into fixed assets. By definition, FDI refers to a long term relationship between the direct investor and the invested enterprise in the foreign country. Direct investment enterprises have access to the resources of foreign parent companies and their international networks for capital financing. They also take advantage of other sources of international financial such as bonds, borrowings in foreign market(portfolio investment) and loans from foreign bank(other investment). The direct investment enterprises "After a very volatile phase of FDI inflow observed in 2010-11; the next phase of 2011-12 reflected a more stable and continuous inflow.

- Portfolio Investments:** The portfolio investors are concerned about the security of their investments in the foreign country. They are primarily interested in the rate of return on their investment in the form of dividends on equities and or interest on debt. Other reasons motivating portfolio investors to invest in another country could be capital appreciation or the desire to diversify investment with respect to currency, country and industry. Portfolio investment may be liquidated when there is a drop in confidence in the enterprise, government or economy. Although short term instruments are a significant component of the portfolio investment such investments can also include equities and debt instruments, such as bonds and notes which are considered long term securities. Nevertheless it is the tradable characteristics of these instruments that gives portfolio investors the ability to shift from one instrument to another. Financial derivatives are of a short term nature and are hedged against such factors as foreign exchange risk, interest rate risk, equity and commodity price risk and credit risk. Other investments can be considered an investment in financial markets, such as trade credits, currency and deposits and bank loans<sup>iii</sup>. The portfolio investment comprises of GDR's/ADR's raised by the Indian corporates and FII's investment in the country. Portfolio investment has played a major role in the Indian capital market.

Investment by SEBI registered FIIs is regulated under SEBI (FII) Regulations, 1995 and Regulation 5(2) of FEMA Notification No.20 dated May 3, 2000, as amended from time to time. FIIs include Asset Management Companies, Pension Funds, Mutual Funds, Investment Trusts as Nominee Companies, Incorporated / Institutional Portfolio Managers or their Power of Attorney holders, University Funds, Endowment Foundations, Charitable Trusts and Charitable Societies. SEBI acts as the nodal point in the registration of FIIs. The Reserve Bank of India has granted general permission to SEBI Registered FIIs to invest in India under the Portfolio Investment Scheme (PIS).Investment by SEBI registered FIIs and its sub accounts cannot exceed 10per cent of the paid up capital of the Indian company. However, in case of foreign corporates or High Networth Individuals (HNIs) registered as sub accounts of an FII, their investment shall be restricted to 5 per cent of the paid up capital of the Indian company. All FIIs and their sub-accounts taken together cannot acquire more than 24 per cent of the paid up capital of an Indian Company. An Indian company can raise the 24 per cent ceiling to the sectoral cap / statutory ceiling, as applicable, by passing a resolution by

its Board of Directors followed by passing a Special Resolution to that effect by their General Body. The Indian company has to intimate the raising of the FII limit to the Reserve Bank to enable the Bank to notify the same on its website for larger public dissemination. The total FDI inflows comprises of Direct investment and the portfolio investment. The months of April, September, October, November, December 2010 and February 2011 saw major inflow and outflows in the Portfolio segment which drastically impacted the Overall FDI inflows.

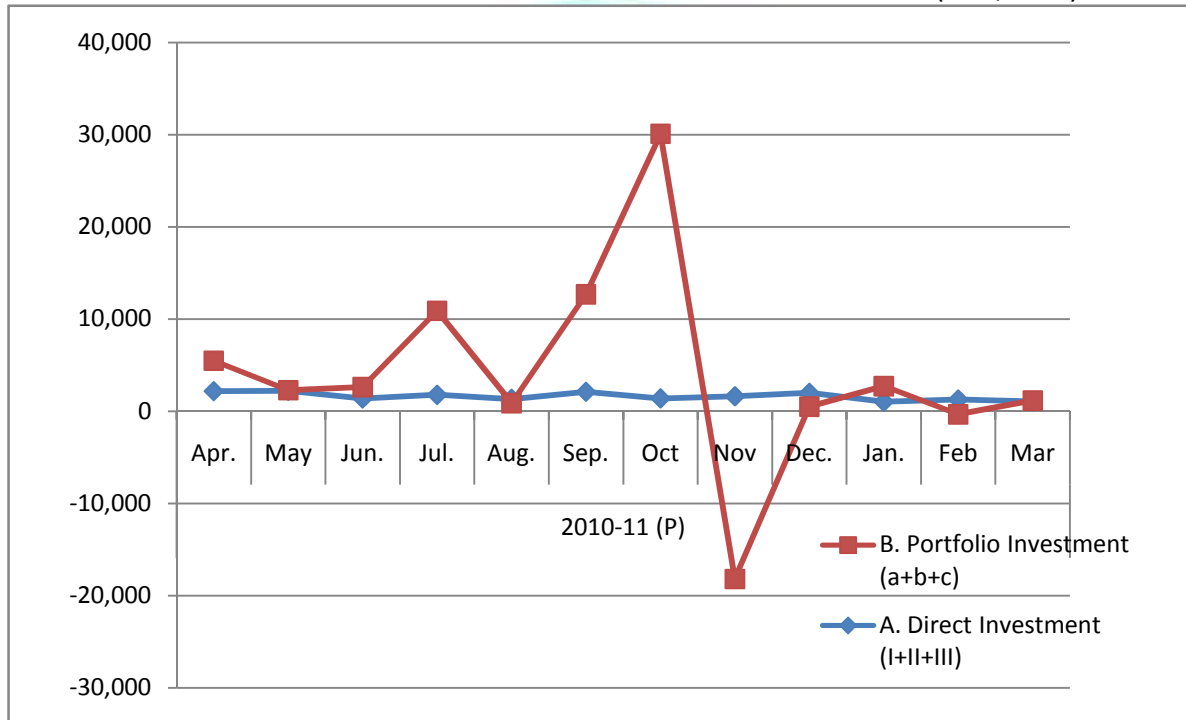
**PORTFOLIO INVESTMENT FOR 2010-11**

If the distribution of the FDI flow is seen clearly Portfolio investments reduced to US\$88 million in the May 2010 thus reducing the overall investment of FDI. Then a very negative trend was seen the portfolio investment went to negative in the August 2010 i.e. US\$(440) million thus the overall FDI inflow became as low as US \$ 890 million from US \$ 10,899 million. FII's pulled out from the Indian markets in May, August, November, December, February and March 2010. FII investment has not been stable , April 2010 saw the inflow and in May 2010 the pull out took place so also every pull had been preceded by the inflow thus reflect inconsistent flow which only helps in the market capitalization. This is not beneficial in the long run for the country.

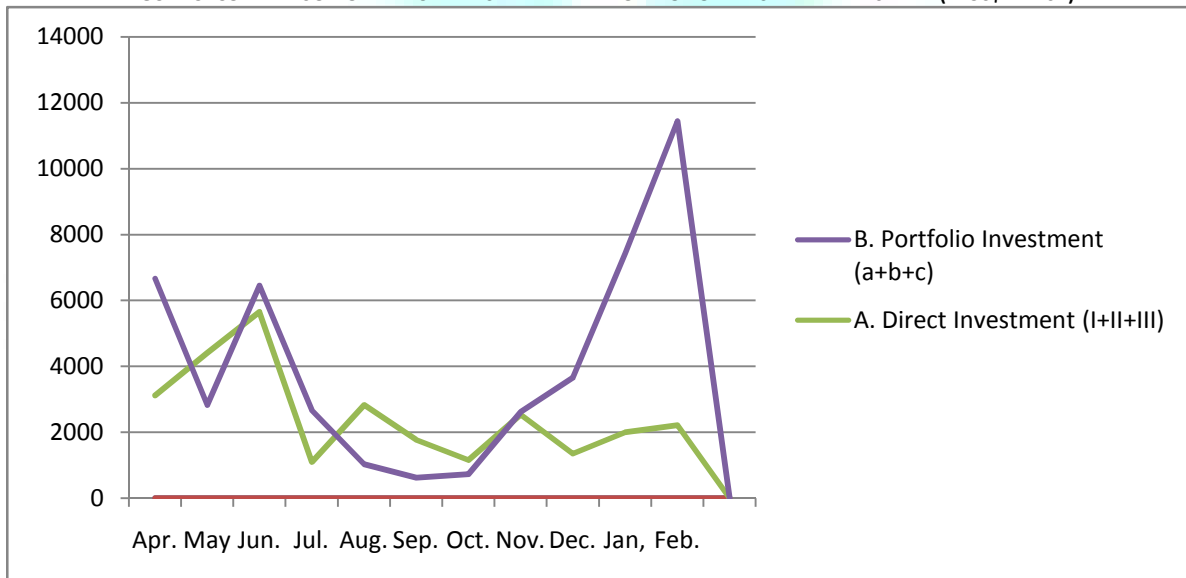
**i. Portfolio investment for 2011-12**

In 2011-12 the FDI inflow in the portfolio investment segment again saw the dramatic pull outs in the months of May, August, September and October 2011. And exactly like the previous year the investments inflows were preceded by the outflows. And these pullouts had a drastic effect on the overall investment scene. The similar pattern is being followed in the current financial year too.

**FIGURE 4: COMPARISON OF DIRECT INVESTMENT AND PORTFOLIO INVESTMENT IN 2010-11 (in US \$ million)**



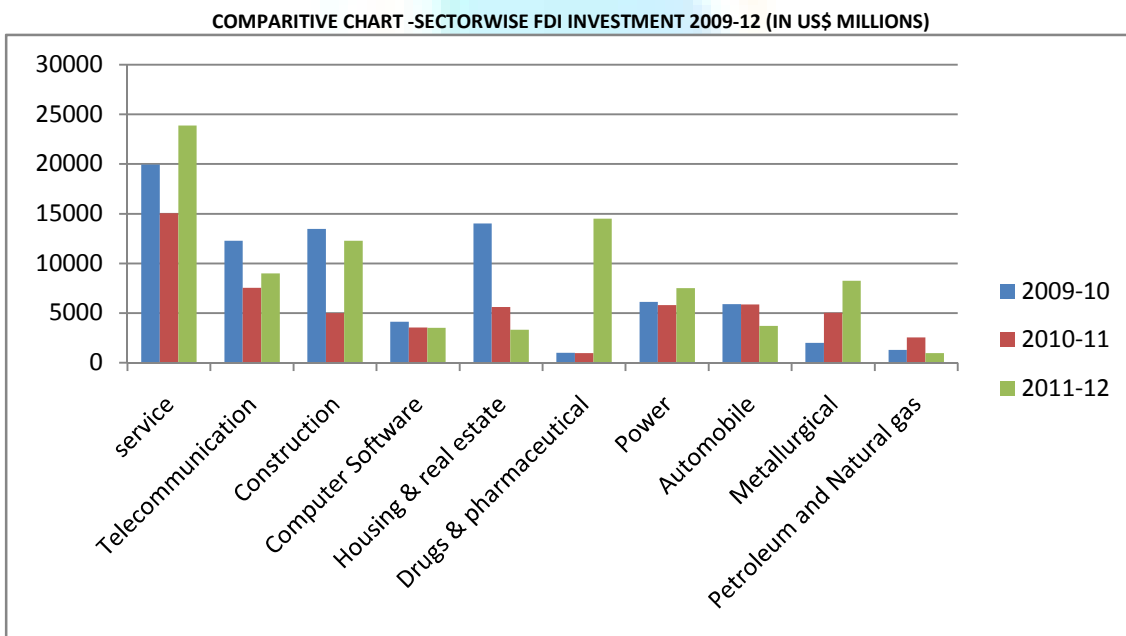
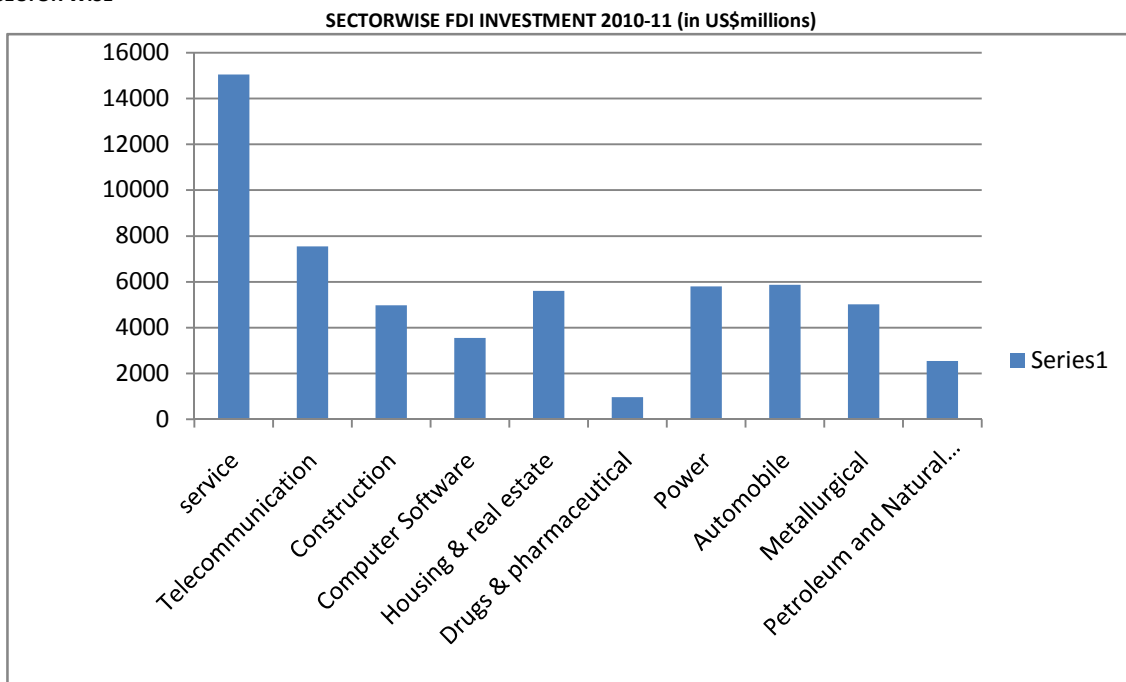
**FIGURE 5: COMPARISON OF DIRECT INVESTMENT AND PORTFOLIO INVESTMENT IN 2011-12 (in US\$ million)**



Portfolio investment has been more than the direct investment. The direct investment is for the long term and for the development of the nation whereas the portfolio investment helps only in giving a ride to the economic picture. And direct investment has been consistent throughout the period. The fluctuations in the portfolio investment reflect the currency fluctuation, instability in the confidence of the government and instability of the economic condition.

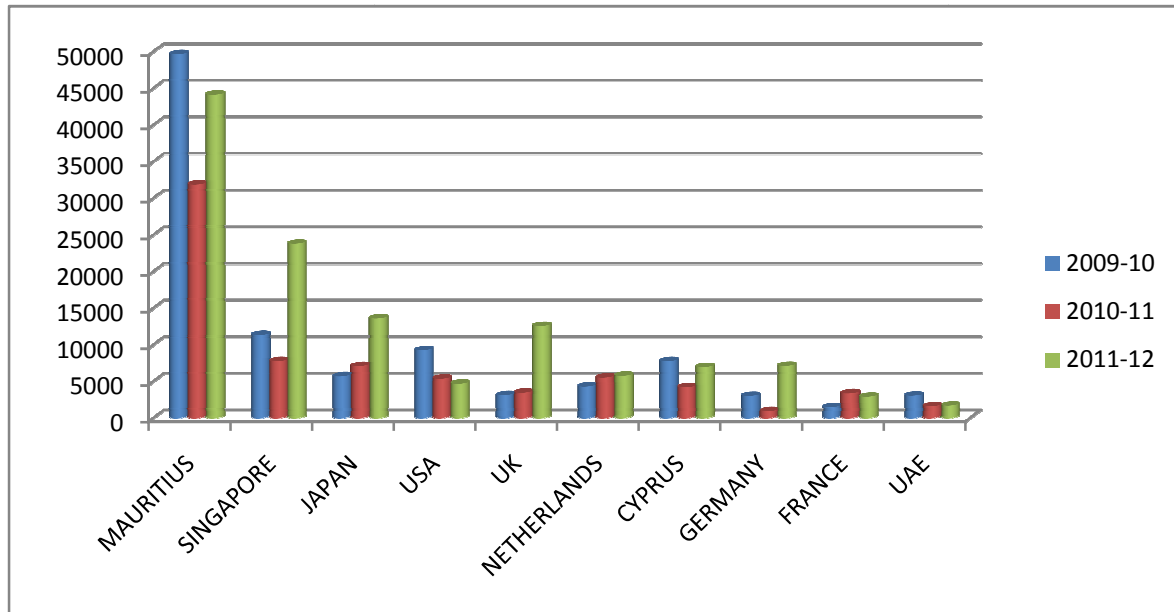


FDI INFLOWS SECTOR WISE



From the table given above we can understand the highest FDI investment is in the service and telecommunication sector respectively. The other infrastructural sectors have not received the expected investments. Even the much need pharmaceuticals and power sector which are high potential sector for the growth has not received the much needed investment. Therefore as a policy matter an initiative must be made to attract the potential investors in these sectors. In 2010 it was observed the FDI inflow even in the Service sector reduced and then again there is improvement in the 2011. The similar trend can seen in all the sectors metallurgical industries and petroleum & natural gas. The petroleum & gas sector has seen a fall in the year 2011. It is seen that as the economy matures the growth pattern sectorwise reflects a two platform growth. On one platform the growth of the industry and service sector increase more than the agriculture sector and on the other platform the service sector grows faster than the rest of the economy thus the its contributory share increases comparatively than the rest of the economy., accompanied by the stagnant or declining share of the industrial sector. These include the availability of highly qualified professionals and people proficient in English; low labor costs; and conducive policies of the government, especially with respect to FDI, taxation, and external trade.<sup>iv</sup>

COMPARITIVE CHART OF COUNTRY WISE FDI INFLOW FROM 2009-12



Mauritius is the highest FDI investor in the country; leaving behind the developed nations with high potential and capacity to make investments in the country. US and UK lag behind at the 4<sup>th</sup> and 5<sup>th</sup> position. Though Mauritius is the highest contributor in the FDI yet in the year 2010 it also pulled out its investment but an improvement has been seen in 2011. Netherlands, Japan, France had shown confidence in investment in India even in 2011. Mauritius is widely considered as the Offshore financial Centre that is used by most foreign investors as an intermediary to reach India, predominantly to capitalize on the tax rebates that the country offers so as to minimize their overall tax burden. Conversely, as Indian companies have become more globalised many have chosen to either use their overseas or have established holding companies and/or special purpose vehicles in OFCs or other regional financial centre's like Singapore or the Netherlands to raise funds in third countries.<sup>v</sup>

**A LOOK INTO THE CAUSES OF SLOWDOWN**

There has been a moderation in the FDI inflow for two continuous years i.e. 2009-11. The factors that have caused the fall of FDI inflow in India can be traced to the various episodes of corruption and fallout of the global picture of INDIA Inc because of which the lack of confidence of the FII's in INDIA Inc. can be seen. The lack of confidence is due to the: (a.) The fallout of the global picture of INDIA INC. (b.) The Recession in the global economy, (c.) The slackness and slowing pace of the policy matters related to FDI inflow.

The confidence level of the global market investors in India suddenly became shaky when the Indian news was flashing about the various corruptions cases in India. The polity of the politics in India and the upswing of the opposition and the doldrums of the anticorruption movement gave a bad name to the INDIA INC. The deadlocks in the parliament and the infamous display by the opposition of the in competency they portrayed to world caused an enormous damage to the brand INDIA INC. The daily newsrooms being filled with insane debates which ought to have been decorated and heard in the parliament were revealing the nudeness and infirmity of the INDIA INC. The damage has been done The second most important factor is the recession in the global economy. The whole world was suffering from a series of global economy malfunction the need of the hour was to sustain their own economies at the same time capitalize in the best economies; therefore emerging economy like India was a haven for them. Therefore we did not experience the drying up of the FDI inflow but only shrinking to some extent. The Greece crisis has shaken the Indian currency and also led the share market to bleed in a day. The FII and FDI pull out took place in a mammoth way and the currency was devalued. Thirdly the maximum damage control which could have been undertaken by the Indian media was not responsibly undertaken but the vice versa was done which totally hampered the little modesty left of the country. The lack of discretion and the sense of responsibility is found lacking in the Indian media. This reflects the level of immaturity and indecisiveness in the media.

Finally the red tapism slowed down the further investment opportunities. Institutional and Governance quality has been identified as a likely determinant of FDI, particularly for less developed countries, for a variety of reasons. First, good governance is associated with higher economic growth, which should attract more FDI inflows. Second, poor institutions that enable corruption tend to add to investment costs and reduce profits. Third, the high sunk cost of FDI makes investors highly sensitive to uncertainty, including the political uncertainty that arises from poor institutions (Walsh and Yu, 2010). The opportunities that knocked the door of the country for the FDI investment faced hard time getting the sanctions from the government. The policy decisions that had to be urgently passed faced the doldrums of the coalition partners and the opposition and left the government stranded. The government's inability and infirmity to pass the required bills came as a major roadblock in the building the confidence level of the global investors. The stranding of the FDI in the retail sector for the multiple brands also caused a lot of disappointment for the investors. Recently another hurdle the government has proposed is to tax the FDI inflow from Mauritius; Mauritius is the highest investor in India. This has shaken the market confidence and a major dip in the stock market was observed.

**CONCLUSION**

To pull the FDI inflow towards India, the government has to make all out efforts to attract the FDI investments in the sectors other than Service; secondly the investments should be attracted from the developed nations which will enhance the technological transfer and advancement in the nation. The moderation that had been experienced in the recent two years has experienced positive vibes so as to state with the recent visit of Ms. Hillary Clinton and negotiations for the waitlisted the FDI investments getting a quick addressing is helping in boosting the FDI inflow in the country. On a positive note INDIA INC has the potential to attract the FDI and also grow as a major consumer market.

**ENDNOTES**

<sup>i</sup>Foreign Direct Investment flows to India; Division of International Trade and Finance of the Department of Economic and Policy Research, Reserve Bank of India  
<sup>ii</sup>Source: Based on IMF, 1993, chapters XVIII and XIX.  
<sup>iii</sup>Source: Based on IMF, 1993, chapters XVIII and XIX.  
<sup>iv</sup>Poonam Gupta, ( 2005),Understanding The Growth Momentum In India's Services, International Monetary Fund March 2005, IMF Country Report No. 05/87)  
<sup>v</sup>Gopalan Sasidaran, Alerts on emerging Policy Challenges, Issue No.5, January 2010.

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**CORPORATE REPORTING - ITS IMPACT ON INDIVIDUAL INVESTORS**

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**ABSTRACT**

*'Corporate Reporting' is an important tool of the Management to communicate the Companies' performance and governance to outside investors. The quality of financial disclosure depends significantly on the robustness of the financial reporting standards on the basis of which the financial information is prepared and reported. Over the last few decades, there has been increasing convergence towards a set of non-jurisdiction specific, widely recognized financial reporting-standards. The International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board provide a widely recognized benchmark in this respect. The present paper describes to what extent quality of financial disclosure is effecting the individual investors decision making in investment making.*

**KEYWORDS**

corporate reporting, individual investor

**INTRODUCTION**

Corporate disclosure is reporting of the entity to outsiders about the quantitative and qualitative information both in terms of financial and non financial nature for the purpose of decision-making. The main objective of financial statements is to provide the information about the financial position, performance and changes in financial position of an enterprise. Such information is useful in decision-making to a wide range of users.

**OBJECTIVES OF CORPORATE REPORTING**

1. To give the information about the present performance of the company.
2. To give the information about the company's performance in relation to the previous year.
3. To give information about the various activities taken up by the company during the period.
4. To give information about the future capital project that would be taken up by the company.
5. To give information about the corporate governance of the company.

**CONCEPT OF DISCLOSURE**

Disclosure is the process of communicating material and relevant facts of the business that are to be disclosed either statutorily or otherwise, and to give a true and fair view of the profitability position and the financial position to the users of the financial reports. This means that corporate disclosure is the process of communicating the information about the business to the outside parties for decision making.

**IMPORTANCE OF DISCLOSURE**

1. In a free enterprise economy full disclosure is a must.
2. By confirming to the generally accepted standards of disclosure, enterprises can easily attract the investors for investments.
3. Disclosure helps the investors in assisting them with the selection of portfolio.
4. With the help of disclosure, investors will be able to distinguish between potentially successful and unsuccessful business.

**DISCLOSURE AND THE LAW**

In India, the Company's Law governs the disclosure of information in the annual reports by the companies. Keeping into consideration the growing needs of the user's information and the increasing complexities of business, the law has been amended from time to time.

**SCOPE OF THE STUDY**

The study is limited to perceptions of investors in the twin cities of Hyderabad and Secunderabad.

**METHODOLOGY**

The study is based on both primary and secondary. Primary data is collected through questionnaires administered to 100 individual investors. Relevant secondary data for the study is obtained for the publications, financial statements, periodicals and news paper, disclosure of voluntary information in annual report, SEBIs website.

**OBJECTIVES OF THE STUDY**

1. The main objective of the study is to identify the factors which the individual investors take into consideration before investment is made.
2. Determine to what extent these factors affect the investment decision.

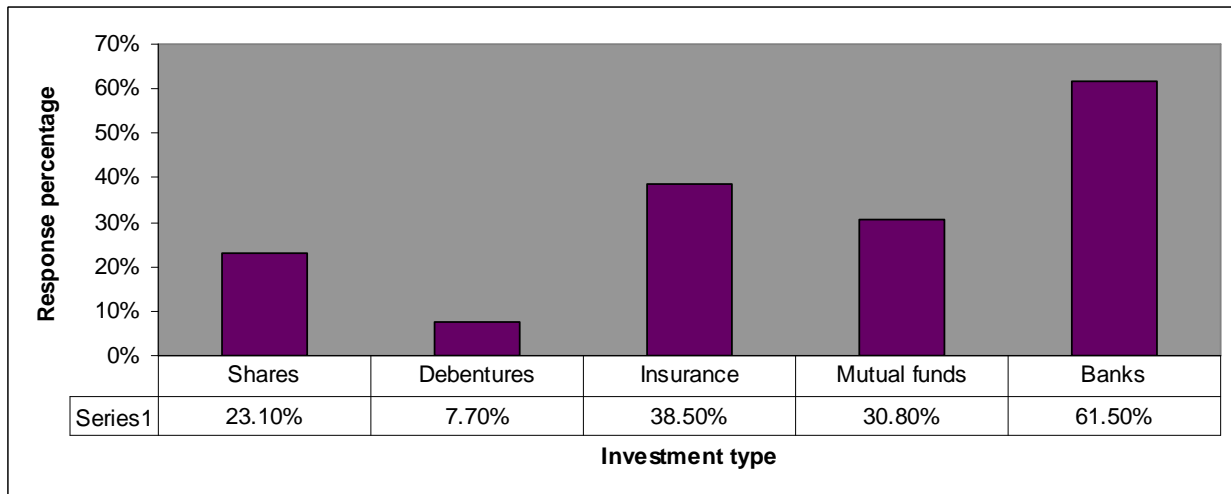
**INVESTOR PERSPECTIVES ON CORPORATE REPORTING**

In general, accounting information provided by the corporate reporting acts as the base for the external users to take decisions regarding investments. The investors are benefited from full disclosure as they do not bear the uncertainty caused by lack of full disclosure. The company is also benefited as the investors' decision to invest in a company that fully discloses the information results in an upward movement of the share prices, thereby reducing the cost of capital and helps in resource mobilization.

Based on the above assumption a questionnaire is circulated to know the opinion of the investors regarding corporate disclosure and the impact it has on their investment decisions.

**ANALYSIS AND FINDINGS**

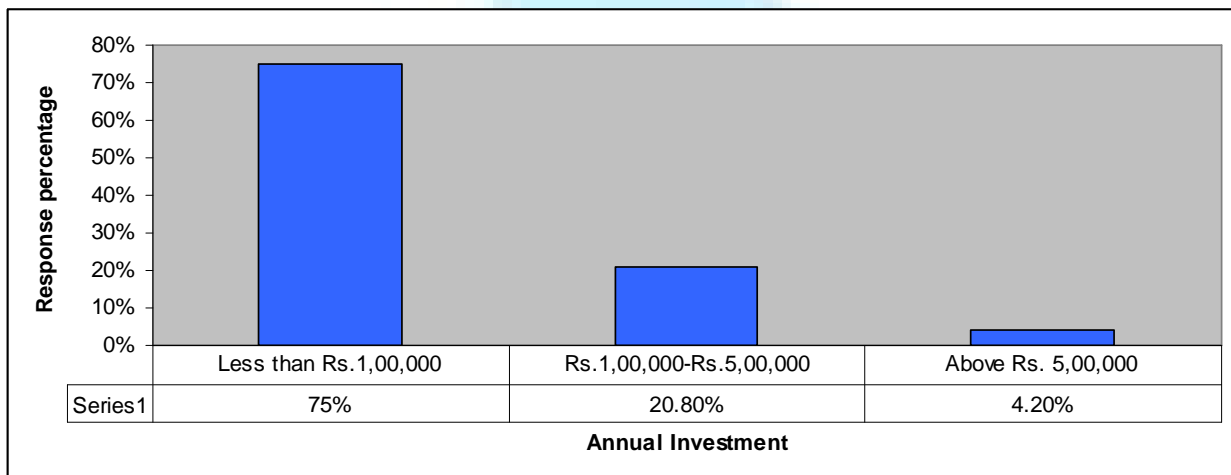
**TABLE NO. 1: INVESTOR'S CHOICE OF INVESTMENT**



Source: Primary data

From Table no.1 it is observed that a majority of individual investors expressed that they choose to invest in banks followed by investments in insurance, mutual funds, shares and debentures as other next preferred options. Hence it is inferred that the investors are giving less importance to benefits resulting out of other financial products.

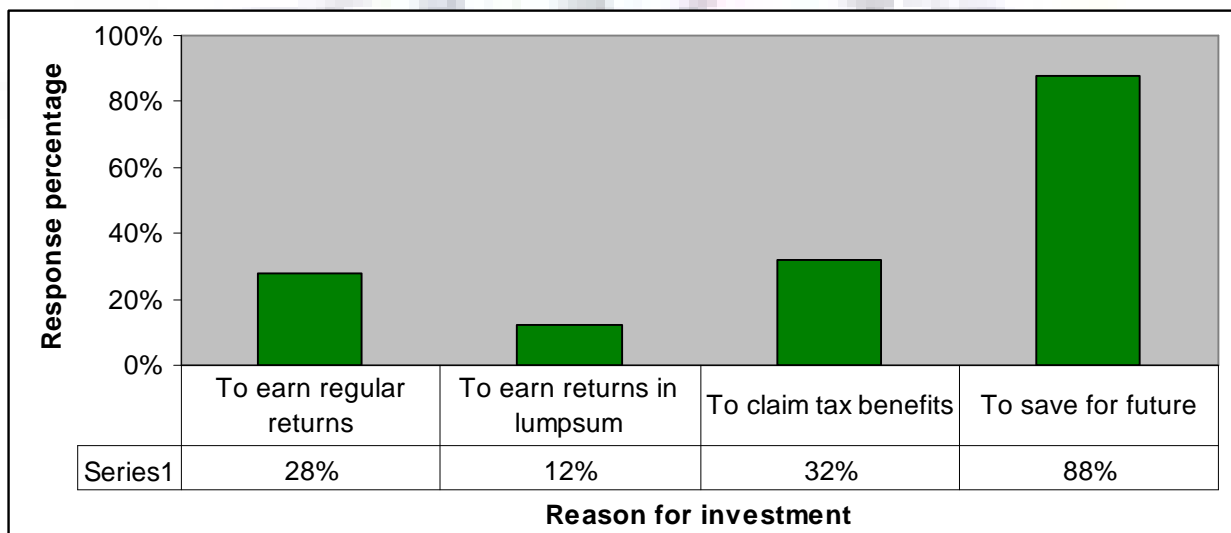
**TABLE NO. 2: INVESTMENT MADE ANNUALLY**



Source: Primary data

From Table no.2 it is seen that of the total individual investors, 75% of them invest less than Rs.1,00,000 annually, 21% of the total investors invest an amount between Rs.1,00,000 and 5,00,000 and 4.2% invest more than Rs.5,00,000.

**TABLE NO. 3: REASON FOR MAKING INVESTMENT**

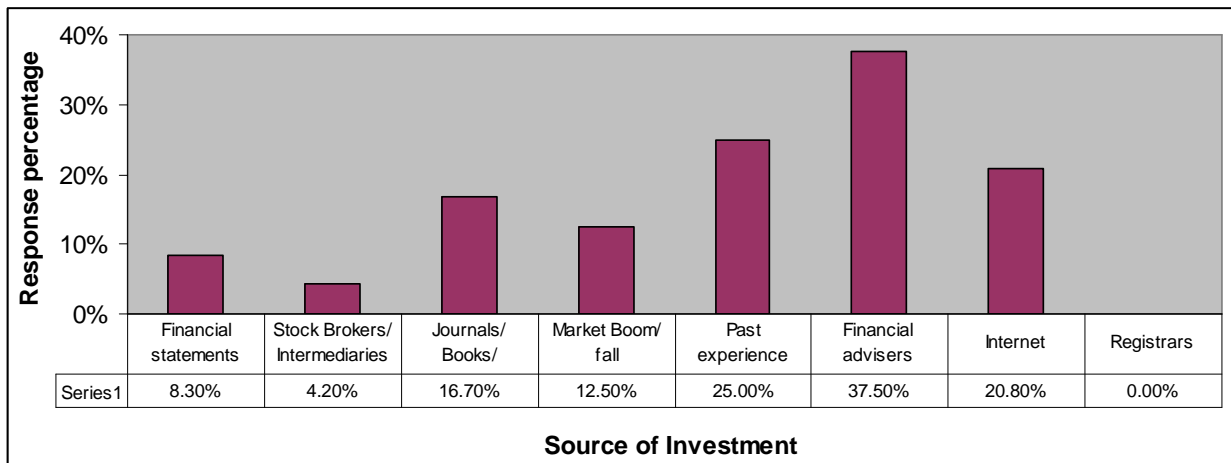


Source: Primary data

From Table no. 3 it is seen that investors saw investment as a mode to save for future in priority then followed by claiming tax benefit, earning regular returns and earn returns in lump sum.

Hence it can be inferred that individual investors are considering investments as their savings for the future and they are unaware about the other benefits involved in the investments.

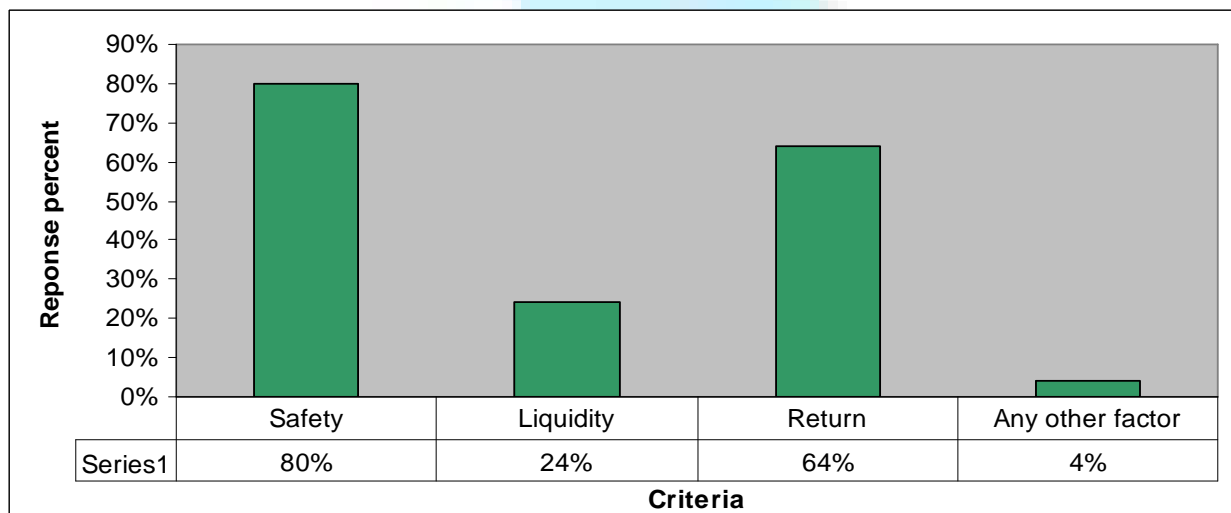
TABLE NO. 4: SOURCE OF INFORMATION AS A BASIS TO TAKE INVESTMENT DECISIONS



Source: Primary data

Table no.4 provides the information about the influential factors which help the individual investors to take decisions relating to investment. It is observed from the table that the majority of individual investors make investments on suggestions made by financial advisers. Around 38% of individual investors expressed that they make investment out of past experience. Around 21% expressed that internet is a source of getting information based on which investment decision is made. A small group of individual investors expressed that they rely on financial statements before investment is made. i.e. it is inferred that disclosure in financial statements are not able to motivate the investors directly in taking investment decision.

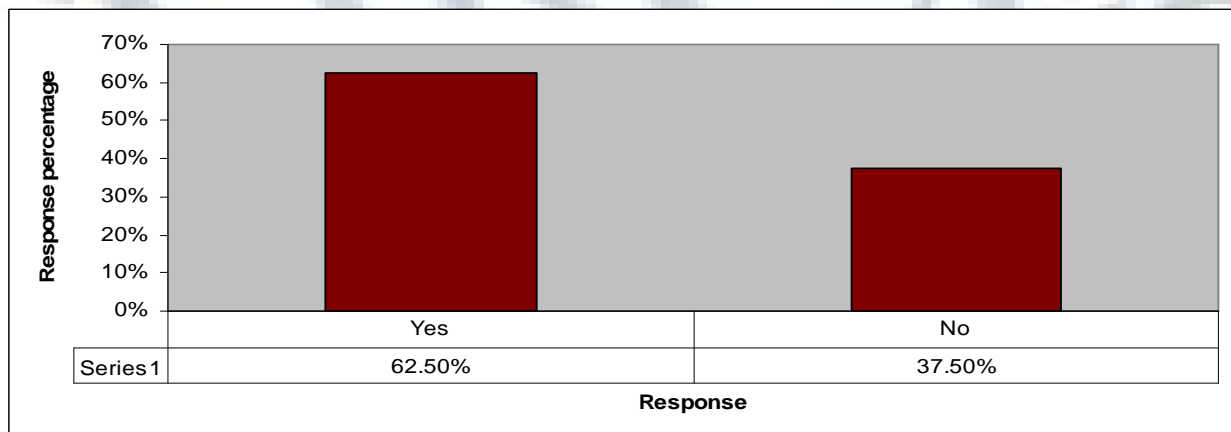
TABLE NO. 5: CRITERIA FOR INVESTMENT DECISION



Source: Primary data

From Table no. 5 it is observed that majority of individual investors i.e. 80% of the respondents expressed safety as the major criteria for investment decision followed by returns (64%) and liquidity (24%). Hence it is inferred that investors are more concern about safety of their investment.

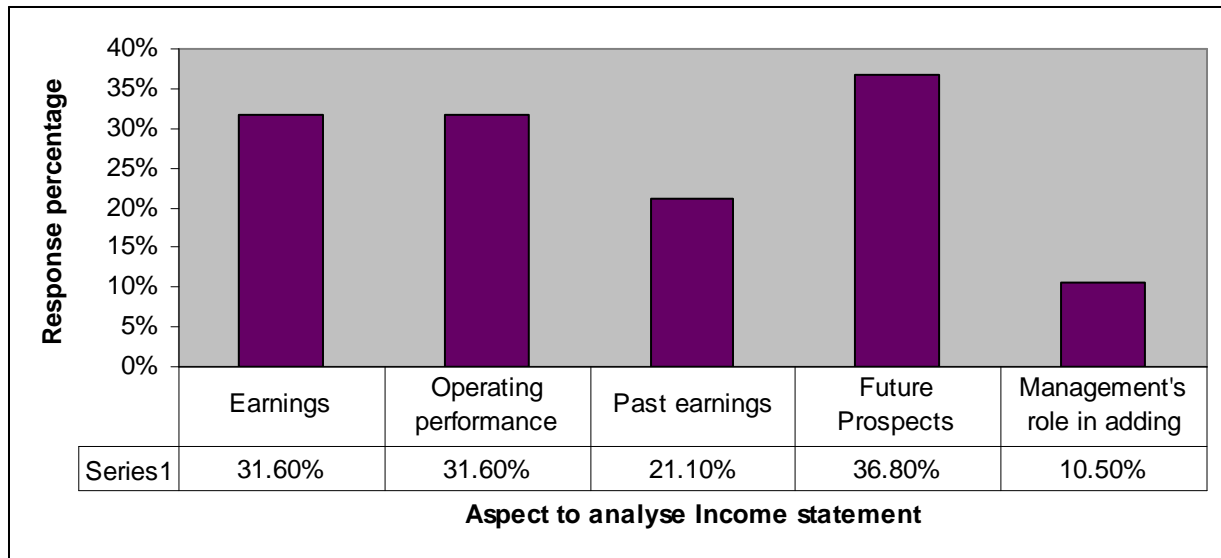
TABLE NO. 6: SKIMMING UP OF INCOME STATEMENT BEFORE INVESTMENT DECISION



Source: Primary data

When the opinion of individual investors is elicited about the analysis of income statement before investment decision, majority of them i.e. around 63% responded positively and the rest of them said they don't analyse the statement.

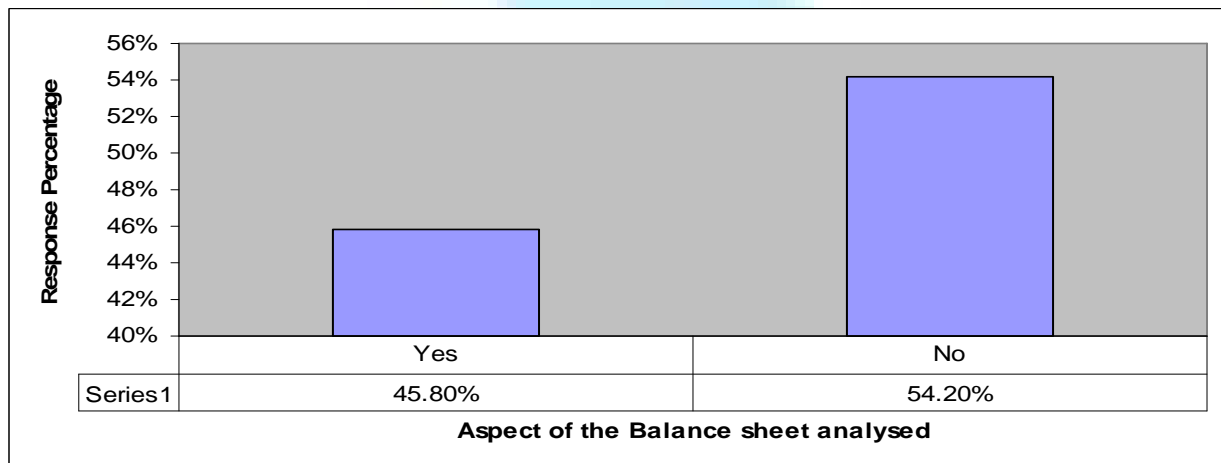
TABLE NO. 7: IF YES, WHAT ASPECTS YOU LOOK FOR IN INCOME STATEMENT /PROFIT AND LOSS ACCOUNT



Source: Primary data

From Table no.7 it is observed that majority of investors give priority to future prospects of company followed by earnings and operating performance aspects in the income statement.

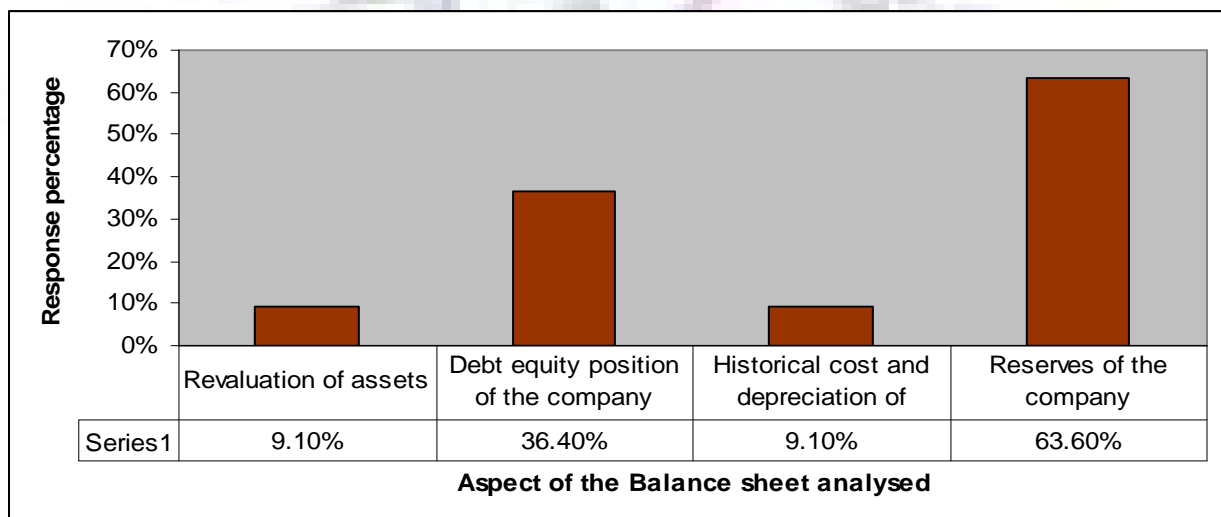
TABLE NO. 8: DO YOU THOROUGHLY READ AND ANALYSE THE BALANCE SHEET OF A COMPANY BEFORE INVESTMENT IS MADE?



Source: Primary data

From the table no.8 it is seen that majority of individual investors are neutral to balance sheet analysis. They said their investment decision is not based on the balance sheet analysis.

