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STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

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CONTRIBUTIONS TO BOOKS

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

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

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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

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SPECIFICS OF INVESTOR SENTIMENTS: ANALYSIS OF CHINESE MARKET

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ABSTRACT

Applying panel regression model with fixed effects, this study analyzes specifics of investor sentiments and future stock returns of the Chinese stock market from 2005 until 2015. The results suggest that Chinese market is speculative and prone to the investor sentiments. To conduct a deeper investigation, this research employs quantile regression model, analyzes time frames, dividend payouts, cross-listing effects, government ownership, firm age and size. Some of the outcomes are unexpected. Susceptibility to investor sentiments is characterized by dividend payers, large, and older firms. On the other hand, cross-listing and government ownership provide significant resistance to the investor sentiments.

KEYWORDS
cross-listing, financial bubbles, investor sentiments, stock returns.

JEL CODES
G02, G14, G15.

INTRODUCTION
Proponents of the Efficient Market Hypothesis consider that the stock prices reflect all available information about companies and investors cannot beat the market by stock picking. This theory has been challenged by many investors (e.g. Benjamin Graham, Warren Buffet, etc.) who have successfully exploited the gaps between price and value. Another well-known investor of the Wall Street, Peter Lynch (2000), warns that it is important to remember that the market following market sentiments can move in the opposite direction from the fundamentals.

Definition of the investor sentiments lies in the assumptions that investors may mistakenly estimate the price of a stock, being based on the calculations of future growth on the criteria not supported by the facts. The consequence of the minor misevaluation leads to the corrections while larger scale over-optimism may cause a stock market bubble, which is not only harmful to the sentimental investors who lose significant portions of their assets, but to the economy in general. Massive over-pessimism leads to a great undervaluation of stocks, it slows down the economy by forcing sentimental investors to liquidate all their positions and keep the funds until the "bearish market" turns to "bullish market".

By becoming the second economy by the size of GDP and the stock market capitalization, China has become one of the major forces in the world which form the investing climate, therefore, tightly monitored by investors around the globe. The Chinese market has a unique set of features which is distinctive for the country with a transitional economy of large scales. Theoretically, a government which remains significant control of the market is assumed to alleviate market shocks, do not allow the market over-optimism to cross the line of reasonableness and lead it to a stock market bubble. On the other hand, not only stock market bubbles become periodical in a recent history of Chinese stock market, but also a scale of every bubble is reaching remarkable extents. This contradiction of theory and facts leads to the questions is the collectivist society with the market which has significant control by the government is driven by the investor sentiments and if "yes", then which factors amplify or mitigate them.

This study examines how sentiments of Chinese investors are related to the subsequent returns of the market. This investigation considers that investor sentiments are time-sensitive and sample with higher observation frequency may better capture this phenomenon. While other researchers (*e.g.,* Brown and Cliff, 2004; Baker and Wurgler, 2006; Gao and Kling, 2008; *etc.*) based their research on the monthly data, this study uses the weekly data. The major idea behind this choice lies in the establishment of links between changes in investor sentiments during the short periods. If within a monthly range unusual high patterns of over-optimistic sentiments may cause a steep rise in stock returns, the rest of the month may be characterized by market correction and as a result, a monthly data will be averaged including stock returns, trading volumes, and stock turnover by letting highs and lows of this phenomenon to be smoothed out.

The remainder of this research is structured as follows: Section 2 presents related literature; Section 3 describes methodology and variables used to conduct this study; Section 4 discusses results and analysis of the model, as well as observes some derivative models. The conclusion finalizes the paper.

LITERATURE REVIEW
The key problem of the sentimental trading which moves the stock prices to unreasonable points is that eventually, the market always corrects itself, bringing opposite returns to the excessive sentiments. Observing sample of US stock market, this fact was repeatedly observed by researchers, who documented negative correlations of investor sentiments and future returns (e.g., Baker and Wurgler, 2006; Brown and Cliff, 2004; etc.). To examine if the phenomenon holds globally, Schmeling (2009) supported their findings by examining 18 countries. His further analysis showed that levels of sentiments effect differed from country to country. The impact of sentiments on stock returns was higher for countries which had less market integrity and which were culturally more prone to herd-like behavior and overreaction. This finding becomes even closer associated with the Chinese example by considering findings of Chui *et al.* (2010), who argue that a lack of individualism in society may lead people to integrate into groups without consensus opinion, or in other words, collectivism leads to the herd-like behavior in a society.

Deepening into the study, researchers investigated if some sorts of stocks cause more sentimental approach in their evaluation than other types. Baker and Wurgler (2006) using quantile regression model investigated the cross-section of the investor sentiments effect to stock returns. Explaining by difficulties of assessment and arbitrage of young, small, unprofitable, distressed, extreme growth, and dividend-nonpaying firms they found the U-shaped conditional difference among the quantiles which demonstrated that both extreme growth and distressed firms are mostly affected by sentiments. They also noted that if quantile regression has not been deployed, the results would be averaged away in an unconditional study. Lemmon and Portniaguina (2006) found that investor sentiments

had a negative effect on value stocks, but no significant effect on growth stocks. However, Schmeling (2009) could not find different relations of returns and sentiments for value stocks, growth stocks, small stocks, even within different time horizons.

Similar to the current research, several other considered Chinese market and detected that the market has characteristics of investors herding behavior which leads to significant overvaluations of the domestic stocks. Ni *et al.* (2015) found the existence of a strong overreaction in the Chinese stock market which was characterized by a speculation tendency. Their results suggested that the correlation was asymmetric and reversal, it was positive and large for stocks with high returns in the short term, while negative and small in the long term. Gao and Kling (2008) also highlighted an interesting phenomenon of the Chinese market. Employing Granger causality test, they found that the lagged market returns affected sentiments of institutional investor while the opposite direction had not been proven.

One of the main reasons of the inconclusiveness of interrelated works involves the difficulty of measuring investor sentiments. The first group of researchers measures investor sentiments by assessing the demand factor on a market, trying to explain excessive trading volumes by investors' optimism. One of the most widely used proxies for the investor sentiments is the difference between market price and net asset value of the closed-end funds (e.g., Lee *et al.*, 1991; Swaminathan, 1996; Zweig, 1973; etc.). Brown (1999) also revealed that sentiments were closely related to the closed-end fund price volatility. Other authors examined the usefulness of a variety of variables used for a technical analysis (e.g. Clarke and Statman, 1998; Fisher and Statman, 2000; Otoo, 1999; Simon and Wiggins, 1999). Baker and Stein (2004) had considered employing NYSE turnover rate as the proxy. They explained their choice of the proxy as increased liquidity of the total stock market by the investors' irrational optimism.

Another group of researchers refer to the professional financial analysts and analyzing their actions and opinions, defined by so-called high and low periods of investor sentiments. Baker and Wurgler (2000) used a ratio of equity issues over total capital funding. They proposed that the firms would seek new funds through issuing new stocks rather than increasing debt when a stock market was high and the opposite was true for the low market. Number and performance of Initial Public Offerings (IPO) have also been studied by researchers (e.g., Ritter, 1991; Stigler, 1964; etc.). It is assumed that firms and underwriters try to choose optimal timing for their IPO in order to maximize the valuation of the company. To get direct opinions of institutional investors, Gao and Kling (2008) used Chinese Central Television Station survey in order to trace their optimistic views.

Believing that there is no perfect measurement of investor sentiments Baker and Wurgler (2006) used a combination of six proxies and based on their principal component, formed an index of investor sentiments.

METHODOLOGY

This study employs a panel data regression with fixed effects. It is a suitable model to trace the effect of investor sentiments while controlling for the other factors, as fundamental features of the companies and macroeconomic indicators, which theoretically should affect the stock valuations. In further investigation of stock returns distribution asymmetry, this study employs quantile regressions following the preceding researches (e.g. Baker and Wurgler, 2006; Koenker and Basset, 1978; Ni *et al.*, 2015; *etc.*).

The sample covers observations period from 2004 until the end of 2015. The reasonableness of the starting point at the year of 2004 resides in the fact that the preceding years are characterized by government's significant manipulations of the stock market, as well as policy changes, liberalization processes, market transition, and other happenings which occurred in the early stages of modern Chinese stock market formation, and created many distortions on the market. The data sample covers all A-shares on both Shanghai (SSE) and Shenzhen (SZSE) stock exchanges.

Stocks closing prices and the data related to the periodic financial statements disclosure was gained through Taiwan Economic Journal (TEJ) database. Macroeconomic, institutional, and other corporate data was obtained in China Stock Market & Accounting Research (CSMAR) database.

To deal with the challenge of measuring investor sentiments further empirical models use various measurements separately and also combine them into one index. Unlike other researchers who based their studies based on relatively mature and highly informative stock markets like the United States, this work has to verify if those proxies are reliable in unique conditions of the Chinese market. It is expected that due to asymmetrical informational dissemination among different investors in China, some variables may lose the property of investor sentiments proxy. Others may weaken or strengthen over time periods. It is assumed that some of the significant changes may be caused by adopting major liberalization policies as the introduction of Qualified Domestic Institutional Investor (QDII), Qualifies Foreign Institutional Investor (QFII), and integration with Honk-Kong Stock Exchange (Shanghai Hong-Kong Stock Connect), permission of short-sales and popularization of margin trading.

Assuming the availability of the data, the following proxies (Table 1) of investor sentiments are chosen to be tested for the relevance. Subjective and costly to obtain proxies which are based on a surveyed data are excluded from the list of potential proxies. Components of the investor sentiments index, introduced by Baker and Wurgler (2006), are also questioned due to multiple essential differences between the US and Chinese stock markets.

TABLE 1: INVESTOR SENTIMENT PROXIES

#	Proxy	Definition	Calculations
1	*Index*	Complexed index based on the common components of 5 proxies.	-
2	*ES*	Equity Share	ES = Cash Flow from proceeds from issuance new shares / (Cash Flow from proceeds from issuance new shares + Cash flow from borrowings).
3	*IPOR*	Average return on the first day of IPO	IPOR = sum of all IPO returns within a month range scaled by market capitalization.
4	*Turn*	Turnover rate of all A-shares.	$Ln(\frac{\sum_{i,t} \text{Weekly amount of shares traded}}{\sum_{i,t} \text{weekly number of circulated shares}} * 100)$
5	*PB*	Price-to-Book ratio of CSI 300	-

A number of other potential proxies (not presented) for investor sentiments were also tested, including a number of IPOs; Insider trading; Margin trading; Short sales. They were excluded from the research due to several reasons. Almost all of that data has started to be collected only in very recent past, an inclusion of which will significantly shorten the observation period. Trading on margin and short sales, which were introduced recently, are constantly growing in amount and at the moment, the demand for them is driven mostly by other forces than the investor sentiments.

The first proxy for the investor sentiments that is employed is the multicomponent index. Baker and Wurgler (2006) calculated it using common component of six proxies which are suitable to the US stock market. Derived from the same methodology, the modified index used in this research is based on the components specific to the Chinese stock market as: (1) Equity share; (2) First day performance of IPO stocks; (3) Turnover ratio of all A-shares; (4) Price-to-book ratio of CSI 300 Index. Each of these proxies has been considered separately in order to compare the results, improve the comprehensiveness of the research, and to analyze if the relationship of outputs and proxies remain the same patterns. During financial booms and high stock prices, firms prefer to plan their capital structure in favor of equity share (ES) over debt. Firms issue new shares to finance new investment projects or even to repay a debt. Previous studies (Ritter, 1991; Stigler, 1964) found that higher returns of the IPO market are sensitive to sentiments, and increased first-day returns on IPOs measure investor enthusiasm, and the opposite interpreted as a symptom of market timing. The study of Ni *et al.* (2015) showed the ability of turnover rate to serve as a proxy for investor sentiments in Chinese stock market. Many non-empirical articles were noticing very high levels of price-to-book (P/B) ratio of entire Chinese market during recent bubbles. The study used P/B ratio of the major 300 companies represented by CSI 300 Index.

Stock returns are calculated by using a conventional formula:

$$R_{i,t} = (\rho_{i,t} - \rho_{i,t-1})/\rho_{i,t-1}, \tag{1}$$

where R is a return and ρ is the closing price on stock i at the time t.

Looking for the important determinants of the expected stock returns, Haugen and Baker (1996) found that the important factors which effect to the returns are amazingly similar to the major equity markets around the globe. They combined those factors into several groups. This research emphasizes on risk, liquidity, and

growth potential. As the risk factor, this study uses 1 year CAPM based "beta" of the stock which is recalculated on a weekly basis. As for the liquidity and growth potential, various combinations of variables employed. The final list of selected variables is demonstrated in **Table 2**.

TABLE 2: VARIABLE DEFINITIONS

#	Factor	Variable	Definition	Calculation
1	Risk	*Risk*	Weekly 1 year CAPM based "beta"	---
2	Liquidity	*Liq*	Weekly Stock Turnover rate	Ln[(Weekly volume/weekly number of circulated shares)*100]
3	Growth	*CF*	Quarterly Cash flow per share	---
4	Growth	*EPSG*	Quarterly Earnings per share growth rate	Weighted average EPS_t/ Weighted average EPS_{t-1}
5	Risk	*L/E*	Quarterly Liabilities / equity ratio	Total Liabilities / Total Equity
6	Growth/risk	*Payout*	Quarterly Total dividends payout ratio	(Cash dividends + Value of stock dividends)/Net income
7	Growth/risk	*Size*	Natural logarithm of total assets for the last quarter	Ln(Total Assets)

To account for the macroeconomic factors, the whole set of indicators was processed, including GDP growth, trading balance, the volume of exports, industrial outputs, *etc*. According to the outcome, most of them are not correlated with the short-term returns in China. The list of established macroeconomic factors comprises two most related variables: Monthly Consumer Price Index (**CPI**) and the natural logarithm of Monthly Total Profits of industrial enterprises (**TP**).

Returns (**R**), Cash flow per share (**CF**), Earnings per share growth rate (**EPSG**), Liabilities/Equity ratio (**L/E**), Total dividends payout ratio (**Payout**), Total assets (**Size**), Beta (**Risk**), Stock Turnover rate (**Turn**) were winsorized at 1 and 99 percentiles.

The main regression consists of lagged form of the investor sentiments proxy ($Senti_{t-1}$), fundamental variables of the companies which theoretically would define the firms' value, and macroeconomic factors which control for the swings of returns due to economic cycles. The model proposed by the study is as follows:

$$R_{i,t} = a_i + \beta_2 Senti_{t-1} + \beta_3 Risk_{i,t} + \beta_4 Liq_{i,t-4} + \beta_5 CF_{i,t-4} + \beta_6 EPSG_{i,t-4} + \beta_7 L/E_{i,t-4} + \beta_8 Payout_{i,t-4} + \beta_9 Size_{i,t-4} + \beta_{10} CPI_t + \beta_{11} TP_t + \varepsilon_{i,t}, \quad (2)$$

where $R_{i,t}$ stands for the stock returns for a firm i at time t, a_i is an unobserved time-invariant individual effect, $\beta_2 \sim \beta_9$ are slopes for the fundamental features of firm i at time t, β_{10} and β_{11} are the slopes of the macroeconomic factors at time t, and $\varepsilon_{i,t}$ is a residual. Four-week lags for all quarterly based fundamental variables has been used because it takes at least 1 month for the firms to publish quarterly financial statements according to which investors are assumed to adjust their valuation of the stocks.

RESULTS
DESCRIPTIVE STATISTICS
Table 3 provides descriptive statistics of the variables except for the set of investor sentiments proxies, which are observed separately and will be included in the main data pool after further examination and analysis. The most noticeable variables are EPS growth rate (EPSG), Payout ratio, and Liability/Equity ratio. Mean **EPSG** is close 1 (0.993) and implies that earnings, in general, remain flat for the time period. As for the **Payout**, on average Chinese firms distributed almost 28% of their earnings. Considering that the variable has been winsorized and excludes outliers, negative minimal **Payout** signifies that some firms distribute dividends even in the periods of losses. Mean **L/E** ratio above 1 reveals the fact that the firms are considerably highly leveraged.

TABLE 3: DESCRIPTIVE STATISTICS OF ALL VARIABLES EXCEPT SENTIMENTS

	R	Risk	Liq	CF	EPS	L/E	Payout	Size	CPI	TP
Mean	0.002	1.103	2.121	0.075	0.993	1.286	0.277	14.71	102.7	10.03
Median	0.000	1.109	1.236	0.040	1.000	0.827	0.000	14.53	102.4	10.14
Max	0.219	1.789	17.00	1.660	2.083	14.49	6.192	19.36	108.4	11.46
Min	(0.183)	0.340	0.093	(1.350)	(0.080)	(2.439)	(1.736)	12.02	98.87	6.686
SD	0.055	0.262	2.580	0.388	0.195	1.842	0.897	1.243	1.859	0.957
Skew.	0.27	(0.15)	2.87	0.37	(0.40)	4.22	3.96	0.94	0.41	(0.52)
Kurt.	4.11	3.44	13.37	7.86	25.18	27.47	22.79	4.41	3.41	2.54
Obs.	737,076	737,076	737,076	737,076	737,076	737,076	737,076	737,076	737,076	737,076

Correlation matrix (not presented) indicates no serious correlations among control variables. The highest correlation (0.32) is between two macroeconomic factors CPI and TP.

Table 4 presents descriptive statistics of investor sentiments proxies and stock returns. All of the proxies are aligned with the smallest sample size variable – IPOR. Despite to small number of firms which passed the IPO procedures during sample period, the study considers the IPO for the following reasons: (1) It has enough observations to reveal the sentiments-future returns relationship; (2) Inclusion of this variable as one of the index's components may evade the omission of important variable; (3) Lost observation periods of other proxies during combination into the index, will be offset by the proxies examined separately.

TABLE 4: DESCRIPTIVE STATISTICS OF INVESTOR SENTIMENTS PROXIES AND STOCK RETURNS

	ES	PB	IPOR	TURN	INDEX	R
Mean	0.08	2.59	0.49	3.02	0.09	0.01
Median	0.07	2.16	0.38	1.76	0.44	0.00
Max	0.19	6.93	3.50	21.18	6.68	0.22
Min	0.01	1.11	-	0.15	(2.28)	(0.18)
SD	0.05	1.29	0.54	3.34	2.06	0.07
Skew.	0.45	1.69	2.64	1.52	0.59	0.24
Kurt.	2.55	5.16	13.50	6.01	2.41	4.00
Obs.	678,103	678,103	678,103	678,103	678,103	678,103

Following Baker and Wurgler (2006), the proxies were picked on the basis of higher correlations with future returns (**Table 5**). This was one of the "filters" which let the other potential proxies to be eliminated from this research.

TABLE 5: CORRELATIONS OF INVESTOR SENTIMENTS PROXIES

	ES	PB	IPOR	TURN	INDEX	$R_{(t+1)}$
ES	1.00					
PB	0.46	1.00				
IPOR	0.24	0.63	1.00			
TURN	(0.33)	0.24	0.11	1.00		
INDEX	0.09	0.77	0.55	0.62	1.00	
R	(0.02)	0.05	0.07	0.14	0.03	1.00

GENERAL SAMPLE

The first set of regressions includes a full sample from 2005 until 2015. As it was set up in the **Equation 2**, the model comprises one lagged term of the investor sentiments proxy and the set of control variables which are assumed to explain the variance of stock returns due to changes in fundamental and macroeconomic factors. There are two major reasons for testing these investor sentiments proxies. The first is the ability to compare them with the results of previous researchers and check whether their impact on the following returns of Chinese stocks remains similar with the US specimens. The second reason lies in the ability to compare them with each other and see if some of them have a significantly different effect on the stock returns. The outcomes of **Table 6** present selected proxies of the investor sentiments in each column. All proxies are statistically significant but have different coefficients and even signs. The first column observes investor senti-ment Index as it was proposed by Baker and Wurgler (2006) and supports the theory that stocks which were higher valued as a result of investor sentiments rather than changes in fundamental dynamics, will be affected by a market correction. It supports the results of previous researchers (*e.g.,* Baker and Wurgler, 2006; Brown and Cliff, 2004, *etc.*). As for the control variables, it is clearly seen that higher coefficients belong to the indicators which are mostly used in technical analysis by traders while fundamental and macroeconomic coefficients are significant but close to 0. Positive signal of liquidity attracts investors, while higher susceptibility to systematic risk let the prices decrease. These are universal linkages, but the fundamental factors appeared to be further from the expected values. If to analyze closer, it can be concluded that Chinese investors mainly look at the profitability of the firms as it can be inferred from the significant and positive EPS and Cash flow per share. Surprisingly small coefficients of Debt and Payout ratios signify that investors are less worried about default risks. The Size variable had twofold expectations. Positive coefficient could be explained by higher stability accordingly less risk involved with large firms, while negative would infer low returns of bigger firms. Finally, macroeconomic factors are significant but not as expected. Consumer price index is close to 0, where Total Production is significant and negative. This poor correlation of stock market with the real economy, which was demonstrated in 2015 when the both SSE and SZSE indices were rapidly rising despite the economy growth slow down, leads towards an assumption that Chinese stock market is disposed to speculations. The second proxy, ES represents a share of capital raisings through an issuance of stocks over cash proceeds from debt. The most noticeable part of this proxy is the coefficient's size in comparison to other proxies. Positive and significant equity share (ES) may imply that companies time the share issues to the periods when investor sentiments are strongly positive and prolonged. In comparison to many other investor sentiments proxies, ES involves professional analysts who routinely analyze the market and deter-mine the best time to issue new stocks, while during market lows they repurchase the stocks on the funds attracted through an issuance of debt. Turnover ratio is similar to the results of Ni *et al.* (2015). Higher trading volumes usually involve optimistic perspectives of traders. Statistically significant and negative correlation of price-to-book (PB) ratio of CSI 300 index with the future returns signals about an ability of this ratio to identify overreactions of the investors and to serve as a gauge of investor sentiments. Finally, returns on the first day of IPO is also positive. It can be explained by the same phenomenon as with the ES, underwriters time the IPOs to the periods when investor sentiments are strong and lasting.

TABLE 6: AGGREGATE SAMPLE AND SENTIMENT PROXIES

	Index		ES		Turn		PB		IPOR	
C	**0.093*****	(0.00)	**0.149*****	(0.00)	**0.198*****	0.00	**0.039*****	(0.00)	**0.091*****	(0.00)
$Senti_{(t-1)}$	**-0.002*****	(0.00)	**0.043*****	(0.00)	**-0.001*****	0.00	**-0.004*****	(0.00)	**0.002*****	(0.00)
Beta	**-0.008*****	(0.00)	**-0.009*****	(0.00)	**-0.009*****	0.00	**-0.011*****	(0.00)	**-0.009*****	(0.00)
Turn	**0.010*****	(0.00)	**0.010*****	(0.00)	**0.010*****	0.00	**0.010*****	(0.00)	**0.010*****	(0.00)
$CF_{(t-4)}$	**0.001*****	(0.00)	**0.002*****	(0.00)	**0.002*****	0.00	**0.002*****	(0.00)	**0.001*****	(0.00)
$EPS_{(t-4)}$	**0.005*****	(0.00)	**0.003*****	(0.00)	**0.003*****	(0.00)	**0.004*****	(0.00)	**0.005*****	(0.00)
$L/E_{(t-4)}$	**0.000*****	(0.00)	**0.000**	(0.74)	**0.000**	(0.20)	**0.000****	(0.01)	**0.000**	(0.49)
$Payout_{(t-4)}$	**0.000*****	(0.00)	**0.000*****	(0.00)	**0.000*****	(0.00)	**0.000*****	(0.00)	**0.000**	(0.48)
$Size_{(t-4)}$	**-0.001*****	(0.00)	**0.002*****	(0.00)	**0.000*****	(0.00)	**0.002*****	(0.00)	**0.004*****	(0.00)
CPI	**0.000*****	(0.00)	**-0.002*****	(0.00)	**-0.002*****	(0.00)	**0.000*****	(0.00)	**-0.001*****	(0.00)
TP	**-0.005*****	(0.00)	**-0.002*****	(0.00)	**-0.004*****	(0.00)	**-0.004*****	(0.00)	**-0.003*****	(0.00)
Obs.	343,884		655,910		656,133		541,341		348,185	
Adj. R²	0.160		0.152		0.152		0.154		0.161	

Coefficients and corresponding p-values (in parentheses). *P<0.10; **P<0.05; ***P<0.01.

QUANTILES, SUBSAMPLES AND TIME FRAMES

This sub-section observes various factors which may change, amplify or diminish effects of investor sentiments on the future returns.