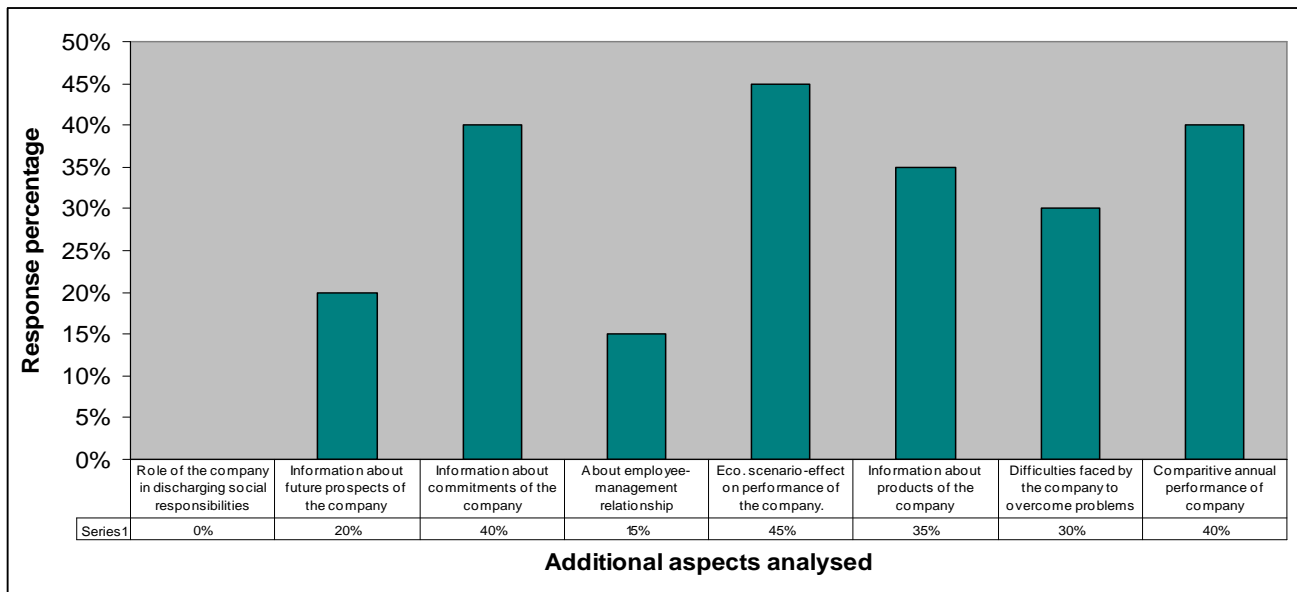
TABLE NO. 9: IF YES WHAT ASPECTS YOU LOOK IN BALANCE SHEET?



Source: Primary data

From the table no. 9 it seen that majority of individual investors expressed their view that they look into reserves of the company's balance sheet before investment decision is made next preference is given to debt equity position of the company. Hence it is inferred that only reserves in the balance sheet is effecting individual investor's investment decision.

TABLE NO. 10: CONSIDERING ADDITIONAL INFORMATION FOR INVESTMENT DECISIONS



Source: Primary data

From the table no. 10 it is observed that all factors are moderately considered by the investors before investments are made. 45% of the respondents consider the economic scenario and its impact on the performance of the company. 40% of the respondents consider information about the commitments of the company and also the performance of the company as compared to the previous year's performance. 35% of the respondents consider the products of the company, 30% consider the difficulties faced by the company to overcome problems. The factors like information about the future prospects of the company, employee – management relationship are given less importance and no respondent is interested in the discharge of social responsibility by the company. To sum up accounting is recognized as an information and communication system of an organization. Disclosure can be explained as the process to communicate all details regarding activities of the business that are to be disclosed either statutorily or otherwise, and to convey a true and fair view of the operating results and financial position to the users of the financial reports. It is nothing but the communication of financial information of the activities of the undertaking to the interested parties for facilitating their economic decisions. In general, accounting information is considered to be the chief means of reducing the uncertainty under which external users make decisions. If other things are equal, one would prefer to invest in a company that discloses fully than in a company that doesn't but from the study it is observed that individual investor's decision is not effected by disclosure practices of the companies. The board should disclose facilities which may exist to provide members with professional advice. The board should also disclose whether that facility has been used during the reporting period.

**CONCLUSION**

Corporate Reporting' is an important tool of the management to communicate the Companies' performance and governance to outside investors. From the study it is inferred that in spite of all factors for disclosure of corporate reporting for investors is essential from the company point of view. These factors are observed to be least influencing factors in inspiring the individual investors in making investment decision. Hence companies should adopt various strategies to educate the investors about various alternatives available for them to invest and also bring awareness as to how other factors are necessary for them to be considered before investment decisions are made. Investors should also be educated related to benefits out of various financial products.

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**KNOWLEDGE MANAGEMENT STRATEGY AND ACTION PLAN FOR SUCCESSFUL IMPLEMENTATION**

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**ABSTRACT**

*In the global era, competition and competitive advantage are the two common elements in any organization. Organizations that create their own dynamic capabilities are better able to sustain competitive advantage. Organizational dynamic capabilities are abilities to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Knowledge management initiatives can play an important role to help integrate organizational resources. An organization that implements an effective knowledge management (KM) program should see a substantial payoff: Reducing duplicated work increases productivity; leveraging past experience improves quality; and tracking customer behaviors enhances customer service. In practice, this has not always happened. Many companies have invested millions, even billions, of dollars on KM technology and received little in return. After researching and reviewing numerous KM initiatives, comparing those that succeeded with those that failed, the answer becomes clear: KM isn't simply about technology. It's about people. The benefits of knowledge management can be tremendous, but getting the most from a KM initiative is no easy proposition. This article explores required stages of implementation of Knowledge Management and explains the action plan with steps to attain success, and explains them to be followed as essential during knowledge management implementation irrespective of the nature of the business as a strategy and action plan.*

**KEYWORDS**

Knowledge Management, Strategies, Competitive Advantage, Initiative, .Action Plan, Technology.

**INTRODUCTION**

The primary objectives of KM initiative in any organization are to enhance the performance of the people along with the organization. It is not mere knowledge sharing but also valuable bi-product of the process, by explicitly designing and implementing tools, processes, systematic approaches, structures, principles to improve the decision making with indirect improvements in identifications, capture validations and transformation of knowledge relevant for decision making. Days are gone in the level of understanding but today we have significant number of the tools, methodology, methods to handle knowledge, to analyze it flow in organisation, way to improve the flow, opportunities to utilize up and way to observe. Today, with the help of Knowledge Management, ample number of tools, crisp methodologies, methods to provide ability to blend and various approaches to knowledge management are available to organization to enjoy competitive advantage. This progress gives strength to organization to handle and tackle real business problem as an easy going. Thus, KM becomes a solution provider to business problem with drastic difference; it got growing recognition to apply knowledge management to handle any business issues and progress. Apart from that is helps to create, user friendly technologies to handle information with collaboration and access, but KM cannot be measured quantitatively but either impact gauged. Thus, KM is systematic approach to make decisions where and how to invest.

**KNOWLEDGE MANAGEMENT**

KM can be defined as information practices and learning strategies, which is accepted in organizations as a set of practices, that helps to improve the applications and use of data and information during decision making. KM in any organization can be implemented by hiring a Chief Knowledge Officer (CKO) to improve information sharing, similarly as a system to support staff involved in the organization with help of technology, to enhance the information flow, to enhance evaluation of outcomes, to improve learning strategies and to develop a framework for the betterment of the organizational growth. To commence a project for the application of knowledge towards knowledge sharing also Knowledge Management can be implemented, to understand and estimate the long term effects of learning system.

**KM APPROACH**

Organisation are system not machines, in organizational development the machine model describes different inputs for specific process into outputs, may be not accurate or useful in understanding the complexity of the functions. Similar, to eco system rejuvenate them according to season, organizations can also rejuvenate themselves through knowledge they create the process to pass to others the methods to utilize in exchanging, and the relationship that they poster among them. Organisation share knowledge to employees both internally and externally. There are challenges while sharing information and knowledge. Technology can help to generate data, information and knowledge depends upon the people involved.

To facilitate such knowledge sharing in organisation, it has to focus towards HR policies information policies, group dynamics, departmental cooperation and organizational incentive structure. Also, in the aspect of pressure from external environment, dynamic customer expectation, expectation of regulating authority, community supports and dynamics. So, KM can build such as a customer centered approach that can be viewed complex system. So, KM can be thought of as either framework or an approach, which will enable to develop a set of practice to collect and share as what they know and implement which can improve the present and future outcomes. In balancing information culture and technological culture there are three resources named people, process and technology which can enable the organisation to utilize and share the information effectively and efficiently.

**PEOPLE**

It is transparent to understand knowledge can be managed only by people not by the system but organisation can prepare policies and promote practices, to make people share and knowledge. Only Knowledge Management create an environment where people can share knowledge with others what they know and what they learnt. Because of such policies in recent days people share their knowledge because it makes their job more rewarding and effective, those groups build image, mutual trust, tools, expert system and artifacts, to utilize for the future learning which has been extended for research also, knowledge management seeks to poster these types of practices called Communities of Practice (COP).

**PROCESS**

In organizations processes exists whether or not people to chose to participate in or pay attention to them. In every organisation information flow is affected due to various reasons such as sharing patterns, procedures, policies, incentives, salary slabs and many other work practices. Knowledge Management help to establish robust processes that people get the information they need, when they need it, where they need it, and to whom they need it. Thus, KM practices helps to promote those processes towards informed decision making.

## TECHNOLOGY AND INFORMATION SYSTEMS

Technology should be recast as important and necessary contributor to the effectiveness of the organisation. Technologies in Knowledge management are accessible to target user group and promote the tracking and exchange of information across the department within the organisation. Similarly Knowledge Management is an approach that can inform wide range of practices within that and can improve the values. Knowledge Management integration is matter of proper alignment among people, process and technology. An organisation without understanding the present organizational level and human patterns of knowledge sharing among the people involved are not reaching the destination even though, they have invested the latest technology. Thus, sound investment in information sharing processes but no effectiveness means for tracking outcomes are tying the hands of their employees. Improved outcome as decision making enhanced creativity and innovation 360 degree communication are the outgrowth of organisation. Thus improving student outcomes is the promise of knowledge management, where the ultimate beneficiaries are organization with their customers as a whole.

### PRACTICAL ASPECTS OF KM

There may be pros and cons about the key elements of Knowledge Management and the most effective way to implement its practices. There are some practical suggestions for Knowledge Management implementation in organizations holds good for any organization: more effective decision making about work processes program improvement, student outcome mainly. Though practical suggestions are build on the vocabulary and practices of the organizational context. Focus on people and their needs and go where the energy exists, make explicit the work processes and pattern of the information flow, make sure technology is on board but do not let it steer the ship, improve organizational learning and outcomes don't settle for procedural tinkering expect an interactive process that endures overtime and consider the larger picture.

### STRATEGY AND ACTION PLAN

To start a KM initiative, an organization should have a focus on targeting a value proposition with a specific business need. Focus may be towards product excellence of an existing or new product by accelerating time-to-market, customer care, and effectiveness, customer's loyalty by marketing, selling to, and providing services to customers more effectively and efficiently. Knowledge Management can be applied for the purpose of achieving operational excellence through savings, process improvements, and new capacities. By identifying such focus areas organization must form a framework or must frame their approach. Many studies and best practices in organization about Knowledge management road map can be completed in terms of stages of KM implementation. These different stages can be used as a road map to understand as a KM journey for an organization. These stages may explore how other organizations handled such similar situation and challenges; learn best practices to be followed to proceed further. Identifying and understanding the issues, seeing the signposts of problems and opportunities and knowing the tools and tactics of others can help at any stage.

Learning from others provides opportunity to avoid old mistakes and new trial and error but provides opportunity to make new mistakes not repeated those others and avoid old trial and errors.

The following Knowledge Management implementation stages are each designate from a Knowledge Management expert or champion can intrude any stage according to his need, as different parts of the organization move at different speeds and various clients fall into places. Organization those who are well aware of the pre-requisite of knowledge sharing can start from stage 2 where an organization simply wants to share knowledge in there business knowledge management as the solution to a problem. Some organization may pass through quickly by learning from easily adaptors and barely stepping to notice they have made to a new level of implementation.

#### STAGE 1: STARTING

Organization has to identify crucial area of problem with in the organization with help of Knowledge Management implementing team because identifying the problem itself is half of the solution. So team should establish a connection with a real business problem. Start invest on the relevant technology, the team have to prepare the most essential picture and relevant stories to explore the problem as a story. In this stage with inspiration the team involved should have the fire to manage knowledge as a starter. The team should have clear vision about knowledge, capture and use provided in the management supports effectively. An expert who is going to handle knowledge management should be a senior manager possessing vast experience and capable to search for opportunity to share to vision to others find opportunities demonstrate the value of Knowledge Management to the entire organization pervasively. Primary assignment to the expert who is leading knowledge management implementation should make the concept of knowledge management a real by clearly defining concepts, data handling story telling, connecting, with other initiatives and benchmarking. Here the challenges to the expert will be preparing tangible picture and clear understanding about Knowledge management to all the colleagues and employees irrespective of the cadre. This should be related to personal level, real issues, opportunities and value, Surrounding as a goal to connect. An expert should avoid theoretical connection at this stage.

In this stage an expert should be capable to understanding other like minded personalities to join in this common cause. So that the effort is not reduced to a single unit, it will help them to get connected and learning about what they know and what they don't know as a present scenario of the organization related to Knowledge Management. As an end of this stage the expert should be capable to chart out the pros and cons or opportunity to show the value and relevance of knowledge management o any organization. Therefore, with the help of the entire above, if the expert is crated a completely rational or vision, engaged fellow staff members, for the common cause fixed as knowledge management implementation. If not already an executive should be included at least now to strengthen the objective, Thus, this is a stage one end with a conclusion explore knowledge management in a more deliberate way.

#### STAGE 2: DEVELOPING

At this stage organization should be able to provide a staring committee and cross functional Knowledge Management, core group with domain knowledge, the team will develop a strategy and executive with pilot initiative with detractive resources. The primary task in this stage is preparing first iteration of KM implementation strategy be determines how its relevant with business and to commence pilot study evaluate the concept which needs working together a cross function Knowledge Management task force.

In any organization, there will be a core group with cross functional representative to identify executor capable to execute and identify resource support to the team. They should have an objective to test and learn how KM practice and principles can be applied in a selected focus area. In such a sway the member should be skilled to facilitate and capable employees to discover in a new way of work.

#### STAGE 3: DESIGN AND LAUNCH

At this stage organizations should facilitate, design thing to provide evidence of Knowledge management business value by conducting pilot study and capturing lesions learnt, these pilots will be more effective and efficient one. In this stage, implementation of KM initiatives formally marked. Here the executive support impacts this speed which an organization can implement an effective KM or knowledge retention initiatives. Here the approach should be top down approach with significant involvement to employers with designed implement. In this stage a mandatory policy should include with the flexibility of reach business unit, to adopt policy to how it is work. Always its wise to begin with focused pilot effort.

In this stage pilots are important to leverage learners and address change management issues, pilots should be selected as much as the organization support, here the challenge is identifying a pilot team which is quick and visible with tangible and measurable results. It sis not only the pilot there tam members or group members should be there under them, who have interest and involvement to reveal what the learnt, where continuous encouragement is more essential, to share any failure with knowledge management core group and executives. Finally, the information learners to learnt maximum from the pilot should be transferable to similar and relevant situation or business environment in an organization. Therefore, the primary objective of this stage is, capture lessons learnt in such a way early initiatives proved with success, wrathful invention for expansion right team to be involved and tools can be handled.

**STAGE 4: EXPANSION**

With evolving vision developing an expansion strategy should be the primary objective of this stage. Under this stage along with well defined governance and roles proper communication should be established market the strategy with balanced set of measures. Decision regarding the future of knowledge management can be proceeds in any one form of the three ways

Expert and support the Knowledge Management efforts where a strategy to proceeds and budget is required. Improve the existing effort for maintenance of the initiatives back to the business or functions like it. And, don't do anything where the employees will offer revert to prior behavior.

At this stage organization should understand and remember to create an expansion strategy and identify and allocate the sources with appropriate communication about the strategy and rationale to the organization with defense mechanism through the knowledge management core group.

**STAGE 5: INSTITUTIONALIZE**

At this stage, logical conclusion of full enterprise wide deployment should be engaged. Senior Managers should incorporate Knowledge management into the business Model. As an impact of the organizational structure is realigned evidence of KM competency becomes part of the formal performance evaluation. Budget, and rewards for performance evaluation, is involved, while the Knowledge core group continuously should monitor and measure the progress. This is a typical stage, where unless knowledge management is embedded in the business model, the organizational structure is realigned, and evidence of KM competency becomes part of the formal performance evaluation.

**CONCLUSION**

The practice of Knowledge Management provides the opportunity for people to build on that energy called management strategy to improve decision making such as: Organizing efforts, sharing resources, information, and knowledge bring about improvement. Knowledge Management practices are promising and appropriate. Information sharing induce the people at every level to contribute, to participate, to involve, to interact, to grow and to learn while learning. Pointing out or importing what one learns and knows to others is more tough and rewarding still. Knowledge Management is not the only single solution that will bring about change, but it merely offers a set of practices and values where some may be relevant to reach their goals. It is what Knowledge Management matters over the long run are vision, fashion, leadership and persistence.

Therefore, organization should have interest and involvement in information sharing practices at all level is being forced to respond to increase calls for accountability. Thus, the organization at different level is in need of information strategies to transform knowledge into effective decision making and action. Thus Knowledge Management can help by providing tools and values for that to happen. Thus, this study explores the role and responsibilities' of senior leaders and realistic expectations for that execution the knowledge management implementation plan. This study explains the basics of knowledge management including the stages of implementation, roles as an action plan to be followed during implementation in any organization is as important for its success as a key factor. Any Organization can provide a major contribution to the technological and conceptual growth but only proper knowledge management implementation is the only solution and can provide real growth in the global era according to the speed of technological growth, where implementation with strategies and road map will provide assured success.

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## HUMAN RESOURCE ACCOUNTING IN INDIA – QUANTIFICATION OF QUALITATIVE FACTORS OF EMPLOYEES

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### ABSTRACT

*This paper seeks to explain the quantification of qualitative information of employees by adopting Human Resource Accounting approach. The study found that human resources can be calculated by discounting of future earnings of employees as an asset under the economic value approach. The concept of Human Resource Accounting was attracted by academicians during the period of 1966-71, and this approach applied to organization initially by R.G. Barry Corporation in the year 1971 further it achieved more prominent in the year 1980 due to expansion of service sector. There are two methods to measure the human resources are (1) Cost Approach (2) Economic Value Approach. The Lev and Schwartz model was followed by most of the public sector organizations. It is suggested that working employees can be shown as an asset in the Balance Sheet like other fixed assets.*

### KEYWORDS

HRM, human resource accounting.

### INTRODUCTION

Human Resources are concerned to knowledge, skill and attitude of the employees, but these are not measured, just like a physical assets, like furniture, machinery etc. It is an immense need of calculation of human resources to reflect the true and fair view of the financial statements. The success of an organization depends upon the qualitative human force rather than quantitative human force, but the measurement of the qualitative human force is a complicated issue. This can be overcome by the Human Resource Accounting Approach which is facilitating to measure the qualitative human capital

### NEED FOR HUMAN RESOURCE ACCOUNTING

1. To provide qualitative information of employees, in the form of quantitatively for effective and efficient management within the organization, and also useful to analyze the changes in structure of manpower to the management.
2. To measure the cost incurred in personnel, and to evaluate the return on investment as human capital and help to management developing principles by differentiation of financial consequences of various practices.
3. To communicate to the organization and public about the worth of human resources and to know whether they allocated and used properly or not.
4. To know, whatever the human resources are giving a return equivalent to their worth or not, to know their appropriate allocation and usage.

### NEED FOR HUMAN RESOURCES ACCOUNTING IN INDIA

1. The huge amount of expenditure incurred on recruitment of employees, therefore, it should be calculated.
2. The main objective of financial statements "true and fair view" is not fulfilled without measurement of human resources.
3. Human Resources Accounting is useful to take various internal decisions regarding employee welfare, promotions, training, work distribution.
4. Human Resource Accounting can enlighten the employee attitude by disclose the information of investment on per employee.
5. Non-valuation of human resources in a particular organization is a cause of strikes, lockouts, go slow, work to rule, absenteeism, high labour turnover rate etc.

### OBJECTIVES OF HUMAN RESOURCE ACCOUNTING

According to Likert (1971), HRA facilitate the following objectives:

1. It is used to monitor the human resources in a right path.
2. To know the, whether the human resources appreciated, depleted or conserved.
3. It facilitates to strengthen the management principles by classifying the financial consequences of various practices.

### HUMAN RESOURCE ACCOUNTING – HISTORICAL DEVELOPMENT

The development of Human Resource Accounting as a systematic and detailed academic activity, according to Eric G. Flamholtz (1999) began in sixties. He has explained the human resource accounting in five phases.

First Phase (1960-66) – During this phase academicians concentrated more on this topic rather than professionals.

Second Phase (1966-71) – In this phase, they stressed on to identify the different validating models to measures human resources as an assets, like Roger Hermanson who was studied problem of measuring the value of human assets as an element of goodwill.

Third Phase (1971-76) – The wide spread interest was emerged in the area of Human Resource Accounting leading to a rapid growth of research in this area during this time. The applicability of HRA in organizations made an effort in this phase, especially by (R.G. Barry Corporation, 1971), R.G. Barry experiments.

Fourth Phase (1976-1980) – This phase concerned to decline the popularity of Human Resources accounting, because of organizations felt that cost of measuring is more than that of benefit of measuring.

Fifth Phase (1980 onwards) – Due to transition from manufacturing to service economies, especially in developed countries the prominence of human resource accounting was increased. Since, the survival, growth and profits of the organizations were perceived to be dependent more on the intellectual assets of the companies than on the physical assets the need was felt to have more accurate measures for HRA investments and value.

## HUMAN RESOURCE ACCOUNTING – STAKE HOLDERS PERSPECTIVE

**Governments:** The key reason for HRA is regulation, provision of education and training, cost optimization and cost sharing.

**Investors:** They want to know the structured information on human resources before they invest in a particular organization.

**Enterprises:** To improve human resources management to attract the investors and to use on cost benefit analysis of investments in human resources.

**Employees:** Human Resource accounting facilitates the employees to improve the work environment, education and training opportunities and career prospects.

## HRA MEASUREMENT APPROACHES/ MODELS

HRA calculation is divided into two parts, namely cost approach, economic value approach. Cost approach concern to the calculation of total cost of employees, this can be calculated by

**Original Cost Method:** This is also called as Historical cost consist of recruitment, selection, hiring, placement, orientation and job training. There are two methods standard cost method; competitive bidding method.

**Replacement Cost Method:** may spent on HRA was spent on something else.

### The Economic Value Approach

This method says that the value of an object, in economic terms, is the present value of the services that is expected to render in future. In this approach employees are treated as assets, therefore expected cash flows are raised like physical assets. Therefore, these are providing the benefits for the future period. Present value of future services can be calculated regarding individuals groups and human organizations.

Individuals: Calculation of present value of future services are divided into two types :

- (1) Monetary Method (2) Non-Monetary method

Monetary Method: This method consist of

- (a) Flamholtz's model determinants (b) Flamholtz's stochastic Rewards valuation model (c) The Lev and Schwartz model (d) Hekimian and Jones competitive Bidding Models.

(a) **Flamholtz's model Determinants:** Flamholtz said that "the value of an individual is the present worth of the services that he is likely to render to the organization in the future and other way, it is treated as the expected realizable value, implies that the individual will remain in the organization for the duration of his/her productive service life.

### Assumptions

1. Set of services contributed in his/her existing position called as productivity or performance.
2. Set of Services provided by him/her, if and when she/he perform different positions at the same level called as transferability.
3. Set of services provided by him/her when he/she performs at higher level positions called as lapromotability.
- (b) **Flamholtz's stochastic Rewards valuation model:** The stochastic rewards model is a direct way of measuring a person's expected conditional value and expected realizable value. The information required to calculate the value of human resources under this model is
  1. The identification of set of mutually exclusive states that an individual may perform in the system during his/her career.
  2. The value of each state, to the organization.
  3. Estimates of a person's expected tenure in the organization .
  4. The probability that in future, the person will occupy each state for the specified time.
  5. The discount rate to be applied to the future cash flows.

(c) **The Lev and Schwartz Model:** The value of human capital embodied in a person who is 'y' year old, is the present value of his/her future earnings from employment and can be calculated by using the following formula.

$$\text{€}(v_y) = \text{€} py (t+1) \text{€I} (T) / (1+r)^{t-y}$$

$$T = y$$

Expected value of a "y" year old persons human capital = sum of the probability of the persons leaving the organization x expected earnings of the persons in period (I) divided by

$(1 + \text{Discount rate})^{\text{the persons retirement age} - \text{persons } y \text{ year old.}}$

It can also be stated

$$V_r = \frac{l(t)}{(1+R)^{t-r}}$$

Where

$V_r$  = the value of an individual r years old.

$l(t)$  = the individuals annual earnings up to the retirement.

t = retirement age

R = a discount rate

The value of an individual r years old (r) =  $\frac{\text{Annual earnings up to retirement}}{(1 + \text{a discount rate})^{\text{retirement age} - r \text{ years old.}}}$

This method of accounting is basically oriented towards measuring changes in employee's value rather than employers gains from the employees. According to Dr. Prabhakara Rao (1993) under the Lev Schwartz model the value of human resources will be more or less increasing, even if the organizations continuously incur losses/decrease in profitability. The attitude and morale of the employees, the contribution of the employees to the organization, and such other factors are out of the purview of the Lev Schwartz model.

(d) **Hekimian and Jones competitive Bidding model:** Value of the employee is determined by the managers, they bid against each other for human resources already available within the organization. The highest bidder wins the resource.

### Non-Monetary methods for determining value:

These methods may refer to a simple inventory of skills and capabilities of people within an organization and to assess the human resources of an organization by using the same

### Behavioral measurement techniques

(B) **Measurement of Group Value:**

(1) **The Likert and Bowers Model:**

The group's value of an organization determined by casual, intervening and result variables. Casual variables consist of managerial behavior and organizational structure. Intervening variables reflect organization capabilities and involve processes, peer leadership organization climate, and the subordinate's satisfaction. Both the casual and intervening variables decide the end result variables of the organization.

**(2) Brummet, Flamholtz, and Pyle's Economic value model:**

$$\text{Groups of Human Resource value} = \frac{\text{Employees contribution}}{\text{Total economic value of the firm}}$$

According to this method, groups of human resources should be valued by estimating their contribution to the total economic value of the firm. Thus firms forecasted future earnings are discounted to know the firm's present value and a part of these earnings is apportioned to human resources according to their contribution.

**(3) Hermanson's Unpurchased Goodwill Model:**

This method is based on the relationship among casual, intervening and end-result variables. The casual variables influence the intervening variables, which in turn, determine the organization's end result variables. Hence changes in the key dimension of organization can be used as dependable indicators for forecasting future changes in productivity and financial performance.

**Steps:**

1. Use a Likert scale to measure the key dimensions of human organization; these are concerned to the non-monetary measurements.
2. Familiarize with standard statistical methods to measure the variability of the set of responses.
3. Calculation of delta which indicates the change in an index of specified dimensions of the human organization.
4. From present change in dimensions of the human organization, the expected future change in end result variable is estimated.
5. Standard scores are converted into the measuring monetary units for the end result variables.

**(5) Flamholtz model for Valuation of Expense Centre Groups:**

He used the surrogate value used for estimation. The three methods are (a) capitalization of compensation (b) Replacement, cost valuation (c) Original cost valuation.

**(A) Capitalization of Compensation:**

In this method a person's salary is capitalized, and using it as a surrogate measure of human capital.

**(B) Replacement Cost Valuation:**

The replacement cost of a group is defined as the sacrifice that would have to be incurred today to recruit, select, hire, train and develop a substitute group capable of providing a set of services equivalent to that of a group presently employed.

**(C) Original Cost Valuation:**

The original cost valuation method involves estimation of original cost of recruiting, selecting, hiring, training and developing a firm's existing human organization.

**HRA – Emerging Issues:**

The human resource accounting has not been introduced so far as a system in India. The Companies Act 1956 does not require furnishing of any significant information about human resource in financial statements of companies. The Institute of Chartered Accountants of India has also not made any guidelines regarding this concept.

**Measuring Human Capitals Contribution Enterprise Goals:**

Chiranjib Das proposed various human resource measurements techniques:

**Calculation of FTE ( FTE Full Time Equivalent;****Hourly Employees)**

- Step 1 : No. of pays Ratio = Expected No. of pays/Normal No. of pays  
 Step 2 : Hours Ratio = Standard Hours per week/Normal Hours per week.  
 Step 3 : FTE calculation = step1 x step 2

Or

$$\frac{\text{Expected No. of Pays}}{\text{Normal No. of Pays}} \times \frac{\text{Standard Hours per week}}{\text{Normal Hours Per week}}$$

**Human Capital Cost Factor (HCCF):** The principal costs of human capital are four: Pay and benefit costs per employee, pay costs for contingents, the cost of absenteeism, and the cost of turnover.

$$\text{HCCF} = \text{Pay} + \text{Benefits} + \text{Contingent labour} + \text{Absence cost} + \text{Turnover cost}$$

**Illustration 1 :** Y Limited disclose the following information : Revenues 2,00,00,000 ; Expenses Rs. 10,00,00,000 ; Payout and other benefits Rs. 3,40,00,000 ; Contingent cost Rs. 47,50,000, Absent cost Rs. 3,00,000 ; Turnover cost Rs. 46,00,000 ; Employees (FTEs) 500 ; Contingent (FTEs) 100 ;

$$\text{HCCF} = \text{Pay} + \text{Benefits} + \text{Contingent Labour} + \text{Absence Cost} + \text{Turnover cost}$$

$$(3,40,00,000 + 47,50,000 + 3,00,000 + 46,00,000) = \text{Rs. } 4,36,50,000$$

It makes clear that labour cost is Rs. 4,36,50,000 not Rs. 2,40,00,000 and 43.65 per cent (Approx).

If we elaborate this information, we can calculate the average FTE cost is not Rs. 3,40,00,000/500 = (68,000) but (Rs. 4,36,50,000/500) = 87,300 Rs.

**HCVA (Human Capital Value Added )**

This can be calculated by using the formula of

$$\text{HCVA (or) Average profit per FTE} = \frac{\text{Adjusted Profit}}{\text{FTEs}}$$

$$\text{Adjusted profit} = \text{Revenue} - (\text{Expenses} - \text{pay and benefits})$$

$$\text{HCVA} = \text{Revenue} - (\text{Expense} - \text{Pay and benefits})/\text{FTEs}$$

$$\text{HCVA} = 2,00,00,000 - (10,00,00,000 - 34,00,00,000)/500 = 2,68,000 \text{ Rs. per FTE}$$

If we include the cost of contingencies, absences and turnover, we would have an adjusted profit figure of Rs.

$$2,00,00,000 - (10,00,00,000 - 4,36,50,000)/600 = \text{Rs. } 2,39,416 \text{ per FTE}$$

The 600 FTEs include employees and contingents.

The average profit per FTE can be calculated by subtracting all corporate expenses except for Pay and benefits, we obtain an adjusted profit figure, in effect, we have calculated no human expenses. Then divide the adjusted profit figure by FTEs, to ascertain an average profit per FTE. The cost of contingencies absence and turnover also included in this calculation.

**Human Capital Return on Investment (HCROI):**

$$\text{HCROI} = \text{Revenue} - (\text{Expenses} - \text{Pay and benefits})/\text{Pay and benefits}$$

$$= 2,00,00,000 - (10,00,00,000 - 3,40,00,000)/3,40,00,000 = 39.4 \text{ per cent}$$

(or) if we use contingent cost

$$\frac{2,00,00,000 - (10,00,00,000 - 4,36,50,000)}{4,36,50,000}$$

This implies that amount of profit per rupee invested in human capital.

It can be calculated by using the formula of

$$\text{HCROI} = \text{Adjusted Profit}/\text{Pay and benefits}$$

**Note:** Pay and benefits will be treated as investment in human resources. For every rupee spent on human costs with no change in total expense, we got a smaller human capital profit ratio.

HCMV = (Market value – Book value)/FTEs

By using this formula, can find the market value premium per FTE (Full time equivalent)

Human Economic Value Added (HEVA)

HEVA = (Net Operating Profit after Tax – Cost of capital)/FTE

**HRA – IN PUBLIC ENTERPRISES OF INDIA**

S.No.	Name of the Public Enterprise	HRA introduced year	Model Adopted	Discount Rate Applied (Percentage)
1.	BHEL	1974-75	Lev & Schwartz	12
2.	CCI	1979-80	Lev & Schwartz	11
3.	EIL	1980-81	Jaggi & Lev Schwartz model	13
4.	ELIC	1983-84	Lev Schwartz model	10
5.	HPCL	1981-82	Lev Schwartz model	11
6.	KRL	1987-88	Lev Schwartz model	12
7.	MELON	1984-85	Lev Schwartz model	12
8.	MRL	1985-86	Lev Schwartz model	15
9.	MMTC	1982-83	Lev Schwartz model	15
10.	NTPC	1986-87	Lev Schwartz model	15
11.	OIC	1982-83	Lev Schwartz model	12
12.	ONGC	1981-82	Jaggi & Lev Schwartz model	11
13.	SAIL	1983-84	Lev Schwartz model	15

Source: Consolidated Annual Reviews of the companies

**The Key Ratios of Human Resource Accounting:**

1. Total Income/Human Resources Value (Ratio)
2. Value added/human resources value (Ratio)
3. Value of human resources per employee (Rs. in crore)
4. Employee cost/Human Resources value (%)
5. Return on human resources value (%)

**Required items:**

1. Value of human resources
2. Total Income
3. Total Employee Cost
4. Value Added excluding exceptional items
5. Net profits excluding exceptional items.

**Value Added Statement:**

Income		xxx
Less Operating expenses	xxx	
Value Added from operations	xxx	
Add other income including exceptional item	xxx	
Total Value Added	xxx	
<b>Distribution of value Added :</b>		
Human Resources:		
Salaries and Bonus	xxx	
Providers of Capital:		
Dividend and minority interest	xxx	
Taxes: Income Tax		
Tax on Dividend	xxx	
Retained in business:		
Depreciation		xxx
Income Retained on business	xxx	
Total		xxx

**Balance Sheet:**

1. A firm has started its business with a capital of Rs. 6, 00,000. It has purchased fixed assets worth Rs. 3,50,000 in cash. It has kept Rs. 1,30,000 as working capital and incurred Rs. 1,20,000 on recruitment, training and developing the engineers and a few workers. The value of engineers and workers is assessed as Rs. 5,00,000. Show these items in Balance Sheet.

**BALANCE SHEET (INCLUDING HUMAN RESOURCES)**

Liabilities	Rs.	Assets	Rs.
Capital	6,00,000	Fixed Assets	3,50,000
Human Assets	5,00,000	Human Assets	
		(i) Individual value	5,00,000
		(ii) Value of firms investment	1,20,000
		(iii) Working Captial	1,30,000
	11,00,000		11,00,000

**SUGGESTIONS**

1. Companies should recognize the importance of knowledge capital.
2. There should be an Internationally Accepted Valuation System for Intellectual Capital.
3. The Professional bodies regarding Accounting (ICWAI, ICAI and the Institute of Actuaries of India) should develop a unanimous accounting procedure for Human Resource Accounting.
4. Incorporate intellectual capital just like as an intangible asset of Goodwill.
5. Incorporate intellectual capital value measures in capital investment decisions.
6. The companies should conduct seminars, lectures to know about this concept by the individual employee.

**CONCLUSION**

In any circumstances, we can look forward to the day when human capital receives the same strength of recognition as other assets in accounting reporting practices as well as the overall management paradigm.

Hence, it can be conclude that the main objective of financial statement accounting has achieved only through adopting of a Human Resource Accounting approach, it will reveal the "true and fair view" of the financial statements.

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## THE IMPACT OF ADVERTISING APPEALS ON CUSTOMER BUYING BEHAVIOR

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### ABSTRACT

*The purpose of this research was to investigate the impact of advertising appeals on Customer Buying Behavior. The second purpose was to compare the effectiveness of the different types of advertising appeals on customer buying behavior. A 2\*2 factorial experiment design method was adopted. The FMCG industry was selected as the research object, and electronic advertisements were used in the experimental design. The samples were chosen from Indore and surrounded area. A total of 120 questionnaires were distributed, 96 effective questionnaires were collected, and the effective response rate was 80%. Analysis of variance (ANOVA), t-test, and regression analysis were used to test the hypotheses. The major findings are listed as follows: (1) advertising appeals have a significantly positive influence on advertising attitude. (2) Advertising appeal does not have significantly positive influence on purchase intention (3) Emotional advertising appeals are more significant than rational appeals.*

### KEYWORDS

Advertising appeals, Emotional appeal, Rational appeal, Customer buying behavior, Purchase intention.

### INTRODUCTION

Advertising has become one of the most important commercial activities in the modern competitive environment. Companies spend a large part of their budget to produce and run advertisements for promotions to communicate information about their company and products. Companies hope that consumers will purchase their products due to the advertisements, which deliver messages about its products through various types of appeals. The best way to motivate the customer for purchase is advertising. Technologies progress rapidly day by day, contributing to the constant renewal of and changes in broadcasting forms. Among those forms, advertising media is widely used. Advertisements are useful for the representation of a commodity's image. They also act in building the corporate image and product positioning. Advertisements are a kind of persuasive communication that offers product information to every consumer via institutions in charge of production or supply. In a complete study of marketing and promotional activities, advertising usually plays the most important role. Therefore, the advertising effect has become a key issue.

**Kotler (1997)** pointed out in his study that advertising appeal is the theme of an advertisement. To make the audience receive a necessary message and create there interest in Ads advertisers have to put some driving power into the message. This driving power is appeal. Every advertising appeal represents an attraction, which provoked consumers' desires. What kind of advertising appeal design can attract consumers more easily and effectively? Expert spokespersons help present product differences more effectively by combining their rich professional knowledge with reasonably persuasive appeals. The right choice of advertising appeal is a critical element in successful advertising. Does an advertising appeal influence consumers buying behavior or enhance its purchase intentions? This is what this paper will explore. Advertising appeals reflect persuasive psychological effects and act as important indices for measuring advertising effects. Thus, advertising attitudes create a certain influential power on purchase intentions, which is yet another management issue we want to explore in this paper.

**Kotler (2003)** divided advertising appeal into rational and emotional appeals. Most studies have focused on the impacts of advertising appeal on attitudes or purchase intentions. Few of them have compared rational appeal and emotional appeal and have determined which one creates significant effects on advertising attitude more effectively. This induces the prime motivation for this study. Most studies have focused on the direct relationship between advertising appeal and purchase intentions, while few of them have examined the relationship among advertising appeal, advert, purchase intentions, and attitude simultaneously..

### LITERATURE REVIEW

- Advertising appeal refers to packaging products, services, organizations, or individuals in a variety of ways that clearly deliver a certain benefit, stimulation, identification or reason to explain what consumers are thinking about and why they buy products (**Kotler, 1991**).
- **Berkman and Gilson (1987)** defined advertising appeal as an attempt at creativity that inspires consumers' motives for purchase and affects consumers' attitude towards a specific product or service.
- **Schiffman and Kanuk (2007)** defined advertising appeal as suppliers' application of a psychologically motivating power to arouse consumers desire and action for buying while sending broadcasting signals to change receivers concepts of the product. Hence advertising appeal is applied to attract the consumers' attention, to change the consumers' concept of the product, and to affect them emotionally about a specific product or service
- .To meet the varying demands of their target consumers, advertisers commonly use rational appeal and emotional appeal in their advertising in an attempt to influence consumer behavior (**Chu, 1996**). By rational advertising appeal, the product can be emphasized by its benefits, in which the consumers' self-benefit is the key proposition, and the function or benefit requested by consumers of the product or service is articulately presented in advertising.
- On the other hand, emotional advertising appeal places stress on meeting consumers' psychological, social, or symbolic requirements, where many purchase motives come from. **Kotler (1991)** defined rational appeal as rationally oriented purchase stimulated by directly giving explanations of a product's advantages. Rational appeal focuses on the benefits consumers may enjoy. In an advertisement, it emphasize that a product or service could achieve the function and benefits consumers desire. He defined emotional appeal as the stimulation of consumers' purchase intentions by arousing their positive or negative emotions. Positive emotional appeal covers humor, love, happiness, etc, while negative emotional appeal involves fear, a sense of guilt, and so on.

- **Schiffman and Kanuk (2007)** stated that attitudes are a psychological tendency accrued from learning and a continual evaluation towards a subject.
- **Lin (2008)** defined advertising attitude as a continuously reactive orientation learned from a certain object. Such an orientation represents an individual's personal standards such as like and dislike, and right and wrong.
- The attitude held by consumers caused by advertising can be classified into two components: cognition and affection. Cognition and affection stand for thinking and feeling, respectively (**Vakratsas and Ambler, 1999**).
- **Allport (1935)** pointed out that the difference between the two components lies in that cognition stands for an individual evaluation towards external stimulation, while affection reflects an individual's internal feelings.
- According to **Belch and Belch (1998)**, advertising appeal is applied to attract consumers' attention. Advertising appeal aims at influencing consumers' attitude and emotions about a related product or service.

## OBJECTIVE OF THE STUDY

This study has two purposes:

- To examine the impact of advertising appeal on enhancing purchase intentions of customer.
- To explore and compare the influence of different advertising appeals on customer buying behavior

## HYPOTHESIS DEVELOPMENT

Based on the above literature review, the first hypothesis for this study is developed as follows:

- H1: Advertising appeal has a significantly positive effect on Advertising Attitude  
 H2: Advertising appeal has a significantly positive effect on Purchase Intention  
 H3: Emotional appeal has a more significantly positive effect on Customer buying behavior than rational appeal.

## METHODOLOGY

### CONCEPTUAL STRUCTURE

This study aims to discuss the effects of different types of advertising appeal adopted by advertisers to increase advertising attitudes and purchase intentions.

### VARIABLE DEFINITION AND MEASUREMENT

#### ADVERTISING APPEAL

This paper defines advertising appeal as the degree of drawing consumers' attention and enhancing their desire to increase their product purchase intention. Advertising appeal is categorized into rational appeal and emotional appeal. In this paper, rational appeal is defined as the degree of rational appeal focusing on rational purchase. The appeal delivers consumers' interests by giving reasons. It emphasizes that a product or service is able to achieve a function or interest which a consumer desires. In this paper, emotional appeal is defined as the degree of stimulating consumers' purchase intention by arousing their positive or negative emotions. Four questions are used to measure if the objects are clearly aware of the rational and emotional appeals being manipulated in empirical advertisements. A Five point Likert scales is adapted to measure advertising appeal.

#### CONSUMER BEHAVIOR

Consumer behaviour can be defined as the decision-making process and physical activity involved in acquiring, evaluating, using and disposing of goods and services. This definition clearly brings out that it is not just the buying of goods/services that receives attention in consumer behaviour but, the process starts much before the goods have been acquired or bought. A process of buying starts in the minds of the consumer, which leads to the finding of alternatives between products that can be acquired with their relative advantages and disadvantages. This leads to internal and external research. Then follows a process of decision-making for purchase and using the goods, and then the post purchase behaviour which is also very important, because it gives a clue to the marketers whether his product has been a success or not.

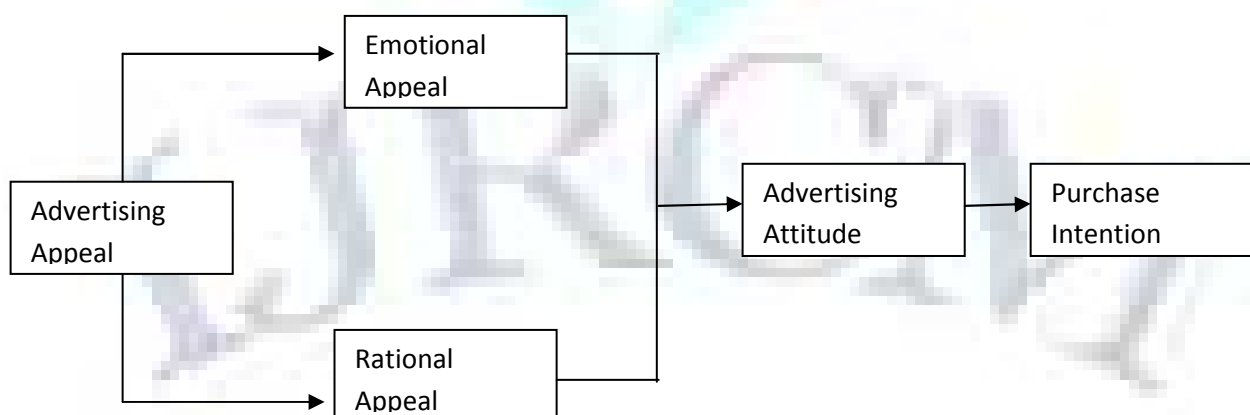
#### ADVERTISING ATTITUDE

Advertising attitude is defined in this study as the degree of a consumer's preference formed by subjective perception towards a commercial. As to the measurement of advertising attitude, this paper refers to Buchholz and Smith (1991) and Schlosser et al.(1999) in classifying cognitive attitude and affective attitude. A total of 14 questions were used to measure advertising attitudes and a five-point Likert scale was adopted. These questions were formed by referring to Lutz (1989), Buchholz and Smith (1991) and Mehta and Sivadas (1995).

#### PURCHASE INTENTION

In this study, purchase intention is defined as the degree of future behavioral orientation reflected by a consumer in purchasing a product presented in an advertisement. A total of 5 questions were proposed and a Five-point Likert scale was adopted.

FIG 1: CONCEPTUAL STRUCTURE OF STUDY



## EXPERIMENTAL DESIGN

This study applies an experimental design and three experimental variables for research. Only one determinant is considered. The determinant is advertising appeal, which is classified into rational and emotional appeal. Students from five colleges were chosen as research subjects for the experiment. An innovative and virtual brand presented in an advertisement was selected as the variable in the advertising message. The FMCG brand was determined as "Surf Excel" and . Before conducting a formal survey, 50 questionnaires were distributed as a pre-test. The pre-test was conducted to ensure that the brand selected for this study had the attributes of an effective utility and the social identification suitable to all types of appeals. After confirming that the experimental product had multiple attributes, the relative importance of the product attributes was explored to serve as the content for rational and emotional appeal.

**DATA COLLECTION AND ANALYSIS METHOD**

This study took male and Female having age more than 30 years leaving in Indore as subjects. The convenience sampling method was adopted for conducting the questionnaire survey. Instructors were present for the distribution and collection of questionnaires. A total of 120 questionnaires were distributed. The collected data was analyzed and compared with SPSS17.0. Descriptive statistical analysis was performed to find out basic information from the sample population. Reliability and validity analyses of the samples were also performed. Correlation analysis was used to explore the correlations between variables. Two way analysis of variance (ANOVA) and regression analysis were adopted to test the hypotheses.