Baker and Wurgler (2006) used deciles in order to examine the difference of sentiments between growth and value stocks. **Table 7** presents the numerical output of deciles for all five proxies and **Figure 3** demonstrates the distribution of deciles graphically. Most of the deciles significant and different from each other. Tracking decile coefficients, it is noticeable that with higher returns, sentiment proxies are growing in value. This signifies that the high return stocks inspire investors with more optimism. It is assumed that in comparison to low return stocks, high return stocks attract more buyers who in own turn increase the price at least for the next week. Overall, this distribution of investor sentiments coefficients in the model imply that the stocks with lower returns are the objects to frequent market corrections, while high return stocks may lead to a serious overvaluation of the latter. It contradicts to the disposition effect in China. The disposition effect conjectures that investors sell the stocks which accumulated returns and retain the loser ones. This behavioral phenomenon is explained by an idea to lock on gains before a stock goes down in price. The results prove that investors in China do not share this way of thinking and stuck to the winners until further corrections. In order to check how long this effect can last, preceding lags (up to 10 weeks) of the investor sentiment of higher decile were examined. Not reported results reveal long lasting effect, all coefficients are positive, however, the values are lessening.

TABLE 7: QUANTILE REGRESSION RESULTS

Quantiles	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
$INDEX_{(t-1)}$	-0.006***	-0.004***	-0.003***	-0.002***	-0.002***	-0.001***	-0.001***	0.000***	0.002***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
$ES_{(t-1)}$	0.025***	0.058***	0.068***	0.065***	0.056***	0.050***	0.045***	0.050***	0.054***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
$TURN_{(t-1)}$	-0.003***	-0.002***	-0.002***	-0.002***	-0.001***	-0.001***	-0.001***	0.000***	0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
$PB_{(t-1)}$	-0.011***	-0.007***	-0.006***	-0.004***	-0.003***	-0.003***	-0.001***	0.000	0.002***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.511)	(0.00)
$IPOR_{(t-1)}$	0.001	0.003***	0.004***	0.004***	0.004***	0.004***	0.003***	0.002***	0.002***
	(0.054)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

The table represents the output of quantile regression based on the stock returns. Coefficients and corresponding p-values (in parentheses). The fundamental and macroeconomic output are not presented. *P<0.10; **P<0.05; ***P<0.01.

Decile coefficients equality test (not presented) discovers that consecutive deciles are significantly different from each other, however, the results of symmetrical comparisons are less idiosyncratic. Distinction disperses in the middle deciles implying that the stocks in the middle range of returns are similarly affected by the sentiments.

FIGURE 1: DECILES OF SENTIMENTS PROXIES *(confidence interval at 95%)*
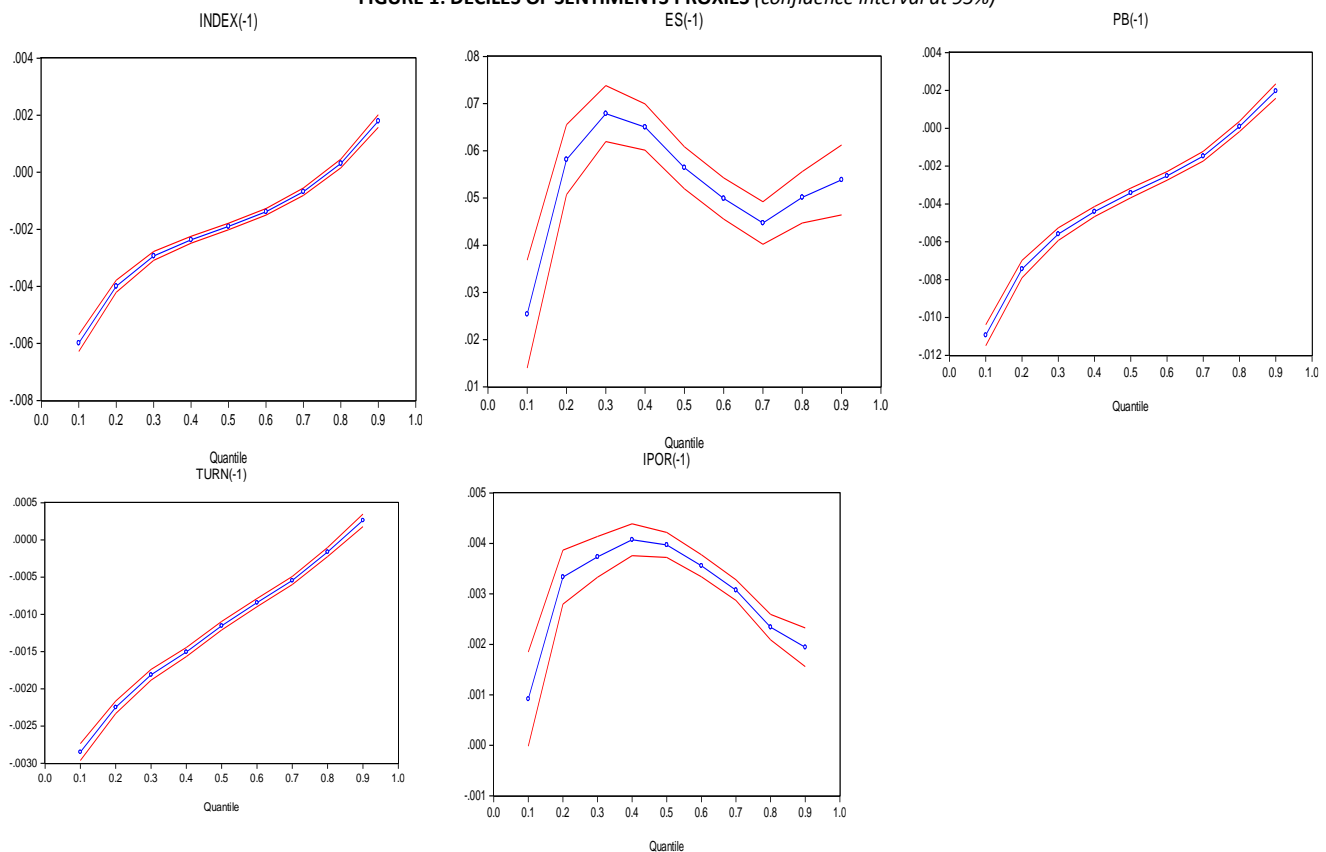
Analyzing **Table 7** and **Figure 1**, the proxies can be divided into the three groups. To eliminate unnecessary overloading of similar results, further one representative proxy of each group will be selected. Despite close resemblance with PB and Turn, Index is separated to the individual group for the reasons of complexity. According to Baker and Wurgler (2006), each sentiment proxy includes not only a sentiment component but also idiosyncratic, non-sentiment-related components. The second group includes Turn and PB and the third group consists of ES and IPOR. For the reason of higher observation numbers and coefficient significance, Turn and ES have been chosen to represent their groups.

FIGURE 2: CUMULATIVE RETURNS FOR SHANGHAI AND SHENZHEN COMPOSITE INDICES *(Above SZSE, Below SSE;)*

Source: finance.google.com

In the next stage of investor sentiments examination, the study observes noteworthy time periods separately. The main idea behind this is to find different effects of investor sentiments within different time periods. Due to partial absence and deficiency of data of an earlier period (before 2005), observing noticeable patterns of the stock market bubbles on Figure 2, the time horizon is separated into three fragments. First, the focus is on the "bubble of 2007", it comprises all the observations until the end of 2008. The second part covers the period from 2009 until the third quarter of 2014. This period is especially interesting because, due to the insufficiency of data and despite high volatility, this is the only period in this study which will characterize the time when the market was not in the bubble stage. The last fragment and the second observable bubble starts from the third quarter of 2014 and ends on the final observable date of the cumulative sample.

TABLE 8: QUANTILE REGRESSIONS OVER TIME

Sentiments Proxy	Deciles	Bubble 2007		Interim period		Bubble 2015	
		Coef.	P-value	Coef.	P-value	Coef.	P-value
INDEX(t-1)	0.1	0.003***	0.000	-0.008***	0.000	0.019***	0.000
	0.2	0.002***	0.000	-0.007***	0.000	0.018***	0.000
	0.3	0.001***	0.000	-0.006***	0.000	0.017***	0.000
	0.4	0.001**	0.014	-0.006***	0.000	0.015***	0.000
	0.5	0.000	0.360	-0.005***	0.000	0.014***	0.000
	0.6	0.000	0.474	-0.005***	0.000	0.013***	0.000
	0.7	0.000	0.209	-0.005***	0.000	0.011***	0.000
	0.8	-0.001***	0.008	-0.005***	0.000	0.010***	0.000
	0.9	-0.002***	0.000	-0.004***	0.000	0.006***	0.000
ES(t-1)	0.1	0.117***	0.000	0.087***	0.000	-0.182***	0.000
	0.2	0.073***	0.000	0.133***	0.000	-0.206***	0.000
	0.3	0.073***	0.000	0.119***	0.000	-0.201***	0.000
	0.4	0.070***	0.000	0.089***	0.000	-0.144***	0.000
	0.5	0.062***	0.000	0.059***	0.000	-0.105***	0.000
	0.6	0.051***	0.000	0.033***	0.000	-0.028	0.122
	0.7	0.035***	0.000	0.010***	0.007	0.025	0.149
	0.8	0.013**	0.021	-0.014***	0.001	0.080***	0.000
	0.9	-0.046***	0.000	-0.052***	0.000	0.229***	0.000
Turn(t-1)	0.1	-0.002***	0.000	-0.010***	0.000	-0.030***	0.000
	0.2	-0.001***	0.000	-0.009***	0.000	-0.025***	0.000
	0.3	-0.001***	0.000	-0.008***	0.000	-0.023***	0.000
	0.4	0.000***	0.000	-0.007***	0.000	-0.022***	0.000
	0.5	0.000**	0.026	-0.006***	0.000	-0.022***	0.000
	0.6	0.000	0.783	-0.005***	0.000	-0.022***	0.000
	0.7	0.000***	0.008	-0.004***	0.000	-0.022***	0.000
	0.8	0.000***	0.000	-0.003***	0.000	-0.022***	0.000
	0.9	0.000***	0.000	-0.001***	0.000	-0.020***	0.000

This table represents the output of quantile regression based on the stock returns, as it is being presented above. The fundamental and macroeconomic outputs are not presented. Regressions deployed three subsamples, separated on the criterion of bubble phases. First (**Bubble 2007:** Apr 2005 to Dec 2008) and third (**Bubble 2015:** Jul 2014 Dec 2015). The second column (**Interim period:** Jan 2009 to Jun 2014) is supposed to symbolize non-bubble period, even though this subsample is characterized by unusual volatility *P<0.10; **P<0.05; ***P<0.01.

EFFECTS OF DIVIDENDS

It has become well documented that dividend payout ratios have a positive association with future earnings growth (*e.g.,* Arnott and Asness, 2003; Zhou and Ruland, 2006). From further analysis of their findings, Zhou and Ruland (2006) revealed that even under a situation of total dividends or various other issues, this phenomenon remains unchanged. They concluded that one potential reason for this is to be found in the 'free cash flow' hypothesis; that is, the likelihood that high cash dividend payouts will reduce agency costs and curb over-investment, thereby creating a favorable environment for a future earnings growth. Dividends were found to play a useful role in reducing agency problems (La Porta *et al.*, 2000). Cash dividends were preferred by majority shareholders in emerging markets (Chen *et al.*, 2009). Considering above mentioned, the analysis indicates that Chinese investors appreciate dividends and it is expected that dividends distribution may serve as a reason for additional optimism of investors. To test the relevance of the hypothesis, the initial model (Eq.2) is modified as follows:

$$R_{i,t} = a_i + \beta_2 Senti_{t-1} + \beta_3 Risk_{i,t} + \beta_4 Liq_{i,t-4} + \beta_5 CF_{i,t-4} + \beta_6 EPS_{i,t-4} + \beta_7 L/E_{i,t-4} + \beta_8 Payout_{i,t-4} + \beta_9 Size_{i,t-4} + \beta_{10} CPI_t + \beta_{11} TP_t + \beta_{12} Div_{i,t} + \beta_{13} Senti_{t-1} * Div_{i,t} + \varepsilon_{i,t}, \text{ (3)}$$

where $Div_{i,t}$ is a binary variable which equals to 1 if the firm paid either stock or cash dividends within a previous quarter, 0 otherwise. $Senti_{t-1} * Div_{i,t}$ – denotes the interaction term of lagged sentiment proxy and dividend dummy variable.

TABLE 9: DIVIDEND PAYERS Vs. NON-PAYERS

	Index		ES		Turn	
	Coef.	P-value	Coef.	P-value	Coef.	P-value
Senti(t-1)	-0.002***	0.000	0.023***	0.000	-0.001***	0.000
Div	-0.001***	0.000	-0.005***	0.000	0.003***	0.000
Senti(t-1) *Div	-0.003***	0.000	0.059***	0.000	-0.004***	0.000
Adj. R²	0.153		0.142		0.146	

The table represents the output of fixed effects panel regression. The fundamental and macroeconomic output are not presented. *P<0.10; **P<0.05; ***P<0.01. According to the **Table 9**, dividends amplify the effect of investor sentiments. This implies that dividend payers are more predisposed to the investor sentiments due to investor preferences of dividends paying stocks. Investors overvalue the importance of dividend paying stocks and bid up the prices of the latter higher than the non-dividend paying stocks. This fact is also interesting because, as it was mentioned in the descriptive statistics, the sample's minimum value of the dividend payout ratio is negative, which infers that some firms distribute dividends even in the periods of losses.

EFFECT OF CROSS-LISTING

The degree of Intermarket transparency matters a great deal in the subsequent price reaction of the underlying stock. Most cross-listings are made to avoid a market segmentation and provide companies with the improved capital access. Strong information linkages between the two markets are beneficial. Overall, a degree of information flow between domestic and foreign markets proves to be very important for the cross-listing effect (Smirnova, 2004). Cross-listing in transparent markets allows efficient firms to separate themselves from non-efficient firms because disclosure requirements and legal liability make cross-listing much more costly for non-efficient firms (Fuerst, 1998). If cross-listed companies are under the stricter observations by international analysts as well as provided by wider arbitrage opportunities on the international markets, they should possess some resistance to investor sentiments. To test this hypothesis, similar to Eq. 3, initial model (Eq.2) is modified as follows:

$$R_{i,t} = a_i + \beta_2 Senti_{t-1} + \beta_3 Risk_{i,t} + \beta_4 Liq_{i,t-4} + \beta_5 CF_{i,t-4} + \beta_6 EPS_{i,t-4} + \beta_7 L/E_{i,t-4} + \beta_8 Payout_{i,t-4} + \beta_9 Size_{i,t-4} + \beta_{10} CPI_t + \beta_{11} TP_t + \beta_{12} CL_{i,t} + \beta_{13} Senti_{t-1} * CL_{i,t} + \varepsilon_{i,t}, \text{ (4)}$$

where $CL_{i,t}$ is a binary variable which equals to 1 if the firm is cross-listed overseas at time t, 0 otherwise. $Senti_{t-1} * CL_{i,t}$ – interaction term of lagged sentiment proxy and cross-listing dummy variable.

TABLE 10: SENTIMENTS AND CROSS-LISTING

	Index		ES		Turn	
	Coef.	P-value	Coef.	P-value	Coef.	P-value
Senti$_{(t-1)}$	-0.003***	0.000	0.033***	0.000	-0.001***	0.000
CL	0.000	0.351	0.001***	0.000	0.001***	0.000
Senti$_{(t-1)}$*CL	0.000	0.581	-0.005*	0.082	0.001**	0.016
Adj. R^2	0.152		0.142		0.143	

The fundamental and macroeconomic output are not presented. *P<0.10; **P<0.05; ***P<0.01.

Table 10 contains results of the model testing for the relevance of cross-listing on the investor sentiments. In the case of the first sentiments proxy, $Senti_{t-1} * CL_{i,t}$ interaction term is insignificant, however, in the other two columns, interactions have a significant and opposite sign to the sentiments proxies. Another observation is that the interaction terms have significantly smaller coefficients which support the expectations that cross-listed companies are valued with higher precision. Chinese companies usually cross-listed on the markets which have better access to cheaper capital as well as arbitrage opportunities (e.g. US, UK, Germany, and Switzerland, etc.). During extreme growth or drop in stock prices caused by investor sentiments in China, traders in those developed overseas markets are able to provide enough demand and supply, to keep stock prices closer to their intrinsic values. Overall, these results support the hypothesis that limitation of arbitrage opportunities significantly strengthens investor sentiments.

EFFECT OF GOVERNMENT OWNERSHIP

China is a communist state and there are companies with significant government share. The government is represented by the assigned government agencies which sometimes make decisions significantly different from the private shareholders. One of the examples of the tunneling effect is described by Lam *et al.* (2012) who tested different approaches of government and private firms related to the payout policy in China. They found that because government agencies are not allowed to sell the shares, firms with higher state ownership tend to pay higher than usual cash dividends. This has a great influence on the firms' growth as the reinvestment funds are being drained periodically. Assuming this impediment to the firms' best interests, it is expected that investors are less enthusiastic toward firms with government ownership, which should be a factor to mitigate investor sentiments. Continuing the line, the initial model (Eq.2) is modified as follows:

$$R_{i,t} = a_i + \beta_2 Senti_{t-1} + \beta_3 Risk_{i,t} + \beta_4 Liq_{i,t-4} + \beta_5 CF_{i,t-4} + \beta_6 EPS_{i,t-4} + \beta_7 L/E_{i,t-4} + \beta_8 Payout_{i,t-4} + \beta_9 Size_{i,t-4} + \beta_{10} CPI_t + \beta_{11} TP_t + \beta_{12} Gov_{i,t} + \beta_{13} + \varepsilon_{i,t}$$ (5)

where $Gov_{i,t}$ is a binary variable which equals to 1 if the firm is owned by the government at time t, 0 otherwise. $Senti_{t-1} * Gov_{i,t}$ denotes the interaction of sentiment proxy and government ownership.

TABLE 11: SENTIMENTS AND GOVERNMENT CONTROLLED FIRMS

	Index		ES		Turn	
	Coef.	P-value	Coef.	P-value	Coef.	P-value
Senti$_{(t-1)}$	-0.001***	0.000	0.038***	0.000	-0.001***	0.000
Gov	0.005***	0.000	-0.019	0.244	0.011**	0.012
Senti$_{(t-1)}$*Gov	-0.000***	0.000	0.000	0.963	0.000***	0.000
Adj. R^2	0.140		0.144		0.144	

The fundamental and macroeconomic output are not presented. *P<0.10; **P<0.05; ***P<0.01.

Analyzing **Table 11**, it is worth to notice that the interaction term in the case of Earnings Share is insignificant. This proves the fact that the firms with government ownership have a different approach to a stock issuance. Another two proxies provide with mixed results. One interaction changes the sign while other not. The similarity lies in the smaller coefficients of these interactions which can be used as a support of the hypothesis – the government ownership can mitigate the effect of investor sentiments.

EFFECT OF AGE AND SIZE

Explained by difficulties of assessment, Baker and Wurgler (2006) found different susceptibility to sentiments by young and small firms. According to their argumentation, these firms have relatively subjective valuations and are hard to arbitrage, so they should be expected to be more affected by sentiments. To test if their hypothesis supports the Chinese stock market, this study runs a model using subsamples divided according to the Age and Size attributes.

TABLE 12: FIRM AGE AND SIZE

	Age	Coef.	Prob.	Obs.	Size	Coef.	Prob.	Obs.
Index$_{(t-1)}$	<3	-0.003***	0.000	87,133	Small	-0.0023***	0.000	120,895
	3 to 7	-0.002***	0.000	74,611	Mid	-0.0026***	0.000	127,549
	7 to 12	-0.003***	0.000	103,987	Large	-0.0030***	0.000	127,639
	>12	-0.004***	0.000	111,989				
ES$_{(t-1)}$	<3	0.063***	0.000	162,375	Small	0.0562***	0.000	240,414
	3 to 7	0.058***	0.000	189,866	Mid	0.0299***	0.000	250,145
	7 to 12	0.032***	0.000	183,325	Large	0.0118***	0.000	238,668
	>12	-0.009	0.054	196,059				
Turn$_{(t-1)}$	<3	-0.0008***	0.000	164,801	Small	-0.0004***	0.000	244,013
	3 to 7	-0.0004***	0.000	193,649	Mid	-0.0006***	0.000	252,361
	7 to 12	-0.0004***	0.000	185,202	Large	-0.0019***	0.000	239,296
	>12	-0.003***	0.000	196,059				

*P<0.10; **P<0.05; ***P<0.01.

Empirical results presented in **Table 12** has twofold outcomes. Index and Turn show the growth of sentiments upon older and larger companies, while ES provides significant decline. Relying on the former 2 proxies, it can be assumed that the older and the larger the firms the more they are affected by the sentiments. This totally contradicts to the findings of Baker and Wurgler (2006). This phenomenon might be explained by the fact that the market is still relatively young in comparison to the long established US and European markets, and stocks of bigger and older companies serve as the primary tools for speculations. It is assumed that the major firms attract more irrational investors, who buy the stocks of firms with known brand names, while smaller and younger firms remain in the shadow zone which attracts only professional investors.

CONCLUSION

This study examines the impact of investor sentiments on the future returns using the weekly data of companies listed on Shanghai and Shenzhen stock exchanges within 2005 and 2015. The employed methodology is a panel regression with fixed effects. To test for the relevance, investor sentiments have been represented by several proxies proposed by major preceding studies. The results show that not all of them share the same sign of correlation with future returns. The outcomes of the general sample support findings of previous authors about a negative correlation of investor sentiments with the future returns. Further analysis of the control variables highlighted the fact that elements deployed by short-term traders are significantly prevailing over the fundamental and macroeconomic indicators which are used by long-term investors. The key valuation factor for the investors was the profitability, while risk and macroeconomic factors were neglected. It can be assumed that during examined period, Chinese market was to a greater extent speculative and prone to the investor sentiments.

Like the previous studies, this paper used quantile regressions to examine sentiments between the stocks within different returns range. The results reveal that high return stocks have higher exposure to the investor sentiments. Stocks with higher returns were being bid up the following week until some greater market corrections. This phenomenon might be the cause of financial bubbles observed recently in China.

Afterward, the sample range divided into the three distinctive time periods. Two of them are characterized by the phases of stock market bubbles, while the third period serves as a transitional period and is used to segregate impact of sentiments between in and out of stock market bubble phases. The outputs distinct differences between these three periods. This fragmental investigation brought up very important conclusion – investor sentiments' impact to the future returns is not constant in the matter of time.

Further, the study tests several important factors which may adjust a relationship between investor sentiments and future returns. Dividends amplify the effect of investor sentiments because investors are attracted to the dividend paying companies even. Cross-listing negates an arbitrage limitations and consequently mitigates investor sentiments, keeping the stocks closer to their intrinsic values. Firms with significant government ownership have resistance to the investor sentiments because they do not follow interests of private investors. The final factors which were examined are Age and Size. It was expected that stocks of young, and small firms should be more affected by the investor sentiments because they are harder to evaluate. The results reveal the opposite; big long-established firms have higher vulnerability to misevaluations caused by the sentiments.

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DETERMINANTS OF THE FLOWER PRODUCERS & EXPORTERS PERFORMANCE IN ETHIOPIA

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ABSTRACT

The major objective of this study is to investigate the effect of various enhancing & inhibiting factors on the level of performance of the flower producers and exporters in Ethiopia. The research questions raised were related to major enhancing & inhibiting factors affecting performance of flower producers and exporters. 122 questionnaires were distributed to flower producers and exporters but only 110 questionnaires were collected. However, only 100 questionnaires were found usable. Descriptive, Correlation and regression analysis was used to analyze the data. In this study, samples were taken from producers and exporters operating in Ethiopia. Both enhancing and inhibiting factors heavily influenced the performance of flower producers and exporters. Potential domestic market, proximity to major flower markets, & privileged access too many markets are found major enhancing factors. On the other hand, being a landlocked country & the Non-availability of strong domestic market for flower were found the major inhibiting factors. From the finding it can be concluded that all enhancing and inhibiting factors influence flower producers and exporters performance. However, the impact of each enhancing and inhibiting factor is different. The instrument used in this study should enable managers to bench mark performance and plan improvements. This study will assist the management of the producers and exporters of flowers in order to enhance their level of performance and serve as an orienting point for policy makers and the Ethiopian Horticulture Producers and Exporters Association.

KEYWORDS

enhancing factors, inhibiting factors, export performance, flower producers, flower exporters.