**RESULTS**

**SAMPLE DESCRIPTION**

A total of 120 questionnaires were distributed in this study, 96 effective questionnaires were collected, and the effective return rate was 80%. Among the collected questionnaires, female subjects (42%) accounted for most of the sample population than males (38%). Freshmen accounted for most of the sample population, totaling 31.39%. The average amount of income managed by the respondents fell between two ranges: from Rs 15,001-30,000 and below Rs 15,000 accounting for 68% and 32% of the income received by the sample population, respectively. Most respondents (55%) lived at home with their family, and about 98.78% of them used premium detergent powder. About 76% of the respondents received information about brand from TV commercials, and 39% of the respondents used the detergent brand Surf Excel.

**RELIABILITY AND VALIDITY ANALYSIS**

The results of the reliability analyses determined that the Cronbach's  $\alpha$  values for advertising attitudes were 0.908 and 0.930 for the pre-test and formal test, respectively. Cronbach's  $\alpha$  values for purchase intention were also determined at 0.889 and 0.923 (pre-test and formal test, respectively). These figures are all higher than 0.7, meeting the requirement suggested by Uielford (1965). Thus, we conclude that the questionnaire used in this study has high reliability. The variables used in this study have been referred to in relevant theory and literature reviews. The questions asked in this study met the research purpose and were revised many times. Before conducting the formal survey, we ran a pre-test to ensure that the respondents truly understood the questions. Thus, we believe that the questionnaire used in this study meets the research requirement of content validity. The results of construct validity analysis are shown in Table 1. According to the data obtained, the factor loading values were all higher than 0.5 for all the questions, the Eigen values were all higher than 1, and the variances were all above 50%. Therefore, the questionnaire used in this study meets the requirement of construct validity.

**TABLE 1: RESULTS OF VALIDITY ANALYSIS OF THE QUESTIONNAIRE**

Variable	Question	Factor loading	Eigenvalue	Variance explained (%)
Advertising attitude	1	0.60	7.2661	51.900
	2	0.65		
	3	0.65		
	4	0.72		
	5	0.80		
	6	0.76		
	7	0.72		
	8	0.74		
	9	0.83		
	10	0.81		
	11	0.81		
	12	0.60		
	13	0.66		
	14	0.68		
Purchase intention	1	0.87	3.838	76.768
	2	0.89		
	3	0.85		
	4	0.90		
	5	0.87		

**Hypotheses testing**

**H1: Advertising appeal has a significantly positive effect on Advertising Attitude.**

The ANOVA results of the effect of advertising appeal on advertising attitude & purchase intention are shown in Table 2. Advertising appeal was found to be  $F=4.798, P=0.029 < 0.05$ , indicating statistical significance. The results show that advertising appeal has a significantly positive effect on advertising attitude. Therefore, H1 is supported. This result shows that advertising appeal has a significantly positive effect on advertising attitude.

**TABLE 2: ANOVA OF THE EFFECTS OF ADVERTISING APPEAL ON ADVERTISING ATTITUDE**

Source of variance	Freedom	F value	P value
Advertising Appeal (A)	1	4.798	0.029*

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

**H2: Advertising appeal has a significantly positive effect on Purchase Intention.**

The ANOVA results of the effects of advertising appeal on purchase intentions are shown in Table 3. The results obtained with regard to advertising appeal were  $F=0.100, P=0.752 > 0.05$ , showing no statistical significance. In effect, advertising appeal does not have any significantly positive effect on purchase intentions. Consequently, H2 is not supported. Advertising appeal has no positive effects on purchase intentions.

**TABLE 3: ANOVA OF THE EFFECTS OF ADVERTISING APPEAL ON PURCHASE INTENTION**

Source of variance	Freedom	F value	P value
Advertising Appeal (A)	1	0.100	0.752

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

**H3: Emotional appeal has a more significantly positive effect on advertising Attitude than rational appeal**

Next, t-tests were conducted on independent samples, the results of which are shown in Table 3. The average presented by emotional appeal was 69.114, which is greater than that by rational appeal (46.235). This means that emotional appeal resulted in better advertising attitudes in this study. As  $P=0.029 < 0.05$ , this result has statistical significance. Consequently, H3 is supported.

**TABLE 3: COMPARISON OF THE AVERAGES OF THE EFFECTS OF ADVERTISING APPEALS ON ADVERTISING ATTITUDES**

Source of Variance	Type	Average	Standard Deviation	Sample	P Value
Advertising Appeal	Rational	46.235	12.252	109	0.029*
	Emotional	69.114	14.525	96	

## CONCLUSIONS

The important findings in this study were as follows:

- (1) Advertising appeal has a significantly positive influence on advertising attitudes.
- (2) Advertising appeal does not have significantly positive influence on purchase intention.
- (3) Emotional advertising appeal is more significant than Rational appeal

## MANAGEMENT IMPLICATIONS

### Comparison of the effects of different advertising appeals on advertising attitudes

Different advertising appeals affect consumer thoughts on product and purchase decisions (Belch and Belch, 1998). According to the literature review, consumers have certain impressions of different advertising appeals. Some research revealed that rational appeal has a more significant effect on advertising attitudes (Lin and Tseng, 2008), while some found that emotional appeal creates more significant effects on advertising attitudes (Ting, 1999). The results of this study show that emotional appeal works better on consumers' advertising attitudes than rational appeal in a FMCG advertisement does. Such a result clarifies the question on which type of appeal creates better effects on advertising attitudes.

## PRACTICAL IMPLICATIONS

### • Adopting different advertising appeal strategies

This study verifies that emotional appeal creates a more significant effect on consumers advertising attitudes than a rational appeal, further revealing that emotional appeal is an important factor in the decision-making process for purchase. Companies may refer to the results obtained in this study for their future considerations in developing an advertising appeal strategy.

### • Extension of the research results to high involvement products

This study selected FMCG (Surf Excel) as the experimental product covered by an advertisement. Generally, FMCG products are high involvement products. Thus, the conceptual structure proposed in this study can also be extended to other high involvement products. The same theory can be applied to customers who substantially buy products and used to analyze consumers' views on the combination of advertising appeals with regard to products introduced to the market. The complete information covered in this study can also be used as a reference for advertising companies or marketing managers as they develop their marketing strategies.

## LIMITATIONS

The design of this study was made as impartially and carefully as possible. Explicit conclusions for the study were also obtained. However, some limitations became evident while conducting the investigation. These limitations include the following:

- **Sampling coverage** - The sampling source only came from the respondents of Indore and surroundings. The samples might not be generalized and not have fully display the general Characteristics of the consumers.
- **Limited time for advertising presentation** - The respondents only read the advertisements for a short period of time. The respondents should watch the same advertisement repeatedly on TV during the same period of time before any advertising effect could be produced.
- **Limitation on the responses to an advertisement after reading** - This study focused on the respondents' immediate response to the experimental advertisements. The respondents' responses might have been different if they had repeatedly watched the same advertisement for a longer period of time.

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**ASSESSMENT OF LIQUIDITY IN INDIAN PHARMACEUTICAL INDUSTRY – A STUDY**

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**ABSTRACT**

*This paper aims at assessment of the liquidity enjoyed by the Indian Pharma Industry through the application of ratio analysis, trend analysis and statistical tests. To this end, 12 pharmaceutical companies have been chosen and categorized into three distinct groups (A) Better Performing Companies (BPCs), (B) Moderately Performing Companies (MPCs) and (C) Low Performing Companies (LPCs). The adequacy of liquidity and solvency is judged both from the point of view of technical and actual sense. Technical liquidity (Current ratio and Liquid Ratio) of BPCs was strong enough, whereas, MPCs was nearer to the industry average. But, LPCs was below the industry average, as well as the other two groups of the IPI, indicating poor technical liquidity. The actual liquidity (net cash flow coverage to current liabilities) in BPCs and MPCs was encouraging, whereas, low in LPCs which leads to lesser degree of liquidity and solvency.*

**KEYWORDS**

liquidity management, finance, Indian pharmaceutical industry.

**1.0 INTRODUCTION**

Liquidity plays a significant role in the successful functioning of a business firm. A firm should ensure that it does not suffer from lack of or excess liquidity to meet its short term compulsions. A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day to day operations of business. Measuring the liquidity and solvency through the actual approach basically differs from the technical approach. The technical approach assumes that the firm might become insolvent at any point of time. But, the actual approach considers liquidity of a business undertaking from the going concern hypothesis. The computation of actual liquidity attempts to measure the potentiality of the firm in meeting out the current obligations on the basis of cash flows originating from the operations (net profit plus non cash expenses). The actual approach is based on the idea that an enterprise cannot or is least expected to pay off its current liabilities from its current assets, when, it is on the run, irrespective of whatever source cash is generated from. It definitely provides coverage to the current obligations.

**2.0 METHODOLOGY**

Multi-stage Sampling Technique is adopted in selecting the sample for the study. Companies which undertake (i) Manufacturing; (ii) Research and Development; and (iii) Plant approvals by various International agencies alone are considered for making out the sample. Based on Return on Capital Employed (ROCE), companies have been categorized as: (i) Better Performing Companies (BPCs) under group – A where ROCE is 20 per cent and above; (ii) Moderately Performing Companies (MPCs) under group – B where ROCE is in between 10 and 19 per cent; and (iii) Low Performing Companies (LPCs) under group – C where ROCE is below 10 per cent. Twelve companies were chosen for the study consisting 4 each from A, B and C groups at random. The sample, therefore, constitutes 12 pharmaceutical companies formed into 3 distinct groups – A, B and C for the study. The data drawn from the annual reports of select companies for the period from April, 2002-03 to March, 2009-10 have been tabulated and analysed and interpreted through ratio analysis, trend analysis, co-efficient and student't' test.

**3.0 OBJECTIVES**

The adequacy of liquidity and solvency can be judged both in technical and actual sense. For the purpose of the present study, liquidity includes: (1) Technical liquidity and solvency and (2) Actual liquidity and solvency.<sup>1</sup> To judge the technical liquidity and solvency, current ratio and quick ratio or acid test ratio have been compiled and to ascertain actual liquidity and solvency, the ratio of coverage of cash flow to current liabilities has been considered. Technical liquidity considers various current assets or quick assets where, the concerns may find it difficult to convert them into cash due to lack of demand or lack of quality of conversion. The actual liquidity approach considers liquidity from the going concern hypothesis, hence, it considers net cash flows generated from its own operations but not by current assets alone.

**TECHNICAL LIQUIDITY AND SOLVENCY****CURRENT RATIO**

The current ratio measures the ability of a firm to maintain solvency over the short run. The significance of this ratio is that, it is not only a measure of solvency but is an index of the working capital available to the enterprise.<sup>2</sup> Hence, this ratio, sometimes, is called as working capital ratio.

The current ratio is computed as shown below:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Higher current ratio is a clue to the company's ability to pay its maturing debts within a year. A low ratio shows inadequacy of working capital which may deter the smooth functioning of the enterprise. A "two to one" Current Ratio and "one to one" Quick or Acid test ratio are considered to be indications of a satisfactory liquidity position of a business concern.<sup>3</sup>

The current ratio of BPCs on an average worked out to 2.08 times. The ratio had exceeded the ideal norm of 2:1.<sup>4</sup> The liquidity position of BPCs was very strong. The current ratio, though decreased initially, had shown an uptrend in the subsequent periods, i.e., from 2006-07 (See Table – 1). Technically speaking, it may be inferred that the liquidity and solvency condition of BPCs was excellent. The average current ratio of MPCs worked out to 1.88 times. The ratio had exceeded the ideal norm in 2004-05 and 2005-06. Though, the current ratio had shown fluctuations during the study period, its average was nearer to the industry average of 1.84 times. Hence, it may deduce that the liquidity and solvency position of MPCs was good. The average current ratio of LPCs of 1.74 times is below the industry average, and moreover, the current ratio started declining year after year as shown in Table – 1 indicating that the LPCs had to face short term liquidity crunch.

The current ratio, on an average worked out to 1.84 times in IPI. Except in 2004-05, the ratio had shown a fluctuating trend. In other words, the liquidity position of IPI was moderate in technical sense.

In comparing with ideal ratio of 2:1, BPCs is 2.08 which is above the ideal norm, MPCs is below ideal norm but above the industry average. Whereas, LPCs are below the ideal ratio and also the other two groups in IPI. Therefore, it is concluded that the short term solvency position of BPCs is good and MPCs moderate, whereas, LPCs weak.

### STATISTICAL ANALYSIS OF CURRENT RATIO OF ALL GROUPS VIS-À-VIS IPI

The higher the current ratio, the more liquid the company is. Current Ratio is equal to current assets divided by current liabilities. If the current assets of a company are more than industry average, then that company is generally considered to have good short-term financial strength. If the current liabilities exceed current assets, then the company may have problems in meeting its short term obligations. The Current Ratio is more satisfactory in the case of BPCs and MPCs, because the ratio is more than the industry (IPI) average. They were able to meet their maturing current obligations, during the study period, and the averages of these groups are higher than the industry average. Coefficient of Variation (CV) of CR of the BPCs, MPCs and LPCs is 28.37 per cent, 15.43 per cent and 29.31 per cent respectively. The CV in MPCs is less, indicating more consistency in MPCs than the other two groups during the study period.

TABLE – 1: CURRENT RATIO OF ALL GROUPS VIS-À-VIS IPI

Year	Current Ratio (CR)			
	BPCs	MPCs	LPCs	IPI
2002-03	2.03	1.65	2.07	1.85
2003-04	1.70	1.34	2.66	1.70
2004-05	1.62	2.23	2.23	2.05
2005-06	1.60	2.20	1.51	1.84
2006-07	1.78	1.97	1.36	1.70
2007-08	1.94	1.96	1.36	1.75
2008-09	2.73	1.88	1.35	1.86
2009-10	3.23	1.78	1.37	1.93
Mean	2.08	1.88	1.74	1.84
Standard Deviation	0.59	0.29	0.51	0.12
C.V	28.37	15.43	29.31	6.52

### TESTING OF HYPOTHESIS OF CURRENT RATIO

**Null Hypothesis** : There is no significant difference between the CR of individual groups and that of IPI.  
**Alt. Hypothesis** : There is significant difference between the CR of individual groups and that of IPI.

### TEST STATISTICS

Name	Mean	Industry Mean	t - Value	Sig (2 tailed)
BPCs	2.08	1.84	1.14	0.27
MPCs	1.88	1.84	0.37	0.72
LPCs	1.74	1.84	0.51	0.61

Accept H<sub>0</sub>, the difference is insignificant.

After testing the statistical hypothesis, it is confirmed that when compared with IPI, the null hypothesis is accepted for all groups in IPI and alternate hypothesis is rejected. Therefore, there is no significant difference between CR in all the groups of IPI.

### QUICK RATIO

This Ratio is a measure of judging the immediate ability of a firm to pay off its currently maturing obligations. It is obtained by dividing quick assets by current liabilities. Quick assets would comprise those assets which can be liquidated immediately and at a minimum loss in order to meet the firm's pressing financial obligations. Inventory as a current asset takes time for conversion into cash. So, this current asset is deducted from the value of total current assets to arrive at the value of quick assets. The ratio is computed as shown below.<sup>5</sup>

$$\text{Quick Assets (i.e, Current Assets – Inventory)}$$

$$\text{Quick Ratio} = \frac{\text{Quick Assets (i.e, Current Assets – Inventory)}}{\text{Current Liabilities}}$$

The quick ratio was more than unity for the all the years of study in BPCs. The ratio had varied from 1.03 to 2.59 and average being 1.47 times. It had shown a declining trend in the first three years of the study period, later showing an uptrend indicating thereby, that the liquidity position in BPCs was strong. In MPCs, the quick ratio is more than unity for all the years of study except in 2003-04. The ratio varied between 0.89 and 1.79, the average being 1.43 times. It fluctuated, during the study period indicating thereby that the liquidity position was satisfactory in MPCs. The quick ratio in LPCs was more than unity only in the first four years of the study period, but later on it was below unity, the average being 1.21 times as can be observed from Table – 2. LPCs were unable to meet the currently maturing obligations fully and therefore, the liquidity condition of this group has not been satisfactory. In IPI the quick ratio was more than unity for all the years. The ratio had varied between 1.12 and 1.50 averaging at 1.34 times. It had shown fluctuations in between indicating liquidity position of IPI is satisfactory.

The ideal quick ratio is 1:1.<sup>6</sup> The short term liquidity position of BPCs is 1.47 and MPCs were 1.43. Both groups were able to record current ratio above the ideal ratio as well as industry average, which reflects their strong liquidity. LPCs otherwise have been facing severe liquidity crunch.

### STATISTICAL ANALYSIS OF QUICK RATIO

Table 2 shows that liquid ratio is more satisfactory in the case of BPCs and MPCs because the ratio is more than the industry average. They have been able to meet their matured current obligations under the study period and the averages of BPCs and MPCs are significantly higher than the industry average. But the average of LPCs is less than the Industry average. Coefficient of Variation (CV) of the BPCs, MPCs and the LPCs is 39.46 per cent, 22.38 per cent and 28.10 per cent. The CV of MPCs is less than the other two groups which shows more consistency in this group.

TABLE – 2: QUICK RATIO OF ALL GROUPS VIS-À-VIS IPI

Year	Quick Ratio (QR)			
	BPCs	MPCs	LPCs	IPI
2002-03	1.31	1.10	1.48	1.25
2003-04	1.05	0.89	1.83	1.12
2004-05	1.03	1.79	1.46	1.50
2005-06	1.06	1.79	1.11	1.40
2006-07	1.19	1.54	0.99	1.27
2007-08	1.40	1.54	0.94	1.31
2008-09	2.13	1.53	0.95	1.45
2009-10	2.59	1.29	0.90	1.42
<b>Mean</b>	<b>1.47</b>	<b>1.43</b>	<b>1.21</b>	<b>1.34</b>
<b>Standard Deviation</b>	<b>0.58</b>	<b>0.32</b>	<b>0.34</b>	<b>0.13</b>
<b>C.V</b>	<b>39.46</b>	<b>22.38</b>	<b>28.10</b>	<b>9.70</b>

**Testing of Hypothesis of Liquid Ratio**

**Null Hypothesis** : There is no significant difference between the LR of individual groups and that of IPI.

**Alt. Hypothesis** : There is significant difference between the LR of individual groups and that of IPI.

**Test Statistics**

Name	Mean	Industry Mean	t - Value	Sig (2 tailed)
BPCs	1.47	1.34	0.62	0.54
MPCs	1.43	1.34	0.77	0.45
LPCs	1.21	1.34	1.03	0.32

Accept H<sub>0</sub>, the difference is insignificant.

After testing the statistical hypothesis, it is confirmed that when compared with IPI, the null hypothesis is accepted for all groups in the IPI and alternate hypothesis is rejected. Therefore, there is no significant difference between LR in all the groups of the IPI.

**ACTUAL LIQUIDITY AND SOLVENCY POSITION**

Actual liquidity position of an enterprise mostly depends on its ability to pay off its current financial obligations from the net cash flows generated from its own operations but not by current assets alone, when it is on run. It is understandable that a manufacturing concern is unable to dispose of its current assets due to either lack of demand in the market or current assets lack the quality of conversion into cash at a given point of time. The higher the cash flow ratio, the greater the degree of liquidity and solvency of a firm and vice-versa. Hence, the relationship of current liabilities with the net cash flows may be measured by computing Net cash flows to current liabilities ratio.

**NET CASH FLOWS TO CURRENT LIABILITIES RATIO**

The actual approach considers liquidity of an enterprise from the going concern hypothesis. The following formula is used to calculate the ratio of net cash flows to current liabilities.

$$\text{Ratio of Net Cash Flows} = \frac{\text{Net Profit} + \text{Non-Cash Expenses}}{\text{Current Liabilities}} \times 100$$

**NET CASH FLOWS TO CURRENT LIABILITIES OF ALL THE GROUPS VIS-A-VIS IPI**

The percentage of cash flow to current liabilities, on an average, worked out to 50.13 per cent in the IPI as manifested in Table 3. The coverage ratio ranged from the lowest of 41.52 per cent to the highest of 59.47 per cent which means that the industry is maintaining moderate cash flows to meet its short term liquidity.

In BPCs, the percentage of cash flow to current liabilities, on an average, worked out to 80.63 per cent and coverage ratio ranged from a minimum of 65.44 to the highest of 89.89 per cent. In MPCs the percentage of cash flow to current liabilities, on an average worked out to 57.54 per cent, the coverage ratio ranged from a minimum of 49.21 per cent to the highest of 68.43 per cent. The average coverage in MPCs provided was higher than the industry mean, but less than the BPCs. This indicates that the creditors can get their dues paid, whenever they demand, because of the strength in the cash flow coverage to current liabilities in both the groups.

In LPCs, the percentage of cash flow to current liabilities on an average worked out to 19.07 per cent. The coverage ratio ranged from a minimum of 8.47 per cent to the highest of 47.21 per cent, which is far below the industry average as well as the other two groups. Therefore, LPCs are covering very low cash flow ratio, which ultimately leads to lesser degree of liquidity and solvency.

The analysis confirms the findings shown by current and quick ratios. The cash flow coverage ratio was strong in BPCs, and moderate in MPCs of IPI. But, LPCs were maintaining very less cash flow coverage ratio reflecting poor liquidity.

TABLE -3: NET CASH FLOW COVERAGE TO CURRENT LIABILITIES OF ALL GROUPS VIS-À-VIS IPI (Rupees in Millions)

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Average
<b>BPCs</b>									
Net Profit + Non-Cash Expenses	3,495.90	4,866.57	5,212.22	6,285.30	8,096.67	9,770.63	11,226.36	11,266.29	7,527.49
Current Liabilities	4,931.10	6,291.71	7,965.25	9,432.05	9,228.97	11,151.79	12,489.27	13,199.62	9,336.22
Ratio in %	70.89	77.35	65.44	66.64	87.73	87.61	89.89	85.35	80.63
<b>MPCs</b>									
Net Profit + Non-Cash Expenses	4,656.08	5,832.90	6,822.90	9,205.88	12,046.05	19,411.76	19,552.69	17,748.64	11,909.61
Current Liabilities	8,521.47	10,855.10	13,866.01	18,489.90	23,109.39	28,368.97	34,467.31	27,908.83	20,698.37
Ratio in %	54.64	53.73	49.21	49.79	52.13	68.43	56.73	63.60	57.54
<b>LPCs</b>									
Net Profit + Non-Cash Expenses	1,464.91	1,935.73	1,216.76	1,508.64	3,216.05	3,936.82	1,893.44	6,348.36	2,690.09
Current Liabilities	4,327.54	4,100.21	5,762.69	13,025.89	20,380.93	20,175.14	22,357.03	22,714.02	14,105.43
Ratio in %	33.85	47.21	21.11	11.58	15.78	19.51	8.47	27.95	19.07
<b>IPI</b>									
Net Profit + Non-Cash Expenses	9,616.89	12,635.20	13,251.88	16,999.55	23,358.77	33,119.21	32,672.49	35,363.29	22,127.16
Current Liabilities	17,780.11	21,247.02	27,593.95	40,947.84	52,719.29	59,695.90	69,313.61	63,822.47	44,140.02
Ratio in %	54.09	59.47	48.02	41.52	44.31	55.48	47.14	55.41	50.13

### CONCLUSION

Through current ratio and liquid ratio, it is observed that the liquidity of BPCs was strong enough. The average current ratio and liquid ratio of MPCs was nearer the industry average but less than BPCs. Hence, it may be inferred that the liquidity of MPCs was good. The current and liquid ratio of LPCs was below the industry average as well as the other two groups of the IPI. Therefore, it is concluded that LPCs may have to face short-term liquidity crunch. The cash flow coverage to current liabilities in BPCs and MPCs was higher than the industry average indicating strength in the cash flow coverage to current liabilities. But in LPCs, the coverage is far below the industry average as well as the other two groups. Hence, LPCs are having very low cash flow coverage, which ultimately leads to lesser degree of liquidity and solvency.

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**N.VENKATA RAMANA****ASST. PROFESSOR****ANNAMACHARYA P.G.COLLEGE OF MANAGEMENT STUDIES****RAJAMPET****ABSTRACT**

*This paper mainly focus on liquidity management of Cuddapah Spinning Mills Ltd, Kadapa (AP). This study tries to achieve the objective of finding relationship if any between liquidity and profitability with the help of Spearman's Rank Correlation. In this study the few financial ratios are calculated such as Current Ratio (CR), Quick Ratio (QR), Absolute Liquidity Ratio (ALR), Inventory turnover Ratio (ITR), Age of Inventory, Debtor Turnover Ratio (DTR), Average Collection Period, Working Capital Turnover Ratio (WTR), Current Assets Turnover Ratio (CATR) and Current Assets to Total Assets (CATA). This study utilized the database from 2001-02 to 2009-10 from the annual reports of Cuddapah Spinning Mills Limited, Kadapa (AP). The final results reveals excess current assets were invested, absolute liquidity ratio are not satisfactory and it not met the standard norm of 0.5 : 1, inventory turnover ratio was very high. There is a positive correlation between the liquidity and profitability. A few solutions are have been offered to ameliorate the problems such as optimum utilization of current assets to maintain the cash position properly to meet the liquidity of the firm and investment in inventory should be minimized.*

**KEYWORDS**

Absolute Liquidity Ratio (ALR), Average Collection Period, Age of Inventory Current Ratio (CR), Liquidity and Profitability.

**INTRODUCTION**

Liquidity refers to the ability to pay in cash the obligations that are due. In the absence of adequate liquidity, an enterprise is technically insolvent and at least faces the financial embarrassments of renegotiating its obligations to creditors. It may be defined as a firm's ability to realize value in money. In other words, liquidity is a firm's ability to meet its maturing obligations.

In relation to business the concept of liquidity has a multiplicity of definitions. In the words on Anthony and Reece, "liquidity refers to the company's ability to meet its current obligations". "Solvency" on the other hand, pertains to the company's ability to meet the interest costs and repayment schedules associated with its long-term obligations. In the words of Hampton, "liquidity means adequate cash in hand held by the firm to meet its obligations at all times". An enterprise must have certain level of cash above its expected needs to act as a reserve to meet emergencies. It should also be able to meet all its bills and to get all possible discount facilities available to for bulk purchases. The highest financial liquidity, the lowest risk of technical insolvency and vice versa.

**LITERATURE REVIEW**

To estimate loss rates and scheming quality of portfolio, a simple statistical tool by means of risk index was developed for risk measurement (Smith, 1964). Modigliani and Pogue (Modigliani, (1974)) presented two measure of risk; relative measure denoted by beta and measure of total risk denoted by standard deviation. Relying on monthly rate of return from 1945 to 1970 they established beta measure to be more significant for securities' pricing and predictable for great portfolios. (Doherty, 1975) Presented a model based on loss probabilities to show how the scope and level of interdependence connecting unusual ways of treating risk rely on the composition of quality in risk management.

(Ratti, 1980) found that dissimilarities in environment can cause positive (negative) income affect that show the way to fewer (extra) risk taking by banks. (Kim, 1988) Found capital ratios fruitless mean to limit bank's insolvency risk. (Deakins, 1994) argued that method of risk estimation has very important inferences for banker and business relationships and highlighted on investing both in time and resources through risk assessment process, (Metwally, 1997) found that while financing loans interest-free banks depend deeply on their equity, face extra complexity, and inclined to be fairly additional conservative in utilizing their loan able resources than conventional banks (Clementi, 2001). Presented an outline of the tendency in consolidation of the market, prior to reviewing present suggestions on new Basel Accord and on the bank's capital adequacy. The study highlighted the returning difficulty of liquidity and then presented some examination of fresh developments, predominantly in risk transfer method. The study stressed that modernism must be handled with some care, and found risk management as significant goal of financial system.

(Ghannadian, 2004) Observed the performance of an Islamic banks and how Islamic banking scheme can offer liquidity and support in the process of money creation from side to side contribution transactions accounts and found that in all developing economies investing funds on basis of profits and losses is an attractive choice for the banks. (Gabbi, 2004), Emphasized about the reliance of risks on organization's place in the market. The study explained that liquidity risk can be controlled in the course of practices that are severely connected to the scale and scope of financial measures, seeing as large banks are capable both to manage additional market information and to influence monetary policy functions. (Zheng H., 2006) Found that short-term yield spreads are dominated by liquidity risk. (Franck, 2007, 2011) Found that securities market matter more in supporting bank for likely liquidity deficiency while studying the function of stock exchange as a similar function of and lender of last resort. Many dealers assert that extra liquid markets are superior to fewer liquid markets, (Mainelli, 2008) and found uniqueness of liquid markets are flexibility deepness and tightness.

(Zheng H. &, 2008) Stated that in the presence of liquidity risk more realistic loss can be estimated by liquidity adjusted conditional value at risk which provides a better measure for risk. And also suggested efficient Monte Carlo method: which applies to portfolio of securities or single securities, and finds approximate conditional value at risk and risk at value of all percentiles from the loss distribution with in single set of samples.

(Anas, 2008) Suggests that Islamic banks should strengthen their risk management practices such as, to enhance secondary market they need price transparency and liquidity. Moreover, they can trade Sukuks and Financial Takaful (insurance) as a medium of risk-hedging. (Hassan, 2009) Argues that three types of risks are being faced by Islamic banks in Brunei Darussalam such as, credit risk, foreign-exchange risk and operating risk, and they are managing those risks very efficiently with the help of risk management practices, which includes risk identification (RI) and risk assessment and analysis (RAA). (Dinger, 2009) proposed that in emerging economies, due to the existence of transnational banks aggregate liquidity shortage risk has been reduced, as in normal circumstances they are holding low liquidity assets but in crises they holds higher liquid assets as compared to single market banks.

(Vaihekoskia, 2009) Investigated that in the period of systematic liquidity risk (illiquidity) of those stocks which provides high rate of return were negatively related to the price of liquidity risk. Therefore, systematic liquidity risk is not priced as an asset-specific risk but as market-wide systematic risk as it is enough to occupy all liquidity related risks. (Uddin, 2009) Identified that there exists the negative relationship between liquidity and stock return, as stock become more illiquid the liquidity risk increases more than the relative rate, also indicate that return is not affected by the fluctuations in the relative stock liquidity.

(Ismal, "Assessment of liquidity management in Islamic banking industry"., 2010) Indicate that with respect to liquidity management, the Islamic banks in Indonesia are evaluating themselves on the basis of three factors such as, banks liquidity management policy, liability side and asset side, and they stands in the index of —good grade. (Ismal, "Strengthening and improving the liquidity management in Islamic banking"., 2010) Suggested that Islamic banks should improve their policies to balance liability and asset, communicate their operations and principles to public to deepen their understanding towards Islamic banks and restructure management of liquidity on asset and liability side in order to improve and strengthen their liquidity management

(Sawada, 2010) Investigated that in the times of crises, due to the liquidity shock persuaded by the depositors, banks increase their cash holdings by selling their securities in the financial market, not by liquidating their loans. As they adjust their portfolio dynamically through selling and buying their securities in financial

market. (Ojo, 2010) Emphasized on the significance of risks all the way through a position to the vital role engaged by capital adequacy. On the basis of Accord principles the study observed that beside substantial development, a lot work is yet to be done specifically relative to liquidity risk.

**NEED FOR THE STUDY**

Liquidity plays a crucial role in the satisfactory ongoing of a firm. Liquidity management has, thus, become a basic and broad aspect of judging the performance of a corporate entity. Liquidity should be neither excessive nor inadequate. Excessive Liquidity is an indicator of idle funds, on the other hand, adversely affects the creditworthiness of the firm, interrupts the production process and hampers its earning capacity to a great extent. Thus, efficient Liquidity management has become essential for the smooth running of any business enterprise.

**OBJECTIVES OF THE STUDY**

The specific objectives of the study are:

- To evaluate the liquidity management of the company through ratio analysis.
- To examine the relationship between liquidity and profitability by using Spearman’s rank correlation and also to test the significance of such correlation

**HYPOTHESIS OF THE STUDY**

H0: there exists no significant correlation between the liquidity and profitability of Cuddapah Spinning Mills Ltd.

**TOOLS OF ANALYSIS**

Current ratio: Current ratio is found out by dividing the amount of current assets by the amount of current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Quick ratio or Acid test ratio: Quick ratio is found out by dividing the amount of quick assets by the amount of current liabilities.

$$\text{Quick Ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

Absolute liquidity ratio: Absolute liquid ratio is found out by dividing the amount of absolute liquid assets (Cash, bank balance & Marketable securities) by the amount of current liabilities.

$$\text{Absolute liquidity Ratio} = \frac{\text{Cash \& bank balance + Marketable securities}}{\text{Current liabilities}}$$

Inventory turnover ratio: Inventory turnover ratio is calculated by dividing the Cost of goods sold by the amount of Average stock.

$$\text{Inventory to sales Ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

Age of inventory: Age of inventory is calculated by dividing the Number of effective days in a year by the Inventory turnover ratio.

$$\text{Age of inventory} = \frac{\text{No. of effective days in a year}}{\text{Inventory turnover ratio}}$$

Debtors’ turnover ratio: Debtors turnover ratio is calculated by dividing the amount of sales by the amount of debtors.

$$\text{Debtors to sales Ratio} = \frac{\text{Sales}}{\text{Debtors}}$$

Age of debtors: Age of debtors is calculated by dividing the Number of effective days in a year by the debtors’ turnover ratio.

$$\text{Age of debtors} = \frac{\text{Number of days in a year}}{\text{Debtors’ turnover ratio}}$$

Working capital turnover ratio: The working capital turnover Ratio is calculated by dividing the amount of sales by the amount of net working capital.

$$\text{Working capital turnover Ratio} = \frac{\text{Sales}}{\text{Net working capital}}$$

Current assets turnover ratio: Current assets turnover ratio is calculated by dividing the amount of sales by the amount of Current assets.

$$\text{Current assets turnover Ratio} = \frac{\text{Sales}}{\text{Current assets}}$$

Current assets to total assets ratio: Current assets to total assets Ratio is found out by dividing the amount of current assets by the amount of Total assets.

$$\text{Current assets to total assets Ratio} = \frac{\text{Current Assets}}{\text{Total assets}}$$

Coefficient of rank correlation: An attempt has been made to study the extent of relationship between the liquidity and profitability. For this purpose the ratio of current assets to total assets has been used as the liquidity indicator and the ratio of return on capital employed has been taken as the profitability parameter.

$$R = 1 - \frac{6(\sum d^2)}{n^3 - n}$$

d = difference in the ranks of individuals in the two characters  
 n = number of individuals

**ANALYSIS AND FINDINGS**

The table 1 shows the current ratio of Cuddapah Spinning Mills Ltd from 2001-to-2010. Current ratio is the relationship between current assets and current liabilities and shows the proportion of current assets available per unit of current liability. From the Table 1 it is inferred that current ratio is satisfied the standard ratio norm of 2:1 in all years except in 2001-02, 2002-03, 2004-05 and 2005-06 the rest of the years excess current ratio it implies that more investment is made in current assets. So, current assets were idle.

TABLE 1: CURRENT RATIO OF CUDDAPAH SPINNING MILLS LTD FROM 2001-02 TO 2009-10 (In rupees)

Year	Current assets	Current liabilities	Current ratio
2001-02	38351673	26324726	1.45
2002-03	37046802	28103426	1.31
2003-04	34886586	11621086	3.00
2004-05	23966296	43784885	0.54
2005-06	39848938	24341623	1.63
2006-07	33454568	9273444	3.60
2007-08	41787791	5436783	7.68
2008-09	48321576	5621176	8.59
2009-10	50028938	5591317	8.94

Source: annual reports from 2002-to-2010

Table no 2 represent the quick ratio. Quick ratio is a rigorous and penetrating measure of a firm's ability to meet the short-term liabilities. It is a widely used parameter of judging the short-term repaying ability of the firm in the near future. It excludes inventory and bank overdraft, which are difficult to realize at short notice. Thus, it can assess the liquidity position of a company more effectively. Normally, an ideal quick ratio of 1:1 is considered to represent a satisfactory current financial condition. From the table no 2 refers that quick ratio was least in 2004-05 and highest in 2009-10 overall excess quick ratios than standard ratio of quick ratio. Hence, excess investment is made in quick assets.

TABLE 2: QUICK RATIO OF CUDDAPAH SPINNING MILLS LTD FROM 2001-02 TO 2009-10 (In rupees)

Year	Quick assets	Current liabilities	Quick asset ratio
2001-02	19379490	26324726	0.73
2002-03	19299917	28103426	0.68
2003-04	26429103	11621086	2.11
2004-05	14859476	43784885	0.33
2005-06	12489004	24341623	0.51
2006-07	11274756	9273444	1.21
2007-08	11330916	5436783	2.08
2008-09	19285356	5621176	3.43
2009-10	32872469	5591317	5.87

Source: annual reports from 2002-to-2010

Looking at the table 3 reveals the absolute liquidity of Cuddapah Spinning Mills Ltd. Absolute liquidity ratio establishes a relationship between absolute liquid assets and quick liabilities. It is a more rigorous test of the liquidity position of a company. A high absolute liquidity ratio is good from the creditor's point of view but from the management point of view, it indicates poor investment policy. In the table 3 it is observed that the absolute liquidity ratio was not satisfied standard ratio of absolute liquidity ratio i.e. 0.5:1 in all years except 2003-04. It means that not invested sufficient amount in cash and marketable securities. Since, the company not meets the liabilities of creditors.

TABLE 3: ABSOLUTE LIQUIDITY RATIO OF CSM LTD FROM 2001-02 TO 2009-10 (In rupees)

Year	Absolute liquid assets	Current liabilities	Absolute liquidity ratio
2001-02	8165102	26324726	0.31
2002-03	8586827	28103426	0.30
2003-04	16542256	11621086	1.42
2004-05	770573	43784885	0.02
2005-06	1647279	24341623	0.06
2006-07	718691	9273444	0.07
2007-08	1058716	5436783	0.19
2008-09	968999	5621176	0.17
2009-10	1397194	5591317	0.24

Source: annual reports from 2002-to-2010

The table no 4 depicted the inventory turnover ratio of Cuddapah Spinning Mills Ltd from 2001-to-2010. The Inventory turnover ratio measures the velocity of conversion of stock into sales. Usually a high inventory turnover/stock velocity indicates efficient management of inventory because more frequently the stocks are sold; the lesser amount of money is required to finance the inventory. A low inventory turnover ratio indicates an inefficient management of inventory. A low inventory turnover implies over-investment in inventories, dull business, poor quality of goods, stock accumulation, accumulation of obsolete and slow moving goods and low profits as compared to total investment. The inventory turnover ratio is also an index of profitability, where a high ratio signifies more profit; a low ratio signifies low profit. Sometimes, a high inventory turnover ratio may not be accompanied by relatively high profits. Similarly a high turnover ratio may be due to under-investment in inventories. From the table no 4 states that inventory turnover ratio is less in all years except in 2004-05. It indicates that inefficient management of inventory, over investment is made in inventory, poor quality of goods, dull business.

TABLE 4: INVENTORY TURNOVER RATIO OF CSM LTD FROM 2001-02 TO 2009-10 (In rupees)

Year	Cost of goods sold	Average stock	Inventory turnover ratio
2001-02	13844853	8528802	1.62
2002-03	16195711	8590661	1.88
2003-04	18974905	6707534	2.82
2004-05	31554232	3339884	9.44
2005-06	53780998	11073184	4.85
2006-07	55972761	17456906	3.20
2007-08	39915264	19084404	2.09
2008-09	44531474	22521551	1.97
2009-10	35286317	21435257	1.64

Source: annual reports from 2002-to-2010

Table 5 present the age of inventory turnover ratio from the table it is inferred that the Age of inventory is very high in all years except in 2004-05. Generally the lower age of inventory is better the liquidity position and vice versa. 2004-05 is good when compared to other years as its age is very less compared to other years during the study period.

**TABLE 5: AGE OF INVENTORY OF CSM LTD FROM 2001-02 TO 2009-10**

Year	No. of days in a year	Inventory turnover ratio	Age of inventory (days)
2001-02	365	1.62	225
2002-03	365	1.88	194
2003-04	365	2.82	129
2004-05	365	9.44	39
2005-06	365	4.85	75
2006-07	365	3.20	114
2007-08	365	2.09	175
2008-09	365	1.97	185
2009-10	365	1.64	225

Source: annual reports from 2002-to-2010

Table 6 : The debtor's turnover ratio indicates the speed with which debtors are converted into cash. This ratio measures the rapidity or slowness of debtors' collection. Generally, the higher the turnover, the more efficient is the trade credit management. On the other hand, low debtors' turnover implies inefficient management of debtors' and less liquid debtors. From the table no 6 is observed that the debtors' turnover ratio is high in 2006-07 year compared to other years. Generally debtors turnover ratio is satisfactory level so more efficient credit management and more liquid debtors

**TABLE 6: DEBTORS TURNOVER RATIO OF CSM LTD FROM 2001-02 TO 2009-10 (In rupees)**

Year	Sales	Debtors	DTR
2001-02	26286788	3466393	7.58
2002-03	43852014	3623870	12.10
2003-04	37935599	1095476	34.62
2004-05	52584203	5425978	9.69
2005-06	80988831	1261936	64.17
2006-07	98078050	921732	106.40
2007-08	66743392	2029944	32.87
2008-09	71633690	10074101	7.11
2009-10	61268742	10373149	5.90

Source: annual reports from 2002-to-2010

Table no 7 shows the age of debtor of Cuddapaha Spinning Mills Ltd from the 2001-to-2010. The average collection period refers to the average time lag between sales and collection measurable in terms of number of days. It is a significant measure of the collection activity and quality of accounts receivables. A rule of thumb is that the collection period should not exceed 1/3 times the regular credit period. From the table no 7 states that the shorter collection period implies quick payment by debtors, it occurs in the years of 2003-04, 2005-06, 2006-07 & 2007-08. Longer the payment period in the years of 2008-09 & 2009-10. Overall average collection period is satisfactory during the period

**TABLE 7: AGE OF DEBTORS OF CUDDAPAH SPINNING MILLS LTD FROM 2001-02 TO 2009-10**

Year	No. of days in a year	DTR	Age of inventory (Days)
2001-02	365	7.58	48
2002-03	365	12.10	30
2003-04	365	34.62	11
2004-05	365	9.69	38
2005-06	365	64.17	6
2006-07	365	106.40	3
2007-08	365	32.87	11
2008-09	365	7.11	51
2009-10	365	5.90	62

Source: annual reports from 2002-to-2010

The working capital turnover ratio measures the efficiency with which the working capital is being used by a firm. A high ratio indicates efficient utilization of working capital and vice versa. But a very high working capital turnover ratio may also mean lack of sufficient working capital which is not a good situation. Table no 8 indicates that the Working capital turnover ratio is fluctuating from year to year. It is higher in 2005-06 and lower in 2004-05. It shows inefficient utilization of working capital during the operation of the business.

**TABLE 8: WORKING CAPITAL TURNOVER RATIO OF CSM LTD FROM 2001-02 TO 2009-10 (In rupees)**

Year	Sales (Rs)	Net working capital (Rs)	Working capital turnover Ratio
2001-02	26286788	12026947	2.18
2002-03	43852014	8943376	4.90
2003-04	37935599	23265500	1.63
2004-05	52584203	-19818589	-2.65
2005-06	80988831	15507315	5.22
2006-07	98078050	24181124	4.05
2007-08	66743392	36351008	1.83
2008-09	71633690	42700400	1.67
2009-10	61268742	44437621	1.37

Source: annual reports from 2002-to-2010

Table no 9 represents the current assets turnover ratio of Cuddapaha Spinning Mills Ltd from 2001-to-210. It is applied to measure the turnover and profitability of the total current assets employed to conduct the operations of the firm. The ratio is calculated by dividing the amount of sales by the amount of current assets. The idea behind the current assets turnover ratio is to give an overall impression of how rapidly the total investment in current assets is being turned. The lower the turnover of the current assets, the worse is the utilization of current assets. The higher the turnover, the better is the use of current assets. From the table no 9 it is inferred that the Current assets turnover ratio is fluctuating from year to year. Current assets are ranging between 1 to 3 times. The higher the turnover of current assets the better is the utilization of them.

TABLE 9: CURRENT ASSETS TURNOVER RATIO OF CSM LTD FROM 2001-02 TO 2009-10 (In rupees)

Year	Sales	Current assets	Current assets turnover ratio
2001-02	26286788	38351673	0.68
2002-03	43852014	37046802	1.18
2003-04	37935599	34886586	1.08
2004-05	52584203	23966296	2.19
2005-06	80988831	39848938	2.03
2006-07	98078050	33454568	2.93
2007-08	66743392	41787791	1.59
2008-09	71633690	48321576	1.48
2009-10	61268742	50028938	1.22

Source: annual reports from 2002-to-2010

The table no 10 shows the current assets to total assets ratio of Cuddapaha Spinning Mills Ltd from the 2001-to-2010. Increasing Current Assets to Total Debt ratio is generally a positive sign, showing the company has a better ability to satisfy its debt obligations using its total current assets. A ratio of 1.0 or greater indicates the company would just meet its debt obligations, when in reality the company would need a ratio result that is higher than this, as some of the current assets could not easily be converted into cash. Table no 10 refers that current assets to total assets ratio is very less during the analysis period so the company not using current assets in proper way and not satisfy the debt obligations.

TABLE 10: CURRENT ASSETS TO TOTAL ASSETS RATIO OF CSM LTD FROM 2001-02 TO 2009-10 (In rupees)

Year	Current assets	Total assets	Current assets to total assets Ratio
2001-02	38351673	196544442	0.19
2002-03	37046802	201811688	0.18
2003-04	34886586	218207224	0.15
2004-05	23966296	130758311	0.18
2005-06	39848938	164495311	0.24
2006-07	33454568	164495311	0.20
2007-08	41787791	172389165	0.24
2008-09	48321576	172389165	0.28
2009-10	50028938	172389165	0.29

Source: annual reports from 2002-to-2010

Table no 11 depicted the rank correlation between the liquidity and profitability of Cuddapaha Spinning Mills Ltd and an attempt have been made to judge the significance of the relationship by using the t-test. For this purpose the ratio of current assets to total assets has been used as the liquidity indicator and the ratio of return on capital employed has been taken as the profitability parameter. It is found that there is a significant correlation is exist between liquidity and profitability (r=0.583) which is significant at 0.05 level. To test the null hypothesis t-test have been used from the results it is inferred that the computed value of t=1.8995 is less than the critical value of 't' (3.499) at 5% level of significance. Hence, the null hypothesis have been accepted, which signifies there exists no significant relationship between the liquidity and profitability of the company

TABLE 11: RANK CORRELATION BETWEEN LIQUIDITY AND PROFITABILITY OF CSM LTD.