INTRODUCTION

Academic research on export marketing has made substantial progress over the past 40 years. This progress is reflected in the development of a substantial body of knowledge concerning the various aspects of exporting, as well as in the application of more rigorous research tools and procedures in investigating export-related phenomena. At the same time, however, the increasingly dynamic, volatile and complex international business environment, combined with significant advancements in marketing thought and the emergence of new marketing paradigms, open up a new research agenda for export marketing researchers. Ethiopia earned about USD 660,038 from exporting cut flowers which grew to USD 12.7 million in 2004/2005 (Ethiopia, 2005). Ethiopia exported 16 million cut flowers to the world market in 2003 and 32 million cut flowers in 2004. Annual flower exports from Ethiopia from the existing units are expected to reach $100 million by 2007. As per the Ethiopian Horticulture Producers and Exporters Association (EHPEA), rose, geranium, gypsophila, static, hypericum, chrysanthemum, limonium, carnation, and pot plants are the main flower types produced in Ethiopia; albeit the production in flower farms is dominated by roses. Meskel Flowers, Mengesha Flowers and Golden Rose Agro-farms are private company to specialize in the production and export of roses in Ethiopia. Netherlands, Germany, Italy, Scandinavia countries and Middle East are major customer of Ethiopia's floriculture. Although, not yet thriving, Ethiopia has potential domestic market since the population base of over 90 million. Despite the enormous potential of the country, foreign currency earnings from the horticultural sub-sector are abysmal. However, the amount of exportable horticultural products is increasing and so are the investors having motivated by various incentives and supports offered by the government. Horticulture export volume has secured more than 100 percent growth in 2003 compared to the previous five years.

The floriculture industry is dramatically expanding in Ethiopia. However, this rapid expansion is also facing major difficulties in order to get the lead in the flower market in the horn of Africa despite availability of abundant land, river and lake water conducive for the growth flower. Moreover, there is no as such a well organized research done on Determinants of flower producers and exporter's performance in Ethiopia. Ethiopia is a developing country moving from a centrally planned economy to a free market economy & is facing multifaceted challenges to build its economy from the ground up. The aim of this study is to examine the effect of enhancing and inhibiting factors that affect the level of performance of flower producers and exporters in Ethiopia. This paper is organized under five sections: Literature review, research methods, research results, analysis or discussions, conclusion and references subsequently.

LITERATURE REVIEW

Recent decades have been marked by the rapid internationalization of business and the emergence of global competition. Markets in many industries, whether for consumer products, industrial goods and services or markets for resources such as capital, materials and technology, are becoming increasingly integrated worldwide (Douglas and Craig, 1992). Now days, it is an inevitable to firms to participate in global markets (Craig and Douglas, 1996a). Naturally, an increasing number of firms have seen in these sweeping developments the opportunity to expand their operations internationally in order to achieve their growth objectives, raise their sales and profits, diversify their business risks, and even retaliate to the entry of foreign competitors into their domestic markets. Exporting has been the most popular approach adopted by firms in their endeavors to enter and penetrate foreign markets, as it requires less commitment of resources, has minimal effect on the ordinary operations of the firm, and involves low investment and financial risks (Leonidou et al., 2002).The crucial importance of exporting for the economic prosperity of national economies and individual firms alike has stimulated increased attention among academic researchers, who have attempted to investigate the key issues involved in the development and implementation of successful export marketing strategies in order to offer sufficient support to corporate and public policy makers confronting today's hostile global business conditions (Katsikeas, 2003).

Globalization, cultural exchanges, and celebrations enhancing fraternity such as New Year, Valentine's Day, Memorial Day and other special days have induced people globally to use flowers as a means of sharing their feelings. Above all, these celebrations have acquired one-to-one pairing with flowers in some cases, e.g. roses to Valentine's Day and carnations to Mother's Day. Increased use of flowers and ornamental plants makes marketing of flowers a lucrative business. The majority of cut flowers are produced in countries with dedicated infrastructure having facilities for airlifting to major distribution centers. According to the AIPH International Statistics Flowers and plants (2005), the Asia/Pacific region leads in flower production with a total production area of 244,263 hectares (HA) followed by Catalysts and barriers to cut flower export Europe (54,815); Central/South America (45,980); North America (26,135); Africa (5,697); and the Middle East (3,845). The AIPH report estimates a global area of 360,000 hectares dedicated to world flower and plant production involving USD 60 billion in value terms and 100,000 companies. In 2001, the UN International Trade Centre estimated the global area of 200,000 hectares dedicated to cut flowers commanding value of USD 27 billion. In terms of total area of production, Asia and the Pacific cover nearly 60 percent of the total world area. The key markets for flower are Western Europe, North America and Japan. The EU is the world's leading importer of flowers. The other largest importers are Germany, the USA, the UK, France, The Netherlands and Switzerland – accounting for nearly 80 percent of global imports.

The Netherlands is the world's largest producer of cut flowers and foliage valued at USD 3.6 billion, followed by Germany and Italy (www.syngenta.com/en/products). In addition, The Netherlands plays a major role in setting the global standard for daily prices through its computerized clock auction system and acts as the logistical distribution hub for Europe. South American countries Colombia and Ecuador as well as Israel, are the major producers of carnations and roses. An increasing investment has also been witnessed in Kenya and other African countries (Hamrick, 2004, p. 4).

The share of the developing countries in the total trade has consistently been around 20 percent during the last five years. There has been a growth in the number of producing countries particularly among the developing nations in Asia, Africa and Latin America (www.fao.org). In the African continent, Kenya leads cut flower exports, expanding annually at 10 to 15 percent per year, followed by Zimbabwe. Export of roses (comprising 75 percent of flower export by weight) from Kenya was up by 19 percent in 2003 to the Netherlands auction market and increased the competition (Hamrick, 2004, p. 4). Existing farms are being expanded and newer ones are being created in countries such as Tanzania, Uganda, Ethiopia, Malawi, Zambia, and Namibia. However, established flower producers have found investing in more than one African country helps spread the risks (Hack and Heybroek, 1992).

Some countries are both producers as well as consumers of cut flower like Asia, while some countries like Israel, Africa and South and Central America are used mainly for export sale. In the case of Ethiopia, the concept flower as a gift emerged recently. However, Ethiopia has attracted several foreign investors in recent years, for exporting cut flowers mainly to European markets. The horticulture commercial farms began in Ethiopia during Emperor Haile Selassie's era. Most of the farms were located in the rift valleys at places where abundant river and lake water was available (Sisay, 2004). Cut flower business was introduced by the Derge regime during 1980/1981 in collaboration with the German Society for Technical Co-operation. Imports of plants from the Canary Islands and Holland became instrumental in establishing Zwai, Debrezeit and Tibila estate farms with about 20 species of different cut flowers. The Horticultural Development Corporation, a state owned enterprise, was the first business entity to enter into the floriculture industry. Cut-flowers and vegetables are fast growing export businesses in Ethiopia

The current trends in exports are threatening the market leader Kenya, which has witnessed a 15 percent decrease in profit for the first time in 30 years – Ethiopia being one of the causes for that (Goldfain, 2006). While the floriculture industry in Kenya is stabilizing, it is expanding in Ethiopia. At the same time, the exports from South Africa, Uganda and Zimbabwe have been shrinking due to several reasons (Goldfain, 2006). Certain movements in the global environment are also favorable. The concerns of the Dutch, offering its citizens sizable development grants to shift their production area to Ethiopia, and the growing hostile environment in Kenya has led to an increase in recent investment recently.

IMPORTANCE OF THE STUDY
This study will have the following contributions to various stakeholders:
- The Federal as well as the regional governments will be able to exert much effort to improve the land tenure policy as well as putting the necessary infrastructure in place where abundant river and lake water was available
- The producers and exporters of flowers will be able to overcome the major inhibiting factors as well as exploit opportunities available in the industry.
- The Ethiopian Horticulture Producers and Exporters Association (EHPEA) has to serve as a major platform to share ideas among producers and exporters as well as play a pivotal role in lobbying regional as well federal government officials on matters most critical to the growth of the industry.
- The EHPEA has to closely work with the media in order to stimulate domestic demand for flowers to exploit this huge potential.

STATEMENT OF THE PROBLEM
Academic research on export marketing has made substantial progress over the past 40 years. This progress is reflected in the development of a substantial body of knowledge concerning the various aspects of exporting, as well as in the application of more rigorous research tools and procedures in investigating export-related phenomena. At the same time, however, the increasingly dynamic, volatile and complex international business environment, combined with significant advancements in marketing thought and the emergence of new marketing paradigms, open up a new research agenda for export marketing researchers.

The crucial importance of exporting for the economic prosperity of national economies and individual firms alike has stimulated increased attention among academic researchers, who have attempted to investigate the key issues involved in the development and implementation of successful export marketing strategies in order to offer sufficient support to corporate and public policy makers confronting today's hostile global business conditions (Katsikeas, 2003).

The floriculture industry is dramatically expanding in Ethiopia. However, this rapid expansion is also facing major difficulties in order to get the lead in the flower market in the horn of Africa despite availability of abundant land, river and lake water conducive for the growth flower. The aim of this study is to examine the effect of enhancing and inhibiting factors that affect the level of performance of flower producers and exporters of Ethiopia.

OBJECTIVES OF THE STUDY
The Main objective of this study is to identify major determinants of the flower producers and exporters performance in Ethiopia
The specific objective of the study includes the following:
1. To identify major overseas flower destinations of Ethiopia.
2. To identify the major enhancing factors affecting Flower producers and Exporters level of performance in Ethiopia.
3. To examine the major inhibiting factors affecting Flower producers and Exporters level of performance in Ethiopia.

HYPOTHESIS OF THE STUDY
H1: Enhancing Factors are positively and significantly related with the level of performance of flower Producers and exporters in Ethiopia.
H2: Inhibiting Factors are positively and significantly related with the level of Performance of Flower Producers and Exporters in Ethiopia.
H3: All Enhancing Factors have a significant factor on the level of performance of flower producers and Exporters in Ethiopia
H4: All Enhancing Factors have a significant factor on the level of performance of flower producers and Exporters in Ethiopia

RESEARCH DESIGN AND METHODOLOGY
Researchers applied two types of research approaches, namely qualitative and quantitative approach (Saunders et.al, 2007). Therefore, this study follows quantitative methods approach.

SAMPLING DESIGN
The researcher adopted the six sampling steps of Malhotra et al., (2006); these steps are closely interrelated and relevant to all aspects of the market research. Those are - identified target population, determine the sampling frame, select sampling techniques, determine the sample size, execute the sampling process and validate the sample. The research target population is managers, supervisors and staffs who are working in marketing and outbound logistics related activities.

Zikmund and Babin (2010) sampling technique was used to determine the sample proportion success and not success based on the experience from previous survey research response rate. Saunders, Lewis and Thornhill (2012) state that the likely response rate shall be reasonable 50% or moderately high, while Patrick, B. (2003) referring Babie (1979), the return or success rate 50% is 'adequate'; 60% response rate is 'good' and 70% rate or higher is 'very good'. In this study confidence of successfully collecting or return rate is expected to be 70% and the remaining might be defected or non-response, and sample size is determined at 95% confidence level.

Having this, sample size is determined with the help of the following formula (Saunders et.al, 2007):

$$n = \frac{Z^2 PQ}{e^2}$$ Where,

- n = sample size,
- p = proportion of success
- q = proportion of fail
- z = confidence level
- e = standard error

Based on the above formula,

$$n = \frac{1.96^2(0.70)(0.30)}{0.05^2} = 325 \; Respondents$$

According to Saunders et.al, (2007) where the population is less than 10,000 a smaller sample size can be used without affecting the accuracy. This is called the adjusted minimum sample size (n'). The adjusted sample size is calculated using below formula after obtaining the exact population or staff number working on marketing and outbound logistics activities. Total number of staffs who have direct relationship with production, marketing and logistics have been found 196.

$$n' = \frac{n}{1 + \frac{n}{N}}$$

Where,
n' = the sample size
N = the total population of target respondents

$$n' = \frac{325}{1 + \frac{325}{196}} = 122$$

The population of the study is all flower producers and exporters operating in Ethiopia. This list of flower producers and exporters were obtained from EHPEA. Then, the flower producers and exporters have been contacted through. Only 100 responses were found fit for the analysis, while 22 of them were either incomplete or failed to be returned.

RESEARCH INSTRUMENT

There are different ways of data collection methods depending upon the type of data and research method. The Survey studies attempt to find relationships between the characteristics of the respondents and their reported behaviors and opinions (Marczyk, DeMatteo, and Festinger, 2005) and also it is appropriate for research questions about self-reported beliefs or behaviors (Neuman, 2007). The method used for data collection was a self-administered questionnaire based on relevant literature and partially adapted from previous studies. The questionnaire is designed mixing of close-ended and rating questions most frequently use five levels Likert-style rating scale (Saunders et.al, 2007).

The cross-sectional study is the most frequently used descriptive design in marketing research. Cross-sectional designs involve the collection of information from any given sample of population elements only once (Malhotra et al., 2006 and Neuman, 2007). Applying of this design has the advantage of conducting the research on time at reasonable cost. In this research cross-sectional research will involve the measurement of all variables within a narrow time span or particular time period (Rushton et al., 2009).

Thus, a research instrument having four sections was developed based on a rigorous and extensive literature review. The first section contains general information about the background of flower producers and exporters. The second section was containing enhancing factors of flower producers and exporters level of performance on a five point Likert scale. The third section contains inhibiting factors that working against the performance level of flower producers and exporters. The fourth section incorporated the measures of flower producers and exporters level of performance. The data has been analyzed using descriptive statistics as well as inferential statistics including correlation and regression analysis.

RESEARCH VARIABLE

According to Neuman (2007), the variable that is the effect or is the result or outcome of another variable is the dependent variable. The independent variable is the causes of result, whereas the dependent variable "depends on" the cause. For this study enhancing and inhibiting factors were taken as independent variables and Flower producers and exporters were used as a dependent variable.

FIG. 1
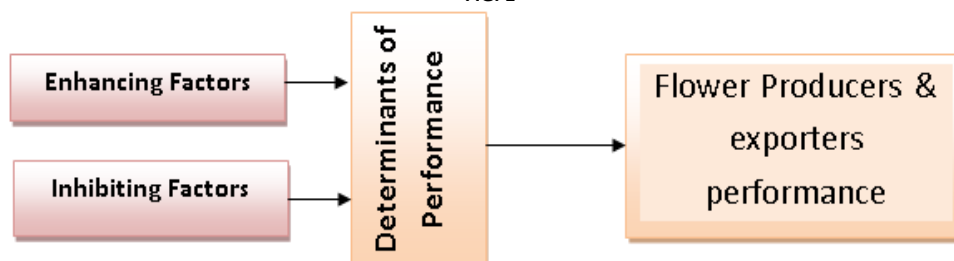
DATA ANALYSIS

Descriptive and inferential statistics were used to describe the data collected in the research study to characterize the variables accurately and to summarize the results of the study. Correlation and regression analysis was also used to examine the relationships of and the independent variables and the dependent variable. SPSS e version 20 software was used as an instrument to analysis the research data.

VALIDITY AND RELIABILITY

Statistical validity also used to measure the validity of the research though use of correct statistical procedure and instruments (Neuman, 2007). To ensure the statistical validity of the study, the researcher has collected quantitative data using survey questioner and analyzed the data using correct statistical instruments like descriptive statistics, correlation and regression analysis to see the relationship of the variable and reach concrete conclusion.

According to Adams et al., (2007) internal validity is used to assure the research validity. To threat the internal validity of this study the questioner was distributed within the same period of time and collected within a month's time and reasonable sample was taken from the population of the study. Furthermore, pilot taste has been made by distributing 20 questionnaires to sample respondents to collect feedback on the clarity, wording, coherence and content of the questionnaire. The major objective of the pilot taste was to get feedback on the questionnaire way of preparation, and any other. Valuable comments obtained from the pilot test as well as experts in the field were used to restructure as well as refine the quality of the research instrument.

The reliabilities of enhancing and inhibiting factors on performance level were assessed with Cronbach's Alpha (α); Cronbach's Alpha is the most common measure of scale reliability (Field, 2006). According to Neuman (2007), Cronbach's Alpha used to assess uni-dimensionality. Alpha ranges from a maximum of 1.0 for a perfect score to minimum of zero, good measure of the alpha should be 0.70 or higher. The researcher measures the reliability of the data using Cronbach's Alpha, detail seen in the analysis part of the study. In this study the Cronbach's Alpha value Enhancing and Inhibiting Factors of Flower Producers and Exporter for 20 items. 760 which is above the minimum threshold.

RESULTS AND DISCUSSION

Once the data has been collected from target respondents, it has been edited, cleaned, coded and entered into SPSS version 20 for analysis using descriptive and inferential statistics.

TABLE 1: NUMBER OF YEARS IN THE FLOWER EXPORT BUSINESS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 5 years	25	25.0	25.0	25.0
	between 6 and 12 years	60	60.0	60.0	85.0
	between 10 and 20 years	15	15.0	15.0	100.0
	Total	100	100.0	100.0	

60 % of the respondents have been in business between 6 and 12 years while 25 % of the respondents have been in business less than 5 years. Only 15 % of the respondents have been in the flower business between 10 and 20 years. None of them have reported more than 20 years. This implies the flower business is a recent phenomenon in the Ethiopian Business context.

TABLE 2: THE MAJOR FLOWER EXPORT BUSINESS

	Frequency	Percent	Valid Percent	Cumulative Percent
EU	65	65.0	65.0	65.0
Middle East	20	20.0	20.0	85.0
Far East	5	5.0	5.0	90.0
Africa	5	5.0	5.0	95.0
Australia and ocean	5	5.0	5.0	100.0
Total	100	100.0	100.0	

65 % of the respondents have reported the major flower export destination is EU, followed by 20% Middle East. On the other hand, 5% of the respondents were reporting Far East, Africa and Australia and Oceania as major flower export destinations.

DESCRIPTIVE ANALYSIS OF ENHANCING FACTOR

Descriptive statistics were used to evaluate enhancing factors affecting performance level of flower producers and exporters.

As the table shown Annex I, the major enhancing factors affecting performance level of flower producers and exporters are potential domestic market (mean=4.2250), proximity to major flower markets (mean =4.0100), privileged access to many markets (mean=3.9250) and government financial and incentive packages (Mean=3.8311) top down. On the other hand, availability and quality of land (mean=3.6425), civilized population and labor force (mean=3.6333), support from the Ethiopian Horticulture Producers and Exporters Association (mean=3.2275) and contribution to export value (mean=3.1350) at descending order.

DESCRIPTIVE ANALYSIS OF INHIBITING FACTORS

The major inhibiting factors affecting performance level of flower producers and exporters, referring Annex II, are the state of being a landlocked country (mean= 4.4500), Non-availability of strong domestic market for flower (mean= 4.0833), Airfreight cost and capacity (mean=3.9417), Inaccessibility and shortage of water (mean=3.9250), Seasonality of production of flowers (mean= 3.7950), Access to finance and foreign currency (mean=3.7950) top down.

On the other hand, International regulatory Frameworks and standards (mean=2.5267), Availability of a small product range (mean=2.8700), intensity of competition (mean= 3.0050), Shortage of agricultural inputs and green house equipment (mean=3.0500), Infrastructural bottlenecks (mean=3.1475) bottom up respectively.

NORMALITY ASSUMPTION OF ENHANCING AND INHIBITING FACTOR

Screening data for assessing the normalization of variables is a critical step in multivariate analysis (Hair, 2010). Skewness refers to the symmetry of distribution and kurtosis refers to the peakness of distribution (Tobachinck and Fidell (2006) as cited by Ebrahim, A Study of Brand Preference: An Experiential View, 2013). According to Hair (2010) the most commonly acceptable criteria value for (kurtosis/skewness) distribution is ±2.58. For this study kurtosis and skewness of variables are calculated for items as shown in the annex I and II, they fall within acceptable range.

CORRELATION ANALYSIS

The result of the Pearson correlation is interpreted by the guide line suggested by Field (2005). According to Field, the Pearson correlation coefficients show the relationship between the predictor and outcome variable. The relationship in the range of 0.1 to 0.29 is considered as weak, 0.30 to 0.49 as moderate and above 0.50 shows strong relationship. Finally, the positive and negative sign is telling us the direction of their relationship.

CORRELATION OF ENHANCING FACTORS VS. FLOWER PRODUCERS AND EXPORTERS PERFORMANCE

The Pearson correlation table (Annex III) shows that government financial and incentive packages, Potential domestic market and Privileged access to many markets have a weak positive relationship, at correlation value of r is 0.195, 0.066 and 0.053, respectively; whereas the rest predictor variable have moderate positive relationship with Performance of Flower Producers and Exporters at Pearson correlation value of availability and quality of land =.398, civilized population and labor Force =.424, proximity to major flower markets =.331, support from the Ethiopian Horticulture Producers and Exporters Association =.485 and contribution to export value =.392.

Most of the predictor variables have a positive correlation with dependent variables at significant value of P<0.01, except the three predictors government financial and incentive packages, potential domestic market and privileged access to many markets have week relation but don't have not significant relationship.

CORRELATION OF INHIBITING FACTORS VS. FLOWER PRODUCERS AND EXPORTERS PERFORMANCE

Annex IV table of correlation result that shows the relationship between predictor variables access to finance and foreign and International Regulatory Frameworks and standards have strong positive relationship with dependent variable (Performance of flower producers and exporters); their Pearson correlation values are access to finance and foreign is .759 and International Regulatory Frameworks and standards is .763. The other predictor which has moderately positive correlation with dependent variable is Inaccessibility and shortage of water and its Pearson correlation is .366.

The state of being a landlocked country, Seasonality of production of flowers and Intensity of competition have week positive relationship with Performance of flower producers and exporters at Pearson correlation value of r=.045,.016 and .189, respectively.

Infrastructural bottlenecks, Shortage of agricultural inputs and greenhouse equipment, availability of a small product range, non-availability of strong domestic market for flower and airfreight cost and capacity have a weak negative relationship with Performance of Flower Producers and Exporters. The Pearson correlation value of those predict that have negative relationship are -, 070, -.128, -.033, -.016 and -.065 respectively.

In general, all the predictor variables have a positive moderate and strong correlation with dependent variables have significant value of P<0.01, while the rest are not significant relationship.

REGRESSION ANALYSIS – ENHANCING AND INHIBITING FACTORS

Assumption Test using Collinearity Statistics-Enhancing Factors

Before running the regression analysis, a multicollinearity test has been done. Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula $1–R^2$ for each variable. If this value is very small (less than.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of Multicollinearity. The other value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance). VIF values above 10 would be a concern here, indicating Multicollinearity. Revering Annex III, the lowest tolerance is **.289** (i.e. >.1) and the highest VIF is **3.46** (i.e. <10) there no problem of multicollinearity.

TABLE 3: MODEL SUMMARY OF ENHANCING FACTORS OF FLOWER PRODUCERS AND EXPORTERS PERFORMANCE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768ᵃ	.590	.554	.47221
b. Dependent Variable: *Flower Producers and Exporters Performance*				

Model summary table describes the overall model whether the model is successful in predicting dependent variables. It gives a value of R square, which measure of how much of the variability in the outcome is accounted for the predictors. In addition, this summary table tells us whether auto-correlation assumption is satisfied or not through Durbin Watson value (Field, 2006).

Coefficient of Determination (Regression Coefficient, R Square) or Regression standardized coefficients can take on any value between 0 and 1, and it measures the proportion of the variation in a dependent variable that can be explained statistically by the independent variable(s) (Saunders et al., 2012).

The Model Summary table gives the R (.768) and Adjusted R square (.590). The Adjusted R square statistics 'corrects' R square value to provide a better estimate of the true population value. The coefficient of determination for enhancing factors, R square is 76.683% of the variation in the dependent variable (performance of flower producers and exporters) is explained by the independent variables and the remaining percent is explaining by other dimensions.

TABLE 4: ENHANCING FACTORS OF FLOWER PRODUCERS AND EXPORTERS PERFORMANCE- ANOVA*a*

Model		Sum of Squares	df	Mean Square	*F*	*Sig.*
1	Regression	29.220	8	3.652	*16.380*	*.000*[b]
	Residual	20.292	91	.223		
	Total	49.512	99			
a. Dependent Variable: Flower Producers and Exporters Performance						

To assess the statistical significance of the result it is necessary to look in the table labeled ANOVA (see table 4). This tests the null hypothesis that multiple R in the population equals 0. As can be seen from the **ANOVA** table, the independent variables significantly predict the performance of flower producers and exporters, (F= *16.380* is significant at P<0.05 level.)