Year	Current assets to total assets (%)	Liquidity rank (r1)	Return on capital employed (%)	Profitability rank (r2)	(r1-r2) d	d <sup>2</sup>
2001-02	19	6	-37.03	8	-2	4
2002-03	18	7.5	-10.35	6	1.5	2.25
2003-04	15	9	-13.17	7	2	4
2004-05	18	7.5	-106.70	9	-1.5	2.25
2005-06	24	3.5	0.37	4	-0.5	0.25
2006-07	20	5	12.99	1	4	16
2007-08	24	3.5	1.93	3	0.5	0.25
2008-09	28	2	6.80	2	0	0
2009-10	29	1	0.14	5	-4	16

$\sum d^2 = 45$

$$R = 1 - \frac{6(\sum d^2 + \sum t^3 - t)/12}{n^3 - n}$$

$$R = 1 - \frac{6(45+5)}{9^3 - 9}$$

$$R = 1 - \frac{300}{720}$$

$$R = 1 - 0.416$$

$$R = 0.583$$

T-TEST

$$t = \frac{R^1}{\sqrt{1 - R^2}} \times \sqrt{n - 2}$$

$$t = \frac{0.583}{\sqrt{1 - (0.583)^2}} \times \sqrt{9 - 2}$$

$$t = \frac{0.583}{\sqrt{0.6602}} \times 2.6457$$

$$t = \frac{0.583}{0.812} \times 2.6457$$

$$t = 1.8995$$

**SUGGESTIONS**

1. The company not maintains the standard ratio of 2:1 in between Current assets and Current liabilities. So, the company maintains 2:1 proportionate in between current assets and current liabilities to avoid the shortage and excess current assets and current liabilities.
2. Made excess investment in quick assets, it leads to idle quick assets. Hence, the company takes necessary steps to control the excess investment in quick assets.
3. The company invest sufficient amount in cash and marketable securities to meet the liabilities of creditors
4. To more emphasis on inventory management for the purpose of optimum investment in inventory and improve the quality of goods.
5. Utilization of working capital is inefficient during the operations of the business. So those utilize working capital properly and effectively during the operations of the business.

**CONCLUSION**

Managing liquidity is a fundamental component in the safe and sound management of firm finance. Sound liquidity management involves prudently managing assets and liabilities (on- and off-balance sheet), both as to cash flow and concentration, to ensure that cash inflows have an appropriate relationship to approaching cash outflows. The study investigate the relationship between the liquidity and profitability of Cuddapaha Spinning Mills Ltd during years from 2001-to-2010. In this study various ratios are calculated to find out the relationships between the liquidity and profitability the results are shows that liquidity has not have a significant influence on the profitability of the company.

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## INTRAPRENEURSHIP AND ORGANIZATIONAL KNOWLEDGE IN THE CORPORATE ENVIRONMENT: A THEORETICAL FRAMEWORK

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### ABSTRACT

*Intrapreneurship is closely related to corporate entrepreneurship which is the creation of new products and ideas within the existing organization using the employees. It is often associated with larger companies that have taken notice of the rise in entrepreneurial activity in recent years; these firms endeavor to create an environment wherein creative employees can pursue new ways of doing things and new product ideas within the context of the corporation. When group knowledge from several subunits or groups is combined and used to create new knowledge, the resulting tacit and explicit knowledge can be called organizational knowledge. Since organizational learning is seen as encoding inferences from history into routines that guide behavior, (Schulz 2001) it could be said that organizational knowledge is the product of those routines. In fact, small businesses, which originate as entrepreneurial ventures, are often ideally suited to foster an intrapreneurial environment, since their owners have first-hand knowledge of the opportunities and perils that accompany new business initiatives. However, the challenges today are quite different from previously. The emergence of knowledge-based organizations and increased importance of knowledge as the key to competitive advantage poses new and interesting challenges for managers and researchers alike. This paper attempts to enlighten the understanding of intrapreneurship based on the organizational knowledge as a resource towards organization.*

### KEYWORDS

Entrepreneurship, Intrapreneurship, Knowledge Based Organizations, Organizational Knowledge.

### INTRODUCTION

Intrapreneurs are passionate employees. In fact, intrapreneurs need to find new challenges from time to time, and sometimes these challenges take them to new organizations that can better benefit from their particular skill set. They work to render a change in the environment and conditions in which they work. Successful intrapreneurs must have the respect and credibility of their peers and their leaders; and in order to gain this credibility, they must have conformed to the organizational culture to some degree. Yet intrapreneurs, by their very nature, are nonconformists, because the most exciting opportunities have not yet been introduced, understood, or embraced by the organization. It is that they act on what they believe to be in the best interest of the company. Their motivation for change is rooted in the survival of the organization, or the maximization of opportunity for the organization. At the organizational level, new knowledge is often generated by combining explicit knowledge with explicit knowledge. "Organizations continuously create new knowledge by reconstructing existing perspectives, frameworks, or premises on a day-to-day basis," (Nonaka,1995) Organizational knowledge becomes particularly powerful and measurable when combined knowledge is used to create standard routines, a common culture and language, and encourages and enables cross-functional group interactions within an organization.

### OPERATIONAL DEFINITIONS

**INTRAPRENEURSHIP:** is defined as the concept of using entrepreneurial skills within an established firm by encouraging innovation by employees.

**INTRAPRENEURS:** are employees who work within a business in an entrepreneurial capacity, creating innovative new products and processes for the organization.

**ORGANIZATIONAL KNOWLEDGE:** The capability, which members of an organization developed, to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalizations whose application depends on historically evolved collective understanding.

### OBJECTIVES OF THE STUDY

1. To study the potential elements and outcomes of intrapreneurship.
2. To explain the concept and model of intrapreneurship in the organization context.

### PURPOSE OF THE STUDY

The purpose of this paper is to explore the concept of intrapreneurship, and organizational knowledge. To analyze intrapreneurship as an approach that can contribute to organizational development in a research environment.

### HISTORY OF INTRAPRENEURSHIP

Intrapreneurship, which is also known as Corporate Entrepreneurship, has been used around the world by major public companies and private companies for several decades. Intrapreneurship has been used successfully in the United States, Europe, Asia and Africa. Intrapreneurship is based on the concept of using entrepreneurial skills within an established firm by encouraging innovation by employees. These employees can use start-up business techniques within a firm (large, medium, or small) to create new products or services from existing products or services, or create new synergistic products or services for the company. This is accomplished by allowing and fostering nontraditional thinking and by encouraging and supporting the use of "out of the box thinking" within the firm. By the 1990's corporations and organizations began formally encouraging "intrapreneurship" – some firms created specific intrapreneurship programs with time allocations for employees to work on innovative intrapreneurial ideas, products, or services. Recent examples of the successful use of Intrapreneurship techniques can be found in major corporations including, but not limited to: 3M, Anaconda-Ericsson, Apple Computer, Autodesk, Corona Data Systems, Caribou Coffee, Gateway, GE, Genetech, Google, IBM, INTEL, iRobot, Kodak, Lockheed-Martin, PR1ME Computer, Sony, Sun Microsystems, Telecommunications, Texas Instruments, Toyota, W. L. Gore, and Yahoo.

### LITERATURE REVIEW

#### INTRAPRENEURSHIP

Intrapreneurship is increasingly becoming a term used in the business world to describe organizations that are willing to pursue opportunities, initiate actions, and emphasize new, innovative products or services. In 1985 Pinchot coined the term 'intrapreneurship', short for intra-corporate entrepreneurship, which describes the practice of entrepreneurship within organizations. The various definitions of intrapreneurship appearing in the literature are remarkably similar. Jennings and Young (1990) define corporate entrepreneurship as the process of developing new products and/or markets. Hornsby, Montagno and Kuratko (1990) describe intrapreneurship as a means to increase corporate success through the creation of new corporate ventures. Hornsby, Naffziger, Kuratko and Montagno (1993) refer to the development of new business endeavors within the corporate framework. The intrapreneurial perspective is similar to the entrepreneurial in terms of its focus on innovation. McGrath, Venkataraman, MacMillan and Bouldin (1992) describe corporate entrepreneurship as a means for

firms to change their pool of competencies to increase long term economic viability. All of the definitions of intrapreneurship have been highly consistent (Cornwall & Hartman, 1988). Zahra (1986) examined the antecedents of corporate entrepreneurship and found that most people see it as being innovative activities within a firm. Kanter and Richardson (1991) identified four approaches to the process of corporate entrepreneurship that include pure venture capital, the new venture development incubator, apparatus for the maintenance of controlled conditions in which eggs can be hatched artificially. The study of corporate entrepreneurship as internally sourced innovations became popular among strategic management researchers throughout the 1980s and early 1990s (Kanter, Ingols, Morgan & Seggerman, 1987; Wood, 1988; Morris, Davis & Ewing, 1988; Sathe, 1988; Jennings & Lumpkin, 1989; Morris & Trotter, 1990; Fulop, 1991; Carlisle & Gravelle, 1992; Hornsby et. al 1993). Morris, Davis and Allen (1994), Ginsberg and Hay (1994) and Bryon (1994) studies also supported the same idea.

Bower (1970) was among the very first scholars to draw attention to the importance of middle managers as agents of change in contemporary organizations. Several authors (Drucker, 1985; Kanter, 1988) have discussed different aspects of middle managers' contributions to intrapreneurship. Other researchers (e.g. Schuler, 1986; Woolridge and Floyd, 1990 and Floyd and Woolridge 1992 and 1994) also examined the contributions of middle managers to a company's strategy, a variable that is intimately connected to intrapreneurship (Guth and Ginsberg, 1990; Ireland et al., 2001; Zahra, 1991; Zahra and Covin, 1995).

#### ORGANIZATIONAL KNOWLEDGE

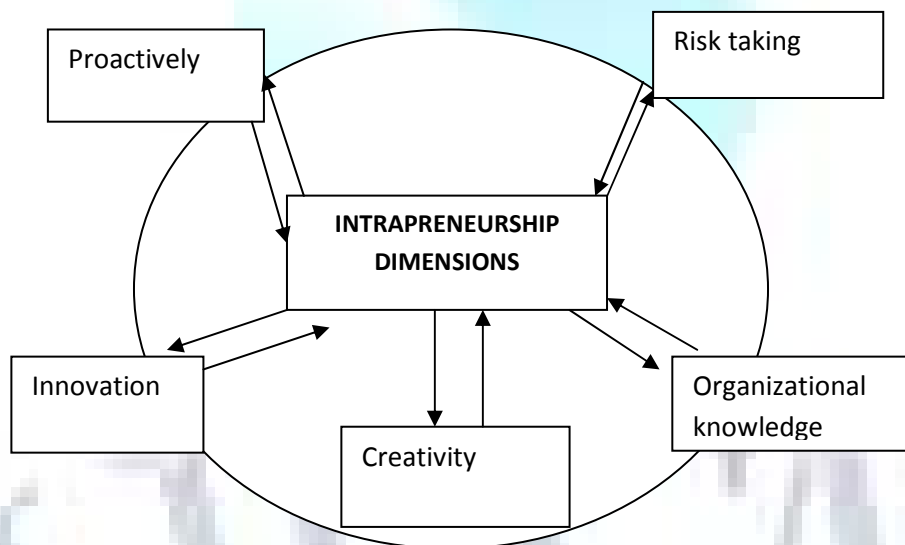
Organizational knowledge has also looked into the literature from two distinct perspectives. The first perspective proposes that organizations have different types of knowledge and that identifying and examining these types will lead to more effective means for generating, sharing, and managing knowledge in organizations (Nelson and Winter, 1982; Leonard-Barton, 1992; Hedlund, 1994; Nonaka and Takeuchi, 1995; Teece, et al. 1997). This perspective focuses on routines, strategies, and techniques, through which different types of knowledge are created, codified, converted, transferred, and exchanged. On the other hand, the second perspective on organizational knowledge argues knowledge to be dispersed, and inherently indeterminate (Tsoukas, 1996) and this perspective on organizational knowledge is supported by Davenport and Prusak (1998) and Cook and Brown (1999).

Today's organizations not only have to plan and execute tasks in an efficient and rational way, but also have to face the challenge of constant learning and, perhaps even more importantly, of learning to learn (Morgan, 1997). In this regard, this metaphor provides a powerful way of thinking about the implications of new information technology and how it can be used to support the development of learning organizations.

During the 1980s, a number of the benchmarking studies of corporate excellence suggested that the best-run companies tended to be more entrepreneurial than their competitors in the same or other industries. Kuratko, Montagno and Hornsby (1990) developed an intrapreneurial assessment instrument to determine the effectiveness of a corporate entrepreneurial environment. In this study, they looked at how best to evaluate an environment that is conducive to corporate entrepreneurship, or intrapreneurship. According to Kuratko, Montagno and Hornsby (1990), this type of rationalizing is difficult because corporate entrepreneurial activity is behaviorally complex and very dynamic. However, they concluded that there are three key factors that affect the development of corporate entrepreneurial activity, namely: management support, organizational structure, and resource availability. The authors also stated that this type of research could be important for corporations that desire to implement an intrapreneurship programmed within their corporate structure, so that they can evaluate their assets and shortcomings in being able to foster entrepreneurial activity.

The intrapreneurship literature highlights the importance of organizational factors for the pursuit of intrapreneurship (Slevin – Covin 1989, Zahra 1991, Antoncic – Hisrich 2001, Heinonen 1999, Heinonen – Vento-Vierikko 2002). By management activities we refer to the role of management as a facilitator and promoter of intrapreneurship (see the charismatic role of management by Thompson 1999). Management activities also affect the organizational culture: at what extent the basic assumptions of intrapreneurship (e.g. risk taking, innovation and creativity, learning, change) can be found within the organization

FIGURE 1: INTRAPRENEURSHIP DIMENSIONS



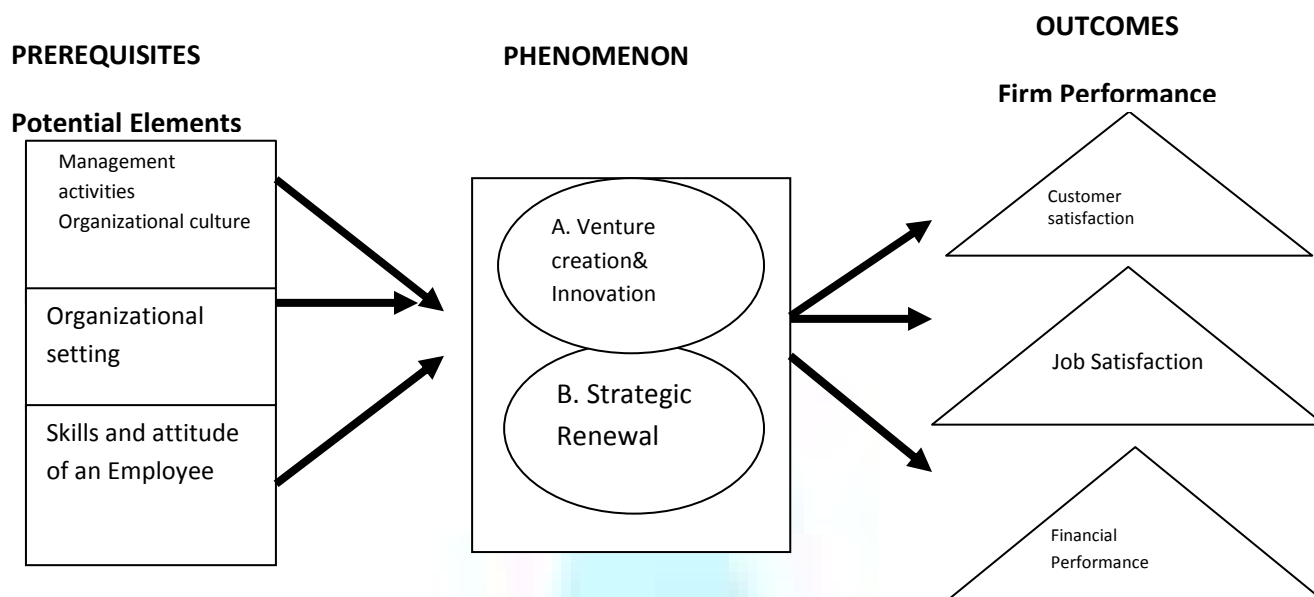
This study takes Miller's (1983) contribution as a starting-point for understanding the phenomenon of intrapreneurship. Miller stresses the company's commitment to innovation, i.e. five related components: creativity, product innovation, proactiveness, risk taking, and organizational knowledge. Product innovation refers to the ability of a company to create new products or to modify existing ones to meet the demands of current or future markets. The innovation comes from creativity of the intrapreneur within the organization. Creativity directly relates to the new ideas of the employees. Proactiveness refers to a company's capacity to compete in the markets by introducing new products, services, or technologies. Finally, risk taking refers to company's willingness to engage in business ventures or strategies in which the outcome may be highly uncertain. (Zahra – Covin 1995) Together these components form – intrapreneurship, emphasizing the creation of innovations and ventures as well as conducting R&D –activities aiming to improve organization's competitive position and performance. The results of the study indicated that lessons learned from experience (Organizational knowledge) often result in learning traps when the environment changes. Conceptualizing organizations as characterized by different entrepreneurial strategies and different levels of entrepreneurship therefore offers a theoretically useful description of differential outcomes with respect to performance, growth and the probability of failure.

#### INTRAPRENEURSHIP MODEL

Intrapreneurship is a concept closely related to entrepreneurship emphasizing the entrepreneurial process (entrepreneurs carry out new combinations) and innovativeness (Guth – Ginsberg 1990).



FIGURE 2: INTRAPRENEURSHIP MODEL



Source: Miller's theory and research instruments (1983)

Intrapreneurship, however, takes place within the organization, in terms of companies may small or large. The intrapreneur acts like an entrepreneur in that he/she realizes his/her own ideas without being the owner of the enterprise (Cunningham – Lischeron 1991). Intrapreneurship is here defined to mean an entrepreneurial way of action in an existing organization – more specifically, call it as – an A-type manifestation of intrapreneurship. The basis of intrapreneurship is recognizing an opportunity, exploiting it and trusting that exploiting an opportunity in a new way that deviates from previous practice will succeed and support the realization of the organization's aims. (Heinonen 1999). Miller's study in 1983 was a key turning point in the research on firm-level entrepreneurship. After that researchers have used Miller's theory and research instruments to examine the linkages between environmental, strategic, and organizational variables, and a company's entrepreneurial activities. (Zahra – Jennings et al. 1999).

Another dimension of intrapreneurship is strategic renewal of the existing business – B-type manifestation of intrapreneurship. This strategic renewal of an existing organization entails areas such as mission reformation, reorganization as well as system-wide changes within the organization. (Zahra 1991, 1993, 1996). The renewal activities relate to the concept of a firm's business and its competitive approach in the markets. Renewal is achieved through the redefinition of a firm's mission through the creative redeployment of resources (Guth – Ginsberg 1990). Renewal requires developing or adopting new organizational structures that promote innovation and venturing. Renewal also covers system-wide changes, which enhance creative organizational learning and problem solving. These changes usually refocus company's basic values. (Zahra 1993). Intrapreneurship is a process, which occurs in interaction with the environment (van de Ven 1993). It appears that the environment plays a profound role in influencing intrapreneurship: the more dynamic, hostile and heterogeneous the environment, more emphasis the company puts on intrapreneurial activities (Zahra 1991, 1993).

Management activities ensure that the organization has a clear and understood vision and direction. The organizational setting also includes the way work is being organized in the company: power and responsibility, division of work, rules etc. Altogether these organizational factors both direct the employees in their intrapreneurial efforts, as well as ensure that employees are empowered and committed. (Thompson 1999) Previous studies indicate that managerial support, organizational structure as well as reward and resource availability affect intrapreneurial activities within the organization (e.g. Hornsby et al. 1993, Antoncic – Hisrich 2001).

All the potential elements of intrapreneurship mentioned earlier are factors assumed to affect intrapreneurship on organizational level. Within intrapreneurship, as within entrepreneurship, the individual is the key actor, making it understandable why the intrapreneur her/himself (either her/his personal attributes or her/his roles and functions) is also a focal area of intrapreneurship research (see Carrier 1996). The individual skills and attitudes describe the capabilities and willingness of any potential intrapreneur to act intrapreneurially.

The Outcomes of Intrapreneurship is evident from the above chart that intrapreneurship can give grounds for competitive advantage of an existing organization. The manifestations of such competitive advantage may be e.g. differentiation or cost leadership in the markets, quick response to any changes, new strategic direction or new ways of working or learning within the organization. (Covin – Miles 1999). Prior research proposes that intrapreneurial processes are associated with an organization's performance (Zahra 1991, Zahra 1995, Zahra – Nielsen et al.). And organizational learning and knowledge creation as outcomes of intrapreneurial activities, and, thus, as grounds for competitive advantage and a basis of superior performance of the organization. In the model organizational performance does not include only financial performance, but also non-financial manifestations, such as customer satisfaction as well as job satisfaction of the employees.

## CONCLUSION

Intrapreneurship is the process of profitably creating innovation within an organizational setting. Most companies are realizing the need for corporate entrepreneurship. This need has arisen as a response to (1) the rapidly growing number of new, sophisticated competitors, (2) a sense of distrust in the traditional methods of corporate management, and (3) an exodus of some of the best and brightest people from corporations to become small-business entrepreneurs. The intrapreneur is someone who can develop an exciting concept into a profit-driven enterprise by using the organizational knowledge promptly. Besides providing definition and concept of organizational knowledge the linkage the study helps to know how companies identify this knowledge as resource and contribute towards company's efforts into profits. Successful intrapreneurs are also unwavering in achieving their goals. Identifying and examining organizational knowledge will lead to more effective means for generating, sharing, and managing intrapreneurship in organizations. Therefore, it is suggested that the processes of intrapreneurial movements within organizations should be followed up and analyzed more in detail and on a longitudinal basis. At its very core, intrapreneurship is the innovation that corporations need to keep them competitive—particularly in today's aggressive and rapidly changing business environment of globalization, emerging markets, and technology innovations.

## SCOPE FOR FURTHER RESEARCH

The research and development activities within business organization present with good possibilities for both measuring intrapreneurship at different stages of the different kinds of organizations, and then also following up and assessing the processes before, during and after training and development. A study on the triangulation between these sources of information is likely to deepen the understanding of the phenomenon of intrapreneurship.

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**SUGAR INDUSTRY IN INDIA – AN OVERVIEW**

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**ABSTRACT**

India was the world's largest producer of sugar cane occupies a very pride place in the world. In India, the cultivation of sugar cane is 10,000 miles tones. Sugar cane is one of the important crops for the Indian farmer. The area under sugar cane varies from 1,176 hectares in 1930-31 to 5,151 in 2007-08. The yield of cane per hectare varies from 39 tonnes in 1930-31 to 71.1 tonnes in 1998-99. The number of factories ranges between 29 in 1930-31 to 527 in 2010-11 and shows an ever increasing trend. The average duration days ranges between 87 in 2008-09 and 181 in 1995-96. But it shows up and down trend in the study period. The capacity ranges between 644 in 1935-36 to 527 in 2010-11 and shows an ever increasing trend. Cane Crushed varies from 1,339 tonnes in 1930-31 to 279,295 in 2006-07 and shows lot of variations in the crushed crane. The total sugar production varies from 120 in 1930-31 to 98,338 in 1993-94 and shows lot of variation in the sugar production. The Molasses Production varies from 336 in 1931-32 to 131,111 in 2006-07. Recovery Performance varies from 8.96 in 1930-31 to 10.55 in 2007-08 and shows variations. The molasses in percentage to cane varies from 3.33 in 1935-40 to 4.69 in 2006-07 with lot of variations. The results show that the sugar industry is growing in area, number and duration but showing ups and downs.

**KEYWORDS**

Molasses production, State- wise yield of sugar cane, consumption of sugar.

**1. INTRODUCTION**

India was the world's largest producer of sugar cane occupies a very pride place in the world. The world production of sugar is 167 million tonnes (World Sugar News, 2010). The world sugar production is highly dependent on weather and the global demand and supply balance which dictates free market pricing (Muthaiya, 2011). In India, the cultivation of sugar cane is 10,000 miles tones. The average yield, being 56 tonnes per acre of total cultivating land is occupied by sugar cane cultivation. Sugarcane is grown in almost all part of India, except in colder regions and extreme North Jammu Kashmir, Himachal Pradesh. Sugar cane is one of the important crops for the Indian farmer. Sugar and Jiggery are the main products that we get from Sugarcane. Other products such as Biogases for industrial use, Molasses for distillery, filter cake, Mud as an organic manure and green leaves with tops for cattle feed are also available as by products because of its multi uses Sugarcane has played crucial role in Indian economy with Rs.20000 cores turnover and width 450 mills providing assistance to 45 million sugar cane farmers and 2 million Sugarcane farmers and 2 million workmen directly and indirectly.

In A.P. sugar industry is an important Agro-based industry, occupying the second position next to text tile industry. The annual cultivated area is about 1.99 lack hectares with a yield of 149.45 lacks of tones during 96-97. At present, there are 36 sugar factories in the state and 50% of them are in co-operative sector. The co-operative sugar units in the states have been suffering due to lack of adequate cane irrigation facilities, working capital, by-product utilization, excessive employment etc. The sugar industries which provide direct employment to about 3 lacks persons of sugar cane followed by Brazil & Cuba. Sugar cane existed in India from 3000 B.C. The centre place of origin of sugar cane regarded as Northeastern Indian, from sugar cane seems to have been to China and other places by early travelers and no man's between 1800 and 1700 B.C. later. It was penetrated to Philippines, Jawa and other places. Actually the word sugar derived from a Sanskrit word "shakra".

Sugar cane cultivated by the growers or promising varieties in terms of sugar content and yield. Cultivation techniques maturity of (decided by the cane personnel) harvested and supplied to the factory in trucks fresh less tops and roots. Trucks are weighed with cane on Weigh Bridge and unloaded on the moving cane carrier. Mechanical un-loaders do unloading. Again empty truck is weighed to assertion in the weight of cane unloaded. Sugar industry is one of the best contributors of revenue both to the Central as well as the State Governments. The sugar industry provides direct employment to about 3.35 lack workers, besides providing indirect subsistence to about 35 million sugarcane growers all over the country. Moreover, the industry covers 67,000 villages in which sugarcane is being cultivated in India.

**2. SUGAR INDUSTRY IN INDIA**

Sugar Industry is the most important industry in Uttar Pradesh as elsewhere in the country (Nawab Ali Khan and Qamrul Islam, 2010). The profile of sugar industry including area, production, yield, number of factories, average duration days, capacity, crude cane crushed, total sugar production, Molasses Production, Recovery Performance, Molasses in percentage to cane etc is shown in table 1.

**2.1 AREA**

The first pan-Indian satellite mapping of sugarcane has revealed that the estimated area under the crop has gone by 5 per cent to 51.82 lakh hectare (Financial Express, 2011). The area under sugar cane varies from 1.176 hectares in 1930-31 to 5,151 in 2007-08 and shows an increasing trend with minor ups and downs in certain years. The production varies from 36,354 tonnes in 1930-31 to 355,520 tonnes in 2006-07 shows an increasing trend with minor ups and downs in certain years. The LGR of area under sugar cane is 1.82 but does not show substantial increase in the area. The expected increase in area under sugarcane in 2011-12 will be 4803.8 tonnes and in 2012-13 will be 4862.4 tonnes. There would not be much variation in increase in area under sugarcane between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for bringing more area under sugar cane crop.

**2.2 YIELD**

The yield of cane per hectare varies from 39 tonnes in 1930-31 to 71.1 tonnes in 1998-99 shows an increasing trend with minor ups and downs in certain years. The LGR of yield of sugar cane is 2.87 but does not show substantial increase in the area. The expected increase in number area under sugarcane in 2011-12 will be **338330.1** tonnes and in 2012-13 will be **343796.2** tonnes. There would not be much variation in increase in the yield of sugarcane between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for getting more yield of sugar cane.

**2.3 NUMBER OF FACTORIES**

The number of factories ranges between 29 in 1930-31 to 503 on 31<sup>st</sup> December 2011 and 527 in 2012 (ISMA, 2012) and shows an ever increasing trend. The LGR of number of factories is **2.32** but does not show substantial increase in the number of factories. The expected increase in number of factories in 2011-12 will be **523.9** and in 2012-13 will be **531.4**. There would not be much variation in increase in the number of factories between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for number of factories.

**2.4 DURATION DAYS**

The average duration days ranges between 87 in 2008-09 and 181 in 1995-96. But it shows up and down trend in the study period. The LGR of duration days of sugar cane is **0.06** but does not show substantial increase in the duration days. The expected increase in number of duration days in 2011-12 will be 135.2 days and in 2012-13 will be 135.3 days. There would not be much variation in increase in the duration days between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for increasing in duration days of sugar cane.

**2.5 CAPACITY**

The capacity ranges between 644 in 1935-36 to 527 in 2010-11 and shows an ever increasing trend. The LGR of capacity of sugar cane is 2.80 but does not show substantial increase in the capacity. The expected increase in capacity in 2011-12 will be **3668.2** tonnes per day and in 2012-13 will be **3727.1** tonnes/day. There would not be much variation in increase in the capacity of sugarcane between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for increasing capacity of sugar cane.

**2.6 CANE CRUSHED**

Cane Crushed varies from 1,339 tonnes in 1930-31 to 279,295 in 2006-07 and shows lot of variations in the crushed cane. The LGR of Cane Crushed is 2.87 but does not show substantial increase in the Cane Crushed. The expected increase in Cane Crushed in 2011-12 will be **338330.1** tonnes and in 2012-13 will be **343796.2** tonnes. There would not be much variation in increase in the Cane Crushed between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for getting more cane for crushing.

**2.7 TOTAL SUGAR PRODUCTION**

The total sugar production varies from 120 in 1930-31 to 98,338 in 1993-94 and shows lot of variation in the sugar production. The LGR of Total sugar production is 2.87 but does not show substantial increase in the total sugar production. The expected increase in total sugar production in 2011-12 will be **338330.1** tonnes and in 2012-13 will be **343796.2** tonnes. There would not be much variation in increase in the total sugar production 2011-12 and 2012-13. Hence immediate immense measures are to be taken for getting total sugar production.

**2.8 MOLASSES PRODUCTION**

The molasses production varies from 336 in 1931-32 to 131,111 in 2006-07. The LGR of yield of molasses production is 6.48 but does not show substantial increase in the molasses production. The expected increase in molasses production in 2011-12 will be **17193.6** tonnes and in 2012-13 will be **17603.7** tonnes. There would not be much variation in increase in the molasses production between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for getting more molasses production.

**2.9 RECOVERY PERFORMANCE**

Recovery performance varies from 8.96 in 1930-31 to 10.55 in 2007-08 and shows variations. The LGR of recovery performance of sugar cane is **0.12** but does not show substantial increase in the area. The expected increase in recovery performance in 2011-12 and in 2012-13 will be 10.3 per cent. There is no variation in increase in the recovery performance of sugarcane between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for getting more recovery performance of sugar cane.

**2.10 MOLASSES IN PERCENTAGE TO CANE**

The molasses in percentage to cane varies from 3.33 in 1935-40 to 4.69 in 2006-07 with lot of variations. The LGR of molasses in percentage to cane is 0.38 but does not show substantial increase in the molasses in percentage to cane. The expected increase in molasses in percentage to cane in 2011-12 and in 2012-13 will be 4.7 per cent. There is no variation in increase in the molasses in percentage to cane between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for getting molasses in percentage to cane.

Karl Pearson's coefficient of correlation between Area and Yield of sugar cane is very low as the  $r = 0.037$  is very low. It is concluded that there is mismatch between area and yield of sugarcane.

**3. STATE-WISE AREA UNDER SUGARCANE**

The state-wise area under sugarcane for chief sugar cane production has been presented in Table 2.

**TABLE 1: SUGARCANE, SUGAR AND MOLASSES PRODUCTION AT A GLANCE STATEMENT SHOWING AREA, PRODUCTION AND YIELD OF SUGARCANE, FACTORIES IN OPERATION, DURATION, CAPACITY, CANE CUSHED, SUGAR AND MOLASSES PRODUCTION & THEIR RECOVERY % CANE**

Years	Area under sugarcane ('000 hectare)	Area under sugarcane ('000 tonnes)	Yield of cane per hectare (tonnes)	No. of Factories in Operation	Average duration days	Average capacity (tonnes per day)	Total Cane crushed ('000 tonnes)	Total sugar product ('000 tonnes)	Recovery of Sugar (%cane)	Molasses Production ('000 tonnes)	Molasses (%cane)
1930-31	1,176	36,354	30.9	29	-	-	1,339	120	8.96	-	-
1935-36	1,681	62,185	37.0	135	126	644	10,045	934	9.29	336	3.33
1940-41	1,617	51,978	321.0	148	113	750	11,492	1,113	9.7	431	3.76
1945-46	1,299	47,273	36.4	145	93	768	9,510	959	10.09	333	3.61
1950-51	1,707	54,823	32.1	139	101	882	11,348	1,100	9.99	387	3.60
1955-56	1,84.7	58,384	31.6	143	145	980	18,642	1,834	9.83	736	3.94
1960-61	2,415	110,001	45.5	174	166	1,172	31,021	3,021	9.74	1,210	3.99
1965-66	2,836	123,990	43.7	200	159	1,253	36,512	3,341	9.7	1,530	4.17
1966-67	2,301	92,826	40.3	200	96	1,229	21,637	2,151	9.94	838	3.89
1967-68	2,046	95,500	46.7	200	97	1,273	22,638	2,248	9.92	861	3.91
1968-69	2,532	124,682	49.2	205	152	1,320	37,699	3,559	9.44	1,671	3.81
1969-70	2,749	135,024	49.2	215	174	1,333	45,701	4,262	9.33	2,004	4.46
1970-71	2,615	126,368	48.3	215	174	1,394	38,205	3,740	9.79	1,611	4.22
1971-72	2,390	113,579	47.5	220	107	1,437	31,015	3,113	10.04	1,228	3.96
1972-73	2,452	124,866	50.9	228	133	1,454	40,407	3,873	9.57	1,694	4.19
1973-74	2,752	140,805	50.9	228	133	1,491	42,278	3,948	9.34	1,831	4.28
1974-75	2,894	144,289	49.9	246	140	1,534	48,345	4,797	9.9	2,012	4.15
1975-76	2,762	140,604	50.9	252	116	1,563	41,880	4,262	10.8	1,703	4.07
1976-77	2,866	153,007	53.4	270	125	1,578	48,819	4,840	9.91	2,059	4.22
1977-78	3,151	176,966	56.2	287	165	1,551	67,329	6,461	9.59	2,971	4.41
1978-79	3,088	151,655	49.1	299	140	1,556	59,717	5,841	9.78	3	4.25
1979-80	2,610	128,833	49.4	300	59	1,651	39,050	3,858	9.88	1,582	4.05
1980-81	2,667	154,248	57.8	315	104	1,718	51,584	5,150	9.98	2,126	4.12
1981-82	3,193	186,358	58.4	320	173	1,721	87,342	8,437	9.66	3,837	4.39
1982-83	3,358	189,505	56.4	321	158	1,779	82,697	8,229	9.95	9.95	3.57
1983-84	3,110	174,076	56.0	326	111	1,779	82,697	8,229	9.95	3,507	4.24
1984-85	2,953	170,319	57.7	339	106	1,824	60,090	6,144	10.22	2,463	4.1
1985-86	2,850	170,648	59.9	342	116	1,885	68,566	7,016	10.23	2,857	4.17
1986-87	3,079	186,090	60.4	354	141	1,862	85,202	8,502	9.98	3,663	4.3
1987-88	3,279	196,737	60.0	357	152	1,888	93,933	9,110	9.7	4,205	4.48
1988-89	3,329	203,037	61.0	365	133	1,925	85,647	8,752	10.22	3,595	4.2
1989-90	3,439	225,569	65.6	377	158	2,036	111,158	10,990	9.89	4,881	4.39
1990-91	3,686	241,045	65.4	385	166	2,088	122,338	12,047	9.584	5,454	4.45
1991-92	3,844	263,995	66.1	392	172	2,167	133,950	13,405	10.01	6,056	4.52
1992-93	3,572	228,003	63.8	393	123	2,325	103,008	10,609	10.3	4,381	4.25
1993-94	3,422	229,660	67.1	394	114	2,388	98,338	98,338	10	4,227	4.3
1994-95	3,867	275,540	71.3	408	159	2,483	147,643	14,643	9.92	6,497	4.4
1995-96	4,147	281,100	67.8	416	181	2,531	174,726	16,453	9.42	8,297	4.75
1996-97	4,174	277,560	66.5	412	130	2,656	130,379	12,905	9.9	5,936	4.55
1997-98	3,930	279,541	71.1	400	123	2,863	129,135	12,852	9.95	5,547	4.37
1998-99	4,055	288,722	71.2	427	141	2,855	157,561	15,539	9.86	6,978	4.37
1999-2000	4,220	299,324	70.9	423	151	3,049	178,494	18,200	10.2	8,013	4.49
2000-01	4,316	295,956	68.6	436	138	3,203	176,660	18,511	10.48	7,820	4.43
2001-02	4,411	297,208	67.4	434	138	3,285	180,346	18,528	10.27	8,073	4.48
2002-03	4,520	287,383	63.6	453	140	3,343	194,365	20,145	10.36	8,879	4.57
2003-04	3,938	233,862	59.4	422	99	3,493	132,511	13,546	10.22	5,905	4.42
2004-05	3,622	237,088	64.8	400	97	3,508	124,772	12,690	10.17	5,513	4.42
2005-06	4,201	281,172	66.9	455	125	3,619	188,672	19,267	10.21	8,549	4.53
2006-07	5,151	355,520	69.0	504	173	3,561	279,295	28,367	10.16	131,111	4.69
2007-08	5,055	348,188	68.9	516	149	3,586	249,905	26,357	10.55	11,313	4.53
2008-09	4,415	285,029	64.6	489	87	3,751	144,983	14,539	10.03	6,546	4.51
2009-10	4,175	292,302	70.0	490	109	3,846	185,548	18,912	10.19	8,400	4.53
2010-11*	4,944	339,168	68.6	527	135	3,744	239,807	24,394	10.17	10,970	4.57
<b>LGR</b>	<b>1.82</b>	<b>2.87</b>	<b>0.23</b>	<b>2.32</b>	<b>0.06</b>	<b>2.80</b>	<b>3.84</b>	<b>4.38</b>	<b>0.12</b>	<b>6.48</b>	<b>0.38</b>
<b>2011-12</b>	<b>4803.8</b>	<b>338330.1</b>	<b>65.7</b>	<b>523.9</b>	<b>135.2</b>	<b>3668.2</b>	<b>196686.9</b>	<b>24318.6</b>	<b>10.3</b>	<b>17193.6</b>	<b>4.7</b>
<b>2012-13</b>	<b>4862.4</b>	<b>343796.2</b>	<b>65.8</b>	<b>531.4</b>	<b>135.3</b>	<b>3727.1</b>	<b>200393.8</b>	<b>24806.9</b>	<b>10.3</b>	<b>17603.7</b>	<b>4.7</b>
Karl Pearson's coefficient of correlation between Area and Yield of sugar cane is $r = 0.037$ NS $p\text{-value} = 0.793$											
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TABLE 2: STATE - WISE AREA UNDER SUGARCANE IN INDIA

Sl. No.	State	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011	2011-12	LGR	2012-13
1	Andhra Pradesh	233	209	210	230	264	247	196	158	192	204	-2.1	189.0
2	Assam	26	25	24	23	27	26	28	27	30	25	1.3	27.9
3	Bihar	107	104	104	101	130	109	112	116	248	235	9.9	211.0
4	Chhattisgarh	4	5	6	6	7	11	10	12	8	8	8.1	11.1
5	Gujarat	203	176	197	197	214	211	221	154	190	194	-0.4	191.4
6	Haryana	189	160	130	127	140	140	90	74	85	95	-8.7	64.3
7	Jharkhand	4	4	4		4	6	5	7	7	7	7.9	7.5
8	Karnataka	383	243	178	219	326	305	281	337	423	430	5.1	400.6
9	Kerala	4	3	3	7	5	2	2	3	3	2	-6.4	2.2
10	Madhya Pradesh	39	43	52	56	64	75	71	62	65	81	6.4	82.1
11	Maharashtra	573	443	324	501	1049	1093	68	756	965	1022	7.7	966.1
12	Orissa	14	15	15	16	20	20	11	8	13	14	-2.7	12.5
13	Punjab	154	123	86	84	99	110	81	60	70	80	-7.5	55.9
14	Rajasthan	10	6	6	8	11	10	7	6	5	16	3.1	9.9
15	Tamil Nadu	261	192	232	336	391	354	309	293	316	382	4.2	378.1
16	Uttar Pradesh	2149	2030	1955	2156	2247	2179	2084	1977	2125	2162	0.2	2126.7
17	Uttarakhand	134	128	107	101	121	124	107	93	107	108	-2.3	98.7
18	West Bengal	20	17	16	15	17	17	18	14	15	16	-1.9	14.8
19	Others	13	12	13	14	15	15	14	15	18	18	4.0	17.9
	All India	4520	3938	3662	4201	5151	5055	4415	4175	4885	5099	2.0	5008.5

\* Provisional. Third Advance Estimates

The table shows that Uttar Pradesh, Maharashtra, Andhra Pradesh, Tamil Nadu and Karnataka are the most populous states having large area under sugar. But the sugar cultivation in all the leading states shows steep ups and downs and these may be due to vagaries of monsoons, farmers' despair on the low selling cost of both sugarcane and jaggery and involvement of excessive expenditure.

The state-wise production of sugarcane for chief sugar cane production has been presented in Table 3.

**TABLE 3: STATE - WISE PRODUCTION OF SUGARCANE IN INDIA**

Sl.NO	State	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011	2011-12	LGR	2012-13
1	Andhra Pradesh	15387	15070	15739	17656	21692	20296	15380	11708	14964	15912	-0.9	15567.2
2	Assam	916	981	884	871	1055	980	1100	1059	1075	984	1.7	1082.4
3	Bihar	4521	4286	4112	4338	5956	385	4960	5033	12764	11839	13.1	10023.0
4	Chhattisgarh	10	13	15	16	19	28	25	29	22	19	7.7	27.9
5	Gujarat	14071	12669	14570	14580	15630	15190	15510	12400	13760	13390	-0.3	13943.9
6	Haryana	10650	9280	8060	8180	9580	8860	5130	5335	6042	6745	-6.3	5076.0
7	Jharkhand	141	136	142	142	142	150	349	447	457	457	17.1	497.8
8	Karnataka	32485	16015	14276	18267	28670	26240	23328	30443	39657	38808	7.1	37351.9
9	Kerala	313	291	283	916	440	218	276	285	271	156	-6.5	222.1
10	Madhya Pradesh	15663	1874	2148	2425	2806	3180	2975	2535	2667	3098	-15.9	484.6
11	Maharashtra	42167	25668	20475	38853	78568	88437	60648	64159	81896	82473	10.9	93335.2
12	Orissa	753	858	560	1073	1274	1096	646	490	903	797	-0.8	808.4
13	Punjab	9290	6620	5170	4860	6020	6690	4670	3700	4170	4800	-7.0	3438.7
14	Rajasthan	422	309	277	483	630	594	388	344	368	998	7.1	668.3
15	Tamil Nadu	24165	17656	23396	35107	41124	38071	32804	29746	34252	39367	5.3	40728.1
16	Uttar Pradesh	102948	112754	118715	125470	133949	124665	109048	117140	120545	39367	-3.2	90989.5
17	Uttarkhand	7332	7651	6441	6134	6100	7686	5590	5842	6498	6596	-1.6	5995.8
18	West Bengal	1281	1253	1033	1248	1267	1272	1638	1001	1134	1175	-0.4	1204.5
19	Others	518	478	492	553	514	680	564	606	937	927	7.4	882.3
	All India	287383	233862	237088	281172	355520	348188	285029	292302	342382	351193	3.2	355219.9

\* Provisional. Third Advance Estimates

The table shows that the sugarcane production is observed highest in the states of Andhra Pradesh, Gujarat, Haryana, Maharashtra and Uttar Pradesh. The sugar cane production in Andhra Pradesh varies between 15387 in 2002-03 and increased continuously to 21692 in 2006-07 and since then shows a peak and valley configuration. The production increased with ups and downs in Maharashtra, Tamil Nadu and Uttar Pradesh states

#### 5. STATE-WISE YIELD OF SUGAR CANE

The state-wise yield of sugarcane for chief sugar cane production has been presented in Table 4.

**TABLE 4: STATE-WISE PRODUCTION OF SUGARCANE**

Sl.NO	State	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011	2011-12	LGR	2012-13
1	Andhra Pradesh	66.2	72.1	74.9	76.8	82.2	82.2	78.5	74.1	77.9	78	1.2	81.2
2	Assam	35.2	39.2	37	37.2	39.1	37.7	38.4	39.1	36.2	39.4	0.5	38.8
3	Bihar	42.1	41.4	39.5	42.8	46	35.5	44.3	43.4	51.5	50.5	2.2	49.0
4	Chhattisgarh	25.0	26.1	24.8	25.6	26	25.2	24	23.6	26.3	23.3	-0.6	24.1
5	Gujarat	69.4	71.8	74.1	74	730	72	70.2	80.5	72.4	69	-2.8	117.1
6	Haryana	56.3	58	62	64.4	68.4	63.3	57	72.1	71	71.1	2.3	72.6
7	Jharkhand	34.3	34.0	36.3	35.5	35.5	25	61.2	68.8	69.2	69.3	10.2	73.3
8	Karnataka	84.9	65.8	80.2	83.4	87.9	85.8	83	90.3	93.8	90.0	2.1	94.1
9	Kerala	82.3	83.1	94.3	134.8	88.0	109.0	125.2	95.0	95.5	95.5	1.2	107.0
10	Madhya Pradesh	39.9	43.3	40.9	43.7	43.6	42.3	42.2	40.8	41.0	38.3	-0.5	40.4
11	Maharashtra	74.4	57.9	63.2	77.6	74.9	80.9	79.0	84.9	84.9	80.7	2.9	88.0
12	Orissa	53.0	59.2	55.8	65.8	63.4	55.4	59.8	61.2	68.9	56.5	1.0	63.2
13	Punjab	60.3	53.8	60.1	57.9	60.1	60.8	57.7	61.7	59.6	60.0	0.5	60.7
14	Rajasthan	42.2	53.3	48.5	61.1	57.8	57.1	59.7	57.4	66.9	62.3	3.4	67.2
15	Tamil Nadu	92.4	91.9	100.8	104.7	105.1	107.5	106.2	101.5	108.4	103.0	1.3	109.5
16	Uttar Pradesh	56.3	55.5	60.7	58.2	59.6	57.2	52.3	59.3	56.7	56.7	-0.2	56.7
17	Uttarkhand	54.6	59.8	60.2	60.7	50.4	62.0	52.2	60.9	60.9	61.1	0.6	60.1
18	West Bengal	65.7	74.1	66.2	83.2	76.3	75.3	93.1	72.5	75.6	73.1	1.1	80.1
19	Others	39.0	40.8	36.2	38.7	38.9	45.3	40.0	35.5	52.1	50.4	2.7	48.0
	All India	63.6	59.4	64.8	66.9	69.0	68.9	64.6	70.0	70.1	68.9	1.3	71.3

\* Provisional. Third Advance Estimates

The sugar cane yield shows that the sugar cane yield shows highest in the state of Tamil Nadu, Kerala, Maharashtra, Gujarat and West Bengal. The yield is very low in the states of Chhattisgarh, Assam and Madhya Pradesh.