TABLE 5: ENHANCING FACTORS OF FLOWER PRODUCERS AND EXPORTERS-COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.603	.710		.848	.399
Availability and quality of land /AQL	.190	.103	.139	1.845	.068
Civilized population and labor Force/ CP	.254	.142	.174	1.788	.077
Proximity to major flower markets /PM	.898	.197	.431	4.567	.000
Potential domestic market /PDM	.017	.105	.013	.160	.873
Government Financial and incentive packages/GFI	.142	.124	.143	1.147	.254
Support from the Ethiopian Horticulture Producers and Exporters Association /EHPEA	.543	.092	.536	5.904	.000
Privileged access to many markets /PAM	.248	.119	.245	2.095	.039
Contribution to export value / CEV	-.041	.092	-.047	-.450	.654
a. Dependent Variable: Flower Producers and Exporters Performance					

Standardized regression coefficient (Beta) is the estimated coefficient indicating the strength of relationship between an independent variable and dependent variable expressed on a standardized scale where higher absolute values indicate stronger relationships (range is from -1 to 1) (William and Barry, 2010).

Here the largest beta coefficient (β=. 898) which is Access to finance and foreign currency. This means that this variable makes the strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model is controlled for with a sig. of 0.000 (<0.05).

The next higher beta coefficient (β =.543) is Inaccessibility and shortage of water with an important sig. level (p=.000) that makes it to be the second most important factor in determining the performance level of flower producers and exporters.

The third most significant beta coefficient is Shortage of agricultural inputs and green house equipment (β=.248) and sig. level (p=000) in determining the performance level of flower producers and exporters.

The multiple regression equation (Ho, 2006):

$Y = C + B_1Xo + B_2X1+……+BnXn$

Where

Y = predicted dependent variable (PFPE)

C = constant

B = Unstandardized regression coefficient

X = Value of the predicted coefficient

PFPE=-0.603+.139AVL+.174CP+.431PM+.013PDM+.143GFI+.536EHPEA+.245PAM-.047CEV

REGRESSION ANALYSIS – ENHANCING AND INHIBITING FACTORS

Assumption Test using Collinearity Statistics-Inhabiting Factors

Before running the regression analysis, a multicollinearity test has been done. Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula $1–R^2$ for each variable. If this value is very small (less than .10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of Multicollinearity. The other value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance). VIF values above 10 would be a concern here, indicating Multicollinearity. Referring Annex IV, the lowest tolerance is .003 (i.e. >.1) and the highest VIF is 7.854 (i.e. <10) there no problem of multicollinearity.

TABLE 6: INHIBITING FACTORS -MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879[a]	.772	.747	.35586

The Model Summary table gives the R (.879) and Adjusted R square (.772). The Adjusted R square statistics 'corrects' R square value to provide a better estimate of the true population value. The coefficient of determination for inhibiting factors, R square is 87.9% of the variation in the dependent variable (performance of flower producers and exporters) is explained by the independent variables and the remaining percent is explaining by other dimensions.

TABLE 7: INHIBITING FACTORS –ANOVA*a*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.241	10	3.824	30.197	.000[b]
	Residual	11.271	89	.127		
	Total	49.512	99			
a. Dependent Variable: Flower Producers and Exporters Performance						

To assess the statistical significance of the result it is necessary to look in the table labeled ANOVA (table 7). This tests the null hypothesis that multiple R in the population equals 0. As can be seen from the ANOVA table, the independent variables significantly predict the performance of flower producers and exporters, (F=30.197is significant at P<0.05 level.)

TABLE 8: INHIBITING FACTORS-ON FLOWER PRODUCERS AND EXPORTERS COEFFICIENTS

Model	Unstand'd Coefficients		Stand'dCoef.	T	Sig.
	B	Std. Error	Beta		
(Constant)	.413	.442		.935	.352
The state of being a landlocked country /LLC	.050	.077	.040	.644	.521
Infrastructural bottlenecks /IBN	.147	.106	.093	1.385	.170
Shortage of agricultural inputs and greenhouse equipment /SAIGE	.342	.049	-.420	-7.001	.000
Inaccessibility and shortage of water /I&SW	.375	.090	.307	4.161	.000
Availability of a small product range /ASPR	.058	.078	-.043	-.743	.459
Non-availability of strong domestic market for flower /NASDMF	.166	.112	.140	-1.487	.141
Seasonality of production of flowers /SPF	.143	.076	.191	1.881	.063
Airfreight cost and capacity /AC&C	.091	.174	.074	.521	.604
Access to finance and foreign currency /AF&FC	*.673*	.053	.659	12.787	.000
Intensity of competition /IntC	.177	.066	.158	2.685	.009
International Regulatory Frameworks and standards /InlRF&S	*.682*	.037	.671	12.891	.000
a. Dependent Variable: Flower Producers and Exporters Performance					

Standardized regression coefficient (Beta) is the estimated coefficient indicating the strength of relationship between an independent variable and dependent variable expressed on a standardized scale where higher absolute values indicate stronger relationships (range is from -1 to 1) (William and Barry, 2010). Here the largest beta coefficient (β=.678) which is International Regulatory Frameworks and Standards. The next higher beta coefficient (β=.673) which is Access to finance and foreign currency. This means that these variable makes the strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model is controlled for with a sig. of 0.000 (<0.05).

The third higher beta coefficient (β =375) is inaccessibility and shortage of water with an important sig. level (p=.000) that makes it to be the second most important factor in determining the performance level of flower producers and exporters. The other most significant beta coefficient is Shortage of agricultural inputs and green house equipment (β=.342) and sig. level (p=000) in determining the performance level of flower producers and exporters.

The multiple regression equation (Ho, 2006):

PFPE= 0.413 +.04LLC +.093IBN -.42SAIGE +.307I&SW -.043ASPR +.14NASDMF +.191SPF +.074AC&C +.659AF&FC +.158IntC +.671InlRF&S

FINDINGS

60 % of the respondents have been in business between 6 and 12 years while 25 % of the respondents have been in business less than 5 years. Only 15 % of the respondents have been in the flower business between 10 and 20 years. None of them have reported more than 20 years. This implies the flower business is a recent phenomenon in the Ethiopian Business context. 65 % of the respondents have reported the major flower export destination is EU, followed by 20% Middle East. On the other hand, 5% of the respondents were reporting Far East, Africa and Australia and Oceania as major flower export destinations.

In the descriptive study the major enhancing factors affecting performance level of Flower producers and exporters included Potential domestic market (mean=4.2250), proximity to major flower markets (mean=4.0100), Privileged access to many markets (mean=3.9250) and Government Financial and incentive packages (Mean=3.8311) top down. The major inhibiting factors affecting performance level of Flower producers and exporters included the state of being a landlocked country (mean=4.4500), Non-availability of strong domestic market for flower (mean=4.0833), Airfreight cost and capacity (mean=3.9417), Inaccessibility and shortage of water (mean=3.9250), Seasonality of production of flowers (mean= 3.7950), Access to finance and foreign currency (mean=3.7950) top down.

In the regression, enhancing factors privileged access too many market; Support from the Ethiopian Horticulture Producers and Exporters Association and proximity to major flower market; were found significant (P<.05) with Flower Producers and Exporters Performance. Furthermore, inhibiting factors including Shortage of agricultural inputs and green house equipment, Inaccessibility and shortage of water, Access to finance and foreign currency, Intensity of competition and International Regulatory Frameworks and standards were found significant (p<.05). Moreover, both the enhancing and inhibiting factors model have a significant impact on flower producers and exporters as is seen in the ANOVA test.

CONCLUSIONS

This study investigated determinants of flower producers and exporters performance level by using enhancing and inhibiting factors. This research explains the relationship between the various determinants i.e. distribution functions in the physical distribution system and their impact on the competitive advantages in the beer market. In fact, the nature and relationship of each enhancing and inhibiting factors is complex. Now days, the flower market is becoming a more imperative issue in Ethiopia in particular and in global market in general. This is the basic reason that this research requires to deal with the impact of key determinants on Flower producers and exporters performance.

This study tries to see the relationship and role of each determining factor on the level of performance flower producers in the horticulture industry. Accordingly, the Pearson correlation coefficient tells us all predictor variables have a significant, p<0.01, positive relationship with Flower producers and exporters performance. From the finding it can be concluded that all enhancing and inhibiting factors influence flower producers and exporters performance. However, the impact of each enhancing and inhibiting factor is different. The instrument used in this study should enable managers to bench mark performance and plan improvements.

RECOMMENDATIONS

1) The Ethiopian Horticulture Producers and Exporters Association need to serve producers and exporters of flowers as vibrant platform to share experiences as well as lobby government officials on critical issues affecting their performances.

2) The Ethiopian Horticulture Producers and Exporters Association should also stimulate domestic flower consumption for there is a substantial domestic market potential for flowers.

3) The Federal and regional governments need to revisit policies affecting the flower production and export sector with respect to Access to finance and foreign currency, Shortage of agricultural inputs and green house equipment and Inaccessibility and shortage of water and Infrastructural bottlenecks and availability of quality land.

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ANNEXURE

ANNEXURE I: DESCRIPTIVE ANALYSIS OF ENHANCING FACTOR

Variables	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistics	Stat.	Stat.	Stat.	Std. Error	Stat.	Std. Error
Potential domestic market	100	4.2250	.56127	-.528	.241	.150	.478
Proximity to major markets	100	4.0100	.33919	.427	.241	.021	.478
Market Access Privileged	100	3.9250	.69767	-.523	.241	-.301	.478
Government Financial and incentive packages	100	3.8311	.71373	-.393	.241	-.860	.478
Availability and Quality of Land	100	3.6425	.51738	-.584	.241	.307	.478
Civilized population and labor Force	100	3.6333	.48432	.177	.241	-.255	.478
Support from the EHPEA	100	3.2275	.69821	.114	.241	1.046	.478
Contribution to export value	100	3.1350	.80984	.118	.241	.076	.478
Valid N (list wise)	100						

ANNEXURE II: DESCRIPTIVE ANALYSIS OF INHIBITING FACTOR

Variables	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Std. Error	Stat	Std. Error
The state of landlocked	100	4.4500	.57075	-.424	.241	-1.337	.478
Non-availability of strong domestic market for flower	100	4.0833	.59812	-.545	.241	-.266	.478
Airfreight cost and capacity	100	3.9417	.57461	-.684	.241	2.039	.478
Inaccessibility and shortage of water	100	3.9250	.57899	.100	.241	-.550	.478
Seasonality of production of flowers	100	3.8400	.94249	-.337	.241	-.984	.478
Access to finance and foreign currency	100	3.7950	.81058	-.295	.241	-.440	.478
Infrastructural bottlenecks	100	3.1475	.44537	.325	.241	.338	.478
Shortage of agricultural inputs and greenhouse equipment's	100	3.0500	.86894	.256	.241	-.549	.478
Intensity of competition	100	3.0050	.62963	-.824	.241	1.701	.478
Availability of a small product range	100	2.8700	.52039	-.609	.241	2.431	.478
International regulatory Frameworks and standards	100	2.5267	.54057	-.277	.241	-.451	.478
Valid N (list wise)	100						

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ANNEXURE III: CORRELATION OF ENHANCING FACTORS VS. FLOWER PRODUCERS AND EXPORTERS PERFORMANCE

Variable key terms abbreviation	
AQL: Availability and quality of land	EHPEA: Support from the Ethiopian Horticulture Producers and Exporters Association
CP : Civilized population and labor Force	PAM: Privileged access to many markets
PM: Proximity to major flower markets	CEV: Contribution to export value
PDM: Potential domestic market	PP&E: Performance of flower producer and exporters
GFI: Government Financial and incentive packages	

ENHANCING FACTORS VS. FLOWER PRODUCERS AND EXPORTERS PERFORMANCE		AQL	CP	PM	PDM	GFI	EHPEA	PAM	CEV	PP&E
AQL	Pearson Correlation	1								
	Sig. (2-tailed)									
CP	Pearson Correlation	.190	1							
	Sig. (2-tailed)	.058								
PM	Pearson Correlation	.272**	.514**	1						
	Sig. (2-tailed)	.006	.000							
PDM	Pearson Correlation	.025	.183	.015	1					
	Sig. (2-tailed)	.808	.069	.885						
GFI	Pearson Correlation	.013	.481**	.426**	-.184	1				
	Sig. (2-tailed)	.901	.000	.000	.066					
EHPEA	Pearson Correlation	.171	.003	.338**	.110	.079	1			
	Sig. (2-tailed)	.089	.978	.001	.277	.435				
PAM	Pearson Correlation	.059	.316**	.409**	.044	.735**	.235*	1		
	Sig. (2-tailed)	.558	.001	.000	.667	.000	.019			
CEV	Pearson Correlation	.012	-.212*	.149	.388**	-.169	.557**	.215*	1	
	Sig. (2-tailed)	.908	.035	.138	.000	.093	.000	.032		
PP&E	Pearson Correlation	.398**	.424**	.331**	.066	.195	.485**	.053	.392**	1
	Sig. (2-tailed)	.000	.000	.001	.512	.051	.000	.604	.000	

**. Correlation is significant at the 0.01 level (2-tailed).; N=100

*. Correlation is significant at the 0.05 level (2-tailed).

ANNEXURE IV: CORRELATION OF INHIBITING FACTORS VS. FLOWER PRODUCERS AND EXPORTERS PERFORMANCE

Variable key terms abbreviation	
LLC: the state of being a landlocked country	SPF: Seasonality of production of flowers
IBN: Infrastructural bottlenecks	AC&C: Airfreight cost and capacity
SAIGE: Shortage of agricultural inputs and greenhouse equipment	AF&FC: Access to finance and foreign currency
ISW: Inaccessibility and shortage of water	IntComp: Intensity of competition
ASPR: Availability of a small product range	InlRF&S: International regulatory Frameworks and standards
NASDMF: Non-availability of strong domestic market for flower	PP&E: Performance of producers and Exporters

INHIBITING FACTORS VS. FLOWER PRODUCERS AND EXPORTERS PERFORMANCE		LLC	IBN	SAIGE	ISW	ASPR	NASDMF	SPF	AC&C	AF&FC	IntComp	InlRF&S	PP&E
LLC	Pearson Correlation (r)	1											
	Sig. (2-tailed)												
IBN	r	.243*	1										
	Sig. (2-tailed)	.015											
SAIGE	r	.102	.121	1									
	Sig. (2-tailed)	.313	.230										
ISW	r	.294**	-.045	.494**	1								
	Sig. (2-tailed)	.003	.658	.000									
ASPR	r	.275**	.329**	.054	.143	1							
	Sig. (2-tailed)	.006	.001	.596	.155								
NASDMF	r	.160	.361**	.215*	.310**	.084	1						
	Sig. (2-tailed)	.111	.000	.031	.002	.407							
SPF	r	.135	.418**	.201*	.260**	.240*	.224*	1					
	Sig. (2-tailed)	.180	.000	.045	.009	.016	.025						
AC&C	r	.112	.513**	.212*	.295**	.276**	.680**	.746**	1				
	Sig. (2-tailed)	.269	.000	.035	.003	.006	.000	.000					
AF&FC	r	.082	-.041	.233*	.397**	-.076	.077	.129	.005	1			
	Sig. (2-tailed)	.415	.683	.019	.000	.454	.445	.203	.962				
	N	100	100	100	100	100	100	100	100	100			
IntComp	r	.317**	.195	.000	.188	.272**	.102	.346**	.336**	.012	1		
	Sig. (2-tailed)	.001	.051	.996	.061	.006	.314	.000	.001	.906			
InlRF&S	r	-.088	-.053	.219*	.396**	-.077	.068	.121	-.007	.998**	.007	1	
	Sig. (2-tailed)	.382	.599	.028	.000	.444	.503	.231	.947	.000	.945		
PP&E	r	.045	-.070	-.128	.366**	-.033	-.016	.016	-.065	.759**	.189	.763**	1
	Sig. (2-tailed)	.658	.490	.204	.000	.748	.872	.875	.518	.000	.060	.000	

*. Correlation is significant at the 0.05 level (2-tailed). N=100

**. Correlation is significant at the 0.01 level (2-tailed).

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ANNEXURE V: ENHANCING FACTORS - COLLINEARITY STATISTICS

Model		95.0% Confidence Interval for B		Collinearity Statistics	
		Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.808	2.014		
	Availability & Quality of Land	-.015	.395	.791	1.265
	Civilized population and labor Force	-.028	.536	.476	2.101
	Proximity to major flower markets	.507	1.289	.506	1.976
	Potential domestic market	-.192	.225	.649	1.541
	Government Financial & incentive packages	-.104	.388	.289	3.460
	Support from the Ethiopian Horticulture Producers & Exporters Association	-.725	-.360	.547	1.829
	Privileged access to many markets	-.484	-.013	.329	3.039
	Contribution to export value	-.225	.142	.404	2.476

ANNEXURE VI: INHIBITING FACTORS-COLLINEARITY TEST

Model		95.0% Confidence Interval for B		Collinearity Statistics	
		Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.503	1.288		
	The state of being a landlocked country	-.103	.207	.654	1.529
	Infrastructural bottlenecks	-.064	.362	.568	1.760
	Shortage of agricultural inputs & greenhouse equipment	-.439	-.238	.669	1.494
	Inaccessibility & shortage of water	.189	.554	.457	2.187
	Availability of a small product range	-.215	.097	.774	1.292
	Non-availability of strong domestic market for flower	-.389	.057	.287	3.488
	Seasonality of production of flowers	-.296	.008	.248	4.026
	Airfreight cost and capacity	-.254	.443	.127	7.854
	Access to finance and foreign currency	-1.045	1.989	.003	6.088
	Intensity of competition	.046	.310	.741	1.350
	International regulatory Frameworks and standards	-1.976	2.582	.003	7.363

a. Dependent Variable: Flower Producers and Exporters Performance

IMPACT OF DEMOGRAPHIC VARIABLES ON QUALITY OF WORK LIFE: AN ANALYSIS ON POLICE PERSONNEL'S OF TAMIL NADU POLICE DEPARTMENT IN TIRUNELVELI CITY

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ABSTRACT
A good quality of work life is essential for an organization to continue to attract and retain efficient and skilled human resources as the success of any organization is highly dependent on how it attracts, recruits, motivates and retain its human resources. This study was intended to understand the concept of quality of work life and their impact on demographic variables of police personnel in police force. Several prominent factors that persuade quality of work life are skill discretion, task control, work and time pressure, hazardous exposure, work life balance, job stress and health and wellbeing with selected demographic variables. Census sampling method was used and sample size is 300. Data were analysed using simple percentage analysis, independent sample t test and regression analysis to test the formulated hypotheses. Finally, suggestions and conclusion are given from the perspective of police personnel to improve their quality of work life

KEYWORDS
quality of work life, police stress, job satisfaction, health & wellbeing, demographic factors.

INTRODUCTION
There is a growing recognition that work-environment factors affect health system performance (Graham S Lowe, 2006). Basically, the work environment factors affect the quality of work life, individual quality of work life outcomes, and organizational outcomes. The study mainly focuses on various factors such as work hours, schedules, time off, professional development and training, job quality, workload, job satisfaction, work team or unit, quality of supervision and management, organizational change, work-life balance, health and well-being, career plans and basic demographic and employment characteristics affect the work environment and work life of healthcare providers particularly nursing staff (Teresa M et el, 1996, Linda Flynn, 2007, L Dugdill and J Springett, 1994).

In the context of quality of work life, organizations have policies and benefits for proper employee valuation. Quality of work life is often considered in two directions, one is to removal of negative aspects of work and working conditions and other direction is the modification of work and working conditions to enhance the capability of employees and to promote behavior which important for individual and society (Kotze, 2005). According to Dessler (1981), quality of work life was seen as the level to which employees are able to satisfy their personal needs not only in terms of material matters but also of self-respect, contentment and an opportunity to use their talents make contribution and for personal growth. So it is very important for an organization to provide employees proper valuation which will satisfy them and will ensure the productivity.

Quality of work life is such a concept that indicates a balance both in personal and professional life of an individual. Therefore; it can be hampered if someone is not satisfied with his or her work life or family life. However; positive quality of work life experience is very important and it is directly interrelated with job satisfaction and productivity. It is a fact which also controls the mental health. Khani A, Jaafarpour M, and Dyrekvandmogadam.A explain QWL is essentially a multidimensional concept, and is a way of reasoning about people, work and the organization. It seems that the relationship between QWL and the degree of the nurse's involvement in their work is a critical factor in achieving higher levels of quality of care delivery. In health care organizations, QWL factors have recently been recognized to significantly influence the performance of staff members, and QWL also refers to strengths and weaknesses in the total work environment. Quality of Work Life (QWL) focuses on the degree to which registered nurses are able to satisfy important personal needs through their experiences in the work organization, while achieving the organization's goals, to make meaningful contributions to their organization.

RELATED STUDIES
Based on researcher's analysis numerical articles have been written on quality of work life. In case of Tirunelveli the research article on quality of work life on police department is very few. S.Khodadadi et al (2014) investigated the QWL dimensions effect on the employees' job satisfaction. In this study independent variables were permanent security providing, salary and benefits payment policies, development and promotion opportunity, and job independence, job satisfaction as the dependent variables. 114 employees selected randomly for this study and two questionnaires of "quality of work life" and "job satisfaction" were used for data collection and Data analysis was done by using SPSS and LISREL software. The results of the study showed that the salary and benefits' policies have a significant and positive effect on Shuhstar's Shohola Hospital employees' job satisfaction.

Gershon (2000) highlighting that Police job stress is believed to be one of the most stressful jobs and the officers are under the risk of psychosocial work stress. As stated, "This police work stress can adversely impact the delivery of effective law enforcement, as well as pose a threat to the safety of police officers, their co workers, their family and friends, and the general public".

Sever and Cinoglu (2010) found in their study that highly stressful officers are 4 times more likely to commit domestic violence. Further, they found that gender matters in domestic violence, as the male officers are more inclined to commit domestic violence compared to female officers. Finally, when officers are involved in negative and critical situations at work, they are more likely to act violently at home.

Gul (2008) studied law enforcement officers' depression on their profession and examined the stressors in policing. He found that officers that make violent arrests were more likely to feel negative or depressed about their work. In addition, he found that officers who attended a police funeral were more likely to feel negative or depressed about their profession and African American officers were less likely to feel negative or depressed about their jobs than whites. Finally, patrol officers were more likely to feel negative or depressed about their work compared to other ranks.

Buker and Wiecko (2007) conducted a survey research on civilian officers, police officers, and mid-level supervisors (a total number of 811 respondents) working for the Turkish National Police Organization. They found that the organizational factors are the most stressful ones among other causes of stress. Moreover, there are differences in some stressors depending on the size and structure of the department.

Kroes (1985) found that bad administration policies, job conflict, under load-overload work, shift work and line-of-duty situations, courts, and negative public image are some important factors and stressors which affect police family life negatively.

Patterson (2002) originate that officers with more education are more likely to report more organizational work events and greater stress. The paramilitary model of the organization is also the source of stress for highly educated officers that may feel that they are not given the opportunity to take part in decision making and contribute in the development. In addition, the higher ranking officers have reported more stress and working condition events. This might be because "Higher ranking officers have more administrative duties and supervise low ranking officers, while at the same time experiencing their own share of organizational events and situations, and consequently they experience more events and greater perceptions of stress".

Brown (1998) found in his study that women police and civilian personnel were asked about their exposure to various forms of sexual harassment 1802 women officers were included in this study. In all instances policewomen were more likely than civilian women to experience sexual harassment from male police officers. More police women than civilian women reported hearing generalized sexual comments about women's physical appearance, hearing unambiguous jokes, being posted for unwanted dates, being touched, stroked or pinched or been subjected to serious sexual assault.

Rajratnam (2007) initiate that post traumatic stress disorder (PTSD), depression and suicidal tendency were reported to be higher in police than in other municipal workers. Sleep disorders were highly prevalent in police officers. Sleep disorders affects physical health, emotional well being, mental abilities and performance. He also states that lack of sleep create serious health problems such as an increased risk of depression, obesity, cardiovascular disease and diabetes.

Kurtz (2009) accent that if the person is sexually harassed it decrease job satisfaction, organizational commitment, physical and mental health and lowers productivity and performance of the employees. Security of female police employees, negative attitude of male officers, rumours is a very prominent source of stress among female police officers. Therefore, both the internal organizational culture and external work environment are much less favourable to female officers. Less peer group support, PTSD, depression, suicidal tendency, sleep disorder are highly prevalent among police officers. Obesity, cardiovascular disease is also found in police employees. The death of a partner, having to take a life, making violent arrest in the line of duty is also considered to be the leading source of stress which affects the mental health of the police officer.

STATEMENT OF THE PROBLEM

Organization keep on concentrating quality of work life to communicate more skills and knowledge, motivating techniques, training methods, evaluate stress level and work environment towards their employees. Work is an integral part of everyday life, as it is our livelihood or career or business. Approximately employees working in organization spend around twelve hours daily in the work place that is one third of their entire life but here the police officers dedicate their entire life for the society and their safety. It does influence the overall quality of our life. This study has been undertaken in order to find out the opinion of police officers about their quality of work life in the organization. Also it helps to understand the impact of demographic factors on QWL.

NEED OF THE STUDY

Quality of work life of employees is more important in any organization. It helps to increase the productivity, efficiency and sense of belongingness towards the department. It aims to gain an insight into current working life policies and practices as well as work-life balance issues of employees.

1. This study helps the officers to convey their feelings and various factors to enrich their work life.
2. Secondly, this study helps the department to evaluate their employee's quality of work life.
3. It also helps to evaluate the Job satisfaction and Job stress level of police officers regarding their job.
4. It will also help to understand how good quality of work life helps the employees to work more effectively in their job.
5. This study helps to understand the importance of demographic variables also the relationship between demographic variables and qwl

RESEARCH OBJECTIVES

BROAD OBJECTIVES

- Impact of Demographic variables on Quality of Work Life: An Analysis on police personnel's of Tamilnadu police department in Tirunelveli city

SPECIFIC OBJECTIVES

- Determining the variables that affect the quality of work life of employees.
- Determining which factors plays the most significant role on quality of work life.
- Establishing hypothesis on the basis of the research work.
- Drawing a qualitative and quantitative conclusion on the basis of the survey.

CONCEPTUAL FRAMEWORK

A conceptual framework has been developed that is one of the relative construct of this study.

FIG. 1
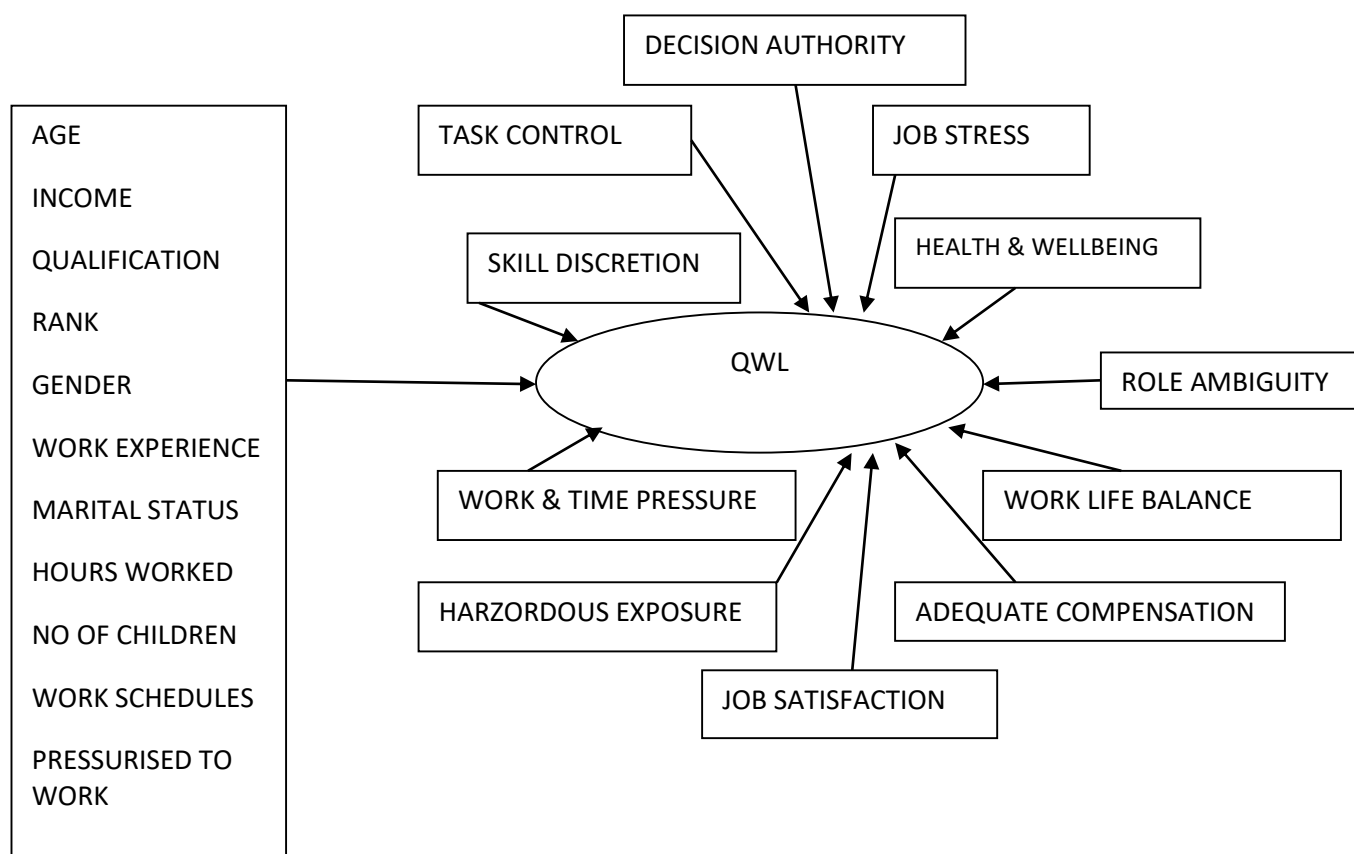
FACTORS CONSIDERED FOR THE STUDY

The factors such as skill discretion, task control, decision authority, role ambiguity, health & wellbeing, hazardous exposure, job stress, job satisfaction, work life balance, work and time pressure and adequate compensation determine the quality of work life.

HYPOTHESIS DEVELOPMENT

Based on research question following hypotheses has been developed for the study.

- H 1= there is no significant difference in the degree of influence of demographic variables, viz., gender, age, marital status, education, experience, income, hrs worked, no of children, work scheduled, pressurised to work and rank

RESEARCH GAP

From the literatures reviewed, the researcher identified the following gaps;

- ❖ Even though there are enormous studies conducted in QWL, still it is new to the police sector. Studies are fewer in India.
- ❖ Especially no studies conducted among police in Tirunelveli City.
- ❖ Most of the researchers analysed only female police officer's stress. But the present study aims to identify both (male & female) police personnel's QWL & Job Satisfaction.

RESEARCH METHODOLOGY

The type of research used in this article is of descriptive nature. Through this descriptive research, the article sought to determine the answers why, what, where and how questions of the existing employees in police sector and expectations. It also involves collecting information that explains people's beliefs, knowledge, attitude and behaviour (Fink 1995, Sommer &sommer 1996). Primary data was collected through structured questionnaire and personnel interview with the employees.

A total of 310 sample size considered to be the adequate for my study. Each and every response is checked thoroughly for incomplete and missing response. The questionnaire has two parts in were the first part contains demographic information. Table 1 gives a proper summary of this sort of information. In the second part, the questionnaire contains 65 items to construct the eleven dependent variables along with a independent variables in the study. The selected dependent variables are skill discretion, task control, decision authority, role ambiguity, health & wellbeing, hazardous exposure, job stress, job satisfaction, work life balance, work and time pressure and adequate compensation. A four point Likert scale (1=strongly disagree to 4=strongly agree) was used to collect data from the respondents. The questionnaire was outlined in English and Tamil and also understandable. Reliability analysis was done to identify the reliability of my study. Beside this, regression analysis, hypothesis testing was done for a proper justification and to draw an appropriate recommendation in the study.

DATA ANALYSIS AND FINDINGS

A)   DEMOGRAPHIC DATA ANALYSIS

From the below table it is inferred that most of the respondents in the survey were male (75%) were (22%) were female. It is found that most of the respondents (37 %) falls under the age of 31- 40 and a few of the respondents are 41-50 years old. It is established that most of the respondents (78%) are married. It is found that maximum numbers of the respondents are earning above Rs 40,000 (30%) as their monthly income and minimum numbers of respondents are earning less than 20,000-30,000 (9%) as their income. It is stated that most of the respondents have 15+ yrs (30.6%) work experience and minimum of 7-15 yrs. This table

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shows that they don't have any define working hours (77%) and (50%) respondents stated that they are working in rotating shifts. It is found that most of the respondents are Graduate (32%). It is stated that most of the respondents are accepted that they are pressurised to do extra work (67%). From the rank categories, there were (53%) who were working as constables. It is also assured that most of the respondents have two children (38%).

TABLE 1: DEMOGRAPHIC PROFILE OF RESPONDENT

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1.	GENDER		
	Male	232	74.8
	Female	78	25.2
	Total	310	100
2.	RANK		
	Constables	163	52.6
	Head Constables	106	34.2
	Sub-Inspector	34	11.0
	Additional Superintend	7	2.3
	Total	310	100
3.	WORK EXPERIENCE		
Below 4 yrs		56	18.1
4-7 yrs		70	22.6
7-15 yrs		89	28.7
15+ yrs		95	30.6
Total		310	100
4.	MONTHLY INCOME		
Below 10,000		56	18.1
10,000-20,000		83	26.8
20,000-30,000		27	8.7
30,000-40,000		52	16.8
Above 40,000		92	29.7
Total		310	100
5.	ACADEMIC QUALIFICATION		
Post Graduate		21	6.8
Graduate		99	31.9
Diploma		35	11.3
HSC		85	27.4
SSLC & Below		70	22.6
Total		310	100
6.	AGE		
20-25		51	16.5
26-30		70	22.6
31-40		115	37.1
41-50		31	10.0
50+		43	13.9
Total		310	100
7.	MARTIAL STATUS		
Married		241	77.7
Single		58	18.7
Divorced/widowed		11	3.5
Total		310	100
8. NO OF CHILDREN			
No children		76	24.5
One		115	37.1
Two		119	38.4
Total		310	100
9.	HOURS OF WORK		
8hrs		16	5.2
9hrs		31	10.0
10hrs		14	4.5
10+hrs		10	3.2
NO definite time		239	77.1
Total		310	100
10.	WORK SCHEDULE		
Day shift		46	14.8
Split shift		13	4.2
Irregular shift		98	31.6
Rotating shift		153	49.4
Total		310	100
10.	PRESSURED TO WORK		
Yes		206	66.5
No		104	33.5
Total		310	100

Source: Field Study (2015)

B) SECONDARY DATA ANALYSIS

A reliability analysis is commonly used to identify the internal consistency of the variables. However, cronbach's alpha is commonly used to test the reliability and the range of alpha coefficient value is in between 0 to 1. The higher value indicates the higher reliability (Hair, et at., 1992). A value more than.70 is significantly good measure for sufficient scale of reliability (Cronbach 1951, Nunnally 1987). According to the cronbach's alpha test the value of alpha in this study is 0.911 (table 2 & table 3) which is higher than the minimum acceptable value. Therefore 91.10% of data are reliable in this study. The reliable analysis has been done for dependent variables.

TABLE 2: SCALE STATISTICS

Mean	Variance	Std. Deviation	N of Items
174.5286	903.709	30.06176	65

TABLE 3: RELIABILITY STATISTICS

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.911	.925	65

TABLE 4: RELIABILITY TESTS

Factors Name	Items	Values
Skill Discretion	6	.776
Decision Authority	4	.618
Task Control	4	.776
Work and time pressure	5	.790
Role Ambiguity	5	.879
Adequate compensation	5	.836
Work life balance	5	.694
Job Satisfaction	7	.794
Hazardous Exposure	6	.825
Job Stress	10	.869
Health & Wellbeing	8	.851

i) HYPOTHESIS TESTING

To conduct the hypothesis test a regression analysis has been done and eleven factors which have effect in demographic factors are considered. However, details of the influence of independent variable over dependent variable have been shown in table 7.

According to the analysis, the significant value for the hypothesis is 0.007, which is less than level of significance 0.05. So null hypothesis is rejected and it is concluded like there is an impact on age and qwl. Rank affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .000, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of rank on qwl. Work experience affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .022, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of work experience on qwl. Monthly income affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .000, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of monthly income on qwl. Educational qualification affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .005, which is equal to level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of educational qualification on qwl. Age affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .016, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of age on qwl. Marital status affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .000, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of marital status on qwl. No of children affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .023, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of no of children on qwl. Hours of work affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .025, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of hours of work on qwl. Work scheduled affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .000, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of work scheduled on qwl. Pressurized to work affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .000, which is less than level of significant value 0.05. So null hypothesis is rejected and it is concluded like there is an impact of pressurized to work on qwl. Exercise regular affects the quality of work life of the employees. According to the analysis, the significant value for the hypothesis is .890, which is higher than level of significant value 0.05. So null hypothesis is accepted and hence it is concluded like there is no impact on qwl.

ii) REGRESSION ANALYSIS

From the regression analysis (table 5), the R square tells the goodness of fit and the degree of association between the dependent and independent variables. In this case, R square value is .447 and it shows a good fitness. The value of F (20.528) depicts the significance of R square, which further means that regression as a whole is significant expects exercise regularly. Hence the hypothesis is rejected, which means that there is significant difference in the degree of influence of demographic variables on QWL of police.

Considering the Beta value (table 7), it is clear that the age explains the maximum proportion of variation for quality of work life, followed by monthly income and work experience. The 't' value and the significance level indicate that age, gender, rank, experience, qualification, income, hours works, pressurized to work significantly contribute to the quality of work life. Only single factor named exercise regular has no significance impact on quality of work life. Probably, respondents have given less notice on it.

TABLE 5: REGRESSION ANALYSIS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.669[a]	.447	.430	.34230

a. Predictors: (Constant), pressurised to work extra, marital status, academic qualification, gender, monthly income, rank, usual work schedule, age, work experience

TABLE 6: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28.842	12	2.403	20.528	.000[b]
	Residual	34.656	296	.117		
	Total	63.498	308			

a. Dependent Variable: QWL

b. Predictors: (Constant), exercise regularly, gender, no of children, academic qualification, pressurised to work extra, rank, monthly income, hours of work, marital status, usual work schedule, age, work experience

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TABLE 7: VARIABLES INFLUENCING QWL OF POLICE

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.234	.269		4.586	.000
	Gender	.095	.050	.091	1.907	.007
	Rank	.271	.029	.565	9.381	.000
	Work experience	.064	.037	.161	1.746	.022
	Monthly income	-.062	.018	-.210	-3.548	.000
	Academic qualification	.027	.021	.073	1.270	.005
	Age	-.080	.033	-.216	-2.414	.016
	Marital status	-.109	.041	-.153	-2.652	.008
	No of children	.026	.021	.067	1.220	.023
	Hours of work	.020	.020	.055	.987	.025
	Usual work schedule	.115	.015	.433	7.816	.000
	Pressurised to work extra	.294	.052	.307	5.642	.000
	Exercise regularly	.007	.052	.007	.138	.890

a. Dependent Variable: QWL

LIMITATIONS OF THE STUDY

This research study has some limitation and the major limitation factor for this report is complexity of the topic. Since the survey will be conducted on questionnaire therefore it is a great challenge to ensure the actual validity of the response. In some cases, the topics were not understood by the employees who have minimal idea about the quality of work life. Respondents are selected only from Tirunelveli city; therefore, this research does not reflect the perception of employees of each corner of Tirunelveli. However, unwillingness of respondents was another limitation of my study.

CONCLUSION AND RECOMMENDATION

This research study is tried to examine the factors that have an impact on quality of work life of employees of police sector in Tirunelveli city. The eleven factors are. skill discretion, task control, decision authority, role ambiguity, health & wellbeing, hazardous exposure, job stress, job satisfaction, work life balance, work and time pressure and adequate compensation The outcome of the research indicates that eleven out of twelve demographic factors (gender, age, income, education, experience, rank, marital status, no of children, hours of worked, work scheduled and pressurized to work) have significant influence on quality of work life and the remaining factor (exercise regularly) has no significant influence on quality of work life. From the finding, it can be recommended that quality of work life is such a critical concept that might be disturbed due to dissatisfaction of mind set. However, the organization can focus on their employee's welfare by providing them a better and attractive compensation policy, optimum work load and by providing a superior work environment. The police department should create a career growth opportunity within their environment that may lead to a better performance and therefore a better productivity. Moreover, participation management will increase the enthusiasm of employees as they will have an opportunity to participate with their ideas. It may be concluded that quality of work life of employees is related to an individual's expectation of different characteristics of the job and perception of how much is attained.

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STRATEGIES IMPLEMENTED IN ORGANIZED RETAIL SECTOR

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ABSTRACT

This paper throws light on organized retail and marketing strategies to enhance the organized sale. The paper deals in detail about organized sale in India statistically with the help of charts and figures, whereas it also discusses role of marketing strategies for promotion of sale at shopping malls. The paper scheme has introduction with literature review showing organized retail sector with statistics, concluding with marketing strategies.

KEYWORDS

marketing mix, organized retails, shopping malls, strategy, tenant mix.

1.   INTRODUCTION

Retailing sector in India has seen a vast transformation from traditional retailing to modern retailing during last decade. The traditional retail consists of small retailers like local Kirana shops, general stores, medical stores, footwear stores, apparel shops, hand-cart hawkers and footpath vendors. As per investment commission of India, there are 15 million such retail outlets in India. As the economy has started growing in India, retail sector has also started modernising and growing. Some of the major industrial houses like Reliance Industries, Bharti group, Aditya Birla group and Tata Trent have entered this sector. Organised retail's share estimated around 10% to total retail in the year 2010 is very low compared to that of developed countries like U.S.A, U.K., France and Germany, where the share of organised retail is around 75-80%. Hence it is expected that the growth of organised retail in India is going to be high in future. Amongst organised retail shopping malls are becoming attractive destinations for retailers and shoppers. In 1999, India had only 3 malls. In 2010 there were 190 malls and at present it is believed that there are around 280 malls in the country. As it is clearly evident, number of malls has gone up tremendously over the years. However, the growth story also has thrown up some hurdles. During the boom days, many developers jumped into the fray of mall development. High economic growth, increasing size of middle class, high urbanization rate and availability of personal credit have all contributed to large number of consumers shopping at the malls. This encouraged many developers jump into the bandwagon and start building malls. There was a rush to be there amongst the many malls which then had high footfalls. There was no proper planning, research, marketing and positioning strategy in place before getting into the mall business for many developers. This resulted in many of the malls not performing up to expectations. Some have high vacancy levels, some have witnessed retailers leaving for the competitors, some have low footfalls and a few malls have closed down. However, the malls which were strongly positioned are still doing well and are fully operational. This research has been conducted to find out the existing positioning strategies of malls, factors influencing positioning of malls, perceptions of shoppers regarding the positioning strategies and to bring out a model to help decision making by mall developers, retailers and shoppers.

2.   LITERATURE SURVEY

Dr. Ramaswamy and Dr. Namakumari S.[1] wrote a book mainly related with marketing management. Some of the important points related to strategic planning are discussed that, it is recommended for managers and students seeking knowledge regarding marketing management, strategic planning and decision-making. Students can learn to apply strategic tools and decision-making frameworks, in actual businesses or corporate situations from this book. Philip Kotler [2] wrote a book is mainly related with marketing management. The book discusses strategic marketing management speaks of the markets of the 21st century and how they are affected by the forces of demand and supply. The reader is taken through the various factors affecting the prices of goods and services such as, the product mix, the distribution channels and the shift and movement in demand and supply. Michael Levy, Ajay Pandit [3] in their book related with marketing management discussed some important points on model of strategic decision-making. The texts organization around a decision-making process allows readers to learn about the process of strategic decisions first before moving on to decision implementation. The implementation decisions are broken down into merchandise management decisions and store management decisions.

Min-Young Lee, Kelly Green Atkins, Youn-Kyung Kim, and Soo-Hee Park [4] studied comparison between demographic composition and retail attributes for four competing retailer formats: (a) regional malls, (b) supercenters, (c) category killer, and (d) warehouse clubs. Vipul Patel and Mahendra Sharma [5] made an attempt to study the motivations that people go shopping in mall. A mall intercept survey was conducted to study the shopping motivation of India shoppers. This study identified three utilitarian convenient shopping, economic shopping and achievement shopping and six hedonic shopping motivations shopping enjoyment, gratification shopping, idea of shopping, shopping for aesthetic ambiance, roll shopping, and social shopping.

Satnam Kour Ubeja and D. D. Bedia [6] study investigated the customer satisfaction with respect to sales promotion mix in shopping malls and to study variations in the customer satisfaction with respect to sales promotion mix across different demographic variables. Jeanne Heitmeyer and Kennita Kind [7] got the results which provide a better understanding of the potential success of commercial retail centres in open-air malls. This cross-generational study found consumers are aware of the open-air mall. They enjoy shopping and purchasing merchandise in this new setting. Attractive exteriors, including lush tropical landscapes, appeal to Florida consumers. Incorporation of discount and department stores may influence the senior citizen consumers to increase their spending as these are their preferred retail formats. By providing an innovative shopping experience for consumers and meeting consumer needs, increased profits for both retailers and mall owners may be expected.

Nilesh Arora[8] research concludes that organized retailing is accepted well and majority of the respondents perceive it to be either better or equally good as traditional retailing. People have a favourable inclination and perception towards the modern retail formats as they like shopping from an organized retail outlet or a shopping mall. The research concludes that people prefer a combination of both a traditional retailer as well as a modern retailer for satisfying their day to day requirements. Arun S. Poojari [9] study reveals that in the Indian context, demographic factors of consumers have an influence on buying behaviour of people towards emerging shopping malls. Demographic factors of Gender, Age, Monthly Income, Occupation, Marital status and Qualification influence the attitudes and perception of buyers toward shopping malls. It was found that Demographic factors majorly influence the buying behaviour of people from traditional store to organized retail stores. Even entertainment & parking space given by the malls plays a vital role in the working of malls.

3. ORGANIZED RETAIL

In 2013 India ranked at the 2nd most attractive FDI destinations [10] followed by China. It has been seen that from year 2000 to 2011 FDI in flows to India is about US $ 194,814 million. FDI in India is controlled by the Government of India under Foreign Exchange Management Act (FEMA) 1999. The Ministry of Commerce and Industry, Government of India is agency for motoring and reviewing FDI policy. The FDI policy is notified by the Secretariat for Industrial Assistance (SIA), Department of Industrial Policy and Promotion (DIPP). The rule has been formulated by DIPP's for FDI is [11].

TABLE 1: SALES IN RETAILING CATEGORY 2006-2011 (in billions INR)

Sr. No.	Year	Store Based Retailing	Non-Store Based Retailing	Total Retailing
1	2006	8,540	40	8,580
2	2007	9,650	55	9,705
3	2008	10,860	60	10,920
4	2009	11,980	80	12,060
5	2010	13,590	90	13,680
6	2011	15,520	120	15,640

Source: Food & Agribusiness Strategic Advisory and Research (FASAR) Team - YES BANK and ASSOCHAM [11]

CHART 1 (Sales in Retailing Category)
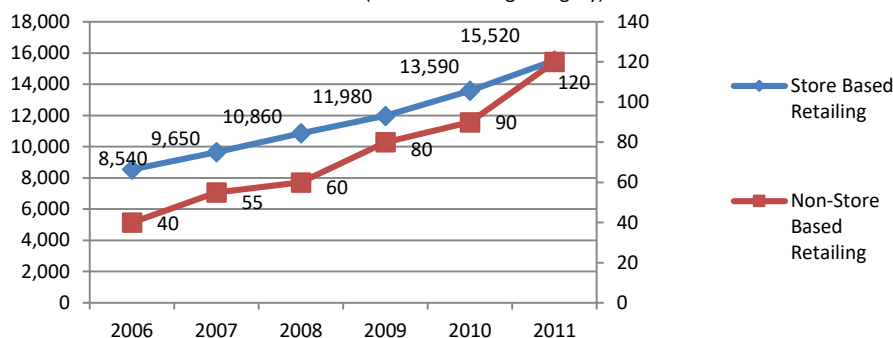
Store based retailing comprises nearly 99% of all retail sales in 2011. Store based retailing is seen growing by around 14% during 2010-11 whereas the growth of non-store retailing is about 33%. It has been observed that the overall retail sector had growth of about 14% during 2010-11. Calculating CAGR value for Store based retail, comes to be 12.69% for store based retail whereas for Non-Store based retail we get the value 24.57%. For whole overall retail CAGR value comes to be 12.76%.

Over the period of 2006-11, store-based retailing grew at a CAGR of 12.6% as compared to 24.5% for non-store retailing whereas the CAGR for the retail sector as a whole was 12.7% for the period 2006-11. Overall, store-based retailing has grown by 81.2% in absolute terms in the period 2006-11 and non store retailing has grown by a phenomenal 200% during the same period. The retail sector as a whole has grown by 82% in absolute terms from 2006 to 2011.