**6. STATE-WISE UTILISATION PERCENTAGE OF SUGAR CANE**

The state-wise area under sugarcane for chief sugar cane production has been presented in Table 5.

**TABLE 5: STATE - UTILISATION PERCENTAGE OF SUGARCANE PRODUCTION OF SUGAR IN IMPORTANT STATES**

Sl.No.	State	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-2011	LGR	2012-13
1	Andhra Pradesh	57.05	58.56	69.68	79.68	65.18	38.97	47.38	68.95	-1.7	56.4
2	Bihar	68.41	64.45	102.70	87.37	89.13	47.78	54.13	32.44	-9.1	43.3
3	Gujarat	76.98	50.82	73.98	85.67	75.97	60.89	91.09	89.82	4.3	88.6
4	Haryana	59.91	48.86	51.19	69.89	68.45	49.28	49.63	71.93	1.8	63.0
5	Karnataka	68.32	72.03	98.28	87.89	109.80	68.87	78.76	85.14	1.4	88.2
6	Madhya Pradesh	48.93	34.08	39.55	68.82	57.30	21.02	33.65	63.74	1.0	47.7
7	Maharashtra	113.28	95.02	114.74	101.67	94.47	65.99	95.68	97.96	-3.5	83.6
8	Orissa	51.86	54.19	41.19	49.06	62.30	50.57	51.23	57.49	1.7	55.8
9	Punjab	60.51	62.28	75.64	84.57	85.97	55.75	57.08	82.33	1.3	74.2
10	Tamil Nadu	52.57	49.12	66.04	66.75	59.90	50.62	48.17	59.30	-0.2	56.0
11	Uttar Pradesh	41.11	43.36	48.46	66.81	59.95	41.71	48.43	53.41	2.2	54.9
12	Uttarkhand	51.93	61.40	73.67	91.93	53.47	43.31	54.33	49.79	-3.9	50.3
	All India										

\* Provisional. Third Advance Estimates

The table shows that the utilization percentage of sugarcane production is highest in Maharashtra, followed by Gujarat, Bihar, Karnataka and shows up and down trend.

**7. PER CAPITA CONSUMPTION OF SUGAR CANE**

The per capita consumption of sugar, gur & khandsari (kg per annum) has been presented in Table 6.

The LGR of population growth is 1.99 but does not show substantial increase in the population growth. The expected increase in population growth in 2011-12 will be 1182.1 and in 2012-13 will be 1197.6. There would not be much variation in increase in the population growth between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for decreasing population growth.

The consumption of sugar, gur & khandsari (kg per annum) is concerned; the consumption of sugar has been continuously increased from 21.13 kg per annum to 1186 in 2010-11. The LGR of yield of consumption of sugar is 5.1 but does not show substantial increase in the consumption of sugar. The expected increase in consumption of sugar in 2011-12 will be 286.4 tonnes and in 2012-13 will be 297.2. There would not be much variation in increase in the yield of sugarcane between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for reducing the consumption of sugar.

Gur & Khandsari increased from 60.74 kg per annum 1962-63 to 117.98 kg per annum in 1997-98. The LGR of yield of sugar cane is 0.24 but does not show substantial increase in the area. The expected increase in gur & khandsari (kg per annum) in 2011-12 will be 84.2 tonnes and in 2012-13 will be 84.4. There would not be much variation in increase in the gur & khandsari (kg per annum) between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for reducing the consumption of gur & khandsari (kg per annum).

The per capita consumption (Kg per annum) of sugar 2.8 in 1961-62 and 19.9 in 2008-09, and Gur & Khandsari decreased 15.2 kg per annum 1961-62 to 3 kg per annum in 2006-07.

The LGR of per capita consumption (Kg per annum) of sugar is 2.26 but does not show substantial increase in the area. The expected increase in per capita consumption (Kg per annum) of sugar in 2011-12 will be 20 tonnes and in 2012-13 will be 20.3. There would not be much variation in increase in the per capita consumption (Kg per annum) of sugar between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for reducing the per capita consumption (Kg per annum) of sugar.

Total per capita consumption of gur & khandsari (kg per annum) varies from 3 in 2006-07 and 15.2 in 1960-61 showing a decreasing trend. The LGR of per capita consumption (Kg per annum) of sugar is -1.61 but does not show substantial increase in the area. The expected increase in per capita consumption (Kg per annum) of sugar in 2011-12 will be 6.4 tonnes and in 2012-13 will be 6.2. There would not be much variation in increase in the per capita consumption (Kg per annum) of sugar between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for reducing the per capita consumption (Kg per annum) of sugar.

Total per capita consumption of sugar, gur & khandsari (kg per annum) varies from 29.2 in 2008-09 and 16.6 in 1967-68. The LGR of per capita consumption of sugar, gur & khandsari (kg per annum) is 0.60 but does not show substantial increase in the area. The expected increase in per capita consumption sugar, gur & khandsari (kg per annum) in 2011-12 will be 25.2 tonnes and in 2012-13 will be 25.4. There would not be much variation in increase in the per capita consumption sugar, gur & khandsari (kg per annum) between 2011-12 and 2012-13. Hence immediate immense measures are to be taken for reducing the per capita consumption of sugar, gur & khandsari (kg per annum).



TABLE 6: PER CAPITAL CONSUMPTION OF SUGAR, GUR &amp; KHANDSARI

Year	Population in million (as on 1st March)	Consumption Lakh tonnes		Per capita consumption (Kg per annum)		Total per capita consumption of sugar, gur & khandsari (kg per annum)
		Sugar	Gur & Khandsari*	Sugar	Gur & Khandsari*	
1960-61	439	21.13	66.87	4.8	15.2	20.0
1961-62	448	25.88	64.32	2.8	14.4	20.2
1962-63	458	24.86	60.74	5.4	13.3	18.7
1963-64	468	23.07	66.67	4.9	14.2	19.1
1964-65	478	24.69	72.05	5.2	15.1	20.3
1965-66	489	28.10	69.11	5.7	14.1	19.8
1966-67	500	26.01	61.25	5.2	12.2	17.4
1967-68	511	22.15	63.05	4.3	12.3	16.6
1968-69	523	26.05	73.46	5.0	14.0	19.0
1969-70	534	32.64	74.01	6.1	13.9	20.0
1970-71	546	40.25	74.37	7.4	13.6	21.0
1971-72	558	37.95	69.98	6.8	12.5	19.3
1972-73	570	35.14	70.30	6.2	12.3	18.5
1973-74	581	35.22	83.36	6.1	14.3	20.4
1974-75	593	34.75	80.63	5.9	13.6	19.5
1975-76	609	36.89	83.67	6.1	13.7	19.8
1976-77	621	37.57	88.41	6.0	14.2	20.2
1977-78	633	44.82	90.88	7.1	14.4	21.5
1978-79	646	62.14	75.96	9.6	11.8	21.4
1979-80	669	78.8@	75.48	7.8	11.3	19.1
1980-81	684	4.80@	85.22	7.3	12.5	19.8
1981-82	700	57.11	80.40	8.2	11.5	19.7
1982-83	710	64.71	86.65	91.0	12.2	21.3
1983-84	723	75.70	95.41	10.5	13.2	23.7
1984-85	737	78.90@	75.48	7.8	11.3	19.1
1985-86	751	83.53@	82.48	11.1	11.0	22.1
1986-87	765	87.75@	83.00	12.0	10.7	22.7
1987-88	779	93.33	83.00	12.0	10.7	22.7
1988-89	804	99.19	93.93	12.3	11.7	24.0
1989-90	821	102.83@	85.73	12.5	10.4	21.9
1990-91	846	107.15	90.71	12.7	10.7	23.4
1991-92	861	112.25	93.95	13.0	10.9	23.9
1992-93	878	120.05	98.62	13.7	11.2	24.9
1993-94	894	111.29@	85.73	12.5	10.4	22.9
1994-95	911	119.74	105.26	12.4	11.8	24.2
1995-96	929	131.72	74.45	14.2	8.0	22.2
1996-97	947	136.75	115.61	14.4	12.2	26.6
1997-98	966	139.78	117.98	14.5	12.2	26.7
1998-99	985	141.35	99.05	14.4	10.1	24.5
1999-00	1005	155.08	87.19	15.4	8.7	24.1
2000-01	1029	1652.00	86.09	15.7	8.4	24.1
2001-02	1043	167.81	83.11	16.1	8.0	24.1
2002-03	1060	183.84	56.94	17.3	5.4	22.7
2003-04	1077	172.85	71.46	16.0	6.6	22.6
2004-05	1093	185.00	81.75	16.9	7.5	24.4
2005-06	1106	189.45	57.39	17.1	5.2	22.3
2006-07	1122	201.60	33.68	18.0	3.0	21.0
2007-08	1138	220.00	50.93	19.3	4.5	23.8
2008-09	1154	230.00	107.92	19.9	9.3	29.2
2009-10	1170	210.00	73.12	17.9	6.2	24.1
2010-11(P)	1186	207.36	59.94	17.5	5.1	22.6
<b>LGR</b>	<b>1.99</b>	<b>5.01</b>	<b>0.24</b>	<b>2.36</b>	<b>-1.61</b>	<b>0.60</b>
<b>2011-12</b>	<b>1182.1</b>	<b>286.4</b>	<b>84.2</b>	<b>20.0</b>	<b>6.4</b>	<b>25.2</b>
<b>2012-13</b>	<b>1197.6</b>	<b>292.7</b>	<b>84.4</b>	<b>20.3</b>	<b>6.2</b>	<b>25.4</b>
@	Consumption of Imported sugar			* The entire productions is taken to be consumed internally		

## CONCLUSION

The area under sugar cane varies from 1.176 hectares in 1930-31 to 5,151 in 2007-08, the number of factories ranges between 29 in 1930-31 to 527 in 2010-11, the yield of cane per hectare varies from 39 tonnes in 1930-31 to 71.1 tonnes in 1998-99, the number of factories ranges between 29 in 1930-31 to 527 in 2010-11 and shows an ever increasing trend. The average duration days ranges between 87 in 2008-09 and 181 in 1995-96. But it shows up and down trend in the study period. The capacity ranges between 644 in 1935-36 to 527 in 2010-11 and shows an ever increasing trend. Cane Crushed varies from 1,339 tonnes in 1930-31 to 279,295 in 2006-07 and shows lot of variations in the crushed cane. The total Sugar production varies from 120 in 1930-31 to 98,338 in 1993-94 and shows lot of variation in the sugar production. The Molasses Production varies from 336 in 1931-32 to 131,111 in 2006-07. Recovery Performance varies from 8.96 in 1930-31 to 10.55 in 2007-08 and shows variations. The molasses in percentage to cane varies from 3.33 in 1935-40 to 4.69 in 2006-07 with lot of variations. The consumption of sugar, gur & khandsari (kg per annum) is concerned, the consumption of sugar has been continuously increased from 21.13 kg per annum to 1186 in 2010-11. Gur & Khandsari increased from 60.74 kg per annum 1962-63 to 117.98 kg per annum in 1997-98. The per capita consumption (Kg per annum) of sugar 2.8 in 1961-62 and 19.9 in 2008-09 and Gur & Khandsari decreased 15.2 kg per annum 1961-62 to 3 kg per annum in 2006-07. Total per capita consumption of sugar, gur & khandsari (kg per annum) varies from 16.6 in 1967-68 and 29.2 in 2008-09.

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**PEPPER PRODUCTION TREND IN INDIA: AN OVERVIEW**

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**ABSTRACT**

*Pepper known as black gold, is an important commodity traded globally since ancient times. A native of the Western Ghats, the fame of pepper brought traders from all over the world to the shores of the southern Indian state of Kerala. Pepper, one of the hottest agricultural commodities traded on the Indian commodity exchange, is on a bull run, at present.*

**KEYWORDS**

pepper production, agriculture commodity.

**INTRODUCTION**

Black pepper (*Piper nigrum* L.) famous as "Black Gold" and also known as "King of Spices" is one of the important agricultural commodities of commerce and trade in India since pre-historic period. Black pepper is one of the important traditional spice crop cultivated in India. Its cultivation is mainly confined to the Southern states viz., Kerala, Karnataka and Tamil Nadu. Kerala accounts for 72% of the total production. The major pepper producing areas in Kerala are Idukki, Wayanad, Kannur, Kasaragod and Kozhikode districts. Unlike other crops, pepper is grown in a large number of small and marginal holdings, mixed with other crops like coconut, arecanut, coffee, cardamom etc. Pepper is cultivated as a pure crop in a very limited area and that too in small pockets. The crop is the major source of income and employment for rural households in the predominantly pepper growing State of Kerala where more than 2.5 lakh farm families are involved in pepper cultivation. Karnataka, Tamil Nadu are the other major pepper producing States in the country. Kerala accounts for 80-90% of the total pepper production in the country. Idukki and Wynadu are the two major pepper producing districts in Kerala. The estimated area under pepper in India is 2,36,180 hectares (2006-07) and the estimated production is 50,000 tons (2007-08). The production of Indian pepper has come down from 80,000 tons (2002) to 50,000 tons (2007-08 estimates).

**CLIMATE AND SOIL**

Black Pepper is a plant of humid tropics requiring adequate rainfall and humidity. The hot and humid climate of sub-mountainous tracts of Western ghats is ideal for its cultivation. It grows successfully between 20° North and South latitude and from sea level up to 1500 metres above sea level. The crop tolerates temperature between 10° and 40°C. A well distributed annual rainfall of 125-200 cm is ideal for the crop. Ideal pH ranges from 4.5 to 6.5.

**VARIETIES**

Over 75 cultivars of Black Pepper are being cultivated in India. Karimunda is the most popular of all cultivars in Kerala. The other important cultivars are Kottanadan (South Kerala), Narayakodi (Central Kerala), Aimperian (Wynadu), Neelamundi (Idukki), Kuthiravally (Kozhikode and Idukki), Balankotta, Kalluvally (North Kerala). Sixteen improved varieties of Black Pepper have been released for cultivation from Pepper Research Station, Panniyur, Kerala and Indian Institute of Spices Research, Calicut such as Panniyur -1 to 7, Sreekara, Subhakara, Panchami, Pournami, PLD-2, Sakthi, Thevam, Girimunda and Malabar.

**INDIAN PEPPER SCENARIO**

Black Pepper is one of the most important spices grown and exported from India. Like other spices, it too has great domestic demand so quantity left for export is limited. Black pepper is mainly used as spice and its consumption is also known to have many health benefits. In India, the harvesting period is Nov-March with South India growing almost all the black pepper production led by the state of Kerala followed by Karnataka and Tamilnadu. Idukki & Waynad in Kerala and Coorg in Karnataka are major pepper growing areas. U.S., Italy, Germany, Canada among other countries is big importers of Indian pepper due to its quality which is why it rules at the premium in International market. India also exports value added products like pepper oil, pepper oleoresins, green pepper in brine, dehydrated green pepper etc. India's main export is of Malabar grade black pepper. The country itself is a very big consumer of spices so the quantity available for export is limited as compared to its competitors. The country is also importing pepper from Sri Lanka, Vietnam, Brazil and Indonesia. The prices of pepper are highly volatile. The availability of pepper futures in Indian commodity market has given the exporters an opportunity to hedge their risks.

**VIETNAMESE PEPPER SCENARIO**

More than 30% of the world productions of pepper come from Vietnam with in the year 2008 it was estimated 34.6%. Binh Phuoc, Dong Nai, Ba Ria - Vung Tau, Dak Nong, Gia Lai and Dak Lak are the main pepper producing regions of Vietnam. The total area under pepper cultivation is around 50,000 hectares with production in the region of 90000-100000 tonnes. The harvesting period is from the month of March to May. Vietnam is not only the biggest producer of pepper but also the largest exporter in world. European and Asian countries are the big buyers of Vietnamese produce besides U.S.

**INDONESIAN PEPPER SCENARIO**

Lampung province of Sumatra is the major black pepper producing region in Indonesia while Bangka region produces white pepper. The harvesting season is from the month of July to October. The production is in the region of 22000-25000 tons contributing 9-10% of the world's production.

**BRAZILIAN PEPPER SCENARIO**

Major production of the pepper in Brazil comes from the State of Para. The harvesting period for Brazilian pepper is August to October. Its estimated production in the year 2008 was 37000 tons contributing 14-15% of the global production. Brazil is one of the biggest exporters of pepper to U.S. market.

**MALAYSIAN PEPPER SCENARIO**

About 95% of the pepper is grown in the Sarawak region in Malaysia and thus in International market it is traded as Sarawak Pepper. About 14,000 hectares of land is under pepper cultivation in Sarawak, the major pepper growing area of Malaysia with an annual production in the region of 20,000 to 25,000 tonnes, contributing around 7-8% of the total world production. The harvesting season is from May to August with the months generally may and June being the peak of the season. It is not a big consumer like India so 90% of its production is exported to overseas market. Distribution of pepper cultivation for the year of 2009 and 2010.

Factors affecting current production and productivity of pepper holdings, prices, acreage expansion, weather conditions, pests and diseases, Government policies, investment programs etc. The main constraint affecting production is low productivity. The major reasons are:

- Cultivation of poor yielding varieties
- Existence of senile and unproductive vines
- Losses due to pest and disease attack and drought
- Non-adoption of appropriate agronomic practices
- Decreasing soil fertility
- Increasing labour cost -resulting in neglect of crop management aspects by farmer
- Changing cropping pattern
- Changing climate
- Minor pests assuming major pest status

### METHODS OF PEPPER PROCESSING

The crop takes about 6–8 months from flowering to harvest. The harvest season extends from November to January in the plains and January to March in the hills. When one or two berries in the spike turn bright orange or purple, it is time for harvest. Harvesting is done by hand picking of the spikes from the vines. The berries are separated from the spikes physically and dried in the sun or concrete floor or bamboo mat till it is crisp. Now, mechanical threshers are also used for separating berries from the spike. During sun drying the berries are periodically turned over to facilitate uniform drying. Properly dried pepper is cleaned and packed in clean gunny bags and stored hygienically. Graded or garbled Pepper and ungraded pepper are stored separately stacked in go downs, where wooden planks are used on the floors.

### TRADE OF PEPPER WITHIN THE COUNTRY AND OVERSEAS - MARKETING CHANNELS

Pepper marketing channels consists of growers, Middle men (in some cases), Assembling market, Terminal markets and then exporters and domestic market. Under the present system the producers can sell their produce in several ways. The most widely practiced marketing channel is collecting directly from the producers by the local merchants, whole sale traders and then the exporters who is the final link in the chain. The private sector operation is mainly through commission agents who collect the produce from the small farmers and dispose of these produce to the retail trade, at a price determined by demand and supply.

### DOMESTIC CONSUMPTION/PER-CAPITA CONSUMPTION

Domestic consumption in India is about 40,000 to 45,000 tons with slight variation depending on the production and price. A statement showing production, Export, Import, domestic consumption during 2009 and estimate for 2010 and projection for 2011.

### DEVELOPMENT PROGRAMME FOR PEPPER, PRODUCTION PROGRAMMES

Spices Board is implementing a re-plantation/rejuvenation programme for pepper in the two major pepper growing districts of Kerala state, viz. Idukki and Wayanad and some of the North Eastern states. The cost of implementation of the programme in Idukki district is Rs. 120 crore and for Weygand and North Eastern states is Rs. 53.28 crore. The major components of the programme are production of planting material, re-plantation/rejuvenation of senile plantations, promotion of organic farming, promotion of integrated pest/disease management, training for the farmers etc.

TABLE-1: PEPPER PRODUCTION IN STATE WISE

State	2007-08	2009-10
Kerala	87605	153,711
Tamil Nadu	851	3,122
Karnataka	2360	18,857
Others	40	5609
<b>Total</b>	<b>90856</b>	<b>181,299</b>

Source: Economic Survey, Government of India, New Delhi

Table-1 shows the state –wise production of pepper in 2007-08 to 2009-10. There has been change in production trend among states and the rising towards pepper production in states other than Kerala. The pepper production has gone up in Kerala; its contribution has fallen a bit from 98 percent in 1995-96 to 96 percent in 2002-2003. In 2009-10 Kerala share in the Production was 153,711 tonnes. The Tamil Nadu is unchanged at 2007-08 851 tonnes has increase in 2009-10 3122 tonnes, but the Karnataka 2007-08, 2360 tonnes at 2009-10, 18857 tonnes with simultaneous rise in cultivation in productivity.

TABLE- 2: PEPPER PRODUCTION IN INDIA

Sl.No	Years	Acreage (ha)	Production (Mts.)	Yield
1	1997-98	181.5	57.3	316
2	1998-99	239.8	75.7	316
3	1999-00	195.6	59.0	302
4	2000-01	213.9	63.7	298
5	2001-02	219.4	62.4	285
6	2002-03	224.4	71.7	320
7	2003-04	233.4	73.2	314
8	2004-05	228.3	73.0	320
9	2005-06	260.2	92.9	357
10	2006-07	246.0	69.0	281
11	2007-08	197.0	47.1	239
12	2008-09	238.7	47.4	199

Source: Economic Survey, Government of India, Various Period, New Delhi

FIGURE-1

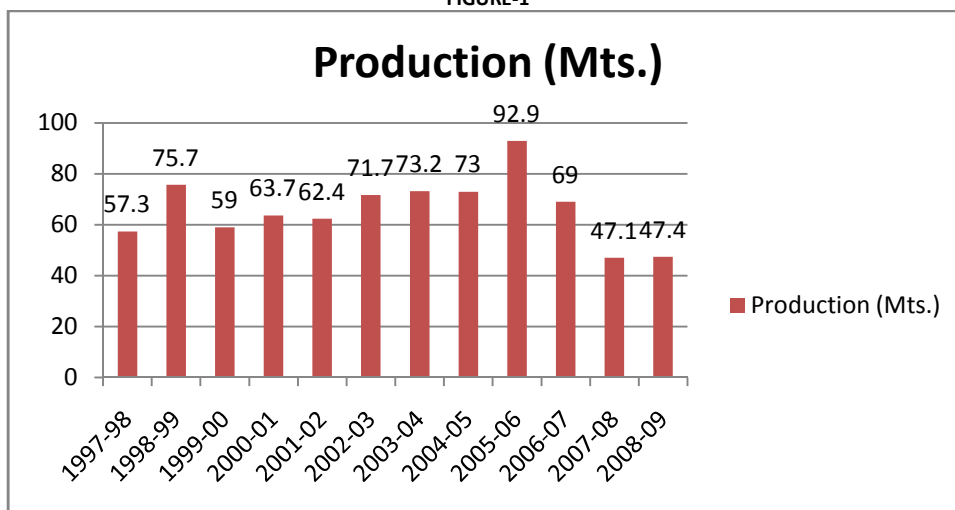


Table -2 pepper production has been rising from a range of 1997-98, million tons for 57.3, (7) percent than increasing from 1998-99 75.7 million tones, whereas 2005-06 has been increasing the pepper production in 92.9 million tones. In India domestic consumption of black pepper was 52,000 tones in 2002 which rose to 58000 tones in 2003. This shows that the consumption is increasing in various sectors in india.

TABLE-3: TYPE OF PEPPER PRODUCTION 2009 - 2011 IN MTS

Year	Black	White	Total
2009	49,550	450	50,000
Estimate 2010	49,550	450	50,000
Projection 2011	48,000	-	48,000

**GLOBAL SUPPLY-DEMAND DYNAMICS**

According to the global figures released by the IPC (International Pepper Community), the balance sheet of supply–demand for 2010, indicates a shortage of nearly 22,216 tonnes. The IPC forecast this year’s world pepper consumption to be around 3,20,000-3,50,000 tonnes—significantly higher than last year’s global production of 2,85,000 tonnes. According to them, the global consumption—excluding China and India—had grown between 4-6% per year. The closing stock of 2009 or the carry-forward stock for 2010 is estimated to be at around 79,124 tonnes while the carry forward stocks for 2011 have been projected at 72,082 tonnes.

TABLE -4: BALANCE SHEET OF GLOBAL SUPPLY & DEMAND FOR 2010

Supply (tonnes)		Demand (tonnes)	
Production	290742	Production	320000
Carry Forward Stock for 2010	79124	Carry Forward Stock for 2010	72082
Total	369866	Total	392082
<b>Shortage: 22216</b>			

Source: Squeal to pepper Seasonal Report, March 2010

The analyzing all of the above mentioned factors, it is expected that the international demand–supply gap is expected to prevail during 2010. A clearer picture will be available from April onwards, upon confirmation of Vietnam’s pepper production. The global pepper production in 2010 is likely to be higher, while the exports are likely to decline due to lower production in individual countries. A slight increase in production coupled with exhausted carryover stocks is expected to result in higher prices in the global market. For the year 2010, the production is expected to increase by 3% over the previous year to 2, 90,742 tonnes, while exports have been projected to be lower by 10.5%, against the previous year to 2, 18,074 tonnes. Moreover, it is evident that the productivity of traditional pepper producing countries is at low levels, making remuneration to the farmers not attractive to remain in the industry. For both black and white pepper, the lucrative prices witnessed from around early 2007 to early 2008 is yet to be achieved. Given the slow growth rate of pepper production and exhausted carryover stocks, the prices may continue to rise in the global market.

**INDIAN SUPPLY-DEMAND DYNAMICS**

According to the figures released by the Spices Board of India, the pepper balance sheet for 2010 appears to be balanced in terms of supply and demand. The production figures are hovering around 55,000 tonnes, while the consumption figures are hovering around 44,000 tonnes, annually. Exports have been targeted at around 25,000 tonnes, while imports are likely to be around 14,000 tonnes. The closing stock for 2009 is estimated around 11,350 tonnes, while the carry forward stocks of 2010 have also been projected at 11,350 tonnes.

TABLE 5: BALANCE SHEET FOR INDIA REGARDING PEPPER SUPPLY & DEMAND FOR 2010

Supply (tonnes)		Demand (tonnes)	
Production	55000	Domestic Production	45000
Imports	14000	Exports	25000
Ending Stocks of 2009	11350	Carry forward stocks	10350
Total	80350	Total	80350

Source: Squeal to pepper Seasonal Report, March 2010

**CONCLUSION**

Drying pepper in a hygienic surface is important to ensure the quality of black pepper. Spices Board support this by providing Bamboo mats/polythene sheets, giving assistance to the construction of concrete yards etc. Spices Board also give assistance for the purchase of mechanical pepper threshers. Pepper prices have shown a rise as expected with intermittent correction due to profit taking. The rise in prices has been supported by the fundamental factors of tight supply situation in the local and international markets. Lower production expectation for top producing countries is further supporting the rise in prices.

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**FINANCING STRATEGIES FOR SMEs IN INDIA – A WAY OUT**

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**ABSTRACT**

*In this paper, a random sampling of 200 SMEs including hotels, retail shops, retail stores, trading agencies, small to medium manufacturing industries, factories, and hydro power projects are included. I found that there are various financing options for SMEs but access to these funds has been difficult inspite of government initiatives. I also found that most of the SMEs raise funds from the informal sources as it is easy and flexible option. In case of hotels the revenue comes during peak season that makes them pay monthly installments during off season, but using informal source they may avoid pay monthly installments. I also found that most of the SMEs raise funds from both informal and formal sources and try to strike a balance between the two. SMEs rather should consider all financing options that maximize the value of the business enterprise.*

**KEYWORDS**

Formal source, Fund, Informal source, SME, Working Capital.

**INTRODUCTION**

 Small and Medium Enterprises, including khadi and village/rural enterprises credited with generating the highest rates of employment growth, account for a major share of industrial production and exports. They also play a key role in the development of economies with their effective, efficient, flexible, and innovative entrepreneurial spirit. The socio-economic policies adopted by India since the Industries (Development and Regulation) Act 1951 have laid stress on SME's as a means to improve the country's economic conditions.

SMEs always represented the model of socio-economic policies of Government of India which emphasized judicious use of foreign exchange for import of capital goods and inputs; labor intensive mode of production; employment generation; non concentration of diffusion of economic power in the hands of few (as in the case of big houses); discouraging monopolistic practices of production and marketing, and finally effective contribution to foreign exchange earning of the nation with low import-intensive operations.

It was also coupled with the policy of de-concentration of industrial activities in few geographical centers. It can be observed that by and large, SME's in India met the expectations of the Government in this respect. SME's developed in a manner, which made it possible for them to achieve the following objectives:-

- High contribution to domestic production
- Significant export earnings
- Low investment requirements
- Operational flexibility
- Location wise mobility
- Low intensive imports
- Capacities to develop appropriate indigenous technology
- Import substitution
- Contribution towards defense production
- Technology – oriented industries
- Competitiveness in domestic and export markets

**DEFINITION OF SMALL AND MEDIUM ENTERPRISES IN INDIA**

There exist several definitions of the term small and medium enterprises (SME's), varying from country to country and varying between the sources reporting SME statistics. The commonly used criteria at the international level to define SMEs are the number of employees, total net assets, sales and investment level. If employment is the criterion to define, then there exists variation in defining the upper and lower size limit of a SME.

In the Indian context, small and medium enterprises as per the SME Development Act, 2006 are defined based on their investment in plant and machinery (for manufacturing enterprise) and on equipment's for enterprises providing or rendering services. According to the Small and Medium Enterprises (SME) Development Act of 2006, (India) a medium enterprise is where the investment in plant and machinery is more than five crore rupees but does not exceed ten crore rupees. A small enterprise is where the investment in plant and machinery is more than twenty five lakh rupees but does not exceed five crore rupees.

**REVIEW OF LITERATURE**

Berry, Edgard, and Henry (Jun 2010) in their work on small and medium enterprise dynamics in Indonesia, have mainly focused on the development of small and medium enterprises (SMEs) in Indonesia before and during crises and argued that SME productivity has risen substantially, at rates not far from those of larger firms. They also argued that rather than providing direct assistance to smaller firms, government should concentrate on creating a business environment conducive to small and medium business growth, and promoting provision of business development services by the private sector.

Bala (July 2003) in his research paper (Pattern of technological innovations in small enterprises: a comparative perspective of Bangalore (India) and Northeast England (UK) has mainly focused on the comparative perspective of the pattern of technology innovations carried out by small enterprises in the engineering industry in Bangalore of India and Northeast England of the UK. However, the two regions have similar features but the insufficient spread of previous inventions and innovations and some other factors explained the lesser extent of radical and incremental innovations of small enterprises in Bangalore relative to that of Northeast England.

Sikka (April 1999) in his research paper, Technological Innovations by SME's in India, while surveying the current Indian scene has mainly focused on the need for SME's to utilize the technical facilities available at the S&T infrastructure created in the country and vice-versa. He has also highlighted the entrepreneurship capabilities which are being developed by SME's in India for producing quality products as well as undertaking ancillarization and sub-contracting activities for the larger firms in India.

Raju (January 2008) in his work on Small and Medium Enterprises (SMEs) in India: Past, Present and Future, has focused on the growth and development of the Indian small scale sector from opening of the economy in 1991 and the present scenario of SMEs and the problems they face like lending, marketing, license raj issues in detail. He also has discussed micro, small, and medium enterprises Act, 2006 in his study.

The aim of Pradhan (February 2010) research paper on R&D Strategy of Small and Medium Enterprises in India Trends and Determinants, work was to contribute to the literature on Indian R&D by analyzing the trends and patterns of R&D investment by Indian manufacturing SMEs during the period 1991–2008 and exploring various factors that determine their R&D behavior. The results show that Indian SMEs have lowest incidence of doing in-house R&D and their R&D intensities have fallen in the last decade.

Bakker, Marie, Gregory, and Leora (May 2004) in their study on Financing Small and Medium-Size Enterprises with Factoring: Global Growth and its Potential in Eastern Europe) have explored the advantages of factoring over other types of lending for firms in developing economies, and discuss the informational, legal, tax, and regulatory barriers to its growth. They also examined the role of factoring in the eight Eastern European countries that became EU members on May 1, 2004 - The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia, referred to as the EU 8.

Cull, Lance, Naomi, and Jean (July 2006) in their research paper on historical financing of small- and medium-size enterprises, mainly focused on the economies of the North Atlantic Core during the 19th and early 20th centuries and found that an impressive variety of local financial institutions emerged to supply the needs of SMEs wherever there was sufficient demand for their services and, in addition, by raising the return to savings for local households, they helped to mobilize significant new resources for economic development.

Young (March 1993) in their work on Policy Biases, Small Enterprises and Development, have mainly focused on the performance and contribution of the small scale industries in the development of country in terms of employment and productivity. They also have revealed that small firms are often more efficient in total resources use than the larger firms. Moreover, small enterprises are often productive in spite of policies that are biased against them, particularly agricultural, financial, and trade policies.

Hutchinson Patrick's (Oct, 2003) in his paper has shown that how much does growth determine SMEs' capital structure. Main focus was to examine the extent to which growth determines the capital structure of small and medium-sized enterprises (SMEs). This is done by considering some theories of capital structure in relation to SMEs and then testing the resulting ideas empirically. A key feature of the empirical studies reported in this paper is that they utilize the same database of SMEs. The data were analyzed using ordinary least squares regression. The results show that growth is not consistently a major determinant of SMEs' capital structure but is more important in some circumstances than others.

Pandey, Prasad, and Shivesh (December 2007) in their work on Routes of Survival of SSI in India and its Futurity - a study of pre and post reform period have compared the performance of SSI in pre and post liberalized period and focuses on policy changes which have opened new opportunities for this sector. Technology development and strengthening of financial infrastructure is needed to boost SSI and thus growth target can be achieved.

Tewari & Pandey (2010) in their research paper on Conservation Of Energy in Small Scale Industries in India have focused on the prominence of the small-scale sector in the Indian economy & the need to improve the energy and environment performance of units operating in the sector. It drew upon the results of a major program initiated by TERI (Tata Energy Research Institute) in 1995 in the small-scale sector with the support of SDC (Swiss Agency for Development and Cooperation). The program aims at finding solutions to the energy problems of the SSI through technology up gradation and human and institutional development in some small scale energy intensive sectors.

Jha and Agarwal (June 2010), authors in their work on A Case Study of the Marketing Problems of Small Scale Industries have examined the marketing problems of small scale industries working in the district of Varanasi. The study opines that the marketing problems has arisen mainly due to cut throat competition from other industries, adoption of cost oriented pricing, lack of advertisement, non-branded products etc. The paper is empirical in nature based on primary data collected from the survey of 101 SSI units operating in Varanasi.

## NEED OF THE STUDY

In my work I have highlighting the growth, performance and contribution of the small and medium scale industries in the development of the country and also the problems that small and medium scale industries are facing relating to project implementation, relating to production, marketing, and finance so that government can take important steps for small and medium scale industries.

## OBJECTIVES

The Objective of the study is three fold:

- 1) To analyze the financing strategies presently used by various SME's.
- 2) To analyze the Growth and Performance of Small & Medium Enterprises (SME's).
- 3) To analyze the problems of the small and medium scale industries and a way out in deciding in the best mix of financial strategies.

## PROBLEMS OF SMEs

Here I have mentioned some problems which SMEs mostly face these days relating to project implementation, finance, production, marketing, and management etc.

### Project implementation

1. Non-availability of land at selected site.
2. Difficulty in procuring construction materials like cement steel etc.
3. Delay in delivery of machines.
4. Delay in getting power connection, water connection, and permission of concerned authorities.

### Finance

1. Inadequate bank finance.
2. Lack of proper planning to pay the creditors.
3. Diversion of working capital funds for acquisition of fixed asset.

### Production

1. Non-availability of raw materials or increase in the price of the raw materials with corresponding increase in sale price of the products.
2. Non availability of power, water, transport etc.
3. Lack of coordination between marketing and production planning.

### Marketing

1. Entry of new which give rise to competition.
2. Dependence of the unit on the one buyer or on very few buyers.
3. Poor quality of products.
4. Lack of sales promotion.
5. Poor delivery schedules and lack of proper distribution system.

### Management

1. Poor industrial relations.
2. Lack of coordination and control.
3. Non availability of skilled man power.

## METHODOLOGY

Both primary and secondary data has been used. For primary data Questionnaires were used to collect data from SMEs. SMEs were randomly selected from various places like kullu, Manali, Banga, and Jalandhar etc. Simple correlation coefficient has been used as a statistical tool to show the dependency of SMEs on formal and informal sources of finance. For correlation coefficient I have used other statistical tools like standard deviation, covariance, and correlation, and sum.

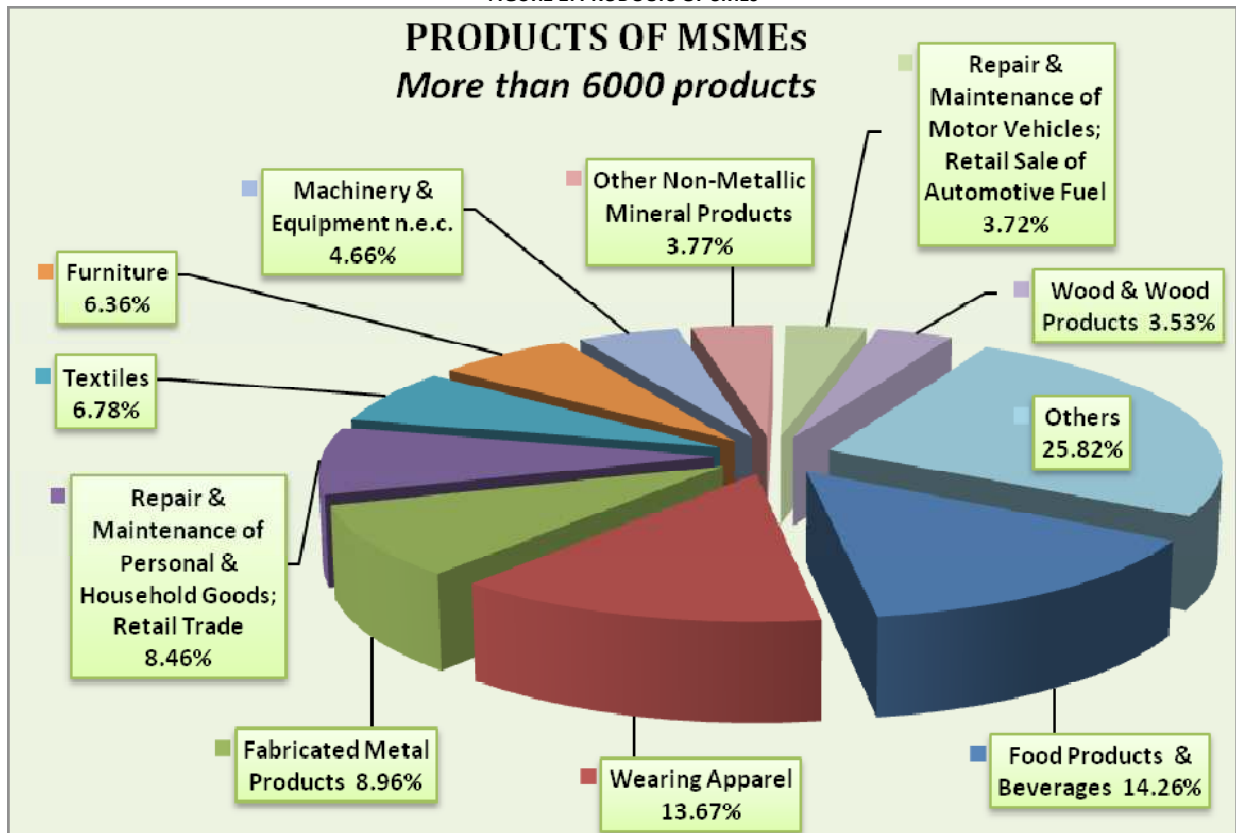
**SOME SMEs FACTS**

**GROWTH AND PERFORMANCE OF SMEs**

The small and medium enterprises (SME) sector contributes significantly to the manufacturing output, employment and exports the country. It is estimated that in terms of value, the sector accounts for about 45 per cent of the manufacturing output and 40 per cent of the total exports of the country.

The sector has employed about 65 million persons in over 28 million units throughout the country. Further, SME sector has consistently registered a higher growth rate than the rest of the industrial sector. There are over 6000 products (Figure 1) ranging from traditional to high-tech items, which are being manufactured by the SMEs in India. It is well known that the SME sector provide the maximum opportunities for both self-employment and jobs after agriculture sector.

FIGURE 1: PRODUCTS OF SMEs



Source: - Final Report of the Fourth All India Census of Micro, Small & Medium Enterprises 2006-07: Registered Sector



## EMPLOYMENT AND EXPORTS

FIGURE 2: MSMEs PERFORMANCE: UNITS, EMPLOYMENT, INVESTMENTS, PRODUCTION, AND EXPORTS

Sl. No.	Year	Total Working MSMEs	Employment	Fixed Investment	Production (Current Prices)	Exports
		(Lakh numbers)	(Lakh persons)	(Rs. crore)		
I	II	III	IV	V	VI	VII
1	2001-02	105.21	249.33	154349	282270	71244
		(4.07)	(4.44)	(5.11)	(8.03)	(2.07)
2	2002-03	109.49	260.21	162317	314850	86013
		(4.07)	(4.36)	(5.16)	(11.54)	(20.73)
3	2003-04	113.95	271.42	170219	364547	97644
		(4.07)	(4.31)	(4.87)	(15.78)	(13.52)
4	2004-05	118.59	282.57	178699	429796	124417
		(4.07)	(4.11)	(4.98)	(17.90)	(27.42)
5	2005-06	123.42	294.91	188113	497842	150242
		(4.07)	(4.37)	(5.27)	(15.83)	(20.76)
6	2006-07	261.12	595.66	500758	709398	182538
		(111.57)	(101.98)	(166.20)	(42.49)	(21.50)
7	2007-08	272.79	626.34	558190	790759	202017
		(4.47)	(5.15)	(11.47)	(11.47)	(10.67)
8	2008-09	285.16	659.35	621753	880805	N. A.
		(4.53)	(5.27)	(11.39)	(11.39)	
9*	2009-10	298.08	695.38	693835	982919	N. A.
		(4.53)	(5.46)	(11.59)	(11.59)	
10*	2010-11	311.52	732.17	773487	1095758	N. A.
		(4.51)	(5.29)	(11.48)	(11.48)	

The figures in brackets show the percentage growth over the previous year. The data for the period up to 2005-06 is Small Scale Industries (SSI). Subsequent to 2005-06, data with reference to Micro, Small and Medium Enterprises are being compiled. The growth for the year 2010 11 is based on the average growth rate for the previous three years. \*: Provisional, #: Projected, N. A.: Not Available.

FIGURE 3: CONTRIBUTION IN THE GROSS DOMESTIC PRODUCT (GDP)

Year	Contribution of MSEs (%) at 1999-2000 prices in	
	Total industrial Production	Gross Domestic Product (GDP)
2004-2005	38.62	5.84
2005-2006	38.56	5.83
2006-2007	45.62	7.20
2007-2008	45.24	8.00
2008-2009	44.86	8.72

\*\* Source: - Final Report of the Fourth All India Census of Micro, Small & Medium Enterprises 2006-07: Registered Sector

\*The data for the period up to 2005-2006 is for Small Scale Industries (SSI)

It is clear from the Figure 3 that the contribution of the SMEs in gross domestic product of the country is very high and it is increasing every year.

### FINANCING OPTIONS FOR SMEs

There are many organizations that have been set by the central governments and state governments and banks to support the development of the small scale enterprises as shown below :-

#### Central government

1. Central Board for Micro, Small and Medium Enterprises.
2. Small Industries Development Organization.
3. National Small Industries Corporation Limited Etc.
4. National Institute for SMEs.
5. Entrepreneurship Development Institute of India.

#### State government

1. District Industries Centers.
2. State Financial Corporations.

3. State small industries Development Corporation.
4. Khadi and Village Industries Commission.
5. State Industrial Development Corporations/State Industrial Investment Corporations

**Banks**

1. Small Industries Development Bank of India.
2. Commercial Banks.
3. Regional Rural Banks.
4. Cooperative Banks.
5. National Bank for Agriculture and Rural Development.

There are many other sources of finance which SMEs use which they think; this is best option for them. Mostly in the rural areas peoples are not that much educated but there are many peoples who are involved in the businesses. To start the business mostly they use their own money or from friends and relatives because they are not aware about the other sources, they are aware about the banks but they are afraid to take loan from the banks. But people who are fully aware about the banks take loan from the banks and use their own money as well along with raising some funds from the relatives, friends, and credit from the suppliers etc. I have divided this into Formal and Informal sources of finance as explained below.

**INFORMAL AND FORMAL SOURCES**

Informal sources of finance are mostly those which do not require written and formalized agreements as given below:-

Own Saving

Some avenues to gaining finance for a new business might include internal sources such as an owner’s personal money. Where this is used in conjunction with external financial help, this can demonstrate that the owner has some confidence and commitment to the venture and might make it easier to gain money from others.

Family and Friends

To meet the financial requirements of a start-up through funding from family and friends might have the advantage of being interest free or carry a lower cost compared to that of a bank loan.