TABLE 2: PURCHASE BASED ON NATURE OF LOCATION

Sr. No.	Location	Organized (%)	Un-Organized (%)
1	Urban	65	28
2	Semi-Urban	23	53
3	Rural	13	19

Source: Food & Agribusiness Strategic Advisory and Research (FASAR) Team - YES BANK and ASSOCHAM [11]

CHART 2 (Purchase Based on Location - Organized)
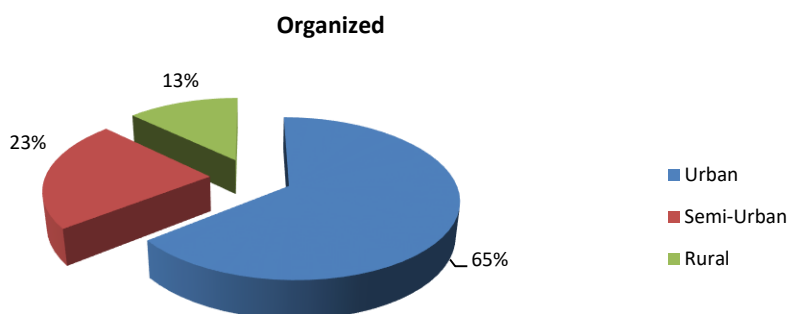
CHART 3 (Purchase Based on Location – Un-Organized)
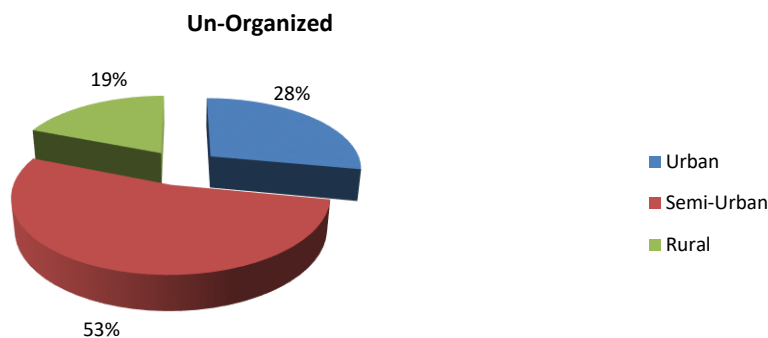
Un-Organized

Retailing is one of the basic method on which Indian economy depends. It is about 15% of its GDP [12]. The retail logistics industry provides employment to about 3.3% of Indian population. Retail industry is mainly divided into organized and unorganized sections [12] [13]. In context of Indian market, around 97% of retailing is unorganized. Around 80% of sale at supermarket consists of processed products. Supermarkets usually buy from poor farmers who don't have equipment and irrigation in their farms. They provide access to infrastructure like cold chain facilities to small farmers. Farmers earn 20% to 50% more because of supermarkets.

4. DIFFERENT STRATEGIES USED IN ORGANIZED RETAILS

1. TRADE AREA AND SITE SELECTION: A trading area is defined as a geographical area containing the customers of a particular firm for specific goods or services. Trade area analysis is a methodology a process a technique that provides a basis for understanding, visualizing and quantifying the extent ok known approximated trade areas. Selection of mall site therefore requires a sound area analysis which include local market opportunities competing business and barriers that would discourage consumers from visiting the site.

2. TENANT MIX DECISION: Tennant mix refers to the combination of retail shops occupying space in a mall. A right tenant mix would form an assemblage that produces optimum sales rents service to the community and financial ability of the shopping mall ventures. A mall depends on the success of its tenants which translates to the financial feasibility of the tenant in the mall. Generally, it is seen that there are two types of consumers visiting malls. They are (1) focused consumers (2) Impulse buyers. Therefore, the relative and quality time is spent by the focused buyers.

3. MALL PROMOTIONS: Promotion activities and events in a mall form an integral part of mall management. The malls should emphasize on the following promotional activities.

- Activities like food festivals, handicraft exhibitions and celebrity visits increase the footfalls and ultimately in turn increase sales volume and revenue.
- Organizing cultural events helps the mall in attracting consumers to a mall.
- Developers can also work on drafting marketing strategies for individual malls so that they can meet the needs of the local consumer base and the challenges of local and regional competitors.

4. FACILITY MANAGEMENT: This refers to the integration of people place, process and technology in a building. It also refers to optimal utilization of resources to meet organizational needs. In a broader sense this refers to inclusion of infrastructure ambience and traffic management.

a) **INFRASTRUCTURE MANAGEMENT**: - Infrastructure Management refers to the Management of facilities provided to the tenants within the mall. This includes to the adequate power supply safety issues in case of emergency and miscellaneous issues related to signage, water supply, sanitation, etc. Infrastructure management also includes risk management issues like measure asset liability and environmental and emergency and evacuation training.

b) **AMBIENCE MANAGEMENT**: The overall shopping experience provided for consumes becomes an important factor for the success of any mall ambience management. This includes management of parks fountains and overall look of the mall. The management should know that, a mall not just a place for shopping but it is also a place where people spend their leisure time in favourable, lush green landscaping with seating faculties and the with the presence of food and beverage inside or outside the mall. This in turn will increase the footfalls.

c) **TRAFFIC MANAGEMENT**: Traffic Management includes managing foot traffic into the mall and parking faculties. Foot traffic management involves crowded management inside the operational area of a mall. The flow of people is related to the design of the mall and the spatial distribution of its tenants.

5. FINANCIAL MANAGEMENT: Professional financial management of a mall as a business venture is a must mall management also covers financial management, which involves monitoring and controlling of various issues such as cash receipts and collection of income including rentals, service charges, car park receipts, electricity and other utility income developing accounting system to track the ageing of debts payment delay patterns, bad debts and payment of all invoices and expenses developing standard financial templates so that a detailed annual property is prepared at times.

5. CONCLUSION

This research paper tries to find the role of marketing strategy in customer retention of shopping centre and also shows the role of organized retail sector in a common man's life. Good marketing strategy can help to retain the repeated customers in the shopping centres. Moreover, the components of "Tenant Mix & Leisure Attractions", "Location/Accessibility" and "Customer Service Provided" play the critical roles for sustaining the customer retention in the shopping centre with reference to the opinions of repeated customers. Owing to the rapid growth of economic development and the violent competitions among the shopping centres, the marketing strategy becomes an important weapon to attract new customers and retain current customers to the shopping centres. It is an overall marketing plan aiming to achieve the customers' needs by influencing the marketing mix. The elements of marketing mix are essential to develop a successful marketing strategy. Traditionally, it consists of 4P's i.e. Product, Price, Place and Promotion, which then further extends to specific adaptations for service marketing i.e. 7P's service marketing mix model by including the additional 3P's i.e. People, Physical Evidence and Process. While considering FDI in retail traditional system of markets has to be modernized. Associations and cooperatives societies of unorganized retailers are to be made so as to monitor the pricing issues and curbing monopolies. Banking solutions like credit availability has to be provided to unorganized retailers and farmers.

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EVALUATION OF CUSTOMER RELATIONSHIP MANAGEMENT IN APSRTC: A CASE STUDY OF EMPLOYEES OF GUNTUR DISTRICT

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ABSTRACT
Customer Relationship Management plays an important role in any organization. The concept is useful to understand the level of satisfaction of Employees and efforts made by all types of organizations to retain the employees. Transport Industry is not an exception to this. The transport industry is operating with both Government owned undertakings and private transport operators. Both employees and commuters are the important elements of transport sector. In this paper an attempt is made to present the views of employees on evaluation of satisfaction of employees towards and transport services of APSRTC in Guntur District.

KEYWORDS
customer relationship management, customer orientation, marketing orientation, relationship marketing.

1. INTRODUCTION
Today's leading companies have one common aspect i.e., holding a strong customer base and heavy commitment to marketing. These companies have apassion for satisfying customer needs in well- defined target markets. The aim of marketing is to build and manage profitable customer relationships. Marketing seeks to attract new customers by promoting superior value and to retain and grow current customers by delivering satisfaction. Marketing operates in a dynamic global environment that can quickly make yesterday's winning strategies obsolete. To continue success, companies must be strong market focused.

Marketing is used to create the customer, to retain the customer and to satisfy the customer. Customer as the focus of its activities, marketing management is one of the key elements of business management. The changes in marketing were due to mature markets and overcapacities during the past two decades. Companies shifted the focus from production to the customer in order to stay profitable.

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)
Customer Relationship Management (CRM) is one of the emerging concepts in modern marketing. The origin of CRM has it deep roots since 1956 in the form of segmenting the customers into discrete groups. Even though the concept of CRM emerged way back, it is only during the last fifteen years the concept of CRM had an' important bearing on the business (Nairn, 2002). The emergence of CRM concept is due to the relationship marketing focus, specifically one-to-one marketing (Peppers & Rogers, 1993; Peppers et al., 1999) by the business firms and the market orientation by the business firms, i.e., collecting, analysing and disseminating huge quantum of customer information. These two important focuses helped in creation of CRM technology. The reasons for the speedy growth of CRM can be ascribed to the following;
a)　Cutthroat competition among the business firms for the valuable customers,
b)　Economies in retaining customers and getting life-time value from them and
c)　Technological breakthroughs (Buttle, 2004; Goodhue et al., 2002; Karimi et al., 2001; Ling & Yen, 2001; Winer, 2001).

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION: A PROFILE
Andhra Pradesh State Road Transport Corporation (APSRTC) is the First Nationalized bus transport undertaking in the country. It has its origin in June 1932, when it was established as "Nizam State Rail and Road Transport Department (NSR-RTD)". Andhra Pradesh State Road Transport Corporation (APSRTC) under the present name was established on 11th January 1958 in pursuance of the Road Transport Corporations Act 1950. It was a wing of Nizam State Railway in the erstwhile Hyderabad State, with 27 buses to 19,286 buses, 166 employees to 1,16,547, with 766 bus stations, 212 depots and 1,880 bus shelters as on 2006.

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION (APSRTC) AT GLANCE AS ON 31-10-2016

TABLE 1.1

1	Number of Vehicles including Hired (As on 31-10-2016	11,912
2	Number of Employees (As on 31-10-2016	57,651
3	Capital contribution from Govt.Sate & Centrl (Rs.Crs)	201.27
4	Number of Depots	127
5	Number of Zones	4
6	Number of Regions	12
7	Total Bus Stations (including 242 Mandal Bus Stations)	426
8	Number of Bus Shelters(including Janmabhoomi)	790
9	Average Daily Earnings (Rs in Lakhs)	1254.93
10	Average Daily Volume of Operation (Kms in Lakhs)	46.42
11	No. of Passengers Transported /day (Lakhs on Oct-2016)	69.75
12	Total No,of Routes (on Oct-2016)	3908
13	Villages Connected	14,123
14	Villages could not be Connected	3,669
15	Number of Depots Computerized	127
16	New Buses Addl. Augmentation	3
17	Buses allotted for Replacement	389

ABOUT GUNTUR DISTRICT

Guntur is a city in the Guntur district of the Indian state of Andhra Pradesh. It is a municipal corporation and the administrative headquarters for Guntur district. It is also the mandal headquarters of Guntur mandal in Guntur revenue division. The city is the second largest by area and third most populous in the state with a population of 743,354 and with an urban agglomeration population of 1,028,667. The city is situated on the plains and located 40 miles (64 km) to north of the Bay of Bengal. River Krishna is the main source of water for the city through channels and tributaries.

APSRTC organization Head Quarters are located at RTC House in Pandit Nehru Bus Station of Vijayawada. APSRTC is divided into Four Zones with twelve Regions. They are Nellore, Kadapa, Vijayawada and Vizianagaram. In Vijayawada Zone West Godavari, Krishna and Guntur Regions.

In Guntur Region two Divisions which are Guntur Division and Narasaraopt Dision. In Guntur Division 7 Depots which are Guntur-1, Guntur-2, Repalla, Tenali, Mangalagiri, Baptla and Ponnur. In the Narasaraopt Division 6 Depots which are Narasaraopt, Macherla, Chilakaluripet, Sattenapalli, Piduralla and Vinukonda.

APSRTC GLANCE OF GUNTUR REGION

TABLE 1.2

1.	Total Depots	:	13
2.	Total Buses including Hire Buses	:	1089
3.	Average Daily volume of Operations (Kms)	:	4.77 Lakhs
4.	Average Daily Earnings	:	Rs.35 Lakhs
5.	No.of Passengers Passengers Transported Daily	:	6.53 Lakhs
6.	Total No. of Routes	:	352
7.	Total No. of Employees	:	6,212
8.	Bus facility available to Villages	:	653
9.	Bus facility not available to Villages	:	74

Source: Standing Board at APSRTC, Guntur Regional Managers Office

2. REVIEW OF LITERATURE

INSURANCE

Robert E. Morgan (1993)[1] et al in their empirical study examined that in UK life insurance there exists significant difference in the implementation of relationship marketing at service encounter and standard bench level.

Abolghassem Asheri (2006) [2] found that the insurance companies are able to develop custom-design policies which may fit the individual needs of customers by making use of advancements III communication and information technology. These technological developments abled the insurance companies to access and process the customer information quickly and deliver the needed services to them. As customer retention is very important, issuing loyalty cards and digital cards to the health insured will save their time in hospital and they will be hospitalized quickly and finally will lead to their more satisfaction from the system.

BANKING

Patrick Amofah (2005)[3] et al conducted a research on three Sweden banks regarding the CRM objectives, implementation strategies and initiatives undertaken. The study reveals that these three banks have considered customer identification, customer segmentation, customer interaction and customization as the important strategic initiatives. The important objectives stated by these banks are enhanced profitability, reduction in cost, customer retention and strategic impact objectives. These banks believe that these initiatives and objectives will improve the overall performance of the organization in long run.

PHARMA AND HOSPITALS

By taking pharmaceutical industry as an example L. Jean Harrison-Walker (2003)[4] et al. suggested that in the light of salesperson defection companies can consider the "bridging strategies," which can be used as alternative relationship strategies between customers and their sales executives. These bridging strategies can be more effective in retaining customers in spite of salesperson defection.

Dr. K.Elangchezhian (2006)[5] et al through their empirical research found that CRM 'practices resulted in improvement in occupancy of beds in the hospitals and also the revenue for patients. Unlike manufacturing and consumer service organizations, in health care sector, customer involvement in product design and development is very much negligible and the design and delivery of health care services has to be done by the expert health care professionals. This results in less motivation from the side of customers in participating in the process of relationship programmes.

TOURISM

Maryam Sotoudeh (2006)[6] found that no significant difference in the CRM implementation factors according to "job position" and "customer relations perspective" in tourism SMEs. The study also felt that poor communication is the important barrier for CRM implementation. Also, internal problems like lack of specialized and skillful human resource or insufficient budget cause the obstacles for CRM implementation.

SOFTWARE SERVICES

Shruthi, V.K. (2011) et al[7] observed that CRM practices of software service firms are more structured and organized. They do adopt formalized and intensified practices of account management to grow the account. From the point of view of Indian software service firms, CRM is a strategic tool which can be used to understand and profitably manage the customer relations.

TELECOMMUNICATIONS

Ronald Batenburg (2007) [8] et al identified that there exists strong correlation between technology adoption of companies and its customer relationship management performance by experimenting with Caribbean telecommunications firm and a Dutch insurance company. The CRM adoption of a business can be identified with its business and information technology alignment framework.

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EXPORTS

Catherine Phambuka (2011)[9] made an attempt to suggest the African exporters in conducting effective foreign trade. His study indicates that relationship building can benefit the African exporters in information sharing, pace of innovation diffusion, reduction in costs and effective joint marketing decisions and actions, if it could build and maintain relationships with rest of the world.

3. METHODOLOGY

NATURE & SCOPE OF THE STUDY

Reflecting the nature of the study following the glance the present study's frame of reference viz., product and service sectors "CRM objectives", the "Management of CRM "and finally, "how organisations evaluate the effectiveness of their CRM ". The three aspects are co-existing and thereby interdependent. The nature of the study is descriptive in nature.

The Scope of the study is limited to evaluation of Customer Relationship Management Practices in APSRTC with reference to Employees in Guntur District. The scope of the study is also restricted to the various issues relating to the planning, implementation of CRM practices in APSRTC.

OBJECTIVES OF THE STUDY

The broad objective of the study is to analyse the customer relationship management in APSRTC with reference to Guntur District.

The following are the specific objectives of the study.

1.   To study the shift of relationship marketing from transactional marketing.
2.   To present the conceptual framework relating to customer relationship management.
3.   To analyse the CRM practices followed in APSRTC with special reference to Guntur District.
4.   To elicit the views of Employees on CRM practices followed by APSRTC in Guntur District.
5.   To offer findings, suggestions and conclusions of the study.

SAMPLE SIZE

The study was conducted within 13 APSRTC depot's of Guntur district, from among these depot's there are 6212 employees and 6.53 lakhs customers/ commuters / passengers travelled on an average per day.

The calculated size of sample for a population of 6212 employees with 5 percent i.e., 310 and the passenger/customers/commuters 6.53 lakhs with 0.1% i.e., 653. The researcher has taken as a sample size.

4. DATA ANALYSIS

TABLE 4.1: EXPERIENCE

Experience (in years)	No. of Respondents	Percentage (%)
Below 10	09	3.00
11 – 20	43	14.00
21 – 30	236	76.00
More than 31	22	7.00
Total	**310**	**100.00**

The Information relating to experience of respondents is given in table 4.1. According to it nearly 76% of respondents are having are experience of between 21 – 30 years. The respondents whose experience is near than 31 years below 10 years are very less in number.

TABLE 4.2: DEPARTMENTS

Departments	No. of Respondents	Percentage (%)
Personnel	65	21.00
Accounts	16	05.00
Traffic	174	56.00
Mechanical	22	07.00
Others(Delivers &Contractors)	33	11.00
Total	**310**	**100.00**

The department wise data of respondents is given in Table 4.2 About 56% of the respondents are working in Traffic department and very few are working in Personnel, Accounts, Mechanical and other departments.

TABLE 4.3: DESIGNATION

Level	No. of Respondents	Percentage (%)
Top	09	3.00
Middle	22	7.00
Lower	279	90.00
Total	**310**	**100.00**

The Cadre / Designation wise data of respondents shown in table 4.3 about 90% of respondents are in lower category and very less number are in top and middle Categories.

TABLE 4.4: OPINION ARE RELEVANCY OF CRM TO APSRTC

Response	No. of Respondents	Percentage (%)
Yes	273	88.00
No	37	12.00
Total	**310**	**100.00**

The details of respondents according to opinion on the relevancy of CRM to APSRTC are shown in Table 4.4. According to it 88% of the respondents feel that CRM is relevant to APSRTC and 12% of the respondents feel that it is non-relevant to APSRTC.

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[9] Catherine Phambuka-Nsimbi (2011), "Relationship building as a marketing strategy: A conceptual guide for African Exporters", Indian Journal of Marketing, Volume 41, Number 8, August 2011, pages 3-10

TABLE 4.5: AGREEMENT WITH VIEWS OF CRM

	Statement	5	4	3	2	1
a)	Is necessary in the context of increasing competition.	21	10	-	-	-
b)	Creates a favorable public image in the long run.	22	7	1	-	-
c)	Helps in maintaining as a viable industry in the society.	18	12	-	-	-
d)	Is very much essential as the expectations of the society from the APSRTC Services are increasing.	19	11	-	-	-
e)	Is important in view of the globalization of the Indian Economy.	12	12	3	1	1
f)	Gives more power to APSRTC to gain leadership	12	10	5	2	-
g)	Is compulsory for the transport industry (APSRTC) as it is already equipped with necessary resources.	15	8	5	1	-
h)	Is a moral responsibility of the transport Industry (APSRTC).	17	8	1	4	-
i)	Effects efficiency and reduces the profits.	4	4	2	5	12
j)	Cannot be obligatory.	4	3	3	10	8
k)	Dilutes the primary economic objectives and effects economic performance.	7	4	1	11	6
l)	Cannot be undertaken as the Executives/Officers lack perception and skill.	5	7	3	10	5
m)	Is not the job of APSRTC as it is accountable to Government and general public	5	5	1	8	10
n)	Is an undesirable exercise as many of the services are incurring losses.	5	5	-	8	11
o)	It diverts attention from more important aspects of profits and employee welfare.	8	3	3	7	8
p)	Is a voluntary activity and not the job of the Organization.	5	3	1	6	14

5-Strongly Agree; 4-Agree; 3-Uncertain; 2-Disagree; 1-Strongly Disagree
The details of agreement in the view of CRM are presented in table 4.5. According to it, majority of respondents have given positive response to the statements:
➢ Is necessary in the context of increasing competition.
➢ Creates a favorable public image in the long run.
➢ Helps in maintaining as viable industry in the society.
➢ Is very much essential as the expectations of the society are increasing.
However, for the negative statements about CRM, the majority of respondents disagree with them. The statements like
➢ Cannot be obligatory.
Diverts attention from more important aspects of profits and employee welfare.

TABLE 4.6: VIEWS AND ASPECTS OF CRM

	Aspects	No. of Respondents	Percentage (%)
a)	Retention of existing key Commuters in the APSRTC.	50	08.00
b)	Acquisition of new Commuters.	44	07.00
c)	Creation of complete Commuters database.	50	08.00
d)	Provision of Help-line, Commuters call centres, Websites etc.	56	09.00
e)	Decrease of general and marketing costs.	12	02.00
f)	All the above.	408	66.00
	Total	**620**	**100.00**

* Multiple answers are allowed
The information relating to views and aspects of CRM shown in Table 4.6. About 66% of the respondents have given positive response for all the above aspects like retention of existing key commuters, acquisition of few commuters, provision of helpline and other centres etc.

TABLE 4.7: IMPORTANT CRM OBJECTIVES

	Cost Saving Objectives	3	2	1
1	Decrease in Marketing Administrative costs	24	10	6
2	Reduction in Sales expenses	17	10	8
3	Increase in Employees Productivity	21	8	2
	Revenue Enhancing Objectives			
4	Ability to improve income.	24	8	-
5	Better Information for better Management	22	10	3
6	Secure Service.	22	9	3
	Strategic Impact Objectives			
7	Improved commuter satisfaction rate	29	7	-
8	Forecasting the global developments and implementing the same in APSRTC.	23	9	4
9	Improving the Channel Management to improve Services	22	7	2

3-Most important; 2-important; 1-least important
The details of important CRM objectives are presented as under. The objectives are divided into cost saving, revenue enhancing and strategic impact. In case of cost saving objectives, decrease in marketing administrative costs, in case of revenue enhancing objectives, better information for better management and in case of strategic impact objectives, it improves commuter satisfaction rate are considered as most important by the majority of respondents. The details are presented in Table 4.7.

TABLE 4.8: IMPLEMENTATION OF CRM IN APSRTC*

	Statement	No. of Respondents	Percentage (%)
a)	Different schemes through leaflets provided to the commuters.	292	73.00
b)	Through e-marketing, tele-marketing, etc.	44	11.00
c)	Through appropriate Ads in the Electronic, Print media.	36	09.00
d)*	Any other method, please specify.	30	07.00
	Total	**402**	**100.00**

* Multiple answers allowed
The opinion of respondents on implementation of CRM practices is furnished in Table 4.8. According to it 73% of the respondents expressed that the APSRTC is implementing CRM practices through different schemes and the information is provided through leaflets etc.

TABLE 4.9: STEPS TAKEN TO IMPLEMENT CRM

		YES		NO		TOTAL	
		N	%	N	%	N	%
a)	The Organizational structure is suitably modified to implement the CRM activity.	140	45.00	170	55.00	310	100.00
b)	Required training is given regarding the importance of CRM and the usefulness of its implementation.	242	78.00	68	22.00	310	100.00
c)	Suitable technological changes are adopted in the APSRTC for proper implementation of CRM.	248	80.00	62	20.00	310	100.00
d)	Required information is given to outside groups	214	69.00	96	31.00	310	100.00

The views of respondents on steps taken to implement CRM is presented in Table 4.9. According to it, the following are the steps taken to implement CRM practices in APSRTC.
- There are no changes in the Organizational structure.
- Required training is given regarding the importance of CRM and the usefulness of its implementation.
- Suitable technological changes are adopted in the APSRTC for proper implementation of CRM. Required information is given to outside groups.

TABLE 4.10: IMPORTANT ASPECTS IN IMPLEMENTATION OF CRM

	Statements	3	2	1
1	Defining CRM	44	08	-
2	Top Management Commitment	15	15	02
3	Staff Involvement	40	09	02
4	Integration of CRM Systems	32	13	04
5	Long-term view	30	08	02
6	Keep it simple	20	09	15
7	Outsourcing	20	09	13
	Total	**201**	**71**	**38**

3 – Most important, 2 – important and 1 – least important

The respondents are asked to give the important aspects in implementation of CRM. They have given the aspects utmost important
- Define CRM.
- Staff involvement.
- Integration of CRM systems.
- Long term view

Top management commitment was rated as important and most important. The following aspects were considered as least important.
- Keep it simple
- Out sourcing.