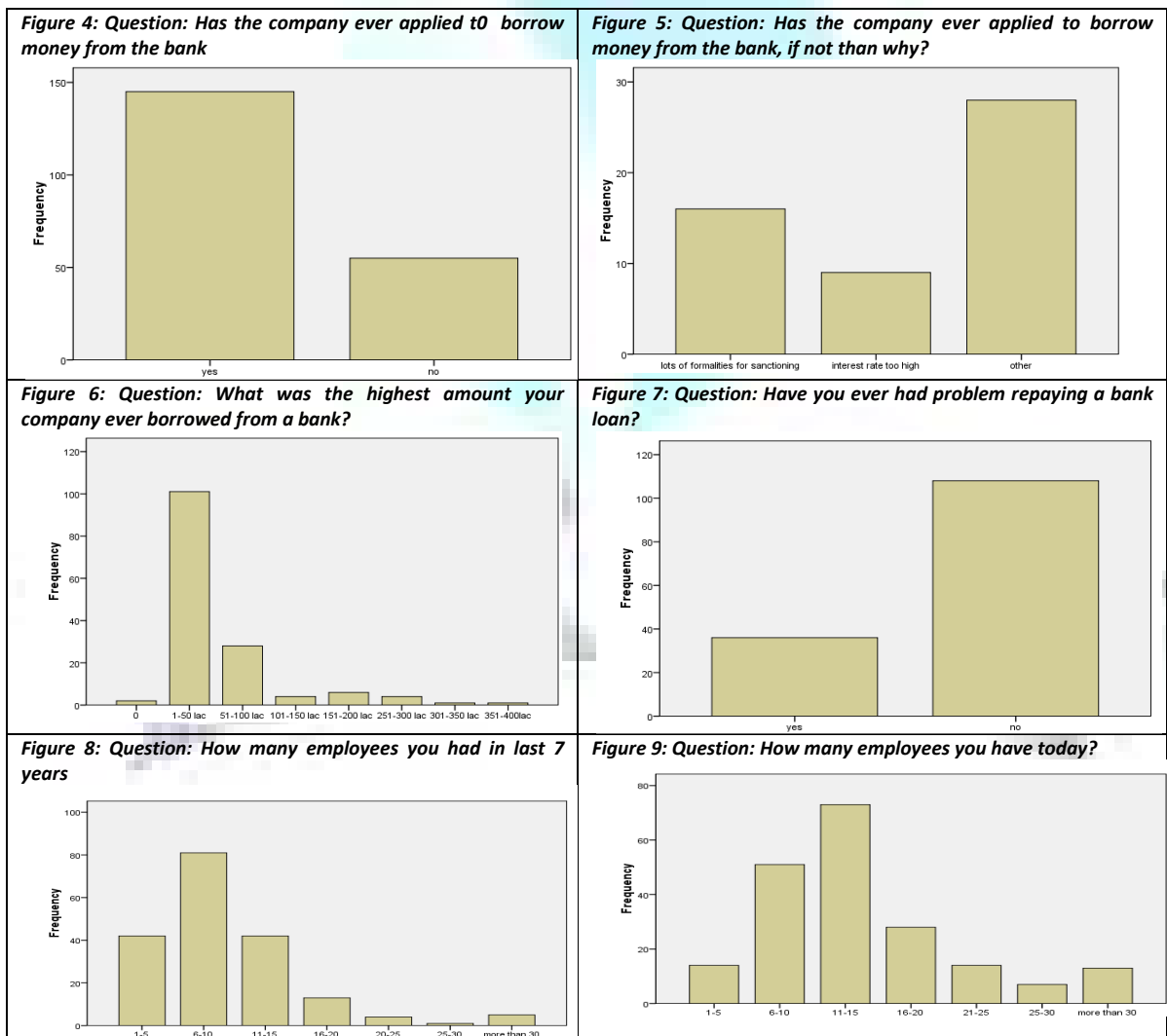
Credit from suppliers

It is possible that by taking longer to pay creditors that the company might be able to use such delays to fund its operations in part. Many business start-ups find it difficult to gain extended credit terms from suppliers who are naturally suspicious of their lack of trading history.

Formal sources of finance are those which require written and formal agreements. There are many organizations and banks for that like SIDBI, NABARD, regional banks, commercial banks, and cooperative banks. SIDBI, that is small industries development bank of India, it is a kind of refinancing institution which refinances the SMEs if they fail to pay back to the others which are instituted by RBI.

**RESULTS AND FINDING**

There are few findings through a questionnaire filled by the respondent which are represented graphically.



It is clear from the Figure 4 that 145 i.e. 72.5% SMEs says that they borrow money from the bank and only 55 that is 27.5% says no, and give certain reasons for that.

Figure 5 indicates that 16 says lots of formalities for sanctioning of loan, 9 says interest rate too high, and 28 goes with others, that is 8 %, 4.5 %, 14 %, total 53 companies out of 200. It shows that they mostly prefer informal source to finance their business. Figure 6 shows that most of the SMEs take loan between 1-50 lakh and their % is 50.5%, there is balance between formal and informal. As given in the Figure 7 there are 144 respondents for this question, 36 says yes and 108 say no. The SMEs who says yes give certain reasons like due to low profits, new in the market, lean season, inadequate return from the hotel, interest rate too high and some says they face problem in paying monthly installments, due to fire in the building, fluctuation in the business and government change and also government policies, off season, recession etc. There are 148 respondents out of which the 86 SMEs have made full disbursement that is they are free from the loan and only 6 have made disbursement less than 25% and 32 less than 50% and 25 have made disbursement less than 75%. Out of 200 SMEs only 40 says that they have faced problem relating to project implementation like delay in legal formalities, labor cost is much, hard to build customer loyalty, in employing well trained personnel, warehouse maintain, maintain the stock, competition, construction of shop was difficult too much formalities, high cost of land, labor problem, lack of coordination, high cost of resources, land, did not get the selected site, electricity problem, legal formalities, high price of land and road, transportation etc., These are various problems they face during their project implementation.

Out of 200, 37 says they face problem relating to the finance like initial capita, initial investment, did not get full finance from the bank, underfinanced, working capital, formalities of the banks. Out of 200, only 26 says that they face problem relating to marketing and production.

**PROBLEMS**

**Relating to Project implementation** like delay in legal formalities, labor cost is much, hard to build customer loyalty, in employing well trained personnel, warehouse maintain, maintain the stock, competition, construction of shop was difficult too much formalities, high cost of land, labor problem, lack of coordination, high cost of resources, land, did not get the selected site, electricity problem, legal formalities, high price of land and road, transportation, etc. these are various problems they face during their project implementation.

**Relating to finance** like initial capita, initial investment did not get full finance from the bank, underfinanced, working capital, formalities of the banks.

**Relating to marketing and production** like competition from others, inadequate raw material, lack of experience, lack of coordination, unawareness about the marketing tools, lack of good distribution, marketing is expensive.

**EMPLOYEES**

As it is clear from the Figure 8 and Figure 9 that the employees between 1-5 and 6-10 frequency have decreased from the 42 and 81 to 14 and 51 and frequency from 11-15 and 16-20 have increased from 42 and 13 to 73 and 28 and frequency have continuously increased today. It shows that there is a great increase in the employment in the SMEs. It shows the contribution of SMEs in the development of country is great.

**PERCENTAGE OF FORMAL AND INFORMAL**

TABLE 1: FORMAL SOURCE OF FINANCING

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	0	4	2	2.7	2.7
	6	1	0.5	0.7	3.4
	10	1	0.5	0.7	4
	12	1	0.5	0.7	4.7
	15	2	1	1.3	6
	20	16	8	10.7	16.8
	23	1	0.5	0.7	17.4
	25	4	2	2.7	20.1
	30	15	7.5	10.1	30.2
	35	4	2	2.7	32.9
	40	25	12.5	16.8	49.7
	42	1	0.5	0.7	50.3
	45	5	2.5	3.4	53.7
	50	15	7.5	10.1	63.8
	55	1	0.5	0.7	64.4
	60	23	11.5	15.4	79.9
	65	4	2	2.7	82.6
	67	1	0.5	0.7	83.2
	70	18	9	12.1	95.3
	75	3	1.5	2	97.3
	80	3	1.5	2	99.3
	90	1	0.5	0.7	100
	<b>Total</b>	149	74.5	100	
	<b>System</b>	51	25.5		
	<b>Total</b>	200	100		

\*Above table 1 is calculated with the help of SPSS.

TABLE 2: INFORMAL SOURCE OF FINANCING

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid				
20	3	1.5	1.5	2
25	3	1.5	1.5	3.5
30	18	9	9	12.6
33	1	0.5	0.5	13.1
35	4	2	2	15.1
40	24	12	12.1	27.1
45	1	0.5	0.5	27.6
50	15	7.5	7.5	35.2
55	5	2.5	2.5	37.7
58	1	0.5	0.5	38.2
60	25	12.5	12.6	50.8
65	4	2	2	52.8
70	14	7	7	59.8
75	4	2	2	61.8
77	1	0.5	0.5	62.3
80	16	8	8	70.4
85	2	1	1	71.4
88	1	0.5	0.5	71.9
90	1	0.5	0.5	72.4
94	1	0.5	0.5	72.9
100	54	27	27.1	100
<b>Total</b>	199	99.5	100	
<b>System</b>	1	0.5		
<b>Total</b>	200	100		

\*Above table 2 is calculated with the help of SPSS.

TABLE 3: DESCRIPTIVE STATISTICS

	Formal	Informal
N Valid	149	199
Missing	51	1
Mean	44.87	66.26
Std. Deviation	19.729	25.981
Variance	389.252	674.990
Sum	6685	13185

\*Above table 3 is calculated with the help of SPSS.

Following are calculated with the help of excel

Covariance = -0.13128

Correlation = -0.58508

Correlation coefficient = -0.17289

As we know correlation can be positive, negative and zero. Positive and negative shows the linear relation while zero correlation shows that there are no relation between two, they are independent of each other. We have calculated correlation is negative, it shows that there is a linear correlation between formal and informal and that they are negatively correlated and are dependent on each other. As we know that in negative correlation if one increases then other decreases. This is clear from the table and all values calculated above SMEs which we have covered in our survey have financed more from the informal. Financing from the informal have increased by 17% and financing from the formal have decreased by 17%.

**FINDINGS**

1. I found that there are various financing options for SMEs but access to these funds has been difficult inspite of government initiatives.
2. I found that most of the SMEs which are taken in our survey raise funds from the informal source. They told that it is easy for them because it is flexible and no need to pay monthly installments.
3. I also found that most of the SMEs raise funds from both by keeping a certain percentage.

**SOME LIMITATIONS OF INFORMAL SOURCE**

In case if person requests that the money is repaid at short notice and this in turn causes working capital shortages for the business.

**SUGGESTION**

While not every SME turns into a big multinational, but they all face the same problem in their early as well as subsequent days – finding the finance to enable them to start and build up their business and test their products or services. In majority, while the financing for SMEs was being provided by informal sources, financial institutions, commercial banks extended working capital. Besides the traditional needs of finance, the changing environment has generated demand for introduction of new financial services for SMEs. SMEs should consider all financing options that maximize the value of the business enterprise.

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**BRAND LOYALTY- A MEASURE**

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**ABSTRACT**

*Branding is a strategic tool; it creates a favourable word of mouth and great publicity. An attempt is made in this paper to understand brand loyalty levels, customer association with the particular brand. Loyal customers are treated as good as brand ambassadors. Most of the international marketing scientist believe that Indian customer are greater loyal than their foreign counterparts. It is vital to companies to know the customer grievances as well as loyalty levels. The loyal customers bring Laura of new customers to the company. Brand loyalty measure gives a panoramic picture of repeat customers.*

**KEYWORDS**

brand, brand loyalty.

**INTRODUCTION**

Competition of the day demanding application of innovative and improved branding strategies, in an attempt to bring out innovation in brand building, the companies are in search of more effective branding practices, through which a marketer tries to build long term relations with the customers. Today's customer life style is highly linked with Brands. The very dawn to dusk customers buying several brands, tooth paste to sleeping pills. In any business, gaining new customers is quite difficult and expensive, and requires lot of marketing effort with uncertainty. In order to retain the current customers and maintain customer base is relatively easy and inexpensive. *Loyal customers are price insensitive by nature, which reduce the vulnerability of any competitive action.* It also reduces the intensity and nature of competitive rivalry in the industry. In marketing, "brand loyalty consists of a consumer's commitment to repurchase the brand and can be demonstrated by repeated buying of a product or service or other positive behaviors such as word of mouth advocacy". True brand loyalty implies that the consumer is willing, at least on occasion, to put aside their own desires in the interest of the brand.

Brand loyalty in fast moving consumer goods categories is a topical issue, with several brands resorting to price cuts across categories. More importantly, price cuts or sales promotion by themselves do not seem to have done much for brands in terms of sustaining brand loyalty. They may attract consumers in the short run: consumers may stock the brands and consumers new to the brand may try it. But over a period of time, a brand's value may get diluted in consumers' psyche, and will eventually lose a strong base of consumers.

In today's highly competitive environments, improving consumers' loyalty to brands permits marketers to maintain a comfortable and lasting position in the marketplace.

Traditional marketing paradigms have always stressed the importance of brand loyalty; and marketers have always believed that brand loyalty would lead them to customer relationships, which would enable them to make the best use of customer lifetime value.

Marketers may have to probe deeper into the concepts of loyalty to understand consumers' buying patterns before they embark on loyalty schemes. Traditional approaches to brand loyalty have stressed the importance of the fact that it is less expensive to maintain existing consumers than to get new ones. Consumers who are loyal to a brand are likely to spend more on it and also likely to spread the positive word of mouth to other consumers, thus becoming advocates of the brand.

**MEASUREMENT OF BRAND LOYALTY**

The criteria and factors considered for loyalty measurements are different at each level of loyalty as the degree of loyalty and nature of relationship changes. In the bottom levels loyalty is not recognisable. Loyalty measurement at this level is in terms of sales turnover, product's profit margins, price attractiveness and price sensitivity. These are the major factors for purchase and repurchase behavior of customers at these levels.

At the middle level, loyalty is measured in terms of potential spending by the customers, recalling level of the brand, perceived attributes of product, and number of other brands purchased during the same time, and changed attitude towards brand.

Loyalty at the top level is measure through satisfaction level, total spending on brand liking – which is scaled in variety of ways like respect, friendship, trust etc, and the reasons attributed. Another important measurement for customer's commitment is their involvement in spreading good word of mouth and number of people to whom they refer the brand. Measurement tools include structured questionnaire (both closed-end, and open- end), likert scale, and semantic differential scale, attitude rating scales, projective techniques and in depth interviews.

Thus the brand loyalty need to be measured, it saves millions rupees expenditure would be devoted to sales promotion. In this article an attempt is made to measure brand loyalty.

**OBJECTIVES OF THE STUDY**

- To understand brand awareness of customers towards FMCG Products.
- To know the degree of brand loyalty towards FMCG Products.
- To study the role of advertisement in building brand loyalty.
- To study the role of sales promotion schemes in building brand loyalty.

**SIGNIFICANCE OF THE STUDY**

Today, products and services are penetrating into customer's life. Customers life styles are changing, consumption pattern are changing, buying habits are changing. Consumption of branded goods is increasing in the market, the whole market is transforming into a world of brands, the process of branding, some products attaining a good success and establishing long lasting relations, while the other are fail to reach their target customers, so there is a need for measurement of branding impact. This study is taken up to measure brand loyalty towards FMCG products.

**METHODOLOGY**

A descriptive research design is adopted in order to conduct the study. This design was found the most suitable for understanding the customers/ consumers perception, views, expectations and experiences with FMCG products, particularly bath soap, shampoo and detergent cake. There is a general feeling that descriptive studies are factual and very simple.

**SAMPLE DESIGN**

The data has been collected using simple random sampling technique. The target areas are Hyderabad, Secunderabad Then, one respondent from each household is contacted, and thus, the primary data is collected from 100 individuals. The data is collected mostly during the evening hours. It is felt that the evening hours are convenient and comfortable to the Respondents.

**SOURCE OF DATA**

The primary data were collected from customer/ consumers of FMCG products. All categories of customers were taken from Hyderabad, Secunderabad and surrounded municipalities.

The secondary data has been collected from Journals, Articles, Books, Doctoral Thesis, Magazines of Indian and Foreign origin, from the last ten years.

**TOOLS OF DATA COLLECTION**

The questionnaire and interview methods were utilized as necessary tools. Part **A**, dealt with questions pertaining to personal background and Part **B** includes standardized scale pertaining to assessment of customer views and opinions, they were measured with 5-point (Likert), where

Strongly Agree	-	5
Agree	-	4
Neither Agree nor Disagree	-	3
Disagree	-	2
Strongly Disagree	-	1

Scores were used to have the accurate value of opinions.

The buying decision of a customer is greatly influenced by demographic factors such as, age, gender, education, occupation and income. Age is the factor that describes the customer experiences, expectations and evaluations.

**TABLE 1: AGE OF THE RESPONDENT**

Age	No. of Respondents	Percentage
Below 20 years	15	15
21 – 30 years	35	35
31 – 40 years	25	25
41 – 50 years	10	10
51 – 60 years	10	10
61 and above years	5	5
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

From the above table it is observed that 15 percent of respondents are below age group of 20 years, 35 percent respondents are between the age group of 21 – 30 years, 25 percent of respondents are between the age of 31 to 40 years, 10 percent respondents are between 41 - 50 years, 10 percent respondents are between 51 – 60 years and 5 percent of respondents are above 61 years. Majority of the respondents are between the age group 21 – 30 years.

**TABLE 2: GENDER OF THE RESPONDENTS**

Gender	No. of Respondents	Percentage
Male	69	69
Female	31	31
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

From the above table it is observed that 69 percent of respondents are Males and 31 percent of respondents are Females. Females' respondents actively participated in the survey. It shows the increasing role of Females' in buying decision.

**TABLE 3: EDUCATIONAL LEVELS OF RESPONDENTS**

Education	No. of Respondents	Percentage
Below SSC	5	5
SSC	16	16
Intermediate	14	14
Degree	20	20
P.G. Degree	45	45
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

The table no.3 shows respondents educational levels. The respondents are distributed between higher education and higher secondary education. It indicates that most of the respondents have high level of awareness and knowledge about the brands which they are using. 45 percent are Post-Graduates, 20 percent are Graduates, and 35 percent are from intermediate and below secondary school.

**TABLE 4: OCCUPATION OF THE RESPONDENTS**

Occupation	No. of Respondents	Percentage
Govt. Employee	15	15
Private Employee	45	45
Home-maker	12	12
Self Employed	10	10
Business	18	18
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

The above table depicts, most of the Respondents are Private Employees whose buying habits are normally go with the market trends. It also indicates private employment increasing in the economy.

The income of respondents explains social status and buying patterns, it is the direct measurer of customers' potential purchase and future buying plans.

TABLE 5: RESPONDENTS INCOME PER MONTH

Income / Month in Rupees (Rs.)	No. of Respondents	Percentage
Below 5,000	22	22
5,000 – 10,000	28	28
10,000 – 15,000	25	25
15,000 – 20,000	15	15
20,000 – 50,000	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

Majority respondent's income is between Rs.5000 and Rs.15000.

TABLE 6: RESPONDENTS BRAND CHOICE PERTAINING TO BATH SOAP

Name of the company	No. of respondents using the brands	Percentage
HLL	53	53
P&G	10	10
Others	37	37
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

It is observed that 53 percent of respondents are using HLL bath soaps, 10 percent of respondents using P&G bath soaps, 37 percent of respondents using other brands. This information is drawn through brand recall test.

TABLE 7: RESPONDENTS BRAND CHOICE PERTAINING TO SHAMPOO

Name of Company	No. of Respondents	Percentage
HLL	43	43
P&G	30	30
Other Brands	27	27
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data

From the above table, it is evident that hair care increasing among customers. 43 percent of respondents are using HLL brands, 30 percent are using Proctor & Gamble brands, 27 percent of respondents are using other company brands.

TABLE 9: RESPONDENTS BRAND LOYALTY (REPURCHASE) TOWARDS BATH SOAP

Brand Loyalty in years	No. of Respondents	Percentage
Below 6 Months	10	10
6 Months - 1 year	15	15
1 year to 2 years	20	20
3 years to 4 years	40	40
5 years and above	15	15
<b>Total</b>	<b>100</b>	<b>100</b>

Source: The figures are compiled from primary data.

Table No. 9 brings out the respondents association with bath soap from past few years. Western countries believe that the Indians are brand loyal, the average brand life in India is more than three years. The figures presented in above table conforms the belief that western world had regarding Indian consumers. Some of the respondents specifically mentioned that they are using bath soap (brands) from last decade; they also said that they are not willing to change their current brands. It shows their faith and affection towards the brands.

TABLE 10: RESPONDENTS BRAND LOYALTY (REPURCHASE) TOWARDS SHAMPOO

Brand Loyalty in years	No. of Respondents	Percentage
Below 6 Months	15	15
6 Months-1 year	20	20
1 year to 2 years	28	28
3 years to 4 years	27	27
5 years and above	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

It gives the picture of brand loyalty towards shampoos, majority respondents seems to be brand loyal, when it compared to bathe soap, the rate of loyalty is less.

TABLE 12: RESPONDENTS READINESS TO CHANGE THEIR PRESENT BRANDS

Readiness to Change	No. of Respondents	Percentage
Yes	12	12
No	88	88
<b>Total</b>	<b>100</b>	<b>100</b>

The table above explicitly puts the opinion of respondents that whether they are willing to change the present brand or not. 12 respondents were in favour of change and 88 percent were not shown interest to change their brands.



TABLE 13: FACTORS INFLUENCING BUYING DECISION

S.No.	Factors	Bath Soap	Shampoo
1	Quality	14	8
2	Brand Image	25	8
3	Features	8	12
4	Price	9	15
5	Advertisements	13	25
6	Fragrance	2	10
7	Availability	6	12
8	Friends	8	6
9	Retailer Advice	7	1
10	Sales People Advice	5	0
11	Credit	0	0
12	Packaging	3	3
Total		100	100

From the above table it appears that all the factors not so important but certain factors are quite important. It is noticed that feelings of respondents while purchasing the bath soaps, they consider quality as major factor, brand image, features and fragrance as desired factor. While buying shampoo, the respondents taking into the account of fragrance, quality, features, brand image. Quality is taken as prime factor while purchasing detergent cake, brand image, availability, wishing factors.

### FINDINGS

- It is found that majority of the respondents are using FMCG brands of their choice from last three years.
- The respondents who are below 21 years old are willing to change their FMCG brands more frequently than their counterparts.
- Majority of customers opined that they are influenced by advertisements.
- It is also noted that HUL has occupied a lion share in FMCG market.
- It also can be understood that the brand loyalty is higher in our Indian market.

### CONCLUSION

The brands have eternal life, products may die and buildings may ruin but brands have long lasting life. Brands establishes deep association with customers, this in turn may reduces marketing expenditure per unit. Brand loyalty is a customers strong faith in product performance, it make them to loyal and assertive towards product or a company. The level of brand loyalty needs to be understood and comprehend. It saves inch by inch marketing cost. In present times brand average life is sharply decreasing. Thus brand loyalty measure acts as checks and balances system to the marketing department and whole organization.

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## ANALYSIS OF LIQUIDITY, PROFITABILITY AND WORKING CAPITAL MANAGEMENT - AN EMPIRICAL STUDY ON BSE LISTED COMPANIES

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### ABSTRACT

Businesses are responsible for the growth of the country in the same way the three main important components are more responsible to the success of the organizations which is profits, liquidity and working capital. "Cash is the lifeblood of business" In business, cash is king, particularly during tough economic times or when the markets are turbulent. Without cash, company cannot survive and to take advantage of business opportunities, it's necessary to maintain liquidity position to overcome the difficulties. Working capital may be regarded as the back bone of business. Many organizations that are profitable on paper are forced to cease trading due to an inability to meet short-term debts when they fall due. In order to remain in business it is essential that an organization successfully manages its working capital. The working capital management plays an important role for success or failure of firm in business because of its effect on firm's profitability as well on liquidity. And in same way Profits are useful to judge the strength of the business and it is earn with the help of contribution of liquidity and working capital management. This study is based on secondary data collected from listed companies in Bombay stock exchange. This paper is going to find out the impact of liquidity, profitability and working capital on the firm's financial aspects. And relationship between liquidity, profitability and working capital. This paper going to use regression and correlation to find out the impact and relationship between the variables.

### KEYWORDS

liquidity, profitability and working capital.

### INTRODUCTION

**L**iquidity: The term liquidity is used in various ways, all relating to availability of, access to, or convertibility into cash. An institution is said to have liquidity if it can easily meet its needs for cash either because it has cash on hand or can otherwise raise or borrow cash. A market is said to be liquid if the instruments it trades can easily be bought or sold in quantity with little impact on market. **Profitability:** it is a class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to a competitor's ratio or the same ratio from a previous period is indicative that the company is doing well. There are some benefits are useful for every kind of organization allocate costs quickly and easily and speed up budgeting and reporting. These term also known as working capital policies.

**Working capital:** it is the device of finance. Working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. Working capital is that part of company's capital which is used for purchasing raw material and involve in sundry debtors. The goal of working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses. **Gross working capital:-**Total or gross working capital is that working capital which is used for all the current assets. **Net Working Capital:-**Net working capital is the excess of current assets over current liabilities.  $\text{Net Working Capital} = \text{Total Current Assets} - \text{Total Current Liabilities}$ .

### LITERATURE REVIEW

The empirical studies conducted in India as well as abroad are presented to discern the impact of liquidity, working capital and profitability on firm's growth i. e. profitability, liquidity and working capital.

**Vishnani Sushma and Kr. Shah Bhupesh**, in this study, "Impact of Working Capital Management Policies on Corporate Performance—An Empirical Study" **Chatterjee Saswata (2010)**, "the Impact of Working Capital Management on the Profitability of the Listed Companies in the London Stock Exchange". **Zubairi H. Jamal (2010)**, "Impact of Working Capital Management and Capital Structure on Profitability of Automobile Firms in Pakistan" **Singh J P and Pandey Shishir (2008)**, "Impact of Working Capital Management in the Profitability of Hindalco Industries Limited." **Lamberg Sanna and Valming Sandra(2009)**, "Impact of Liquidity Management on Profitability : A study of the adaption of liquidity strategies in a financial crisis" **Greg Hundley, Carol K. Jacobson and Seung Ho Park(1996)**, "Effects of Profitability and Liquidity on R&D Intensity: Japanese and U.S.Companies Compared" **Étienne Bordeleau and Christopher Graham(2010)**, "The Impact of Liquidity on Bank Profitability" **Sadana Sanjay Kumar** "Conceptual Analysis of Working Capital and its Impact on Profitability."

### OBJECTIVES

1. To analyze the impact of liquidity on profitability and working capital.
2. To study the impact of profitability on liquidity and working capital.
3. To study the impact of working capital on profitability and liquidity.
4. To open new vistas for further researches.

### METHODOLOGY OF THE STUDY

The research design chosen is descriptive as the study reveals the existing facts. The research concentrated on the service and non service sectors. Population of the study was all companies listed in the BSE. The data was used on the basis of probability random sampling and collected data from 20 companies listed in BSE (Bombay Stock Exchange) group A. Secondary data were collected from the books, journals and internet. The data was analyzed through the regression analysis to find out the impact of the liquidity on working capital and profitability, profitability on working capital and liquidity and working capital on profitability and liquidity of businesses. Correlation analysis was used to find out the relationship between liquidity, profitability and working capital.

### RESULTS AND DISCUSSIONS

#### ➤ Regression Analysis

**Hypothesis:** - Using the parameters the following hypotheses have been tested.

**Case 'A':-  $H_0$  (Null Hypothesis):** There is no significant impact of liquidity on working capital and profitability.

Coefficient

Year	Cause	Effect	model	Unstandardized coefficient		Standardized coefficient beta	T	Sig.
				B	Std. error			
2009	Liquidity	W.C.	1(Constant)	2437.181	1234.932	.893	1.974	.064
			Liquidity	2.403	.286			
2010	Liquidity	W.C.	1(Constant)	3627.526	1554.932	.920	2.333	.031
			Liquidity	1.992	.200			
2011	Liquidity	W.C.	1(Constant)	4617.040	2252.967	.562	2.049	.055
			Liquidity	1.687	.585			
2009	Liquidity	Profitability	1(Constant)	2075.034	453.477	.496	4.576	.000
			Liquidity	.254	.105			
2010	Liquidity	Profitability	1(Constant)	2510.083	501.135	.578	5.009	.000
			Liquidity	.194	.065			
2011	Liquidity	Profitability	1(Constant)	2918.244	683.210	.275	4.271	.000
			Liquidity	.216	.177			

a. Dependent Variable: working capital and profitability

Y= a + bx

Y = 2437.181+2.403x, Y= 3627.526+1.992x, Y= 4617.040+1.687x

Y = working capital (dependent variable), X = Liquidity (independent variable)

Y = a + bx

Y= 2075.034+.254x, Y= 2510.083+.194x, Y=2918.244+.216x

Y = Profitability (dependent variable), X = Liquidity (independent variable)

The linear regression was applied between "liquidity" (independent variable), "working capital" and "profitability" (dependent variable). The results of regression in the year 2009, 2010 and 2011 suggest that the liquidity (independent variable) has an impact on working capital (dependent variable) signified by the coefficient beta factors of 0.893, 0.920 and 0.562. And profitability (dependent variable) signified by the coefficient beta factors of .496, .578 and .275. In 2009, as the value of T is 8.412 (working capital) and 2.425 (profitability), which is not accepted at 0.000 (working capital) and .026 (profitability) level of significance hence the hypothesis that there is no significant impact of liquidity on working capital and profitability is not accepted. In 2010, as the value of T is 9.947, (working capital) and 3.005 (profitability) which is not accepted at 0.000 (working capital) and .008 (profitability) level of significance hence the hypothesis that there is no significant impact of liquidity on working capital and profitability is not accepted. In 2011, as the value of T is 2.882, (working capital) and 1.216 (profitability) which is not accepted at 0.010 (working capital) and .240 (profitability) level of significance hence the hypothesis that there is no significant impact of liquidity on working capital and profitability is not accepted.

**Case 'B':- H<sub>0</sub> (Null Hypothesis):** There is no significant impact of profitability on working capital and liquidity.

Coefficient

year	Cause	Effect	model	Unstandardized coefficient		Standardized coefficient beta	T	Sig.
				B	Std. error			
2009	Profitability	W.C.	1(Constant)	-975.206	3034.871	.658	-3.21	.752
			profitability	3.457	.932			
2010	Profitability	W.C.	1(Constant)	-2615.959	4703.091	.614	-5.56	.585
			profitability	3.965	1.200			
2011	Profitability	W.C.	1(Constant)	2107.435	3405.701	.454	.619	.544
			profitability	1.739	.805			
2009	Profitability	Liquidity	1(Constant)	-148.540	1300.579	.496	-1.14	.910
			profitability	.968	.399			
2010	Profitability	Liquidity	1(Constant)	-2303.472	2245.922	.578	-1.026	.319
			profitability	1.722	.573			
2011	Profitability	Liquidity	1(Constant)	781.759	1224.105	.275	.639	.531
			profitability	.352	.289			

Dependent Variable: working capital and liquidity

Y= a + bx

Y = -975.206+3.457x, Y= -2615.959+3.965x, Y= 2107.435+1.739x

Y = working capital (dependent variable), X = Profitability (independent variable)

Y = a + bx

Y= -148.540+.968x, Y= -2303.472+1.722x, Y=781.759+.352x

Y = Liquidity (dependent variable), X = Profitability (independent variable)

The linear regression was applied between "profitability" (independent variable), "working capital" and "liquidity" (dependent variable). The results of regression in the year 2009, 2010 and 2011 suggest that the profitability (independent variable) has an impact on working capital (dependent variable) signified by the coefficient beta factors of 0.658, 0.614 and 0.454 and liquidity (dependent variable) signified by the coefficient beta factors of 0.496, 0.578 and 0.275. In 2009, as the value of T is 3.711 (working capital) and 2.425 (liquidity), which is not accepted at 0.002 (working capital) and 0.026 (liquidity) level of significance hence the hypothesis that there is no significant impact of profitability on working capital and liquidity is not accepted. In 2010, as the value of T is 3.303, (working capital) and 3.005 (liquidity) which is not accepted at 0.004 (working capital) and 0.008 (liquidity) level of significance hence the hypothesis that there is no significant impact of profitability on working capital and liquidity is not accepted. In 2011, as the value of T is 2.161, (working capital) and 1.216 (liquidity) which is not accepted at 0.044 (working capital) and 0.240 (liquidity) level of significance hence the hypothesis that there is no significant impact of profitability on working capital and liquidity is not accepted.

**Case 'C':- H<sub>0</sub> (Null Hypothesis):** There is no significant impact of working capital on profitability and liquidity.

Coefficient

Year	Cause	Effect	model	Unstandardized coefficient		Standardized coefficient beta	T	Sig.
				B	Std. error			
2009	W.C.	profitability	1(Constant)	1653.536	429.113	.658	3.853	.001
			W.C.	.125	.034			
2010	W.C.	Profitability	1(Constant)	2177.880	525.901	.614	4.141	.001
			W.C.	.095	.029			
2011	W.C.	Profitability	1(Constant)	2402.773	696.956	.454	3.448	.003
			W.C.	.118	.055			
2009	W.C.	Liquidity	1(Constant)	-308.140	500.790	.893	-6.15	.546
			W.C.	.332	.039			
2010	W.C.	Liquidity	1(Constant)	-1073.875	779.242	.920	-1.378	.185
			W.C.	.425	.043			
2011	W.C.	Liquidity	1(Constant)	474.225	826.072	.562	.574	.573
			W.C.	.187	.065			

a. Dependent Variable: profitability and liquidity

Y = a + bx

Y = 1653.536+.125x, Y = 2177.880+.095x, Y = 2402.773+.118x

Y = Profitability (dependent variable), X = Working Capital (independent variable)

Y = a + bx

Y = -308.140+.332x, Y = -1073.875+.425x, Y = 474.225+.187x

Y = Liquidity (dependent variable), X = Working Capital (independent variable)

The linear regression was applied between “working capital” (independent variable), “profitability” and “liquidity” (dependent variable). The results of regression in the year 2009, 2010 and 2011 suggest that the working capital (independent variable) has an impact on profitability (dependent variable) signified by the coefficient beta factors of 0.658, 0.614 and 0.454 and liquidity (dependent variable) signified by the coefficient beta factors of 0.893, 0.920 and 0.562. In 2009, as the value of T is 3.711 (profitability) and 8.412 (liquidity), which is not accepted at 0.002 (profitability) and 0.000 (liquidity) level of significance hence the hypothesis that there is no significant impact of working capital on profitability and liquidity is not accepted. In 2010, as the value of T is 3.303 (profitability) and 9.947 (liquidity) which is not accepted at 0.004 (profitability) and 0.000 (liquidity) level of significance hence the hypothesis that there is no significant impact of working capital on profitability and liquidity is not accepted. In 2011, as the value of T is 2.161 (profitability) and 2.882 (liquidity) which is not accepted at 0.044 (profitability) and 0.010 (liquidity) level of significance hence the hypothesis that there is no significant impact of liquidity on working capital and profitability is not accepted.

➤ Correlation Analysis

To determine strength of linear relationship between variables correlation coefficients are calculated. These correlation analyses were interpreted on the scale offered by Guilford (1956) (i.) R < 0.20 indicates slight, almost negligible relationship (ii) r = 0.20 to 0.40 indicates low correlation, definite but small relationship; (iii) r = 0.40 to 0.70 indicates moderate correlation, substantial relationship; r = 0.70 to 0.90 shows high correlation and (iv) if r = 0.90 is indicative of very high correlation, very dependable relationship.

Year	Variable	Profitability	Liquidity	W. C.	
2009	Profitability	Pearson Correlation	1	.496*	
		Sig. (2-tailed)		.026	
		N	20	20	
	Liquidity	Pearson Correlation	.496*	1	.893**
		Sig. (2-tailed)	.026		.000
		N	20	20	20
	W.C.	Pearson Correlation	.658**	.893**	1
		Sig. (2-tailed)	.002	.000	
		N	20	20	20

2010	Profitability	Liquidity	W. C.		
	Profitability	Pearson Correlation	1	.578**	
		Sig. (2-tailed)		.008	
		N	20	20	
	Liquidity	Pearson Correlation	.578**	1	.920**
		Sig. (2-tailed)	.008		.000
		N	20	20	20
	W.C.	Pearson Correlation	.614**	.920**	1
		Sig. (2-tailed)	.004	.000	
		N	20	20	20

2011	Profitability	Liquidity	W. C.		
	Profitability	Pearson Correlation	1	.275	
		Sig. (2-tailed)		.240	
		N	20	20	
	Liquidity	Pearson Correlation	.275	1	.562**
		Sig. (2-tailed)	.240		.010
		N	20	20	20
	W.C.	Pearson Correlation	.454*	.562**	1
		Sig. (2-tailed)	.044	.010	
		N	20	20	20

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis of the variables indicates the relationship between the variables. The relationship between profitability, liquidity and working capital. The correlation is analyzed on the basis of three years.

The relationship between **profitability and liquidity** in the year **2009** is having marked relationship as the value  $r = 0.496$  which according to Guilford (1956) the variables have **substantial relationship**:  $r = 0.40$  to  $0.70$  indicates moderate correlation, substantial relationship. The relationship between **profitability and working capital** in the year **2009** is having marked relationship as the value  $r = 0.658$  which according to Guilford (1956) the variables have **substantial relationship**:  $r = 0.40$  to  $0.70$  indicates moderate correlation, substantial relationship. The relationship between **liquidity and working capital** in the year **2009** is having marked relationship as the value  $r = 0.893$  which according to Guilford (1956) the variables have **high relationship**:  $r = 0.70$  to  $0.90$  shows high correlation.

The relationship between **profitability and liquidity** in the year **2010** is having marked relationship as the value  $r = 0.578$  which according to Guilford (1956) the variables have **substantial relationship**:  $r = 0.40$  to  $0.70$  indicates moderate correlation, substantial relationship. The relationship between **profitability and working capital** in the year **2010** is having marked relationship as the value  $r = 0.614$  which according to Guilford (1956) the variables have **substantial relationship**:  $r = 0.40$  to  $0.70$  indicates moderate correlation, substantial relationship. The relationship between **liquidity and working capital** in the year **2010** is having marked relationship as the value  $r = 0.920$  which according to Guilford (1956) the variables have **very high relationship**:  $r = 0.90$  is indicative of very high correlation, very dependable relationship. The relationship between **profitability and liquidity** in the year **2011** is having marked relationship as the value  $r = 0.275$  which according to Guilford (1956) the variables have **small relationship**:  $r = 0.20$  to  $0.40$  indicates low correlation, definite but small relationship. The relationship between **profitability and working capital** in the year **2011** is having marked relationship as the value  $r = 0.454$  which according to Guilford (1956) the variables have **substantial relationship**:  $r = 0.40$  to  $0.70$  indicates moderate correlation, substantial relationship. The relationship between **liquidity and working capital** in the year **2011** is having marked relationship as the value  $r = 0.562$  which according to Guilford (1956) the variables have **substantial relationship**:  $r = 0.40$  to  $0.70$  indicates moderate correlation, substantial relationship.

From the above analysis the result is, there is substantial relationship between the liquidity, profitability and working capital because business growth is based on the profitability of firms and profitability requires optimum level of working capital and liquidity and has to maintain that level. So the result shows the positive relationship between them.

## CONCLUSION

Innovation is indispensable for the success of every kind of business firms. If business concerns wants to survive in the market they have to make their product and services innovative and to take the right opportunities at the right time. For this purpose the business concerns have to increase their earning capacity i.e. profitability, working capital as well as liquidity position.

The study was done to explore that weather liquidity has an impact on working capital and profitability, profitability on working capital and liquidity and working capital on profitability and liquidity and also relationship between them in respective three years. The results indicate that all aspects are interrelated and based on each other because the firms have to maintain liquidity position, working capital and also its profits and results suggest that there is positive relationship between them.

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**COMPLAINTS MANAGEMENT IN BANKS: AN AID TO CUSTOMER SATISFACTION**

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**ABSTRACT**

Customer satisfaction today is the pre-requisite for the success of any organization providing services to customers. It has become one of the biggest challenges in the service sector today as customers' awareness has increased tremendously. Information technology revolution, coupled with rapid urbanization has created net-savvy customers who demand various products at the press of a button. Banks are no exception to this as they are leveraging on technology and have entered greatly into para-banking activities which have provided them higher fee-based incomes, thereby augmenting their profitability. Public sector banks in India in the last decade have metamorphosed themselves through a phase of technology up-gradation and have migrated to core banking solution (CBS) platform. Complaints management has become a vital issue for banks as proper grievance handling can enhance customer satisfaction and help in retaining customers. Thus, an attempt is made to study the nature of customers' complaints, analyse their causes and suggest remedial measures for the same so that they can be redressed at the earliest, without losing the customers.

**KEYWORDS**

Customer satisfaction, card related complaints, complaints via e-mail, complaints related to non-adherence, charges without notice.

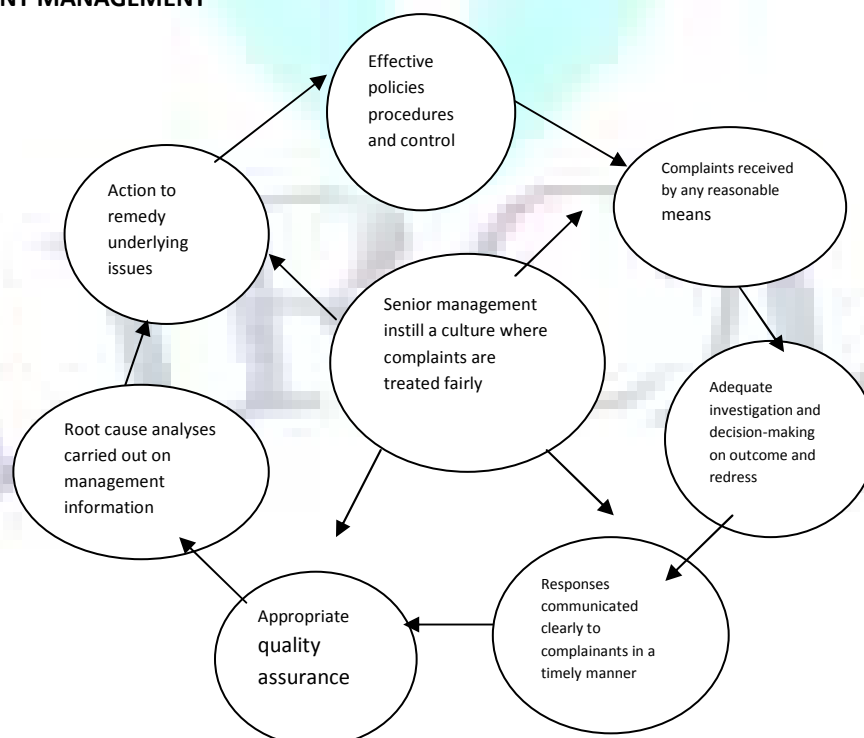
**INTRODUCTION**

Customer satisfaction today is the pre-requisite for the success of any organization providing services to customers. It has become one of the biggest challenges in the service sector today as customers' awareness has increased tremendously. Information technology revolution, coupled with rapid urbanization has created net-savvy customers who demand various products at the press of a button. Banks are no exception to this as they are leveraging on technology and have entered greatly into para-banking activities which have provided them higher fee-based incomes, thereby augmenting their profitability. Public sector banks in India in the last decade have metamorphosed themselves through a phase of technology up-gradation and have migrated to core banking solution (CBS) platform. It is highly imperative that banks have an effective complaints management system in place as it can go a long way in retaining customers by redressing their grievances timely. Thus, an attempt is made to study the nature of banks' customers' complaints, analyse their causes and suggest remedial measures for the same so that they can be redressed at the earliest, without losing the customers.

**MEASURES BY RBI TO ENHANCE CUSTOMER SERVICE**

RBI has formulated and issued guidelines on Fair Practices Code for both banks and non-banking finance companies. The Indian Banks' Association has formulated a "Model Code for collection of dues and repossession of security." RBI has set up an exclusive department for ensuring customer services in 2006. The functions of the Customer Service Department include:

- Dissemination of information relating to customer grievance redressal by banks and RBI;
- Overseeing the grievance redressal mechanism in respect of service by various RBI departments;
- Administering the Banking Ombudsman Scheme;
- Acting as a nodal department for the Banking Codes & Standards Board of India (BCSBI)
- Ensuring the redressal of complaints received directly by RBI against other banks;
- Liaison between banks, IBA, BCSBI and RBI's departments on matters related to services and grievance redressal.

**ESSENTIALS OF COMPLAINT MANAGEMENT**

Source: JeyaKumar, S (2010), "Complaint Management in Banks for Improving Customer Satisfaction," Vinimaya, Vol. XXXI, No.3, Oct-Dec.

**COMPLAINT MANAGEMENT SYSTEM IN BANKS**

Effective complaint management is vital for banks to satisfy and retain its customers. It consists of:

- *Classification of Customer Complaints* on the basis of nature.
- *Analysis and Trend Reporting*: The complaint data should be analysed regularly to identify trends that occur with front-line delivery.
- *Timely Action*: Management needs to timely measures like updating customer service standards, training the staff etc.
- *Better Complaint Management System*: The information obtained regarding complaints can be effectively used to remove the lacunae in customer service, thereby improving customer satisfaction.

**GROUND OF COMPLAINTS OF BANK CUSTOMERS**

Some of the common grounds of complaints of bank customers are:

Non-payment or inordinate delay in the payment or collection of cheques, drafts, bills etc; Non-acceptance, without sufficient cause, of small denomination notes tendered for any purpose, and for charging of commission in respect thereof; Non-acceptance, without sufficient cause, of coins tendered and for charging of commission in respect thereof; Non-payment or delay in payment of inward remittances ; Failure to issue or delay in issue of drafts, pay orders or banks' cheques; Non-adherence to prescribed working hours ; Failure to provide or delay in providing a banking facility (other than loans and advances) promised in writing by a bank or its direct selling agents; Delays, non-credit of proceeds to parties' accounts, non-payment of deposit or non-observance of the RBI directives, if any, applicable to rate of interest on deposits in any savings, current or other account maintained with a bank ; Levying of charges without adequate prior notice to the customer; Non-adherence by the bank or its subsidiaries to the instructions of RBI on ATM/Debit card operations or credit card operationsetc

**SCENARIO OF COMPLAINTS IN INDIAN BANKS****Receipt of Complaints**

The complaints pertaining to deficiency in service provided by banks, as depicted in Table 1.