It is surprising to note that none of aspects expect one was rated as important by the respondents.
The analysis is observed through Table 4.10.

TABLE 4.11: FACTORS INFLUENCING CRM IMPLEMENTATION

	Statements	3	2	1
1	Distribution channels' effectiveness	20	9	02
2	Utilizing agents, Brokers.	10	12	09
3	Designing CRM oriented web sites.	13	13	04
4	Intent of gaining competitive advantage.	23	05	02
5	Staff training and behaviors.	29	06	01
6	Idea of Commuters/Customer retention.	28	03	01
7	Acquainting Commuters/Customers with utilizing different Schemes and Services.	25	05	01
8	Idea of gaining new Commuters/Customers.	28	03	00
9	Services quality	29	04	03
10	Others Please specify.	10	07	05
	Total	**215**	**67**	**28**

3 – Most important, 2 – important and 1 – least important

The factors influencing CRM implementation are analyzing through Table 4.11. According to it almost all the factors are rated as most important by majority of respondents. The factors include
- Distribution channels' effectiveness.
- Designing CRM oriented web sites.
- Idea of commuters/customers retention.
- Idea of gaining new commuters/customers.

TABLE 4.12: IMPORTANT ARE THE FOLLOWING CRM INITIATIVES FOR YOUR ORGANIZATION

	Statements	3	2	1
1	Cross-selling and up-selling (Selling more schemes to the same Commuters / Customers)	25	32	8
2	Commuters/Customers retention.	65	10	0
3	Identifying key and profitable Commuters/Customers from your customer base.	70	14	6
4	Event-based marketing	65	6	9
	Total	**225**	**62**	**23**

3 – Most important, 2 – important and 1 – least important

The respondents asked to give weight age for the CRM initiatives of APSRTC three statements are considered as most important and one statement considered as important by respondents. The three statements are
- Commuters/Customers retention.
- Identifying key and profitable commuters/customers from your customer base.
- Event-based marketing.

The statement which is rated as important
- Cross-selling and up-selling (selling more schemes to the same commuters/ customers), The analysis available from Table 4.12.

TABLE 4.13: THE FOLLOWING VIEWS ARE TRUE IN RESPECT OF YOUR ORGANIZATION (APSRTC)

		YES		NO		TOTAL	
		N	%	N	%	N	%
a)	Acceptance of CRM philosophy requires a change in the responsibility from former structure.	133	43	177	57	310	100
b)	Requires a new or different criteria for performance evaluation of Employees.	174	56	136	44	310	100
c)	Requires new or different information to be gathered which the Transportation Company would not usually require.	186	60	124	40	310	100
d)	A change in technology is necessary to implement the activities of CRM.	239	75	71	23	310	100
e)	Acceptance and implementation of CRM will adversely affect the Economic performance of transportation Industries.	130	42	180	58	310	100
f)	A change in the attitudes of employees is necessary to implement CRM activities.	242	78	68	22	310	100
g)	A change in the attitudes of Commuters/ Customers is necessary.	248	80	62	20	310	100

Views * Response Cross tabulation

		Response		Total
		Yes	No	
a)	Acceptance of CRM philosophy requires a change in the responsibility from former structure.	133	177	310
b)	Requires a new or different criteria for performance evaluation of Employees.	174	136	310
c)	Requires new or different information to be gathered which the Transportation Company would not usually require.	186	124	310
d)	A change in technology is necessary to implement the activities of CRM.	239	71	310
e)	Acceptance and implementation of CRM will adversely affect the Economic performance of transportation Industries.	130	180	310
f)	A change in the attitudes of employees is necessary to implement CRM activities	242	68	310
g)	A change in the attitudes of Commuters/ Customers is necessary.	248	62	310
Total		**1352**	**818**	**2170**

The respondents are given few statements about changes required to implement CRM in respect of philosophy, change in the criteria for evaluation, new information to be gathered etc. The views are observed as under:

- Acceptance of CRM philosophy does not requires a change in the responsibility from former structure.
- Requires new or different criteria for performance evaluation of Employees.
- Requires new or different information to be gathered.
- A change in technology is necessary to implement the activities of CRM.
- Acceptance and implementation of CRM will not affect the performance of transportation Industries.
- A change in the attitudes of both commuters and employees is necessary.

TABLE 4.14: RATING OF IDEA OF CRM IN APSRTC

	Statements	3	2	1
1	Recognizing the need for CRM.	48	10	4
2	Communicating the need among Employees.	32	28	2
3	Communicating CRM to Commuters/Customers.	32	24	6
4	Preparing policies of CRM.	30	30	2
5	Implementing CRM	32	24	6
	Total	**174**	**116**	**20**

3 – Most important, 2 – important and 1 – least important

The respondents are asked to give rating of the idea of CRM in APSRTC is furnished in Table 4.14. The majority of respondents have rated all the five ideas as most important. They are

- Recognizing the need for CRM
- Communicating the need among Employees.
- Communicating CRM to commuters/customers.
- Preparing policies of CRM.
- Implementing CRM.

TABLE 4.15: VIEWS ON CUSTOMERS ATTITUDE IN APSRTC

	Statements	Most important		Least important	
		N	%	N	%
1	Unfavorable nature of the Commuters/Customers	186	60.00	124	40.00
2	Failure to follow procedures	211	68.00	99	32.00
3	Always demanding quick delivery through short-cut Procedures even during busy hours.	217	70.00	93	30.00
4	Not empathetic	180	58.00	130	42.00
5	Not receptive to change	192	62.00	118	38.00

The information relating to the views of respondents on customer's attitude which is presented in Table 4.15 reveals the following. The respondents are given few statements and two options i.e., Most important and Least important options are given to them.

1. Unfavorable nature of the Commuters/ Customers
2. Failure to follow procedures
3. Always demanding quick delivery through short-cut Procedures even during busy hours.
4. Not empathetic
5. Not receptive to change

All the above statements are considered as most important by the majority of respondents.

FINDINGS RELATED TO STUDY OF EMPLOYEES

1. From the profile of the respondents, it is evident that majority of the respondents are male, having an average experience of 21-30 years.
2. The observation relating to departments and their designations reveals that the majority of respondents are from traffic department and belongs to the lower cadre.
3. The CRM concept is very much relevant to APSRTC as it is a public transport provider, as was observed by majority of respondents.
4. The majority of respondents are of the view that CRM is necessary in the context of increasing competition, and is also very much essential as the expectation of the society are increasing. However, few negative arguments are also endorsed by the respondents which are not considerable.

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5. It was also observed that, the CRM includes all aspects like, retention of existing commuters, acquisition of new commuters, provision of on-line services, and decrease of all related costs.
6. The important CRM objectives include, cost saving, revenue enhancing, and strategic impact objectives which are recognised as important objectives, by majority of respondents who participated in this study.
7. A CRM plan has been prepared and is being communicated to employees also which is clear from the analysis of the respondents.
8. It also observed that CRM plan is also communicated to commuters through pamphlets, broachers, adds in bus-stations etc.
9. The APSRTC has being using a variety of ways to implement the CRM practices they include leaflets, e-marketing, electronic and print media.
10. The attention to the issue of CRM is mostly centred in internal news magazines and annual reports. It is also understood that the issue of CRM is not known to many others.
11. It can be concluded that required training is given regarding the importance of CRM and the usefulness of its implementation. The suitable technological changes are also planned to implement CRM practices in APSRTC.
12. From the analysis of the important aspects in implementation of CRM it was observed that the important aspects are involvement of the staff and integration of CRM systems.

SUGGESTIONS

1. **Extend up to Collaborative CRM:** The APSRTC is not exploring the benefits of collaborative CRM. The APSRTC failed to integrate their business operations with intermediaries, business partners and other external agencies. If the business integration can get their services timely and conveniently.
2. **Information of Cancellation of Services:** The APSRTC is not maintaining about cancellation of services which is affected a bad image on APSRTC. In modern way the APSRTC to adopt the technology for better services relating to the status about cancellation services and other information.
3. **Updating of Information of new schemes/renewal of old schemes:** APSRTC has provided no. of schemes relating to CAT CARDS, VANITHA FAMILY CARDS, VIHARI CARD, SILVER CARDS etc., for customers/commuters. But APSRTC has not to inform for renewal and their exact status and to overcome the problem by maintaining the database.
4. **Publicity Materials:** Treating advertisers as privileged customers – exploit various advertising options. Improving aesthetics of bus stops & installing 'Instant snack machines' at key areas. Recommendations to Increase Revenue APSRTC should therefore provide a comfortable travel experience to its customers who will result in more customers using state transport and thereby increasing revenues.
5. **Customer Relationship Councillors (CRC):** APSRTC has appointed Customer Relationship Councillors (CRC) and design their duties and responsibilities for improve the revenue. The CRC 's regularly to visit the villages at their Depot's jurisdictions, to meet the village heads and explain different schemes implemented by APSRTC and benefits. Explain the APSRTC faces threat from it's in the private sector operating illegal buses on nationalized routes, also ply jeeps, taxis, medium-sized vehicles and seven seaters.
6. **Effective Implementation of CRM Team:** An effective Customer Relationship Management appears to be the only Strategy for continuation and survival of APSRTC. APSRTC would have to change over from routine management of operations to providing CRM orientation to its revenue and expense activities. Survey of customer satisfaction in APSRTC points out that there is a need to bring about fundamental change in the attitudes of management and employees. To generate a higher revenue stream for APSRTC – elements to drive CRM must be put in place.
7. **Improve External Relationship for savings:** Dimensions of C R M for APSRTC Revenue related Customer Relationship Passengers Cargo/Goods Advertisement Estate Revenue Scrap Grants (State govt./Central govt.) Subsidies (State govt.) Financial institutions Capital Markets Expenditure related Customer Relationship - HSD Oil, Lubricants - Tyres - Spare parts - Maintenance - Contractors Net Revenue Levers Occupancy Ratio - Operating Staff Gross income - External Relationship Management Other income.
8. Recommendations to reduce Expenditure and Cost Improve operational efficiency with respect to customer needs. Concentrate on route rationalization to increase vehicle utilization /Km, occupancy and reduce bus-staff ratio. Encourage use of technology to project bus services linking various places & informing the customers regarding cancellations / new routes / special fares etc. thereby discouraging customers to shift to private operators reducing cost of acquiring new customers.
9. **Improve Occupancy Ratio (OR)/Revenue and Bus services:** The steps include Punctuality & maintaining schedules as per customer's needs. Willingness of employees to help. Responding to written & verbal complaints. Action to be taken on customer's feedback and loyalty programmes to be effectively used to retain existing customers. Caring and individualized attention of employees to customers. Superior physical infrastructure – Ambience, cleanliness, technology & advertising. Improvement in Quality of Services etc.

CONCLUSION

CRM play an important role in modern business organizations. This is also a very much essential for service sectors. APSRTC being a leading transport provider should take up necessary steps to improve its CRM practices. The new state of Andhra Pradesh (AP) offers wider opportunities to expand its business in the 13 districts. A proper planning and implementation of CRM practices will go a long way in reducing the losses and improve its profitability over the next few decades to come.

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A STUDY ON FINANCIAL PERFORMANCE IN MAYURAM CO-OPERATIVE URBAN BANK LTD. WITH SPECIAL REFERENCE TO MAYILADUTHURAI, TAMILNADU

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ABSTRACT
The Cooperative banks generally provide their members with wide range of banking and financial Services. Financial analysis is a powerful mechanism of determining financial strengths and weaknesses of a firm. The purpose of financial analysis is to diagnose the information content in financial statements so as to judge the profitability, financial soundness of the firm and chalk out the overall financial performance of MCUB.

KEYWORDS
cooperative banks, financial analysis.

INTRODUCTION
Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the item of the balance sheet and the profit and loss account. Financial analysis can be undertaken by management of the firm, or by the parties outside of the firm, via owners, creditor's investors and others. The nature of analysis will differ depending upon the purpose of analysis. The present study is an effort to analysis the working capital management of MCUB, Mayiladuthurai, over the period of five years and suggests measures for the smooth ranging of business and projects with help up actual financial numbers and outstand figures. Here, financial analysis helps the management to make best use of its financial strength and to spot out the financial weakness to take corrective actions. Thus it could be stated that it is starting point for using any sophisticated forecasting and planning procedure.

PROFILE OF THE MAYURAM CO-OPERATIVE URBAN BANK LIMITED
As for as MCUB Mayiladuthurai is concerned the financial process is entangled in red tapism. The analysis of financial health for the past five years in the study will reveal the financial position of the MCUB. For this various financial tools like ratio analysis, working capital analysis, comparative statement analysis and common size statement analysis are used.

HISTORY OF MCUB
The Mayuram Co-operative Urban Bank was registered on 23rd November 1912 and started its business from 24th November 1912. Now the MCUB was 100 years old. It has a one more extension branch at Cauvery Nagar. It was started on 12th December 1994. Both the head office and branch office are successfully functioning in Mayiladuthurai Town.

OBJECTIVES OF THE MCUB
1. To offer various deposit schemes to the people.
2. To borrow funds from members or others to be utilized for loans to members.
3. It generally encourages the self –help and co-operative among the members.
4. To collect insurance premium for insurance companies.
5. To issue cheques, drafts and to collect cheques, drafts for approved members subject to the provision of the byelaw 69.
6. To undertake the financing of private small scale industries.

REVIEW OF LITERATURE
A variety of studies have been conducted with regards to the financial and operational affairs of the banks, various scholars, academicians and analyses have come up with their expertise to assess the performance of the banks.

T.R.Gurumurthy (2002) in his articles has highlighted the performance of urban co-operative banks. He has concluded that the urban banks are felt need of the hour to utilize the mobilized deposits profitably.

K.Ashokkumar (2004) finding of his study on the performance of Mayuram Co-operative Urban bank ltd. Mayiladuthurai." Reveals overall performance of MCUB is satisfactory. The profit of the MCUB were not constant improvement. But, the profit of the bank slowly increased.

Nanbankur Gupta (2006) the economy is exposed to a greater degree of external competition, more liberal trade and investment policies, and improvement in the balance of payments and foreign exchange position. The liberalization and development with the country's clothing industries

Rajendran (2010) the study entitled, "Financial management in NRB Bearings Company limited". He has taken up with a view to fill the research gap. It hoped that the study shall highlight the importance of an efficient financial management of the company and help to point out the possible shortcomings of the various aspects of financial management of the company. So that they can be corrected to make the company financially more prudent. Realistic suggestion of the study may probe helpful in improving the financial management of the other companies in the industry.

K. Srinivas (2013) in his research on "A study on financial performance of Hindustan tale printers limited". The study revealed that financial performance of the company with the help of fund flow analysis, trend analysis, common-size analysis, comparative financial statement & ratio analysis. His study suggests a very high quantum of liquidity cash in the company.

TABLE 1: CURRENT RATIO (Rs. in crores)

Year	Current Asset	Current Liability	Ratio
2010 – 2011	8.2395	5.9402	1.39
2011 – 2012	8.3810	5.9675	1.40
2012 – 2013	9.6679	7.1264	1.36
2013 – 2014	10.6231	8.0035	1.33
2014 – 2015	11.1739	8.4866	1.32

Source: Annual Report of MCUB.

A current ratio 2:1 is considered ideal. From the above table, we clearly know that the current ratio for the year 2011-2012 is high which indicate there may be possibility of more ideal funds. The current ratio for the year 2014-2015 is comparatively low than other years from the overall statement.

TABLE 2: LIQUIDITY RATIO (Rs. in crores)

Year	liquid Asset	liquid Liability	Ratio
2010 – 2011	8.2123	5.9402	1.38
2011 – 2012	8.3628	5.9675	1.40
2012 – 2013	9.6439	7.1264	1.35
2013 – 2014	10.6140	8.0035	1.33
2014 – 2015	11.1640	8.4866	1.32

Source: Annual Report of MCUB

Above table shows that the ratio is high for the year 2007-2008 and low for the year 2011-2012. The higher ratio indicates that greater efficiency in the utilization of liquid assets. In the year 2014-2015 the ratio shows 1.32 due to a lower efficiency in the utilization of liquid assets.

TABLE 3: DEBT EQUITY RATIO (Rs. in crores)

Year	Debt	Equity	Ratio
2010 – 2011	23.21	2.8555	8.13
2011 – 2012	24.74	2.9889	8.28
2012 – 2013	25.75	3.0908	8.33
2013 – 2014	27.61	3.1816	8.68
2014 – 2015	19.09	3.3917	5.62

Source: Annual Report of MCUB

Above table shows that the ratio is high for the year 2012-2013 and low for the year 2014-2015. So the above two financial year's outsider's fund (debt) is higher than that of proprietor's fund (equity).

TABLE 4: PROPRIETARY RATIO (Rs. in crores)

Year	Proprietor's fund	Total tangible assets	Ratio
2010 – 2011	2.8555	8.6157	0.3314
2011 – 2012	2.9889	8.7264	0.3425
2012 – 2013	3.0908	9.9872	0.3095
2013 – 2014	3.1816	10.9551	0.2904
2014 – 2015	3.3917	11.5283	0.2942

Source: Annual Report of MCUB

Above table shows that proprietary ratio is high for the year 2011-2012 and low for the year 2013-2014. The fluctuation of total tangible assets results that the above two financial year's proprietary ratios are varied.

TABLE 5 -FIXED ASSETS TO NET WORTH RATIO (Rs. in crores)

Year	Fixed assets	Proprietor's fund	Ratio
2010 – 2011	0.3762	2.8555	0.1317
2011 – 2012	0.3454	2.9889	0.1156
2012 – 2013	0.3193	3.0908	0.1033
2013 – 2014	0.3320	3.1816	0.1043
2014 – 2015	0.3544	3.3917	0.1045

Source: Annual Report of MCUB

Above table shows that the fixed assets to net worth ratio is high for the year 2010-2011 and low for the year 2012-2013. Higher ratio indicates that greater efficiency in the utilization of proprietor's fund.

TABLE 6: RATIO OF CURRENT ASSETS TO PROPRIETOR'S FUND (Rs. in crores)

Year	Current Asset	Proprietor's fund	Ratio
2010 – 2011	8.2395	2.8555	2.8854
2011 – 2012	8.3810	2.9889	2.8040
2012 – 2013	9.6679	3.0908	3.1280
2013 – 2014	10.6231	3.1816	3.3389
2014 – 2015	11.1739	3.3917	3.2945

Source: Annual Report of MCUB

Above table shows that the ratio is high for the year 2013-2014 and low for the year 2011-2012. Because the reason behind is the fluctuation between current assets and proprietor's fund. This ratio should be more to have an improved performance. Therefore, the bank has to take necessary for increase the current asset. The ratio indicates that current assets are in the good position.

TABLE 7: RETURN ON PROPRIETOR'S FUND (Rs. in crores)

Year	Net profit after interest & tax	Proprietor's fund	Percentage
2010 – 2011	0.18	2.8555	6.30%
2011 – 2012	0.23	2.9889	7.69%
2012 – 2013	0.23	3.0908	7.44%
2013 – 2014	0.23	3.1816	7.22%
2014 – 2015	0.35	3.3917	10.32%

Above the table shows that the ratio is high for the year 2014-2015 and low for the year 2010-2011. High ratio indicates that there is high value of net profit of the bank than other financial years.

TABLE 8: RETURN ON NET CAPITAL EMPLOYED (Rs. in crores)

Year	Net profit	Capital employed	Percentage
2010 – 2011	0.18	2.6755	6.73%
2011 – 2012	0.23	2.7589	8.34%
2012 – 2013	0.23	2.8608	8.04%
2013 – 2014	0.23	2.9516	7.79%
2014 – 2015	0.35	3.0417	8.22%

Source: Annual Report of MCUB

Above tables shows that the ratio is high for the year 2011-2012 and low for the year 2010-2011. The higher ratio indicates that greater efficiency in the utilization of working capital.

TABLE 9: SOLVENCY RATIO (Rs. in crores)

Year	External liabilities	Total assets	ratio
2010 – 2011	5.9402	8.6157	0.69
2011 – 2012	5.9675	8.7264	0.68
2012 – 2013	7.1264	9.9872	0.71
2013 – 2014	8.0035	10.9551	0.73
2014 – 2015	8.4866	11.5283	0.76

Source: Annual Report of MCUB

Above table shows that the ratio is high for the year 2014-2015 and low for the year 2011-2012. The external liabilities of the bank is low than the total assets.

TABLE 10: RETURN ON TOTAL ASSETS (Rs.in crores)

Year	Net profit	Total assets	percentage
2010 – 2011	0.18	8.6157	2.09
2011 – 2012	0.23	8.7264	2.64
2012 – 2013	0.23	9.9872	2.30
2013 – 2014	0.23	10.9551	2.10
2014 – 2015	0.35	11.5283	3.04

Source: Annual Report of MCUB

The above table shows that the ratio is high for the year 2014-2015 and low for the year 2010-2011. In the financial year 2014-2015 net profit and total assets values are comparatively high than other financial years.

FINDINGS

In the current ratio, current asset and current liability rapidly increased. Due to increase of liabilities the current ratio has been decreased from the year 2014 onwards.

➤ In the year 2010-11 the liquid ratio has been increasing trend, from the year 2014 onwards it has been decreasing trend.
➤ The debt equity ratio on increasing trend except 2014-2015. The outsider's fund (debt) is higher than proprietor's fund (equity).
➤ Even proprietor's fund and total tangible assets has been increasing trend but there is no constant improvement in the proprietary ratio.
➤ In the fixed asset to net worth ratio the proprietor's fund value has been increasing gradually. But the fixed asset has more fluctuation in its values. So this ratio also has fluctuation in its values.
➤ The ratio of the year 2012-2013 has suddenly increased due to high value of current assets. But there is no constant improvement in the ratio of current assets to proprietory fund.
➤ The return on proprietor's fund ratio 0.32 percentage is the highest percentage in the year of 2014-2015 due to the highest value of net profit 0.35.
➤ Although the capital has been increasing trend in the return on net capital employed ratio, the net profit has the same value from 2010 to 2015.
➤ The solvency position of the bank on increasing trend due to the frequent increase of total assets.
➤ The ratio of return on total assets has been decreasing from 2010 to 2015 due to the un improvement or value of net profit same.
➤ The all the results of the schedule of changes in working capital shows on increasing trend during the study period.
➤ The comparative statement results show positive level. But there is no constant improvement in its values year by year.

SUGGESTIONS

➤ The value of current assets is increased over the years at the same time current liabilities also increased so, the bankers try to keep current assets at maximum level.
➤ Working capital management is an integral part of the overall the business. So, it has to be efficiently maintained. The working capital of the bank is in continuously increasing position. So, if the bank need to maintain this position in future, it has to concentrate more on current assets.
➤ The liquid ratio is higher than standard level. So, the bank has to be keep maximum level of liquid assets.
➤ The debt and equity is maintained at satisfactory level in capital structure of the business. So, the bank has to maintain relative proportion of debt and equity.
➤ The bank may try to keep this solvency position for reducing the risk of owners.
➤ To increase the return on total assets, the bank should prevent the frequent fluctuation between the net profit and total assets.

CONCLUSION

Finance is the life blood and nerve centre of a business, just as circulation of blood is essential in the human body for maintain life, finance is very essential to smooth running of the business. It has been rightly termed as universal lubricant which keeps the enterprise dynamic.

Financial analysis is a powerful mechanism of determining financial strengths and weaknesses of a firm. The purpose of financial analysis is to diagnose the information content in financial statements so as to judge the profitability, financial soundness of the firm and chalk out the overall financial performance of MCUB, Mayiladuthurai has been good. After analysis of the financial statements of the company for the period (2010-2015) it is clear that the financial performance is relation to solvency, both short term and long term, liquidity, activity, profitability, indicates a good position. Certain area has to be concentrated more to further improving the overall financial performance.

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IMPACT OF PSYCHOSOCIAL FACTORS ON DOCTORS PRESCRIBING BEHAVIOR

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ABSTRACT

Nothing is forever in today's marketing sector. The one who manages to create the marked difference succeeds in the marketing era. Prescription behavior is a kinetic and ingenuous that involves the customers who follow the rule of the guiding principle for making a choice. In the past study, it is well stated that prescribing behavior of physicians can be influenced and various factors can change the prescribing habits of the physicians. The prime focus of this study is to find out the impact of psychosocial factors on different area of specialty of doctors in private and government sector of the Chandigarh. The results show that impact of psychosocial factors on physician prescribing behavior varies across demographic characteristics.

KEYWORDS

prescription behavior of physicians, psychosocial factors, physicians prescribing trend.