**TABLE 1 - NUMBER OF COMPLAINTS RECEIVED BY THE BO OFFICES**

Period	No. of BO offices	No. of complaints received during the year	Rate of increase (% over previous year)
2006-07	15	38,638	22
2007-08	15	47,887	24
2008-09	15	69,117	44
2009-10	15	79,266	15
2010-11	15	71,274	(-10)

Source: www.rbi.org.in

The number of complaints received has recorded increase of 22% in 2006-07 as new grounds of complaints such as credit card issues, failure in providing the promised facilities, non-adherence to fair practices code and levying of excessive charges without prior notice, etc were included in ambit of the Scheme. Complaints related to internet banking were added as a new ground for complaint which increased awareness among the public about the Banking Ombudsman Scheme (BOS) and online accessibility to BO office through internet contributing to the increase in receipt of complaints of 44% in 2008-09. The number of complaints received in 2009-10 increased by 15% but declined by 10% in 2010-11.

**Region-wise Receipt of Complaints**

The offices of the Banking Ombudsman received maximum number of complaints from rural and metropolitan areas during the year 2009-10 as a consequence of the awareness efforts undertaken by the Offices of the Banking Ombudsman as well as the RBI Regional Offices through personal/village visits, media campaign etc. The detailed region-wise position of complaints is given in Table 2:

**TABLE 2**

Region	No of complaints received during 2008-09	No of complaints received during 2009-10	No of complaints received during 2010-11
Rural	13915(20)	25,055 (32%)	7,816(11%)
Semi Urban	9817(14)	10,741(14%)	10,816(15%)
Urban	15,723(23)	16,423 (21%)	21,218(30%)
Metropolitan	29,662(43)	27,047(34%)	31,424(44%)
Total	69,117	79,266 (100%)	71,274

Source: www.rbi.org.in Figures in parentheses indicate the share of complaints of each region in the total complaints

The share of complaints from rural areas decreased from 20% in 2008-09 to 11% in 2010-11, while complaints from the semi-urban areas increased mildly from 14% to 15% during the same period. The share of complaints from urban areas increased from 23% to 30% during the same period, along with a rise from 43% to 44% from 2008-09 to 2010-11 from the metropolitan areas.

**Mode-wise Receipt of Complaints**

During the years 2007-08, 2008-09 and 2009-10 the complaints received by different modes are depicted in Table 3:

**TABLE 3 – MODE-WISE RECEIPT OF COMPLAINTS AT THE BO OFFICES**

Mode	No. of Complaints received during 2008-09		No. of Complaints received during 2009-10		No. of Complaints received during 2010-11	
	No.	%	No.	%	No.	%
Email	15,927	23%	9221	12%	9,736	14%
On line	9352	14%	11,400	14%	9,265	13%
Letter, post-card, Fax, etc.	43,838	63%	58,645	74%	52,273	73%
Total	69,117	100	79,266	100	71,274	100

Source: www.rbi.org.in Figures in parentheses indicate the share of complaints of each mode in the total complaints

During the period 2008-09 to 2010-11, the share of complaints received has been maximum through Letters, post-card, Fax, etc and has risen from 63% to 73%. This is due to the fact that 32% of complaints have been received from rural areas and 14% of complaints have been received from semi-urban areas (as per Table 2) and urbanites are more techno-savvy as compared to ruralites who do not have access to internet. Complaints via E-mail have declined from 23% to 14% from 2008-09 to 2010-11 along with online complaints, which decreased slightly from 14% to 13% during the same period.

**Bank Group-wise Analysis Receipt of Complaints**

The complaints received by BO offices against different bank groups are indicated in Table 4:

**TABLE 4**

Bank group	2006-07	2007-08	2008-09	2009-10	2010-11
Nationalized Banks	10543	12033	14974	19092	20,417
	(30%)	(26%)	(22%)	(25%)	29%
SBI Group	11,117	13,532	18,167	22,832	22,307
	(33%)	(29%)	(27%)	(30%)	31%
Private Sector Banks	9,036	14,077	21,982	22,553	17,122
	(23%)	(29%)	(32%)	(29%)	24%
Foreign Banks	3,803	6,126	11,700	11,450	7,081
	(11%)	(13%)	(17%)	(15%)	10%
Scheduled Primary Co-op. Banks and RRBs	849	1121	1148	968	1,130
	(3%)	(3%)	(2%)	(1)	(2%)
<b>Total</b>	<b>35,348</b>	<b>46,889</b>	<b>67,971</b>	<b>76,895</b>	
	<b>(100%)</b>	<b>(100%)</b>	<b>(100%)</b>	<b>(100%)</b>	

Source: www.rbi.org.in. Figures in parentheses indicate the share of complaints of each bank group in the total complaints

During the period from 2005-06 to 2010-11, the share of complaints has declined for Nationalised banks, i.e. from 30% to 29%, for SBI Group, from 33% to 31%, from 11% to 10% for Foreign Banks, while it increased for Private Sector Banks, from 23% to 24%, which is alarming. Regional Rural Banks and Scheduled Cooperative Banks recorded a reduction in complaints, from 3% to 2% during the said period. On the whole, in 2010-11, the largest share of complaints has been for SBI Group, i.e. 31%, followed by Nationalised banks, i.e. 29%, Private Sector Banks, i.e. 24%, Foreign Banks, i.e. 10% and Regional Rural Banks, i.e. 2%. This clearly indicates that Public Sector Banks need to pay more attention towards the quality of customer services to remain competitive.



**Nature of Complaints Handled**

The grounds of complaints have been enumerated in Clause 8 of the Banking Ombudsman Scheme 2006. Table 5 gives the broad category-wise complaints received during the last three years:-

**TABLE 5 - CATEGORY-WISE RECEIPT OF COMPLAINTS**

NATURE OF COMPLAINTS	COMPLAINTS RECEIVED DURING (%age to aggregate complaints)				
	2008-09	2009-10	2010-11	2009-10	2010-11
Deposit accounts	6,706	3,681	1727	4.7	2
Remittances	5,335	5,708	4216	7.2	6
Credit cards	17,648	18,810	17,116	23.7	24.0
Loans and advances -	8,174	6,612	4,564	8.3	6.0
Charges without notice	4,794	4,764	4,149	6.0	6.0
Pension	2,916	4,831	5,927	6.1	8.0
Failure to meet commitments	11,824	11,569	2,962	14.6	4.0
DSAs and recovery agents	3,018	1,609	1,722	2.0	2.0
Notes and coins	113	158	146	0.2	0.2
Others	8,589	18,840	20,451	23.8	29.0
Out of Subject	-	2,684	8,204	3.4	11.0
Total	47,887	69,117	79,266	100.00	100.00
Deposit accounts	6,706	3,681	1727	4.7	8.0
Remittances	5,335	5,708	4216	7.2	4.0

Source: www.rbi.org.in Figures in parentheses indicate the share of complaints of each category in the total complaints

Among the various types of complaints received by Banking Ombudsmen, the largest share of complaints has been received in respect of other complaints, i.e. 29.0% in 2010-11, comprising of non-adherence to prescribed working hours, refusal to accept or delay in accepting payments towards taxes as required by RBI/ Government of India, refusal to accept/delay in issuing or failure to service or delay in servicing or redemption of Government securities, refusal to close or delay in closing of accounts, etc. The second major type of complaint has been received in relation to Credit cards, i.e. 24.0% in 2010-11, which was 23.7% in 2009-10. Card-related complaints consists of items like issuance of unsolicited credit cards and unsolicited insurance policies and recovery of premium charges, charging of annual fee in spite of being offered as 'free' card and issuance of loans over phone, disputes over wrong billing, settlement offers conveyed telephonically, non-settlement of insurance claims after the demise of the card holder, abusive calls, excessive charges, wrong debits to account, non dispensation of money from ATM, etc. The third major source of complaints has been received in respect of Pension, which have increased from 6.1% in 2009-10 to 8.0% in 2010-11. The next important cause of complaints has been due to failure to meet commitments made, consisting of non-adherence to fair practices code as adopted by the bank, failure to provide or delay in providing banking facilities other than loans and advances etc., which declined tremendously from 14.6% in 2009-10 to 4.0% in 2010-11. Complaints related to loans and advances declined from 8.3% to 6.0% during the same period. Complaints related to Remittances decreased marginally from 7.2% in 2008-09 to 6% in 2009-10. Charges without notice have been the bone of contention between banks and customers, their share declining from 6.9% to 6.0% during the same period. Grievances related to Pension, however increased from 4.2% in 2008-09 to 6.1% in 2009-10. Complaints related to Coins and Notes have been constant at .2% during the same period.

**CONCLUSIONS & SUGGESTIONS**

There has been increase in the receipt of complaints received through the postal mode as compared to on-line complaints and complaints via email, indicating the technology-savvy nature of the urbanites residing in urban and metropolitan areas. Among the various bank groups, the Nationalised Banks and SBI Group need to hone up their customer management skills as they have received the highest number of complaints. The Foreign Banks have been most efficient in providing customer services as they have received the least number of complaints - a lesson to be learnt by all other bank groups. Complaints pertaining to non-adherence to prescribed working hours, refusal to accept payments towards taxes as required by RBI etc have been the major bone of contention between banks and customers. These complaints are of very basic nature and should be redressed at the branch level instead of being taken up to the offices of the BOs. Complaint related to credit cards has also been a major contributor to the complaints, due to the difficulty in accessing the credit card issuers and the poor response from the call centres. Pension related grievance need to be tackled with care and sensitivity.

Banks face certain challenges relating to providing IT related infrastructure in the branches, hence, they need to resolve the software and hardware issues causing hurdles in providing hassle-free customer service at the branches. Certain loopholes need to be plugged, viz. system failures, connectivity, backup support, data mining, unauthorized access, data integrity etc. Enabling the customers to use technology based products and services so as to make a transition from manual mode to technology modes can be instrumental in reducing complaints and enhancing customer satisfaction.

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**PERFORMANCE MANAGEMENT: A HOLISTIC REQUIREMENT FOR ORGANIZATIONS**

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**ABSTRACT**

*The companies these days are on the edge of the cliff due to cut throat competition, technological changes & innovation. Faced with economic uncertainties, risky strategies, competing priorities, limited resources, and managerial complexities, organizations are realising the value of human resource management. The role of HR is changing fast to adopt and adapt to new organizational structure and culture. Today, if an organization is to survive, it needs to adapt and continually seek to reduce costs, increase quality, create new products, and increase performance. Performance management has become a major element of HRM. Through performance management strategies, HR helps in identifying the skills that employees need and then providing employees with the training and structures needed to develop and deploy those competencies. This paper analyses the importance of different strategies of performance management like reward, career, team, culture, measurement, competency and leadership. By implementing all the performance management strategies organizations can face the market competition and can achieve all the heights of success. This paper also analyses the successful implementation of performance management at various organizations in order to have a practical experience. Performance management is the backbone of human resource management for any organization intending to produce a high performance and leverage its human capital.*

**KEYWORDS**

performance management, HRM.

**INTRODUCTION**

Performance management has assumed a pivotal role in the face of rapid changes such as globalization, liberalization, technological and market changes. During organizational development and change management, performance management has occupied a centre stage. Performance management as a distinct discipline is gaining ground slowly but firmly. All human resource management efforts are directed towards enhancing performance of employees and thereby improving the performance of organizations. Therefore for bringing positive results, performance management efforts in organizations should be distinctly integrated and every sphere of human resource management activity must be integrated vertically and horizontally to deliver significant positive business results. Performance management as a concept and practice has substantive potential to fulfil business demands of an organization by integrating its growth with motivational needs of human resource. The term performance management is commonly used today to describe a range of managerial activities designed to monitor, measure and adjust aspects of individual and organisational performance through management controls of various types. Performance management integrates the management of organisational performance with the management of individual performance. An integrated framework is presented in the paper by aligning seven core performance strategies such as reward, career, team, culture, measurement, competency and leadership.

**REVIEW OF LITERATURE**

The evolution of the concept of performance management reflects a change of emphasis in organizations, away from command and control towards a facilitation model of leadership. Performance management is a broad term coined by Dr. Aubrey Daniels in the late 1970s to describe a technology for managing both behaviour of employees and results, two critical elements responsible for performance of organizations. Performance management can be regarded as a systematic process by which the overall performance of an organization can be improved by improving the performance of individuals within a team framework. Bititci, Carrie & McDevitt, 1997 define **performance management** as a "process by which the company manages its performance in line with its corporate and functional strategies and objectives".

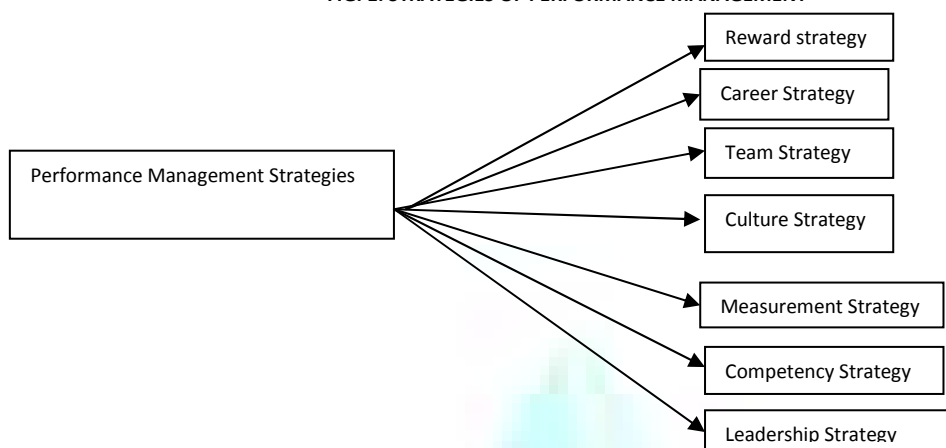
Armstrong and Baron (1998) defined it as a "strategic and integrated approach for increasing the effectiveness of companies by improving the performance of the people. It can be applied by organisations or a single department or section inside an organisation, as well as an individual person. The term performance management gained its popularity in early 1980's when total quality management programs received importance for achievement of superior standards and quality performance. Tools such as job design, leadership development, training and reward system were considered equally good along with the traditional performance appraisal process. A **performance management system includes the following actions-**

- Developing clear job descriptions and employee performance plans which includes the key result areas (KRA's) and performance indicators.
- Selection of right set of people by implementing an appropriate selection process.
- Negotiating requirements and performance standards for measuring the outcome and overall productivity against the predefined benchmarks.
- Providing continuous coaching and feedback during the period of delivery of performance.
- Identifying the training and development needs by measuring the outcomes achieved against the set standards and implementing effective development programs for improvement.
- Holding quarterly performance development discussions and evaluating employee performance on the basis of performance plans.
- Designing effective compensation and reward systems for recognizing those employees who excel in their jobs by achieving the set standards in accordance with the performance plans or rather exceed the performance benchmarks.
- Providing promotional/career development support and guidance to the employees.
- Performing exit interviews for understanding the cause of employee discontentment and thereafter exit from an organization.

**STRATEGIES OF PERFORMANCE MANAGEMENT**

Nowadays managers want to know exactly which characteristics make their specific organization successful. Seven core strategies of performance management can be applied within the organization to manage performances of both individual and organizations. These are reward, career, team, culture, measurement, competency and leadership as shown in figure 1.

FIG. 1: STRATEGIES OF PERFORMANCE MANAGEMENT



## REWARD STRATEGY

Reward is needed for effective performance of employees. Monetary and nonmonetary rewards are the basic building blocks in the architecture of performance management. Reward's basic function is to fulfil motivational needs of employees. Monetary rewards fulfil basic/physiological needs of employees while nonmonetary rewards fulfil higher order (psychological) needs of employees. Non monetary rewards can be given to employees by giving them more autonomy/freedom and recognition in their job. *Reward is a double edged sword. Once the needs of the employees are fulfilled, they became satisfied and their performance increases which ultimately leads to the high performance and high productivity of the organization.* Ineffective reward management can cause other performance management activities to collapse. A systematically evolved and applied reward strategy not only fulfils basic motivational needs of employees, but also enables employees to operate at higher motivational level. First priority of organizations is that they must reorient their compensation, incentive and recognition schemes to be performance focused. Reward must be used and deployed as a powerful corporate strategy to obtain superior employee and organizational performance. It is one of the best strategy through which performance can be managed.

The main focus of corporate should be on retention of high potential employees. "There will be a strong focus on the overall value proposition to support retention of high potential employees by organizations", said Hindustan Coca-Cola Beverages Vice-President (HR) P V Ramana Murthy at two day National Summit 2011 on Emerging trends in Compensation and Rewards. He also said that **retention of talent is possible only by giving employees monetary and nonmonetary rewards.** Companies are using benefits from "employee empowerment" which serves as a tool to keep employees informed, motivated and focused.

While pay-for-performance is here to stay in corporate India, the concept poses a challenge to HR professionals who have to formulate a policy that will reward performance and boost employee morale in the right manner. The recently held National Summit on 'Recent Trends in Compensation & Rewards: Managing from Design to Delivery', organized by the All India Management Association (AIMA), emphasized that *while retaining talent in companies is a major challenge for HR professionals, one must not go overboard with rewards and incentives.*

Various organizations are adopting reward strategy as a tool of performance management. Reckitt Benckiser, India is one such company which sends its employees to foreign trip every year as a reward for showing high performance. This motivates employees for further high performances.

In today's fast changing business environment, the way companies communicate with their employees also determines their success or failure. At PepsiCo global boss, Indra Nooyi writes to 150,000 employees and regularly asks for their suggestions and feedback. Those who give good suggestions get rewards. At RPG Life Sciences "Eureka" is a centralized e-mail system for employees to suggest ideas and business strategies. Every employee who comes up with an idea which is implementable and successful gets 10% of the profit.

Lead by INFOSYS (an attrition of almost 17 employees a day), IT companies are most at risk, actually the entire Service Industry falls into the danger zone. As a result, there is a need for good and effective Reward & Recognition programmes. Some organizations have kicked off R&R programmes, managed by an in-house team from the HR department. However, some companies have realized the importance of taking a more professional approach.

## CAREER STRATEGY

Career is a sequence of jobs occupied by a person in his/her professional life in the similar organizations. Career management can be done by career planning and development, which is a good source of enhancing the performance of employees. Career management helps employees to fulfil their career aspirations and to match their skills, interests and values with that of the organization. Career as a strategy of performance management works on two principles, first is that careers must be managed to motivate employees to optimize their potential and to have peak performances. Secondly organizations must deploy career management as a sharp strategy to attain organizational growth and innovation by vertically and horizontally aligning the progress of employees with the organization.

In Unilever, people are the most important asset. Human Resource members support and develop employees by showing them a career path which helps in delivering outstanding business performance. Unilever empowers employees to contribute to the business objectives and for their own personal development & career growth.

### CASE STUDY: CAREER DEVELOPMENT AT CORNING GLASS WORKS

Corning Glass Works is a fortune 500 company reputed for its glass and ceramic ware, and a leader in telecommunication, health and consumer products. It has successfully employed a career development system to develop a productive and effective workforce. *Career development system at Corning focused on bringing employees' attention on the current job and how he/she could progress in the company.* Before the introduction of the career development system the workforce at Corning was demoralized due to lack of participation in appraisal, insufficient attention to appraisal interviews, lack of career information, lack of awareness about internal placement processes. The career development system was aimed at providing employees with information, skills and tools to help them to take charge of their own career development. Interactive computer software, video booklets and personal counselling sessions were used as part of the system to help employees analyze their actions, goals and alternatives and assess themselves. Managers conducted career discussions with their employees to help them to do their own career planning. The efforts made by Corning paid dividends and the workforce became more productive, effective and efficient.

Source: Zandy, B. Leibowitz et al. April 1990. Career Development Works Overtime at Corning Inc., Personnel, 38-45

In today's competitive world, attraction and retention of talent continues to be the most important challenge for HR. Employees' are rather committed to career than committed to organization and therefore managing and retention of talent has become more challenging.

Organizations today are beginning to realize that executives can benefit in their career growth greatly from educative programmes and hence, are bringing back the conventional wisdom of teaching combined with modern-day training methods.

"Organizations are looking at executive education as an important tool for the development of its employees". Further, executive education particularly from some of the esteemed colleges internationally, serves as a very strong motivation and engagement opportunity. Again, at senior levels, employees look at executive education as a way of networking and gaining exposure to some of the best practices in the function," says Chaitali Mukherjee, country manager, Right Management.

For career development Amul Cooperative Ltd. (GCMMF) send its managers to other countries for learning and developing skills. For example, Amul company sends its managers to attend an executive development programme on "Kaizen" (Continuous Improvement) to Japan in the year 2007. Such career development programmes are a great source of learning and development as well as a source of motivation to other employees of the organization.

### TEAM STRATEGY

Teams and teamwork are not new to organizations. Teamwork is an activity in which tasks are interdependent and performed by individuals in a collaborative manner with different skills to achieve a common goal with performance excellence. Participative management, workers cooperation in management, quality circles, small group activity and so on are some of the examples of team work in organizations. With the competitive, challenging and changing environment teamwork has acquired a special place in organizations as most of the work inside organizations has become more interdependent. There is a growing necessity to introduce flexibility, delegation, consensus, two way communication, flat structures, empowerment, continuous improvement and more importantly constantly changing work patterns have increased the role of teams in organizations. However, for achieving success organizations must have teams with clear vision, purpose, commitment and alignment with organizational goals. Teamwork and teams can be a natural source of improving performance.

To elicit, Tata Consultancy Services (TCS) is 1,40,000 strength organization with diverse workforce which represents the global character of the company. Over 8% of its employees originate from 75 nationalities. Managing diversity and team management is a key challenge. The company has adopted several diversity management and team management initiatives in the last few years. Foreign languages like French, German & Spanish are part of its curriculum.

### CULTURE STRATEGY

Culture is the most powerful and intangible ingredient of performance management. Many organizational studies, including Peter and Waterman's "In Search Of Excellence" and William Ouchi's Z Theory, have sufficiently pointed out that culture is the key factor in making an organization competitive, world class and innovative. Organizational Culture is shared values, morals, traditions and ideologies of people inside organization. Shared values are commonly held beliefs, mindsets, and assumptions that shape how an organization behaves. Culture of the organization influences decision making, communication, interpersonal relationships, work environment, trust and openness, and the way organization behaves and interacts within and outside. This implies that culture is the strongest determinant of organizational performance. Strong and positive culture creates positive work environment in which every employee feels comfortable to work. A positive and strong organizational culture helps employees to explore their potential into tangible performances through reinforcing the strengths and relieving their weaknesses.

To elicit, a familiar hospitality industry, Pizza Hut is an example for flatter organization. The emphasis is on competency, where people are considered as important resources. It has reinvented into a flatter organization, and has an outward focus through project teams and encouraged by support services. Pizza Hut has practiced a culture of teaming, which spreads from the top of the organization.

Hindustan Lever Limited (HLL), known for acquisition of companies has significantly contributed on two key areas- growth and people. The company connects its customers across the country, exactly what they look for. Technology and restructuring (right sizing) are the levers in facing competition which has resulted in simpler and flatter organization with few hierarchy levels and greater empowerment eliminating complexity and enabling quicker decision making. Today the company is far more youthful in attitude and spirit which is an example of openness and transparency.

### MEASUREMENT STRATEGY

Performance *measurement* is an essential part of the performance management. By measuring, people transform complex reality into simplified numerical concepts that can be easily communicated and acted upon (Lebas, 1995). According to Lebas, the simplification of reality by measuring is the prerequisite of successful management. Similarly, Bititci et al., 1997 argue that performance measurement is at the heart of the performance management process and it is of critical importance to the effective and efficient functioning of performance management. ). Although "performance" may appear to be an easy concept, a unique definition in the literature does not exist. Moreover, academics often use special definitions tailored to fit the individual research purposes (Langfield-Smith, 1997).

Bourne, M., Neely, A., Mills, J. and Platts, K. (2003) worked on the topic "Why some performance measurement initiatives fail". The paper suggested areas of improvement in the performance measurement methodologies and their application, together with suggestions of fruitful topics for future research.

Several ways to categorize performance have been presented in the literature (see literature review by Kihn, 2010). One way is to distinguish the outcomes of organizational activities and the means by which these outcomes are reached (Govindarajan & Fisher, 1990). The former is often called "performance" while the latter is commonly referred to as "effectiveness" (Ukko, 2009). Interestingly enough, this distinction appeared only after 1978 (Henri, 2004). Before that time both definitions were used interchangeably.

There is a great myth surrounding human resource management that its contribution to business and effectiveness cannot be measured. A gap is observed between line managers and human resource managers/ performance managers. Line manager's talk in terms of profits, sales, turnovers, customers, costs etc. but performance managers talk in terms of feelings, emotions and employee job satisfaction. *Unless an activity is measurable, it is not manageable.* Measurement based performance management proves that human element can be measured with accuracy and objectivity. Most of the methods, techniques and tools employed in human resource performance measurement are Social Research Methodology, Psychometrics, Generic Statistical Tools, Balance Score Card, SMART and Performance Management Questionnaire. For performance management these tools and techniques can be applied to measure the performance of employees. Balance Score Card (BSC) is one of the most commonly used measurement strategy. Robert Kaplan and David Norton has developed balance score card method of measurement. The balanced scorecard is a management system (not only a measurement system) that enables organizations to clarify their vision and strategy and translate them into action. In its simplest form the Balanced Scorecard breaks performance monitoring into four interconnected perspectives: Financial, Customer, Internal Processes and Learning & Growth.

Reckitt Benckiser the world's no. one manufacturer of household cleaning products like Lysol, Dettol, Airwick etc., manages its business performance and share holders value by using an analytical tool for tracking key indicators more effectively and identifying, analyzing and addressing critical issues faster and more efficiently. To get quality information Reckitt Benckiser started to implement balance score cards for measuring and managing key performance indicators and various company processes at various levels of control and activity and across a variety of markets, culture and geography.

Some of the companies which have applied BSC approach for performance measurement are Godrej, HLL, LG, Samsung, Reliance, TATA etc.

### COMPETENCY STRATEGY

Utilization of all the physical resources technology/machines, money, material, distribution and marketing network, exploitation of emerging and existing markets, , opportunities of business environment depends upon the reservoir of human competency an organization builds. Knowledge, skills and attitude are three important factors for identifying competency in a person. Different individuals require different competency for different jobs and it also differs from industry to industry.

Competency based performance management is a strong weapon in the hands of the organization in achieving its goals. Competency based performance management strategy helps in identifying and building the most relevant competencies to facilitate employee and organizational performance. Competency management focuses on identifying knowledge *and* skills in order to perform a role, manage a function and lead an organization. After identifying knowledge and skills to perform a job, competency management helps in setting benchmarks which helps in achieving the desired results.

**PERFORMANCE MANAGEMENT STRATEGY AT SONA KOYO STEERING SYSTEMS LTD.**

Sona Koyo Steering Systems Ltd., the flagship company of the Sona Group is the largest manufacturer of steering systems for passenger cars and utility vehicle market in India with a market share of 45% company adopted various performance management strategies like-

Competency mapping- competency identification and assessment of current and estimated skill levels desired to fulfil the goals and alignment of these goals across functions. This ensures the right person at right place, clarity of goals, and more customer focus.

Career planning- Career succession and talent management is ensured with appropriate reward and retention policies, and it builds Sona Koyo as 'Employer of Choice' by way of involved, aggravated and enthusiastic workforce.

Source: Hari Nair, August 2006, Business Manager.

**LEADERSHIP STRATEGY**

Leadership is the most vital and influential strategy among the seven strategies of performance management because it is the leader who helps in the conceptualization, facilitation, execution and evaluation of the other six performance management strategies such as reward, career, competency, culture, measurement and team. A good leader can make performance management work at least for certain time in the absence of one or more strategies of performance management. In the context of performance management, leadership is defined as a process that maximizes the performance of employees and organizations in all types of business environments and situations by sharply aligning objectives of performance management strategies with business strategies, nurturing leadership at all levels of organization, developing, integrating, executing and evaluating six performance management strategies to deliver the best of the human and organizational results. Competence of leaders depends upon his ability to conceptualize, communicate and lead people towards a direction which they believe perfect.

Fundamentally, a leader is someone who leads, who influences others and inspires them.

There is the shining example of Azim Hashim Premiji who turned the small time oil mill – Western India Vegetable Products Ltd into a software powerhouse by dreaming big and translating his ideas into concrete actions plans – all within a short span of 35 years. When every pharmaceutical company worth the name was focusing attention on formulations, generics and bulk drugs, Dr Anji Reddy visualized the threats in the post patent regime after 2005 early concentrated on original research and is celebrating now as the new molecules in the R&D pipeline of Dr Reddy's labs are being rewarded in world markets.

Infosys believes that leadership plays a very important role in organizational success. Leadership is provided by its chairman N R Narayanmurthy. Leadership is based on high business vision and predominantly supportive styles. There is emphasis on developing leadership qualities among employees. For this purpose, it has established "Infosys Leadership Institute". Top management emphasizes on open door policy, continuous sharing of information, takes inputs from employees in decision making and builds personal rapport with employees. From last few years, we have seen smooth transition from N R Narayanmurthy to Nandan Nielkani and from Nandan Nielkani to Kris Gopal Krishnan without any adverse effect on the company outlook and each one has proved to be an able leader taking company forward.

**CONCLUSIONS AND SUGGESTIONS**

With the globalization of the world economy, the market place has become highly complex, turbulent and competitive. People are at the heart of business success. They are the most important asset of any organisation. Your technologies, products and structures can be copied by competitors. No one, however, can match your highly charged and motivated people.

Performance management can be used by the organizations as a tool of success. By adopting a good performance management system organizations can have competitive employees with increased performance and productivity thereby increasing the productivity of organizations. Human resource management can make the best use of all the performance management strategies like reward, career, team, culture, measurement, competency and leadership in achieving organizational excellence. A holistic approach must be followed by the organizations while implementing performance management strategies as all of them are important so each end every strategy must be implemented without neglecting a single one.

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**WORK EFFICIENCY ACQUISITION: AN IMPERATIVE NEED FOR HUMAN RESOURCE PROFESSIONAL**

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**ABSTRACT**

*Work-efficiency means doing right work at the right time. It is one of the important modern management thoughts. There is not much difference between efficiency and effectiveness. Both the terms are used quite closely and sometimes, interchangeably. Work efficiency is a 'human capital' for the organisation. In this age of technology and industrialisation, the demand for efficient people will far exceed the availability of inefficient workers – at all levels and in all industries. Getting the efficient people and keeping the effectiveness is becoming intensely competitive. Most corporate sectors say that the biggest constraint to pursuing growth opportunities is efficiency and effectiveness. Therefore, the human resources professionals are adopting work-efficiency acquisition approach. The core concept of work-efficiency acquisition is to reach a given goal through contemplated action. Efficiency requisition is similar to the acquisition of competency and awareness. It requires emotional health, mental health and physical health. By getting self-confidence, decisiveness, emotional balance and creativity, Human Resource Professionals can acquire efficiency. Hence, the key to work-efficiency acquisition is not only finding efficiency but also developing it.*

**KEYWORDS**

Work-efficiency, Awareness, Self-knowledge, Human effort, Skill

**INTRODUCTION**

**W**ork-efficiency is one of the important modern management thoughts. It means doing the right work at the right time. Work, deeds or actions of a person are not only the reflection of his past experiences but also the reflection of his future actions. So, efficiency is needed in each and every human effort. Man cannot help doing some activity or other; he keeps on doing something or the other; he cannot stop acting. It is said that a person cannot remain without doing something for even a moment. Action may be spontaneous or contemplated. Spontaneous action happens by itself. It requires no thinking. The fly flies all day long and the fish always swims. The mosquito keeps hovering about. Similarly, if a sparrow sits before a mirror it keeps on fighting. In above such actions, there is no question of any efficiency needed. The question of efficiency arises only when an action is contemplated and is done with a sense of discretion.

Human being is a thinking and an industrious being. He thinks and makes effort. The action of a thinking person is contemplated not spontaneous. So, the contemplated action is known as work-efficiency. The contemplated action always requires purpose.

The Purpose of work is not obligatory to work. What makes it obligatory is its necessity. We work as much as is necessary. Work in itself has no meaning. Man works according to his needs. Work is dependent on the purpose in view. Once the purpose is achieved the work comes to an end. There is a saying; even a dull-witted man does not work without a purpose. Purpose is important for any activity. It is to fulfil the basic needs of life. Work grows the growth of needs.

Doing right work in right direction at right time is work efficiency. Industrial and business expansion has taken place in modern time. Lakhs of workers found work, with it the question of work-efficiency arose. But discussion about efficiency in work is nothing new. It existed in ancient time too. What is, however, significant is the meaning we give to the word efficiency. Efficiency in work lies in ensuring that it does not obstruct or harm some other good. For example, if efficiency in working harms physical health, then it is not efficiency. Today, work and activities have multiplied to the extent that physical health is being adversely affected. Even greater harm is being caused to mental and emotional health. Efficiency is something, which does good but no harm. Efficiency of work requires two important principles –

1. No long gaps between thinking, deciding and implementing.
2. Nothing should be done impetuously with unthinking hastiness.

For efficiency, a proper strategy of work should have to be prepared. Whatever the work, it should be done in a planned manner. Lenin gave a fine principle of work efficiency – there should be no hiatus between deliberation, decision and its implementation. There should be harmony among the three. A thought comes today, a decision about it is taken a year thereafter and it is implemented five years later. This should not be happen. This is purely against efficiency.

**HYPOTHESES**

Researcher visualises Strategic Human Resources Development through Efficiency and Effectiveness.

**METHODOLOGY**

The method of study is descriptive. The study surveys from textbooks, reports, journals and from self-knowledge.

**IMPORTANCE OF THE STUDY**

Work-efficiency acquisition is one of the important management thoughts. It is important for strategic development of human resources. Work, deeds or actions of a person are not only the reflection of his past experiences but also the reflection of his future actions. So, efficiency acquisition is needed in each and every human effort. It is a combination of attitude, work-skill and knowledge which largely impact an individual's job performance. It is a process for attitudinal change, behavioural modification and integrated development of personality. An organisation remains effective as long as it uses efficient human resources. The study ensures that work efficiency acquisition is very much needed for successful completion of the task.

**OBJECTIVES**

1. To understand the meaning of work-efficiency
2. To find the way 'how efficiency is acquired'
3. To understand the need of work-efficiency acquisition for the development of human resources
4. To understand the use of efficiency acquisition model for enhancing the performance of human resources on the job
5. To analyse the relationship between work-efficiency acquisition and Human Resources Management

**RESULTS & DISCUSSION**

**Work-efficiency requires Emotional Health:** Efficiency in work is not possible in absence of emotional health. Although, there is no parameter whereby emotional health may be judged but it can be tested through an individual’s behaviour. Behaviourally, following criteria of emotional health can be laid down –

- ❖ Peace of mind
- ❖ Polite behaviour
- ❖ Steady behaviour
- ❖ Contentment

We can assess efficiency in work by observing the increase or decrease in the above four characteristics. Therefore, the first definition of work-efficiency is that it does not obstruct, impede and adversely affect any other aspect of life. Everybody looks for peace and happiness and nobody likes to face adversity. We can change our future happening by virtue of our present pious deeds and by adopting true path. The aim of human being is, spread brotherhood, love, humanity, spread cooperation, discharge duties, do pious deeds and finally get the ultimate goal. Assessing work-efficiency, we should not forget the above aims of human being. Efficiency in work lies in ensuring that it does not obstruct in the fulfilment of above aims. It secures physical, mental and emotional health.

**Work-efficiency requires Mental Health:** Efficiency in work is not possible in absence of mental health. Mental health may be judged through self-realisation and wisdom. There are following criteria of mental health can be laid down:

- ❖ Willpower and Tolerance
- ❖ Fortitude or Steadiness
- ❖ Intelligence
- ❖ Memory

We can assess efficiency in work in these criterions. Willpower and tolerance are important elements of our mental health. The individual with strong willpower firmly resolves to fight in the way of obstacles. He struggles hard and does not leave the work in middle. Willpower is a very important factor for work-efficiency. It involves self-control, self-confidence and disciplined action. In the absence of willpower, our mind loses its power and simultaneously efficiency in work suffers. Tolerance is the quality of the mind. A man with healthy mind can tolerate any situation. He can understand another’s view in their right perspectives. This creates an atmosphere of harmony and peace which is necessary for work-efficiency.

Another creation of mental health is fortitude or steadiness. A steady person does not get deflected even in the face of adversity. He retains his equanimity despite bad news. It enables man to overcome all adversities and sorrows. This is the sign of work-efficiency.

Another criterion of mental health is intelligence. The function of intelligence is to discriminate and decide. An intelligent person takes correct decision at right time. It helps in building performance.

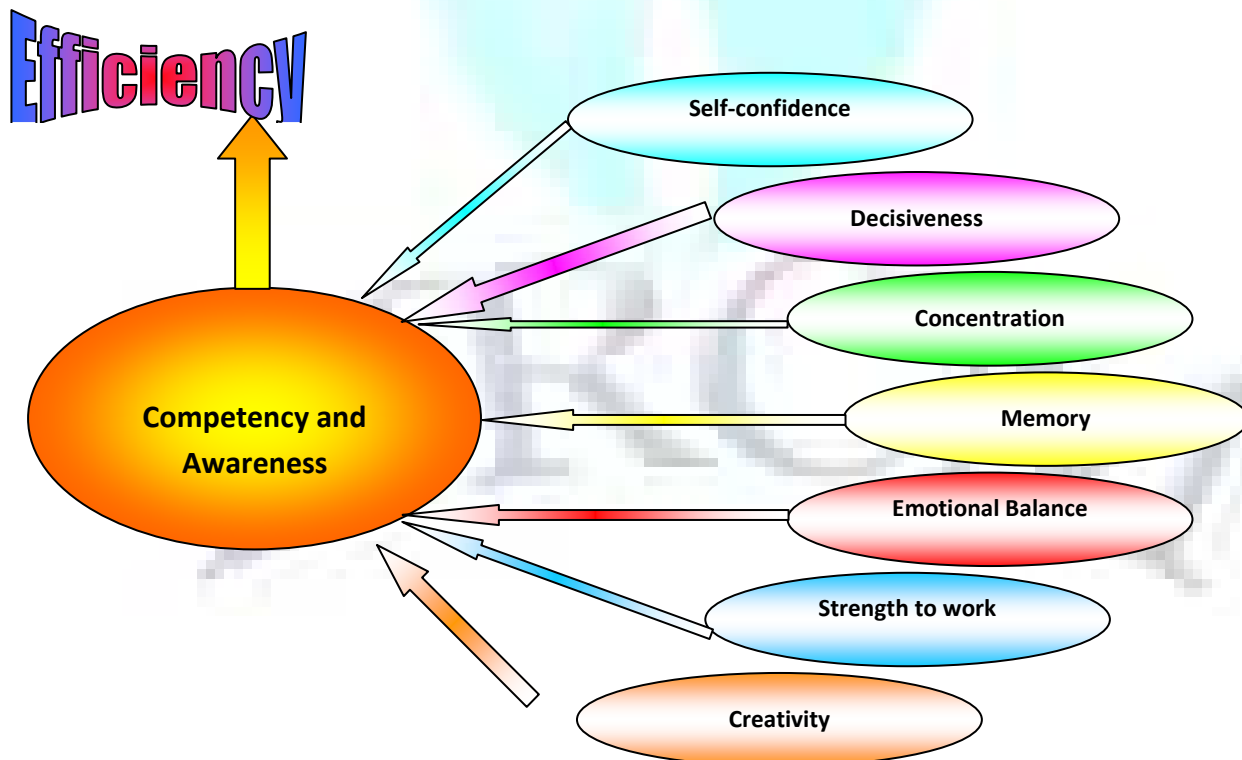
A good memory is the fourth criterion of mental health. Whenever a sign of mental disease appears or depression sets in, memory also suffers. Absence of the loss of memory denotes mental health. Good memory always increases efficiency in work.

**Efficiency requires Physical Health:** Efficiency in work is not possible in absence of physical health. Physical health may be judged through scientific viewpoint. According to *Ayurveda*, he is healthy whose sense organs are in a state of felicity. Perfect equilibrium between the three forces (*Doshas*) controlling all bodily and mental activity viz. phlegm, bile, wind (*Kapha, Pitta, Vayu*) and a parallel equilibrium of biological combustion are the hidden symptom of good health. The visible symptoms of good health are happy mind and uncontaminated sense organs. Good physical health is very necessary for efficiency in work. In fact, good health determines the quality of knowledge and the quality of work.

**How Efficiency is acquired**

Efficiency is neither related to any one particular field, nor to any particular time or situation. The definition of efficiency changes according to the matter, area of operation, time and situation. In the field of spiritualism, that person is considered efficient who is calm, steady, aware of himself, free from anger, lust, greed etc. In the field of materialism, that person is considered efficient who has competency and awareness in his particular profession and other field of activity. The Competency and Awareness require following elements: self-confidence, decisiveness, development of concentration, development of memory, emotional balance, development of skill and development of creativity. These can be observed in figure 1:

**FIGURE-1 – ELEMENTS OF COMPETENCY & AWARENESS LEADING TO EFFICIENCY**



**SELF-CONFIDENCE**

Self-confidence is first element of competency or efficiency in work. It is an important quality of a competent person. We take an example of a doctor. For a doctor, it is not enough to be a skilled physician or surgeon; he should also be professionally competent, which is the result of self-confidence. No success is possible without self-confidence. Along with his daily work he has to perform certain other expert tasks which can only be achieved through faith and self-confidence.

**DECISIVENESS**

The second element of competency is the development of the ability to take decisions. Inefficient persons are just unable to decide. They have lack of decisiveness. Both self-confidence and ability to take decisions are extremely necessary for a man to be successful. Even few minutes delay in arriving at a decision may prove very costly. So decision making is most important ingredient for a competent person.

**CONCENTRATION**

The third element of efficiency is concentration. Sometimes people begin a piece of work, give it up half way and start doing something else and so on. They do not concentrate on a single piece of work. The result is that it creates incompetency in every work. A French scientist wrote nine hundred articles on different topics of science. It is said that if he had chosen one direction in which to work, he would have become one of the greatest scientists of the world. He failed to achieve that direction due to lack of concentration. It is necessary to get absorbed in whatever one has undertaken to do and being so devoted to it that nothing else may enter the mind while the work is being executed. Therefore, concentration develops competency or efficiency in work. Work losses are largely caused by the deflection of the mind.

**MEMORY**

A sharp memory is essential for developing efficiency of working. It is the sign of competency.

**EMOTIONAL BALANCE**

The fifth element is emotional balance. It is the most effective principle of work efficiency. Failure is certain in case of people who lack emotional balance. Balancing the impulses is very necessary for work efficiency. Imbalance is not desirable under any circumstances. Disorganised working, quarrels, family and institutional disputes are all the result of imbalanced emotions. Clash of egos is the biggest obstacle to success. An incompetent person has no control over his emotions. Therefore, efficiency requires emotional stability.

**STRENGTH TO WORK**

The sixth element of the efficiency of work is the development of the strength to work. Without it, talking about efficiency is meaningless. Education, knowledge of scriptures and training are the means of developing the strength to work.

**CREATIVITY**

The seventh element of the efficiency of work is the development of creativity. People become dull-witted if they lack creativity, new ideas about the future, new creation, brilliance and vibrancy.

**WORK-EFFICIENCY ACQUISITION – A STRATEGY**

In organisational context work-efficiency is a combination of attitude, skill and knowledge which largely impact an individual's job performance. It is similar as to competency. It implies that an efficient person has the capability to perform the assigned task. Work-efficiency acquisition provides a way for identifying necessary skills as well as personal traits or characteristics among the human resources. So, many organisations have been using efficiency acquisition model for enhancing their performance on the job. They follow efficiency based human resource management system. The efficiency acquisition model can be observed as follows:

**CRITERION FOR EFFICIENCY MODEL****1. CAPABILITIES**

- a. Capability to address multi-dimensional issue, mental agility and capability to learn.
- b. Ability to understand with logic, critically analyse database to conclude and be at ease with qualitative numbers.
- c. Ability to divergent logical thinking to formulate and give unique solution.

**2. PERSONALITY**

- a. Be able to keep concentrated and be effective in all favourable and unfavourable conditions.
- b. Be capable to tactfully/diplomatically face situation.
- c. Be self-reliant to work.

**3. SOCIAL SKILLS**

- a. Be self-confident and self-motivated to work.
- b. Be capable to interact with all displaying respect to all.
- c. Be high spirited, keep up speed and level of performance.

**4. TECHNICAL SKILLS**

- a. Be able to get proficiency in activities involving methods, procedures and processes.
- b. Be able to work with specific tools and techniques.

**5. CONCEPTUAL SKILLS OR GENERAL MANAGEMENT SKILLS**

- a. Ability to deal with obstructions and to formulate plans.
- b. Ability to balancing, integrating, setting priorities, conceptualisation, leading and delegating.

**6. SALES SKILLS**

- a. Be smart and keep up perseverance and command the audience.
- b. Be able to articulate in presentation of ideas or data and so on.
- c. Have the skill to sell products
- d. Be capable to understand needs and wants of customers.

**7. KNOWLEDGE**

- a. Be knowledgeable about production, sales, financial aspects and competitiveness.
- b. Be knowledgeable about the organisation's strategies to deal with customers and the products.

**8. AWARENESS**

- a. Be aware about organisation's goal.
- b. Be aware about rate of growth, profitability, share holders' value and social performance.

**9. PERSONAL SKILLS**

- a. Creativity
- b. Sense of high achievement
- c. Risk taking attitude
- d. Emotional balance
- e. Accuracy in work

Efficiency acquisition model highlights the traits, knowledge and skills that are inevitably need for effectively discharging a role. It is used as a tool in Human Resource Management system of training and development. As a human resource tool, the efficiency acquisition model is a must for defining the capabilities. The efficiency essentially needed for effectively performing a task, it must also cite illustration when a given trait can be observed or seen in the job. People are



considered as human capital and their efficiency is their centre point on which an organisation builds its competitive advantage. It is imperative for human resources working in an organisation to have the willingness to learn new knowledge and skills as well as competence to do the task they are paid for.

The identification and measurement of efficiency is a different task. In the case identifying the skills in operation of equipment or computer, the job is not so difficult but identifying the intangible capabilities or innate capabilities, the job is not so easy.

Work-efficiency acquisition is more related to organisational goal. It is a process for attitudinal change, behavioural modification and integrated development of personality. It is an imperative need for human resource professionals. An organisation remains effective as long as it uses efficient human resources. Efficient human resources are important because they help the organisation to have:

- (a) **Competitive Edge** – How can one organisation be better than their rivals? Why do customers buy the product of this company than the other company? The answer is if the company has a better competitive edge i.e. it provides better facilities, excellence in product or service quality, better product design etc. This is possible only through the application of work-efficiency. Global competitiveness can be achieved not merely through the best technologies and plans, but through efficient human resources.
- (b) **Products and Human Resources** – Product improvement is possible by efficient people. The new ideas are created by efficient Human Resource Professionals and they compete on the strength of their products. New designs of the product depend crucially on using efficiency as a core competence of the corporation.
- (c) **Manufacturing and Human Resources** - Work-efficiency is the only core competence for coping with change. Today when manufacturing is done through automation and sophisticated machineries are used for curtailing down the monotonous jobs, nothing but efficient human resources can do to improve their productivity manifold.
- (d) **Marketing and Human Resources** – Products are produced, new styles are designed, but these will not be any use till they are marketed. Marketers are supposed to develop unique selling proposition in their products to make the customers loyalists and satisfied. Efficient Human Resources enable customers' need to be anticipated and produce the products according to needs and wants of the customers.
- (e) **Management Techniques and Human Resources** – Efficient Human Resources can solve problems creatively and innovatively through using relevant management techniques.
- (f) **Effective Business Strategy and Human Resources** – No strategy can be formed without efficient Human Resources. Organisation can only lead in the market if it provides best product, best price and best service. This will only possible through work-efficiency and effectiveness.

## FINDINGS

1. The study focuses on strategic development of Human Resources through work-efficiency.
2. The study demonstrates spiritual and moral techniques for work-efficiency acquisition.
3. The study indicates that efficient Human Resources can help the organisation to have competitive edge i.e. it provides better facilities, excellence in product or service and better product design etc.
4. The study shows criterion for efficiency model which provides a way for identifying the necessary skills as well as personal traits among the staff for enhancing their performance on the job.

## CONCLUSIONS AND RECOMMENDATIONS

Key to work-efficiency acquisition is not only about acquiring efficiency but also developing it. Efficiency in work is not possible in absence of physical, mental and emotional health. In the context of the globalised competitive edge organisations are focussed on work-efficiency acquisition. If we are to move our profession upward, we should develop work-efficiency within the organisation. The study suggests that work-efficiency is a combination of attitude, work-skill and knowledge which largely impact an individual's work-performance. Knowledge, skill and attitude can be measured on defined norms and standards and further improved through training and development, organisation should use efficiency acquisition model for enhancing performance of human resources. Finally, the study suggests that organisations should follow efficiency based human resource management system to achieve the set goals.

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**RETENTION AND SATISFACTION OF CONSUMERS: A STUDY OF UNIVERSITY OF JAMMU**

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**ABSTRACT**

*Consumer retention, loyalty and satisfaction are important ingredients for the sustainability of any organisation. Customer switching is opposite to the customer loyalty, and being loyal means satisfaction for a particular product or services. The consumers may switch to other brands if they are not satisfied with the present one. Thus, for the long term sustainability of the organisations, consumer retention has become challenge for them and hence, satisfaction plays an important role. The satisfied consumers have less probability to switch to other brands. For satisfying the consumers, one has to know about what consumer buy, why they buy it, when they buy it, how and how often they buy it and what made them to switch to other brands. The present paper is an attempt to study the toothpaste buying patterns among the individuals. The study also examines the various factors which influence the consumers to buy toothpaste of particular brand and reasons for their switching to other brands.*

**KEYWORDS**

Consumer retention, Consumer Switching, Toothpaste buying patterns, Consumer satisfaction.

**INTRODUCTION**

A consumer is a person or group of individuals that are the final users of products and or services generated within a social system. A consumer select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires. In other words, Consumers are the ultimate destination of any products or services. The study of these individuals, groups, or organizations is what we call Consumer behaviour. Consumer retention, loyalty and satisfaction are important ingredients for the sustainability of any organisation. Customer retention is more than giving the customer what they expect; it is about exceeding their expectations so that they become loyal advocates for a particular brand. Customer loyalty is all about attracting the right customer, getting them to buy, buy often, buy in higher quantities and brings even more customers. Customer switching is opposite to the customer loyalty, and being loyal means satisfaction for a particular product or services. The consumers may switch to other brands if they are not satisfied with the present one. Thus, for the long term sustainability of the organisations, consumer retention has become challenge for them and hence, satisfaction plays an important role. The satisfied consumers have less probability to switch to other brands. For satisfying the consumers, one has to know about what consumer buy, why they buy it, when they buy it, how and how often they buy it and what made them to switch to other brands.

Today, particularly in the competitive global market, it has been seen that organisations are increasingly focusing on the retention of their existing customers. Thus, Gaining knowledge about customers' switching behavior is substantively important for the sustainability of any organisation. Customers' switching behavior is the process exhibited by a customer, behaving differently to a particular brand and undergoes alteration in the preference of the existing product or services. Since, customers are the ultimate end users of any product or services, the success of any organisation depends upon the satisfaction of the consumers, if not they will switch to other brands. When any organisation loses a customer they are not only losing future earnings but also incurring the cost of finding new customers. Over time loyal customers become less price-sensitive therefore, losing loyal customer means giving up high margins. Considering the technological advancements and its easy access to every individual, customers are becoming intolerant and they can dissolve the relationship as soon as any problem arises. Thus, customer retention is the core concern of each and every organization. Due to this reason, the satisfaction of the consumers becomes priority for any organisations. The present paper is an attempt to study the toothpaste buying patterns among the individuals. The study also examines the various factors which influence the consumers to retain to a particular brand and reasons for their switching to other brands.

**OBJECTIVES**

1. To study the toothpaste buying patterns among the select individuals.
2. To study the factors which influence consumer to switching to other brands.

**REVIEW OF LITERATURE**

The current literature revealed that researchers have been focusing on customer retention, loyalty and satisfaction. Customer retention is important to most of the organisations because the cost of acquiring a new customer is far greater than the cost of maintaining the relationship with a current customer (Ro King, 2005). Also, customer loyalty can be defines as "customer behavior characterized by a positive buying pattern during an extended period (measured by means of repeat purchase, frequency of purchase, wallet share or other indicators) and driven by a positive attitude towards the company and its products or services" (Looy, Gemmel & Dierdonck, 2003). It has been further seen in the studies of Reichheld and Kenny (1990), that there are six factors which are imperative to improve retention: senior management commitment; a customer-focused culture in which all employees and managers focused their full attention on customer satisfaction; retention information systems that tracked and analyzed the root causes of defections; empowerment of front line employees to take actions that provided immediate customer satisfaction; continuous training and development; and incentive systems based on customer retention.

To retain customers, organizations have to understand the behaviour of their customers and try to satisfy them, by catering their needs and preferences (Oyeniya and Abiodun, 2010). Consumer behaviour has been defined as those acts of individuals directly involved in obtaining, using, and disposing of economic goods and services, including the decision processes that precede and determine these acts (Engel, et al., 1986). The consumer in this era is in target of massive media attacks effectively planned, and enlighten with glamour as per the emotions, needs, wants and demands of the consumers. Market researchers and organisations are spending billions of dollars on consumer research and to know the important factors involved in consumer decision making. Consumer behaviour analysis helps to determine the direction that consumer behaviour is likely to make and to give preferred trends in product development, attributes of the alternative communication method etc. consumer behaviours analysis views the consumer as another variable in the marketing sequence, a variable that cannot be controlled and that will interpret the product or service not only in terms of the physical characteristics, but in the context of this image according to the social and psychological makeup of that individual consumer or group of consumers (Proctor and Stone, 1982). Zain-Ul-Abideen and Salman Saleem, found that emotional response of consumer purchase behavior is the variable that results into strong association with the consumer buying behavior. It has been seen that people purchase those brands with which they are emotionally attached. The given study presents new evidences in the field of consumer buying behavior of consumers pertaining to the local markets. In addition to it, advertising also plays an important role in making purchasing decisions of the consumers.

Bashir and Malik, (2009), in the given study revealed that consumers considered advertisement as a reliable source of knowledge about any product or services. Advertisement can affect any income group individuals. Consumers were influenced by the appeal and personality used in the specific brand advertisements. Alnaimi, Richard Jones and Perkins studied that maintaining a long-term relationship with a customer is one of the fundamental factors determining the value that the customer provides to the organisation. Thus, a serious threat to achieving a long-term relationship is the customer's switching behaviour. The study also

revealed that customers' switching behaviour (switchers and stayers) is a vital construct to understand the relationship development process between customers and the organisations. A different approach was applied by Bansal (1997) by incorporating some measures of theory of planned behavior (TPB) in predicting switching intentions. TPB posits a link between attitudes and behavior. In combination, perceived behavioral control, subjective norm and attitude toward the behavior lead towards "behavioral intention" (Ajzen, 1991). Bansal (1997) measured the impact of one's attitude towards switching behavior, perceived behavior control (termed as perceived switching costs) and satisfaction with the product or service provider, with intentions to switch. Results confirmed the significant influence of all three variables on switching intentions.

It has been seen from the existing literature that understanding behaviour of consumers (retention, loyalty and satisfaction) plays an important role in catering their needs and preferences over a time. Also, retention of these consumers plays vital role in the long term sustainability of the organisations. Thus, the present study tries to understand the behaviour of toothpaste users and the various factors that helps to retain the customers and reasons for their switching to other brands.

## RESEARCH METHODOLOGY

The present study has been conducted among the boarders of the girl's hostels of University of Jammu, of state Jammu and Kashmir. These respondents have been chosen for the study, as it is one of common place where girls from different regional and cultural background prevailed. This study will be helpful in evaluating the attitude of the select boarders of the hostel towards usage of toothpaste. For the purpose of the given study primary as well as secondary data has been used. The Secondary data has been collected from various books, journals, published research papers, websites etc. The primary data was collected by means of a questionnaire. Copies of the questionnaire were given personally to respondents in the university hostel. The questionnaire consists a total of 14 items. The respondents are randomly selected and out of 130 respondents, the responses of 124 respondents have taken into consideration. The data collected was mainly primary in nature.

## DATA ANALYSIS AND INTERPRETATIONS

The study deals with the analysis of consumer awareness towards toothpaste usage. The responses from the respondents were subjected to simple percentage method, in order to know the inferences out of the collected data.

TABLE 1: DEMOGRAPHIC PROFILE

Demographic variable	No. of Respondents	Percentage (%)
<b>Age (Yrs) - Below 22</b>	60	48.38
22-25	52	41.93
25-28	8	6.45
28 & above	4	3.22
<b>Gender - Male</b>	0	0
Female	124	100
<b>Educational Qualification</b>		
Graduation	52	41.93
Post-Graduation	48	38.7
M.Phil	12	9.67
Others	12	9.67
<b>Status - Student</b>	84	67.74
Professional	8	6.45
Research Scholar	32	25.8
<b>Monthly Family income -</b>		
Below Rs.25000	32	25.8
Rs.25000-30000	12	9.67
Rs.30000-35000	12	9.67
Above Rs.35,000	68	54.83

As indicated from the Table 1, it has been seen that about 48.38% of the respondents have their age below 22 years, followed by between 22-25 years (41.93%), 25-28 years (6.45%) and 28 & above (3.22%). All the respondents of the given study are females (100%), as the sample selected is the girl's hostels of the University of Jammu. About 41.93% respondents have their qualification as graduation, 38.7% as post-graduation and others are 9.67%. It has been seen that 67.74% respondents are students, 25.8% are Research Scholars and 6.45% are professionals. Also, it has been found that about 54.83% have their monthly family income above Rs. 35,000 followed by below Rs, 25,000 i.e. 25.8% respondents and 9.67% ranging between Rs. 30,000- Rs. 35,000 and Rs. 25,000-Rs. 30,000.

TABLE-2: TOOTHPASTE USAGE RATE

Usage rate	No. of respondents	Percentage (%)
Yes	116	93.54
No	8	6.45

Table-2 indicates the usage rate of toothpaste by the respondents. As revealed from the table it has been found that about 93.54% of the respondents using toothpastes in University girl's hostel and only 6.45% using toothpowder and mouthwash etc.

TABLE-3: CONSUMER BRUSHING PATTERNS

Using Frequency	No. of Respondents	Percentage (%)
Once	40	32.25
Twice	80	64.51
Thrice	4	3.22

As observed from the Table-3, the brushing frequency of consumer, the data revealed that 64.51% of the respondents use toothpaste twice a week, 32.25% of the respondents use only once and 3.22% use toothpaste thrice a day i.e. after every meal.

TABLE-4: FREQUENCY OF BUYING PER MONTH

Buying Frequency	No. of Respondents	Percentage (%)
Once	64	51.61
Twice	56	45.16
Thrice	4	3.22

Table 4 shown above indicates the frequency of purchasing toothpaste per month by the users. The given data revealed that half of the respondents buying toothpaste only once in a month (51.61%), 45.16% buy twice in a month and 3.22% respondents buying toothpaste thrice in a month.

TABLE-5: AWARENESS OF BRANDS

Brands	No. of Respondents	Percentage (%)
Colgate	52	41.93
Close Up,	36	29
Pepsodent	20	16.12
Dabur	12	9.67
Others	4	3.22

Table 5, examined awareness of the people regarding various brands of toothpastes like Colgate, Close up, Pepsodent, Dabur and others. Most of the respondents (41.93%) aware of Colgate, as it is considered to be a generic name for the toothpaste. 29% of the respondents aware of Close up, followed by Pepsodent (16.12%), Dabur (9.67%) and others constitutes (3.22%).

TABLE-6: USAGE OF TOOTHPASTE BRANDS

Usage of brand	No. of Respondents	Percentage (%)
One	68	54.83
Two	36	29
More than three	20	16.12

Table 6 identified the usage of different brand by the respondents. An examination of the data revealed that most of the respondents (54.83%) used only one brand, 29% respondents used two brands and 16.12% respondents used more than three brands.

TABLE-7: RECOMMENDATIONS FOR BUYING TOOTHPASTES

Recommendation	No. of Respondents	Percentage (%)
Dentist advice	76	61.29
Taste makes me to Change brand	36	29
Not interested in oral care	4	3.22
Promotion technique	8	6.45

The above Table-7 shows the recommendation for buying toothpastes by different people; the data pertaining to this revealed that about 61.29% of the total respondents i.e. more than half of the respondents accept Dentist advice to use toothpaste. About 29% respondents agreed that taste makes them to change brand. 6.45% of the respondents consider it as a promotion technique to increase the sale of the product and 3.22% of the respondents are not interested in oral care and gum related problems.

TABLE-8: FACTORS WHICH MAKES CONSUMER TO BUY TOOTHPASTE

Factors	No. of Respondents	Percentage (%)
Price	36	29
Availability	62	50
Packaging	6	4.83
Others	20	16.12

Table- 8 shows the reasons to buy toothpaste by the respondents. The consumers are influenced by the Price, availability and Packaging of the product. It has been seen that half of the respondents (50%) buy toothpaste depending upon the availability of a particular brand, 29% influenced by the price, followed by 16.12% influenced by the other factors, and 4.83% influenced by packaging.

TABLE-9: PREFERENCE OF TOOTHPASTE

Preference	No. of Respondents	Percentage (%)
Brand	24	19.35
Quality	84	67.74
Flavor	12	9.67
Others	4	3.22

The given Table-9 presented data to find the reason for the preference of buying toothpaste. An examination of the data revealed that most of the respondents preferred brand, quality, and shine. In the above table 67.74% of the respondents preferred quality, 19.35% of the respondents preferred brand name, 9.67% of the respondents preferred flavor of the toothpaste, and 3.22% of the respondents preferred other factors.

TABLE-10: PREFERENCE OF AN ATTRIBUTE

Attribute	No. of Respondents	Percentage (%)
Healthy tooth& gums	60	48.38
Long lasting freshness	20	16.12
Prevention of tooth decay	32	25.8
Whiteness	8	6.45
Use of natural herbs	4	3.22

Table-10 shows the reasons to buy a toothpaste based on attribute, the data pertaining to this revealed that most of the respondents preferred healthy tooth& gums, Long lasting freshness, prevention of tooth decay, whiteness and use of natural herbs. The above table clearly shows that 48.38% of the respondent's preferred healthy tooth& gums, 25.8% respondents preferred prevention of tooth decay, 16.12% respondents preferred long lasting freshness, 6.45% whiteness and 3.22% respondents preferred use of natural herbs.

TABLE-11: PERSON WHO INFLUENCED CONSUMER TO PURCHASE TOOTHPASTE

Persons	No. of Respondents	Percentage (%)
Friends	12	9.67
Parents	36	29
Self	68	54.83
Spouse	8	6.45

Table-11, indicates the persons who influenced consumer to purchase toothpastes. An examination of the table revealed that the people who influenced more are parents, friends, spouse and self decision. Based on the above data, more than half of the respondents (54.83%) decide themselves for using a toothpastes, followed by parents (29%), friends influenced (9.67%) and spouse (6.45%).

TABLE-12: TO WHICH MODE OF PROMOTION CONSUMER GETS ATTRACTED

Mode of promotion	No. of Respondents	Percentage (%)
Advertisement	48	38.7
Celebrity	32	25.8
Banner	12	9.67
Others	32	25.8

Table-12 shows that by which mode of promotion consumer gets attracted. An examination of the table reveals that, most of the consumers preferred advertisement, celebrity, banners. Majority of the respondents 38.7% get attracted by advertisements, 25.8% of the respondents by celebrity endorsements and other means of promotion, followed by banners (9.67%). Advertisement creates attention and stimulates the consumer to buy a particular brand.

TABLE-13: FACTORS WHICH MAKES CONSUMER TO BUY TOOTHPASTE

Promotion tools	No. of Respondents	Percentage (%)
Gift	20	16.12
Discount	12	9.67
Extra quantity	20	16.12
Price off	12	9.67
Others	60	48.38

The above Table-13 shows the promotion tools preferred by the consumers while purchasing the toothpastes. An examination of the above data reveals that, consumers preferred gift, extra quantity, discount, price off. The data revealed that gifts and extra quantity attracted more respondents (16.12%), followed by discounts and price off (9.67%). It has been observed that besides these, there are other factors also (48.38%) which make consumers to buy toothpastes.

TABLE-14: SWITCHING TO OTHER BRAND

Reason for switching	No. of Respondents	Percentage (%)
Impact of packaging	12	9.67
Price rise of current brand	16	12.9
Scheme of brands	34	27.41
Advertisement impact	22	17.74
Brand not available	9	7.25
To try new option	18	14.51
Influence by other	13	10.48

Table-14, given above shows the reasons for switching to other brand by the consumers. The data revealed that about most of the respondents switch to other brand because of scheme (offer) associated to it (27.41%), followed by advertisement impact (17.74%). 14.51% respondents switched to other brand to try new options, followed by due to price rise (12.9%), influence by others (10.48%). Also, 9.67% respondents get attracted by packaging and 7.25% respondents changed due to non-availability of product in the market and switch to other brands.

## CONCLUSION

Thus, it has been concluded that usage rate of toothpaste among the select individuals has been high and their buying behaviour is also very frequent. It has been seen that most of the people are aware of toothpastes like Colgate, Close up, Pepsodent, Dabur and others. Price, availability and Packaging of the product also plays an important role in buying the toothpaste products. Most of the consumers get attracted by advertisement, celebrity, banners of a particular brand. It has been found that most of the consumers preferred gifts, extra quantity, discount, price off while making decision for buying the toothpastes. Also, it has been seen that various factors influence the switching behaviour of the consumers like impact of packaging, price rise of current brand, scheme of brands, impact of advertisement, non-availability of brand, to try new option and influence by others etc.

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## CUSTOMER SATISFACTION TOWARDS VARIOUS FACILITIES PROVIDED BY PUBLIC BANKS (A COMPARATIVE STUDY OF PNB AND SBP IN JIND DISTRICT, HARYANA)

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### ABSTRACT

*In the context of Indian market, where we are moving towards market economy with customers as the central focus, achieving total customer satisfaction, delighting the customer is a key element in setting and achieving the business goals and objectives of an organization. Satisfaction assists consumers in formulating a revised opinion about their service quality perception. In banking, it is necessary to maintain the best quality of its service to satisfy and attract more customers. Service quality of a bank also includes various facilities provided by banks to its customers to make feel them more comfortable. In this research paper, we studied the customer satisfaction towards various facilities (ATM services, E-Banking, Basic Facilities and Extra facilities to old customers) provided by Public Banks. State Bank of Patiala (SBP) and Punjab National Bank (PNB) have taken for present study. Primary data has been used for this study. Data was collected from customers of SBP & PNB, Jind District (Haryana) by using questionnaire. "A questionnaire is a formalized set of questions for eliciting information". Customer satisfaction was measured by applying one way ANOVA test.*

### KEYWORDS

ATM services; Credit Card; Debit Card; E-Banking; One way ANOVA; Smart Card.

### INTRODUCTION

The banking system occupies an important place in a nation's economy. A banking institution is indispensable in a modern society. It plays a pivotal role in the economic development of a country and forms the core of the money market in an advance country. In India though the money market is still characterized by the existence of both the organized and the unorganized segments, institutions in the organized money market have grown significantly and are playing an increasingly important role. Amongst the institutions in the organized sector of the money market, commercial banks and commercial co-operative banks have been in existence for the past several decades.

The business of banking is as old as the civilization itself. As early as 2000 B.C. the Babylonians had developed a system of banking. They used their temples for leading at higher rates of interest against gold and silver which had been left with them for safe custody. In India, the ancient Hindu scriptures refer to money lending activities in the vedic period. During the Smrity period, which followed the Vedic period, the business of banking was largely carried on by the members of Vaish community. The banker in this period performed many of the function which a modern banker perform these days viz. accepting deposits, granting of advance, acting as banker etc. In the initial stages, the banking largely meant money lending and it was restricted to selected number of families working as sole proprietary firms.

Modern banking in India started only in 18th century. The first bank in India was established in 1770 by an Agency House namely, Alexandra and Co. This bank was named as 'Bank of Hindustan'. With government assistance, presidency Bank of Bengal, Presidency Bank of Bombay, and Bank of Madras were established respectively in 1806, 1840 and 1843. In 1894, the Punjab National Bank and in 1901 the Peoples Bank were established. In 1921, all the three Presidency Banks were merged to become imperial Bank of India. In 1935, Reserve Bank of India was established. The RBI is India's central Bank.

### PUBLIC SECTOR BANKS

Public ownership of banks helps in the most effective mobilization and development of national resources in accelerating the tempo of investment and production so as to improve living standards of the people and create employment opportunities. Banks, being the creator of credit, command the economic power. In private banks, practically, the power is enjoyed by those who control and manage the banks. This economic power if misused would be harmful to the nation. This danger is wiped off if banks are nationalized. Public sector banks are those banks which are owned by the Government. The Government runs these banks. In 1955, imperial Bank was nationalized and renamed as state Bank of India. This was the first public sector bank in the country. The Regional Rural banks came in to existence since the middle of seventies. State Bank of Patiala is an associate bank of state Bank of India. State Bank of Patiala (SBP), originally named Patiala state Bank was founded on 17th November 1917. After India's independence, the Bank was made a wholly owned subsidiary of the Government of Punjab. On 1st April 1960, SBP was accorded the status of an associate bank of the State Bank Group. State Bank of Patiala was set up for the purpose of Promoting the growth of agriculture trade and Industry. SBP has grown significantly in terms of its size and the volume of business. It is now one of the prominent Banks of India. Between 1949 and 1959 as many as 388 banks had failed. To check this trend, amalgamation of banks was taken up in 1960. In India 20 banks (14+6) were nationalized in 1969 and 1980 respectively. In 1993 due to merger of New Bank with PNB, the number of nationalized banks reduced to 19. These entire banks now belong to the public sector category. Social welfare is their principle objectives. Public Sector Banks can be further classified:-

- (a) SBI & its subsidiary banks
- (b) Nationalized Bank
- (c) Regional Rural Bank.

### CUSTOMER SATISFACTION

The customer satisfaction is a psychological phenomenon. It differs from person to person i.e. a person may feel satisfied by a certain product or service, other maybe not. Thus, efforts are made by every concern to provide product / services which satisfy the needs of a varying class of customers. Whether the buyer is satisfied after purchase depends on the offer's performance in relation to the buyer expectations. Philip Kotler, SiewMeng Leong, SweeHoon Aug, Chin Tiong Tan, "Satisfaction is the level of a person's felt state resulting from comparing a product's perceived performance (or outcome) in relation to the person's expectations.

#### Satisfaction = Perceived Perception – Expectation

The satisfaction level is a function of the difference between perceived performance and expectations. A customer could experience one of the three broad levels of satisfaction. If the performance falls short of expectations, the customer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations the customer is highly satisfied, pleased or delighted. At present time success of any organization is depend upon consumer or customer satisfaction. An organization can't survive, if it perform its activities just for profit earning and ignore customer satisfaction.

For being in the market for a long run, the time arises for a company to identify, attract and retain most valuable customers that help business to sustain profitable growth.

High quality satisfying service requires that a bank understand the consumer / customers needs in detail as also the operational constraints. It reminds the service provider to focus on quality and the process should be designed to support this system by proper control and delivery. Service quality can be a way of

achieving success among competing services. This can be particularly so when the competing service firms provide identical services. As we can say that in competing world of banks, service quality can be the only way of providing satisfaction to customer. If service quality of services provided by a bank is good then satisfaction level of customers of that bank will be high but if service quality is poor then satisfaction level of customers of that bank will be low.

## REVIEW OF LITERATURE

Review of literature provides guidelines in research work. For this research paper various studies are concerned. Some of them are below:-

- ❖ **Boulding (1993):** In the study on service context, he said. "Overall satisfaction is similar to overall evaluations of service quality. Compared with more episode based or transaction-specific measures of performance, overall evaluations are more likely to influence the customer behaviours that help a firm, such as positive word of mouth and repurchase."
- ❖ **Vasya Kenova, Patrik Johansson (2006):** (Quality Online Banking Services) using an already developed model for measuring the quality of on line services, the authors of this thesis have developed and later on modified a theoretical model (instrument) for measuring the quality of online banking services in particular. Using quantitative research method including the design and distribution of a questionnaire, empirical data was collected on which statistical analysis has been performed.
- ❖ **Mana Farshid (2008):** (Investigating CRM activities in e-banking of Iranian banks), One of the most important thing for the bank is how can they develop an effective process for establishing and maintaining a relationship with their key consumers? The aim of this research is to investigate CRM activities in e-banking among Iranian banks. These banks are already adopting CRM and approaching it differently, and achieving different rates of success in terms of customer satisfaction and customer relationship management.
- ❖ **Vijay Maruti Kumbhar (2011):** (Customers' Satisfaction In ATM Service: An Empirical Evidences From Public And Private Sector Banks In India) The aim of this paper was to provide a preliminary comparative investigation of the customer satisfaction in ATM service of public and private sector banks in India. For this investigation primary data was collected from 150 respondents of public and private sector banks through a structured questionnaire. Collected data was analyzed according to the objectives of the present research and result of the statistical analysis indicates that private sector banks are providing more satisfactory ATM service as compared to public sector banks. Empirical evidences indicates that customers perception about Efficiency, Security and Responsiveness, Cost Effectiveness, Problem Handling and Compensation and Contact service related to ATM service is low in both public and privates sector banks (ranging between 3.00 to 3.50). Therefore both types of banks should aware about these aspects of ATM service to enhance customers' satisfaction.
- ❖ **Hazlina Abdul Kadir, Nasim Rahmani, Reza Masinaei (2004):** (Service Quality Analysis: An Application on Online Banking and ATM Facilities) this study tries to identify the effects of services offered by Malaysian banks through online media and ATMs on customer satisfaction. 500 students from different universities in Malaysia including University of Malaya, University Kebangsaan Malaysia, University Putra Malaysia, Multimedia University Malaysia and Limkokwing University chosen as a sample frame of the study. Questionnaires are distributed among them and they are asked to respond to questions which ask about their perception as well as experience for their banks. Two analyses are employed to fully reflect the effect of online and ATM services on their satisfaction level. The first one was service quality model which compares the difference between satisfaction and expectation level in order to find out which dimensions need to be improved. Second analysis was Two-Way ANOVA analysis which tried to identify the relationship between demographic factors and the study's outcome. Finally, the study determined which factors have the most effect and which factors have the least effect on customer satisfaction level.
- ❖ **A VFA White Paper (2006):** (Managing a Retail Bank's Facilities for Competitive Advantage) A bank's facilities – whether branch locations, back offices or data centers – play an important role in supporting its objectives for attracting customers, retaining employees and operating efficiently. Yet many organizations are only beginning to truly view their facilities as strategic assets. This paper focuses on how retail banks can more effectively align facility management and spending with business goals, including:
  - Supporting customer acquisition and retention
  - Increasing employee retention and productivity
  - Reducing short and long-term operational costs and enhance efficiency.

## OBJECTIVES

The main aim of the study is to assess the quality of facilities provided by Public Sector Banks to their customers and how the customers feel about the banking facilities (General facilities, E-banking, ATM & other cards facilities, extra facilities to old customer). Which bank is more successful in satisfying the maximum needs of the various categories of customers more efficiently? The objectives of the study are:-

- To study the quality of various facilities provided by Public Sector Banks
- To study the perception of customers towards the various facilities provided by Public banks.
- To make comparison of the customer satisfaction of both banks (SBP & PNB) regarding various banking facilities.
- To find out those facilities, where customer satisfaction of both bank can be increase by improving that facility.

## HYPOTHESIS

Hypothesis is an assumption to be tested. A research hypothesis can be a predictive statement, capable of being tested by scientific methods, that relates an independent variable to some dependent variable. The null hypothesis taken for the present study is described below:

$H_0: \mu_1 = \mu_2$  (There is no significant difference between the mean satisfaction of SBP and PNB's customers regarding various facilities provided to them, Jind District).

Against null hypothesis, Alternative hypothesis say that there is significant difference between mean satisfaction of SBP and PNB's customers, regarding various facilities provided to them, Jind District.

## SAMPLE DESIGN & DATA COLLECTION

A Universe or population means the entire field under investigation about which knowledge is sought. The relevant universe in this case is all customers of state Bank of Patiala and Punjab national Bank in Jind district .A random sample of 100 respondents had been drawn from the various socio-economic classes at different educational qualifications and age groups. For the present study, a 'convenience sampling' technique has been used. Only those respondents were consulted who have actually been using the services provided by state bank of Patiala and Punjab national Bank in district Jind to check the satisfaction level among the customers.

The present study is based on primary data. Primary Data was collected by filling up the well structured standardized questionnaire from 100 customers of SBP and PNB, District Jind. The final questionnaire has two sections. Section-I of the questionnaire was designed to get the personal information of the respondent. Section II of the questionnaire was drafted to get the information related to services provided by banks. For getting information, questionnaire includes multiple choice questions and 5-points scale questions.

## ANALYSIS & INTERPRETATION

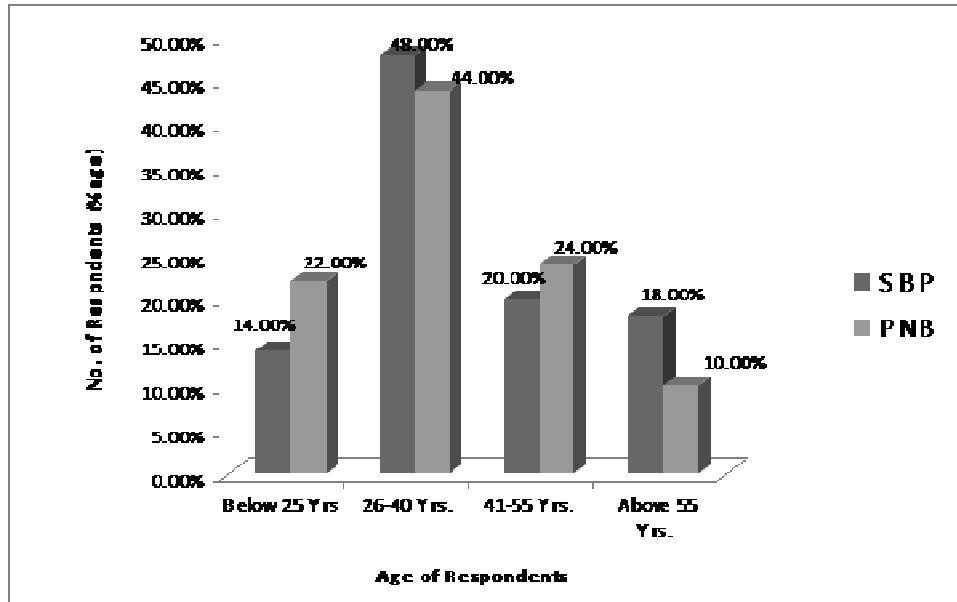
The present study is designed to explore customer satisfaction of SBP and PNB regarding banking facilities to customers, Jind District. To analysis and interpretation of personal information of SBP and PNB's customers, percentage as a statistical technique has been used. To analysis & interpretation of customer's information related to facilities provided by banks, Mean and ANOVA (Analysis of Variance) as a statistical technique have been applied with the help

of SPSS software. ANOVA indicates whether there is significant difference or not between mean satisfaction of PNB and SBP's customers, Jind District. Mean indicate out of SBP and PNB, which Bank's customers are more satisfied.

TABLE – 1.1: AGE WISE DISTRIBUTION OF RESPONDENTS

	SBP	PNB	Total
Below 25 Yrs	14.00%	22.00%	18%
26-40 Yrs.	48.00%	44.00%	40%
41-55 Yrs.	20.00%	24.00%	22%
Above 55 Yrs.	18.00%	10.00%	14%
Total	100%	100%	100%

CHART – 1.2: AGE WISE DISTRIBUTION OF RESPONDENTS

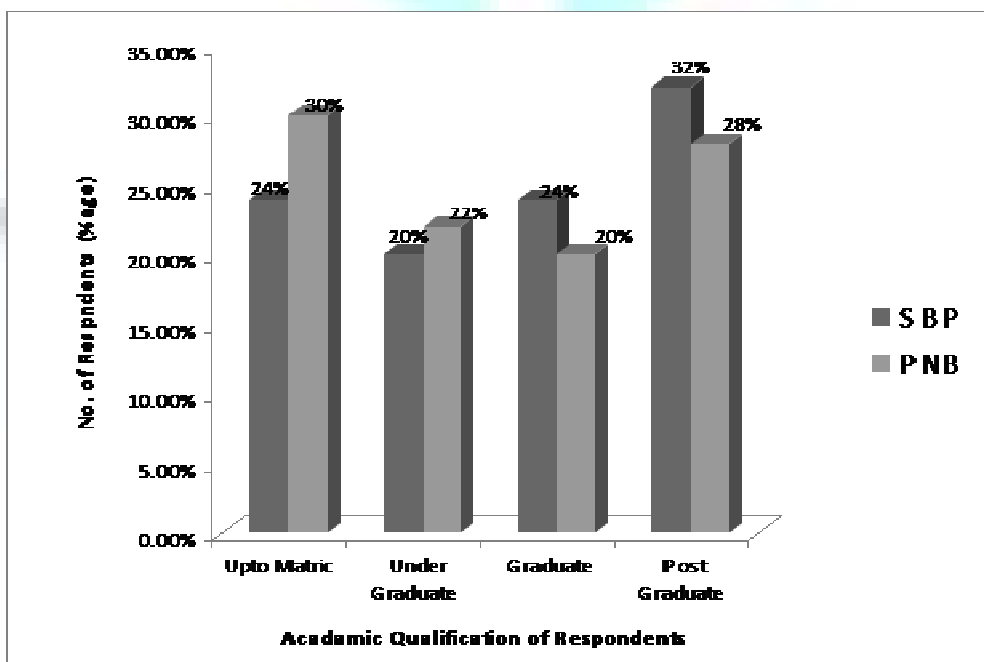


The age wise distribution of the respondents in Table 1.1 shows that out of 100 respondents, 18% belong to below 25 years, 46% respondents are within the age group of 26-40 years, 22% respondents are from the age group of 41-55 years and 14% respondents are above 55 years of age. It is evident from chart 1.2 that the majority of the respondents belong to the age group of 26-40 years in both cases of SBP and PNB and minority of respondents belong to the age group of above 55 years.

TABLE – 2.1: ACADEMIC QUALIFICATION WISE DISTRIBUTION OF RESPONDENTS

	SBP	PNB	Total
Upto Matric	24.00%	30.00%	27%
Under Graduate	20.00%	22.00%	21%
Graduate	24.00%	20.00%	22%
Post Graduate	32.00%	28.00%	30%
Total	100%	100%	100%

CHART – 2.2: ACADEMIC QUALIFICATION WISE DISTRIBUTION OF RESPONDENTS



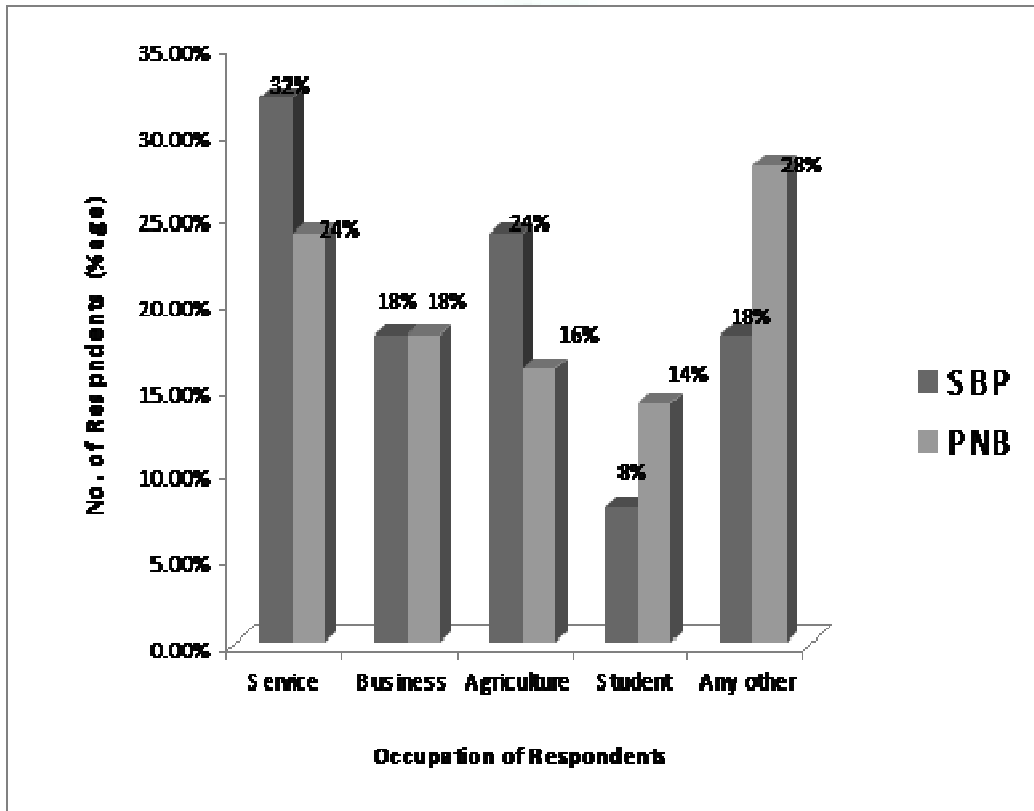


On the basis of academic qualifications, respondent's qualification is taken as upto matric, under graduate, graduate and post graduate. It is evident from the table that out of 100 respondents, 27% respondents are upto matric, 21% respondents are under graduate, 22% respondents are graduate and 30% respondents are post-graduate. Chart 2.2 shows that majority of respondents are post graduate (32%) in case of SBP and in case of PNB, majority of respondents are up to matric (30%).

TABLE – 3.1: OCCUPATION WISE DISTRIBUTION OF RESPONDENTS

	SBI	PNB	Total
Service	32.00%	24.00%	28%
Business	18.00%	18.00%	18%
Agriculture	24.00%	16.00%	20%
Student	8.00%	14.00%	11%
Any other	18.00%	28.00%	23%
Total	100%	100%	100%

CHART – 3.2: OCCUPATION WISE DISTRIBUTION OF RESPONDENTS



As far as occupation is concerned, the customers' occupation has been classified as service, business, agriculture, student and any other. Table 3.1 shows that out of 100 respondents, 28% are servicemen, 18% are businessmen, 20% are in agriculture, 11% are students and 23% belong to any other category. Chart 3.2 reveals that in case of SBP, majority of respondents are servicemen (32%) & in case of PNB, majority of respondents belong to any other category (28%).

CUSTOMER SATISFACTION TOWARDS FACILITY OF E-BANKING

TABLE 4.1 (A) (DESCRIPTIVE)

Name of the Bank	(No. of Res.)	Mean	S.D.	Mean Diff. (SBP-PNB)
SBP	50	3.7400	0.75078	0.2000
PNB	50	3.5400	0.83812	
Total	100	3.6400	0.79798	

TABLE 4.1 (B) (ANOVA)

	Sum of Square	D.O.F.	Mean Square	F-Value (Calculated)
Between Group	1.000	1	0.1000	1.580
Within Group	62.040	98	0.633	
Total	63.040	99		

Table 4.1 (B) reveals that calculated F-Value (1.580) is less than table value (3.92) at 5% level of significance, so null hypothesis is accepted. It refers that there is no significant difference (0.2000) between mean satisfactions of SBP & PNB's customers as far as E-Banking service is to be provided to customer. It means that both bank, SBP & PNB are providing facility of E-Banking to their customers. Through E-Banking, customers can easily deal with their bank from anywhere. It increases customer satisfactory level.

TABLE 5.1 (A) (DESCRIPTIVE)

Name of the Bank	(No. of Res.)	Mean	S.D.	Mean Diff. (SBP-PNB)
SBP	50	4.1400	0.60643	0.6200
PNB	50	3.5200	1.05444	
<b>Total</b>	<b>100</b>	<b>3.8300</b>	<b>0.91071</b>	

TABLE 5.1 (B) (ANOVA)

	Sum of Square	D.O.F.	Mean Square	F-Value (Calculated)
Between Group	9.610	1	9.610	12.990
Within Group	72.500	98	0.740	
<b>Total</b>	<b>82.110</b>	<b>99</b>		

Table 5.1 (B) indicates that calculated F-Value (12.990) is greater than table value (3.92) at 5% level of significance that's why null hypothesis is rejected. It means there is significant difference (0.6200) between mean satisfactions of SBP & PNB's customers. It shows that general facilities like water, lighting & sitting facilities etc are not similar in both banks. Customer of SBP are more satisfied with such facilities in comparison to customer of PNB as mean of SBP (4.1400) is higher than mean of PNB (3.5200) as represented by table 5.1 (A). Infrastructure facilities of a bank also effect customer satisfaction. Good infrastructure facilities like lighting, water, sitting arrangement etc. give satisfaction to customers.

**CUSTOMER SATISFACTION TOWARDS EXTRA SERVICES BY BANKS TO OLD CUSTOMERS**

TABLE 6.1 (A) (DESCRIPTIVE)

Name of the Bank	(No. of Res.)	Mean	S.D.	Mean Diff. (SBP-PNB)
SBP	50	3.2800	0.80913	0.3000
PNB	50	2.9800	0.93656	
<b>Total</b>	<b>100</b>	<b>3.1300</b>	<b>0.88369</b>	

TABLE 6.1 (B) (ANOVA)

	Sum of Square	D.O.F.	Mean Square	F-Value (Calculated)
Between Group	2.250	1	2.250	2.938
Within Group	75.060	98	0.766	
<b>Total</b>	<b>77.310</b>	<b>99</b>		

Table 6.1 (B) shows that calculated F-Value (2.938) is less than table value (3.92) at 5% level of significance, so null hypothesis is accepted. It refers that there is no significant difference (0.3000) between mean satisfactions of SBP & PNB's customers. It means that the services such as overdraft, concession bank drafts etc. are available to old customers. The customers of both banks are more or less equally satisfied. To increase satisfactory level of old customers, banks provide extra facilities to their old customers like overdraft, concession on bank draft etc. It improves the image of bank.

**CUSTOMER SATISFACTION TOWARDS AVAILABILITY OF CONVENIENT FACILITIES TO CUSTOMERS LIKE ATM, DEBIT CARD, CREDIT CARD, SMART CARD ETC.**

TABLE 7.1 (A) (DESCRIPTIVE)

Name of the bank	(No. of Res.)	Mean	S.D.	Mean Diff. (SBP-PNB)
SBP	50	4.2000	0.45175	0.2200
PNB	50	3.9800	0.71400	
<b>Total</b>	<b>100</b>	<b>4.0900</b>	<b>0.60461</b>	

TABLE 7.1 (B) (ANOVA)

	Sum of Square	D.O.F.	Mean Square	F-Value (Calculated)
Between Group	1.210	1	1.210	3.390
Within Group	34.980	98	0.357	
<b>Total</b>	<b>36.190</b>	<b>99</b>		

Calculated F-Value (3.390) is less than table value (3.92) at 5% level of significance that's why null hypothesis is accepted. It refers that there is no significant difference (0.2200) between mean satisfactions of SBP & PNB's customers with 'Bank Provides convenient facilities to customers like ATM, Credit Card & Smart Card. It means both banks provide convenient facilities to their customers. Customers of both banks are agreeing with the convenient facilities provided by bank as shown in table 7.1 (A).

**FINDINGS AND SUGGESTIONS**

Customer satisfaction is measuring the scale of the credibility of the services provided by banks. In present time, customers are the centre of services provided by organization. That's why a bank has to give priority to customer satisfaction to survive in competitive global market. The present study was carried out to find out which bank (out of SBP & PNB) provides more satisfaction to their customers regarding various facilities (E-Banking, General Facilities, Extra Facilities to old Customer, and convenient facilities like ATM, Various Card etc). Major findings of the study are given below on the basis of analysis and interpretation:

1. It is found that customers of both banks agree that bank provides facility of E-Banking. There is insignificant difference (0.200) between mean satisfactions of customers of PNB & SBP regarding facility of E-Banking.
2. It is found that customers of State Bank of Patiala are more satisfied with general facilities provided by bank in comparison to customers of Punjab National Bank. There is significant difference (0.6200) between mean satisfaction of SBP and PNB's customers. State Bank of Patiala is concerned to provide general facilities such as water, lighting and sitting
3. Result reveals that both banks, SBP & PNB provide extra services to its old customers like overdraft, concession on bank draft etc. There is insignificant difference (0.3000) between means satisfaction of SBP & PNB's customers.
4. It is found that SBP & PNB both provide convenient facilities to their customers such as ATM, credit card and smart card etc. There is no significant difference (0.2200) between mean satisfactions of SBP & PNB's customers.

State Bank of Patiala is providing good general facilities in comparison to Punjab National Bank. For increasing customer satisfaction PNB should provide general facilities like water, lighting and sitting facilities etc. to customers. It will provide comforts to customers. Both banks should increase the facilities related to E-banking, ATM, credit card and smart card etc to increase customer satisfaction. SBP & PNB should provide extra services to its old customers like overdraft, concession on bank draft etc to maintain customers for long term with bank.

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