INTRODUCTION

Likewise other business arena, the main intent of pharmaceutical marketing is to increase the prudence of the organization while focusing the demand of the consumers. For uninsured people and for many of those with some kind of health insurance, outpatient prescriptions are very costly for the patient. Drug prices have been shown to affect conformity regimens, and patients regularly report not buying or delaying the buying of prescribed medications. A more prudent efficient use of drugs could be attained by a revised knowledge of daily therapeutic costs (Mcguire et al., 2009) Thus, for health and economic reasons, it is crucial to investigate the factors affecting doctor's prescribing behavior (Hartzema & Christensten, 1983).

As in case of prescription drug market in India, where the patients have little say and are dependent upon the intermediate customers (doctors). It is estimated that India's $12 billion drug market is growing 14 percent annually and companies are expected to triple sales forces by 2020 to capture this growing market as per website of Govt. of India. Hence to sustain in this competitive business, a viable strategy is needed.

The Competition is escalating day by day in marketing area and one who response within time can survive in the rivalry, same in the field of pharmaceutical marketing, daily various firms bring different brands enhancing the size of market. In this rivalry physicians are the key customers for this industry. Physicians are the only decision makers who decide which brand should be prescribed to their patients. Therefore, all the marketing strategies are being focused towards them (Waheed, Jaleel, & Laeequddin, 2007).

The Physicians who were in training were highly influenced by the antibiotic prescribing behavior of their physicians who were their supervisors. Respondents quested their colleagues' antibiotic prescribing decisions, but they frequently avoided providing direct feedback or critique. These physicians cited obstacles of hierarchy, infrequent face-to-face encounters, and the awkwardness of these conversations (Livorsi et al., 2015).

REVIEW OF LITERATURE

Taneja Girish (2008) investigated the influence of promotional tools used by pharmaceutical enterprises on various doctors concluded that physicians in private sector tagged more predominance to personal selling and educational promotional tools whereas DMs gave more predominance scientific promotional tools in comparison to MD and PG diploma doctors.

In the past studies it is been concluded that prescribing behavior of physicians can be affected as well as prescribing habits of physician's decisions can be influenced by the various factors. (Hartzema & Christensten, 1983) studied that non medical factors are essential determinants for physician prescribing behavior.

Wazana (2000) stated that physicians have positive attitude towards the interaction by the pharmaceutical firms which initiated in medical colleges and continued till the practice lasts. (Watkins et al 2003) and (Chimonas et al 2007), concluded that the persistent contact with PSR visits impacted the physician prescribing behavior. Another study conducted by Saito et al (2010) concluded that most of the physicians appreciate the information they receive from the PSR.

A study conducted by Wazana et al. (2000) have concluded that pharmaceutical promotional interactions with physicians can have a detrimental impact on prescribing behavior. A review also concluded that meetings with MRs were related with requests by doctors for promoted drugs to be included to the hospital formulary, requiring manipulation in prescribing behavior with increased prescribing costs and less rational prescribing. Interactions of physicians and pharmaceutical firms raise scientific and ethical questions.

Theodorou et al. (2009) studied the factors, which impact the prescribing behavior of doctors and their practice in Greece and Cyprus, and may be used for making policies and increase their choices. The study concluded is that drug clinical effectiveness is important element in prescribing medicine.

Gehlbach et al. (1984) conducted a research in Denmark, which derived that price is also an important factor in prescribing drug and on top of that Pharmaceutical industry, sales representative affects physician's behavior.

Waheed Abdul Kareem et al (2007) found that tangible rewards to physicians offered by pharmaceutical companies, visits by MRs lead to physician honesty to prescribe. Tan N C et al (2009) concluded the relation of interrelated factors that affect the family physicians (FP) choice of drug whereas the ineffective factors to influence FPs are CME programmes and detailing. Neyaz et al (2011) concluded national and international dissimilarities in prescription. Studies concluded the effect of marketing tools and prescription behavior has a positive interaction between both. (Girdharwal (2007), Jayakumar (2008), Stros et al (2009)).

MATERIAL AND METHODS

DATA, SAMPLE AND METHODOLOGY

The targeted population is given below and on the support of target population sample size has been selected.

TARGETED POPULATION

The total population of the study is the following:

All the doctor's society either they are Medical officers in Government and Private hospitals or Consultants of all specialties either they are working in Government and Private Hospitals. Sample data from different hospitals of Chandigarh and Mohali like PGIMER, IVY Mohali, Govt. Hospital 32, Govt. Hospital 22, Fortis Mohali, CMC Chandigarh, Govt. Hospital Manimajra, Max Mohali, Govt hospital 16, Govt. Hospital 45 were taken for the study.

SAMPLE SIZE

A total of 470 responses were drawn from cities of Chandigarh and Mohali. For this study, questionnaire was formulated and pretested for reliability and validity.

STATISTICAL TOOL AND TECHNIQUE

The statistical tools used were frequency distribution, ANOVA and t – test to find out results of above objective of research.

T-TEST TECHNIQUE

In this research mean scores were calculated by designating values of 1, 2, and 3 and so on to the responses. A lower score indicate that specific factor has less influence than with higher scores.

MODEL EQUATION

PPB= α + β1 DS + β2 LT + β3 MEP + β4SO+ β5MI*e*

Whereas PPB is physician prescribing behavior, DS is drug sample, LT is Literature, MEP is Medical Education programmes, SO represents asking colleques/specialist are the first thing that is done for their opinions are first thing that is done when a new medication is available, and MI represents collecting information from MRs is first thing that is done when a new medication is available and e denotes error term.

MODEL HYPOTHESIS

Ho_1: There is no statistically significant impact of the psychosocial factors on prescribing behavior among different specialties of doctors.

Ho_2: There is no statistically significant impact of the psychosocial factors on prescribing behavior among different genders of doctors.

RESULTS AND FINDINGS

DEMOGRAPHIC PROFILE

As depicted in Table 1, out of 470 doctors 332 were females doctors which accounts for 70.6 % of the sample and 138 were males, which accounts for 29.4 % of the sample. The physicians in the study who belonged to the age group of 25 -35 years of age were 105(22.3%), while 36-45 years of age of doctors were 192(40.9%), 46-55 years of age groups of doctors were 168 (35.7%), while 56 -65 age groups of doctors were 5(1.1%). The number of physicians who were from internal medicines was 64(13.6%) while surgery was 58 (12.3%), orthopedics was 50(10.6%), Pediatrics 22(4.7%), Obstetricians/ Gynecologists 68(14.5%), Psychiatrists were 2(0.4%), Opthamologists 14(3%) while others were 192 (10.6%).

TABLE 1: DESCRIPTIVE STATISTICS OF THE SAMPLE

		Frequency	Percentage
Age	25 – 35	105	22.3%
	36 – 45	192	40.9%
	46 – 55	168	35.7%
	56 – 65	5	1.1%
Gender	Male	138	29.4%
	Female	332	70.6%
Specialty	Internal Medicine	64	13.6%
	Surgery	58	12.3%
	Orthopedics	50	10.6%
	Pediatrics	22	4.7%
	Obstetrics/gynecology	68	14.5%
	Psychiatry	2	0.4%
	Ophthalmology	14	3.0%
	Other	192	40.9%

Different statistical tests of significance for testing of hypothesis related to the difference in the significance attached by physicians relating to psychosocial factors were determined.

Independent samples t-test analyze the means of two independent groups. The inequality between the groups' mean are then tested for significance. The checking is done at 95% confidence level.

Impact of different psychosocial factors on physicians among different specialties was tested by one –way ANOVA test. As per table 2, the mean score of impact of literature /updates/special physicians who have ophthalmology specialty is 3.14 whereas the mean score of impact of literature /updates/special physicians who have psychiatry specialty is 2.50. As per table 3, the significance value of Literature/Updates/journals among different specialties is more than 0.05 which means the impact of literature/updates/journals is insignificant among specialties while the same value for others factors are significant. So, Ho_1 can be rejected. There is a statistically significant impact of the psychosocial factors on prescribing behavior among different specialties of doctors.

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TABLE 2: DESCRIPTIVE STATISTICS OF DIFFERENT PSYCHOSOCIAL FACTORS ON PHYSICIANS

Oneway ANOVA

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Literature/updates/Journals	INT MEDICINE	64	2.75	1.491	.186	2.38	3.12	1	5
	SURGERY	58	3.34	1.446	.190	2.96	3.72	1	5
	ORTHO	50	3.12	1.409	.199	2.72	3.52	1	5
	PEDERATICS	22	3.36	1.560	.333	2.67	4.06	1	5
	OBST&GYNE	68	3.24	1.477	.179	2.88	3.59	1	5
	PSYCHIATRY	2	2.50	2.121	1.500	-16.56	21.56	1	4
	OPTHOMOLOGY	14	3.14	1.562	.417	2.24	4.04	1	5
	OTHERS	192	3.28	1.459	.105	3.07	3.48	1	5
	Total	470	3.19	1.470	.068	3.05	3.32	1	5
Medical Education programmes	INT MEDICINE	64	1.95	1.201	.150	1.65	2.25	1	5
	SURGERY	58	2.84	1.412	.185	2.47	3.22	1	5
	ORTHO	50	2.22	1.314	.186	1.85	2.59	1	5
	PEDERATICS	22	1.68	.894	.191	1.29	2.08	1	4
	OBST&GYNE	68	1.88	1.058	.128	1.63	2.14	1	5
	PSYCHIATRY	2	2.50	2.121	1.500	-16.56	21.56	1	4
	OPTHOMOLOGY	14	2.86	1.460	.390	2.01	3.70	1	5
	OTHERS	192	2.11	1.341	.097	1.92	2.31	1	5
	Total	470	2.16	1.310	.060	2.05	2.28	1	5
Drug Samples	INT MEDICINE	64	2.16	1.312	.164	1.83	2.48	1	5
	SURGERY	58	3.03	1.510	.198	2.64	3.43	1	5
	ORTHO	50	2.14	1.246	.176	1.79	2.49	1	5
	PEDERATICS	22	1.91	.971	.207	1.48	2.34	1	5
	OBST&GYNE	68	2.06	1.020	.124	1.81	2.31	1	5
	PSYCHIATRY	2	3.00	2.828	2.000	-22.41	28.41	1	5
	OPTHOMOLOGY	14	2.50	1.092	.292	1.87	3.13	1	5
	OTHERS	192	2.31	1.252	.090	2.13	2.49	1	5
	Total	470	2.31	1.281	.059	2.20	2.43	1	5
Asks colleagues /specialists for their opinions are first thing that is done when a new medication is available	INT MEDICINE	64	4.11	1.544	.193	3.72	4.50	1	5
	SURGERY	58	4.57	1.061	.139	4.29	4.85	1	5
	ORTHO	50	4.00	1.552	.219	3.56	4.44	1	5
	PEDERATICS	22	3.36	1.814	.387	2.56	4.17	1	5
	OBST&GYNE	68	3.75	1.596	.194	3.36	4.14	1	5
	PSYCHIATRY	2	5.00	0.000	0.000	5.00	5.00	5	5
	OPTHOMOLOGY	14	4.43	1.089	.291	3.80	5.06	2	5
	OTHERS	192	4.39	1.301	.094	4.20	4.57	1	5
	Total	470	4.19	1.430	.066	4.06	4.32	1	5
Collect information from MRs is the first thing when a new medication is available	INT MEDICINE	64	2.80	1.471	.184	2.43	3.16	1	5
	SURGERY	58	3.48	1.314	.173	3.14	3.83	1	5
	ORTHO	50	3.04	1.355	.192	2.66	3.42	1	5
	PEDERATICS	22	3.05	1.618	.345	2.33	3.76	1	5
	OBST&GYNE	68	2.59	1.509	.183	2.22	2.95	1	5
	PSYCHIATRY	2	4.00	0.000	0.000	4.00	4.00	4	4
	OPTHOMOLOGY	14	3.43	1.342	.359	2.65	4.20	1	5
	OTHERS	192	3.32	1.346	.097	3.13	3.51	1	5
	Total	470	3.13	1.420	.066	3.00	3.26	1	5

TABLE 3: ANOVA TEST RESULTS OF DIFFERENT PSYCHOSOCIAL FACTORS

		Sum of Squares	df	Mean Square	F	Sig.
Literature/updates/Journals	Between Groups	17.230	7	2.461	1.141	.336
	Within Groups	996.294	462	2.156		
	Total	1013.523	469			
Medical Education programmes	Between Groups	47.817	7	6.831	4.171	.000
	Within Groups	756.568	462	1.638		
	Total	804.385	469			
Drug Samples	Between Groups	42.674	7	6.096	3.876	.000
	Within Groups	726.721	462	1.573		
	Total	769.396	469			
Asks colleagues /specialists for their opinions are first thing that is done when a new medication is available	Between Groups	48.174	7	6.882	3.489	.001
	Within Groups	911.207	462	1.972		
	Total	959.381	469			
Collect information from MRs is the first thing when a new medication is available	Between Groups	44.745	7	6.392	3.276	.002
	Within Groups	901.595	462	1.952		
	Total	946.340	469			

Table 4 shows that that mean of impact of literature/updates/journals on physician prescribing behavior for males is 3.27 while same value for female is 2.99. As per table 5, the significance value of psychosocial factors like impact of medical education programmes, asking colleagues/specialists for their opinions are first

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thing that is done when a new medical education is available and collecting information from MRs is the first thing when a new medication is available, is less than 0.05, so there is statistically significant difference between these psychosocial factors among genders. So, Ho_2 can be rejected.

TABLE 4: GROUP STATISTICS OF T –TEST

Gender		N	Mean	Std. Deviation	Std. Error Mean
Literature/updates/Journals	FEMALES	138	2.99	1.516	.129
	MALES	332	3.27	1.445	.079
Medical Education programmes	FEMALES	138	2.11	1.206	.103
	MALES	332	2.19	1.351	.074
Drug Samples	FEMALES	138	2.25	1.183	.101
	MALES	332	2.34	1.320	.072
Asks colleagues /specialists for their opinions are first thing that is done when a new medication is available	FEMALES	138	3.96	1.528	.130
	MALES	332	4.29	1.378	.076
Collect information from MRs is the first thing when a new medication is available	FEMALES				
	MALES				

TABLE 5: INDEPENDENT SAMPLE T –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	
Literature/ Updates/ Journals	Equal variances assumed	2.774	.096	-1.854	468	.064	-.275	.149	-.567	.017	
	Equal variances not assumed			-1.817	245.475	.070	-.275	.151	-.574	.023	
Medical Education Programmes	Equal variances assumed	4.270	.039	-.588	468	.557	-.078	.133	-.339	.183	
	Equal variances not assumed			-.616	285.081	.538	-.078	.127	-.327	.171	
Drug Samples	Equal variances assumed	3.815	.051	-.747	468	.455	-.097	.130	-.352	.158	
	Equal variances not assumed			-.782	284.112	.435	-.097	.124	-.341	.147	
Asks colleagues for their opinion is first thing when a new medication is available	Equal variances assumed	7.079	.008	-2.328	468	.020	-.336	.144	-.619	-.052	
	Equal variances not assumed			-2.231	234.265	.027	-.336	.150	-.632	-.039	
Collecting information from MRs is first thing when a new medication is available.	Equal variances assumed	6.718	.010	-2.700	468	.007	-.386	.143	-.667	-.105	
	Equal variances not assumed			-2.627	241.619	.009	-.386	.147	-.675	-.097	

IMPLICATIONS AND CONCLUSIONS

The study concludes that impact of psychographic factors changes across different demographic characteristics of the physicians. The study would provide theoretical framework for the pharmaceutical managers so that they can segment and target doctors as per demographic characteristics of the doctors as the psychographic factors changes across the demographic characteristics.

LIMITATIONS OF THE STUDY

The limitations of the study is that beside impact of psychosocial factors on the prescribing behavior among different specialties of doctors and different genders of doctors, the impact of psychographic factors on prescribing behavior among different age groups was not investigated. Therefore, in depth study of impact of psychographic factors among different age groups could provide a broader outlook. The study is limited to two cities i.e. Chandigarh and Mohali. The topic of further research is that this study could be to find out impact of psychographic factors on prescribing behavior among different age groups.

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DIMENSIONS IN GROWTH OF SMALL SCALE INDUSTRIES (MSMEs) IN ODISHA: AN IMPACT OF EMPLOYEES

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ABSTRACT
In a developing country like India, Small Scale industries play a significant role in economic development of the country. These industries represent a stage in economic transition from traditional to modern technology after globalization. The variation in transitional nature of this process is reflected in the diversity of these industries. Most of the small scale industries use simple skills and machinery. Small scale industries also play social and political role in local employment creation, balanced resource utilization, income generation and in helping to promote change in a gradual and peaceful manner. It is focused that the smaller SSIs are growing not only numerically but also in terms of employments, investment and output. The present study is basically based on secondary data collected from unpublished journals, literature, economic survey, MSMEs annual reports and reports of government of Odisha. The research tools like ratio, percentages, average etc., are being used to reach valid findings and conclusion.

KEYWORDS
SSIs, growth of industry units, investment, employment.

INTRODUCTION
Industrialization is sine qua non of economic progress. The objectives of industrialization are high growth rates, employment generation and equitable distribution of income and wealth. The countries are trying to solve their endemic problems of poverty, inequality and unemployment through a systematic process of industrialization. The development of industrialization has played a crucial role in economic development of any country. Small industries play a key role in countries economic development with advantages of low investment, high potential of employment generation, decentralization of industries base and dispense of industries to rural and semi urban areas. It is associates with technical progress and increasing labour productivity resulting in higher level of national income and employment. It is also considered as a means to transfer surplus labour out of agriculture to the modern industrial sector. The development achieved has not made any significant impact on their basic problem of poverty, unemployment and inequalities.

Illiteracy came in their way of adopting latest science and technology for pushing up the production. With the introduction of the latest technology in the industrial sector, the production process may tend to be capital intensive, as a result of which the unemployment became more intense even though there is development at certain levels. Therefore, it is now recognized that small enterprises are as economical as large enterprises and in fact in some product lines they are even more economical on terms of capital investment, employment generation and output. Hence these countries have diverted their attention towards the development of small, tiny village and cottage industries to attain their basic objectives of development.

The establishment of industrial estate was therefore adopted as an effective means of solving these problems and for developing small industries in all parts of the country with a view to balancing regional development and to improve the economic condition of the poor.

REVIEW OF LITERATURE
The research is a continuous process. The review of literature seems to be indispensable, as it provides strong feedback to the present study to strengthen research activities. The some of the important provisional research literature covering various dimensions of SSI/MSMEs are presented.

Singh et al. (2012) analyzed the performance of small scale industry in India and focused on policy changes which have opened new opportunities for this sector. Their study concluded that SSI sector has made good progress in terms of number SSI units, production and employment levels. This study recommended the emergency of technology development of strengthening financial infrastructure to boost SSI and to achieve growth target.

Subrahmanya Bala. (2011) has probed the impact of globalization on the exports potentials of the small enterprises. The study shows that share of SSI export in total export has increased in protection period but remain more or less stagnated during the liberalization period. However, the correlation co-efficient in liberalization period is higher than that of protection period suggesting that the relationship between the total export and SSI export has become stronger in liberalization period. This may be due to the drastic change in composition of SSI export items from traditional to non-traditional and growth in its contribution to total export through trading houses, export houses and subcontracting relation with large enterprises. Thus, the current policy of increasing competitiveness through infusion of improved technology, finance, and marketing techniques should be emphasized.

Bhavani T.A. (2010) highlights the issue of quality employment generation by the SSIs and negates the short term attitude of increasing the volume of employment generation compromising with quality. The author argues that employment generation by the SSIs may be high in quantitative term but very low in quality. Technological up gradation would enable the small firms to create quality employment improving remuneration, duration and skill. This structural shift may reduce the rate of employment generation in the short run but would ensure high-income employment generation in the long run.

Bargal et al. (2009) examined the casual relationship among the three variables GDP, SSI output and SSI export and also have compared the performance parameters of SSI's in the pre and post liberalization era. The study found that the annual average growth rate of different parameters of SSIs have declined in the period

of nineties vis-à-vis the pre-reforms years. There is an absence of any lead-lag casual relationship between exports and production in small scale sector and GDP of Indian economy.

OBJECTIVES OF THE STUDY

The primary objective of the study is to evaluate critically the contribution made by small scale industries to balanced growth of the economic and development backward areas like rural and urban areas. The studies also analyze present status and future prospects of the small scale industry in Odisha. It will examine the relative contribution of labour and capital growth in Odisha.

METHODOLOGY

The period of the study is 2000-2015 and is based on secondary information. The secondary information's were collected from the various publications of government and non-government organization. This paper examined the importance, contribution and development potential of small scale industries in the state of Odisha.

ROLE OF SMALL SCALE INDUSTRIES IN ECONOMIC DEVELOPMENT

SSI requires less capital per unit of output and provides quick returns on investment due to shorter gestation period. They help to remove regional disparities by industrialization rural and backward areas. SSI also helps to improve the standard of living in sub-urban and rural areas. These industries facilitated the growth of local entrepreneurs and self-employed professionals in small towns and villages.

SSI helps reducing pressure on the countries balance of payments in two ways. Firstly, they do not require imports of sophisticated machinery or raw materials. Secondly, SSI can earn valuable foreign exchange through exports. There has been a substantial increase in exports from the small scale sector.

GROWTH OF SMALL SCALE INDUSTRIES IN ODISHA

A small scale industry (SSI) is an industrial undertaking in which the investment in fixed assets in plant & machinery, whether held on ownership term or on lease or hire purchase, more than Rs. 25 lakh rupees but does not exceed Rs. 5 crore in manufacturing sector and in services sector more than Rs.10 lakh rupees but does not exceed Rs. 1 crore. However, this investment limit is varied by the Government from time to time.

The analysis of growth and development of SSI in Odisha indicates in different districts the number of units promoted by entrepreneurs is increasing manifold. Their contribution in the overall production, employment and investment is a multiplier impact on the different sectors. Various factors are affecting the performance of entrepreneurship over a period of time. The government changed its policy to give a boost to entrepreneurship in the country. The growth of the SSI sub-sector is being emphasized not only became of its potential for generation of employment opportunities, but also for its contribution to industrial output in the state.

Table 1 shows the number of small scale units has increased from 3676 units in 2000-01 to 7009 units in 2013-14, that is an increases of nearly two times and at the same time 15.38 per cent increase over the previous year 2012-13. Similarly, the level of employment has increased from 18115 numbers of persons in 2000-01 to 32136 numbers of persons during 2013-14 showing a rise of 43.63 per cent. Investment in the small scale sector too marks a rapid increase during the study period. During the year 2000-01 to 2013-14 investment increased from 15318 lakhs to 66944 lakh recording a rise of 77.11 per cent. The compound average growth rate of investment was substantially higher and this provided impetus to the growth of employment and production of SSI/MSMEs. Investment grew at a compound rate of 11.11 per cent and employment rose at the rate of 4.18 per cent. Consequently, the number of small scale units during the period of 2000-15 the growth rate is 4.72 per cent.

TABLE 1: NUMBER OF UNITS, INVESTMENT AND EMPLOYMENT OF SSI/MSMEs IN ODISHA

Year	No. of SSI units setup	Investment made (Rs. Lakh)	No. Employment Generated
2000-01	3676	15318	18115
2001-02	3919	16523	16582
2002-03	4008	15514	16302
2003-04	4435	17013	20547
2004-05	4507	24559	21898
2005-06	4786	27044	25142
2006-07	4556	27114	20839
2007-08	4710	29551	23301
2008-09	4806	22792	20996
2009-10	4907	29235	23195
2010-11	5016	23902	24451
2011-12	5505	50073	30387
2012-13	5931	43290	27104
2013-14	7009	66944	32136
MEAN	4840.786	21331.29	18696.76
CAGR	4.72%	11.11%	4.18%
AGR	67.95	212.88	70.01
AAGR	5.23	16.38	5.39

a. Source: Economic survey 2014-15 Govt. of Odisha.

b. Source: Annual report 2014-15 of MSMEs Govt. of Odisha.

The figure 1 vividly shows the small scale units and employees which are increases in SSI/MSMEs in Odisha. It was 4786 number of units in the year 2005-06 which has increased continuously up to the year 2013-14 as 7009 units. But the number of units in SSI/MSMEs in Odisha has been declined to 4556 units in the year 2006-07, further it has increased up to the year 2013-14. The growth of employees was 20839 numbers of persons in the year 2006-07 which is shows negative growth of employees in SSI/MSMEs. But in the year 2011-12 the growth has been increased as 30387 numbers of persons.

FIGURE 1: SHOWING THE GROWTH RATE OF UNITS AND EMPLOYMENT OF SSI/MSMEs
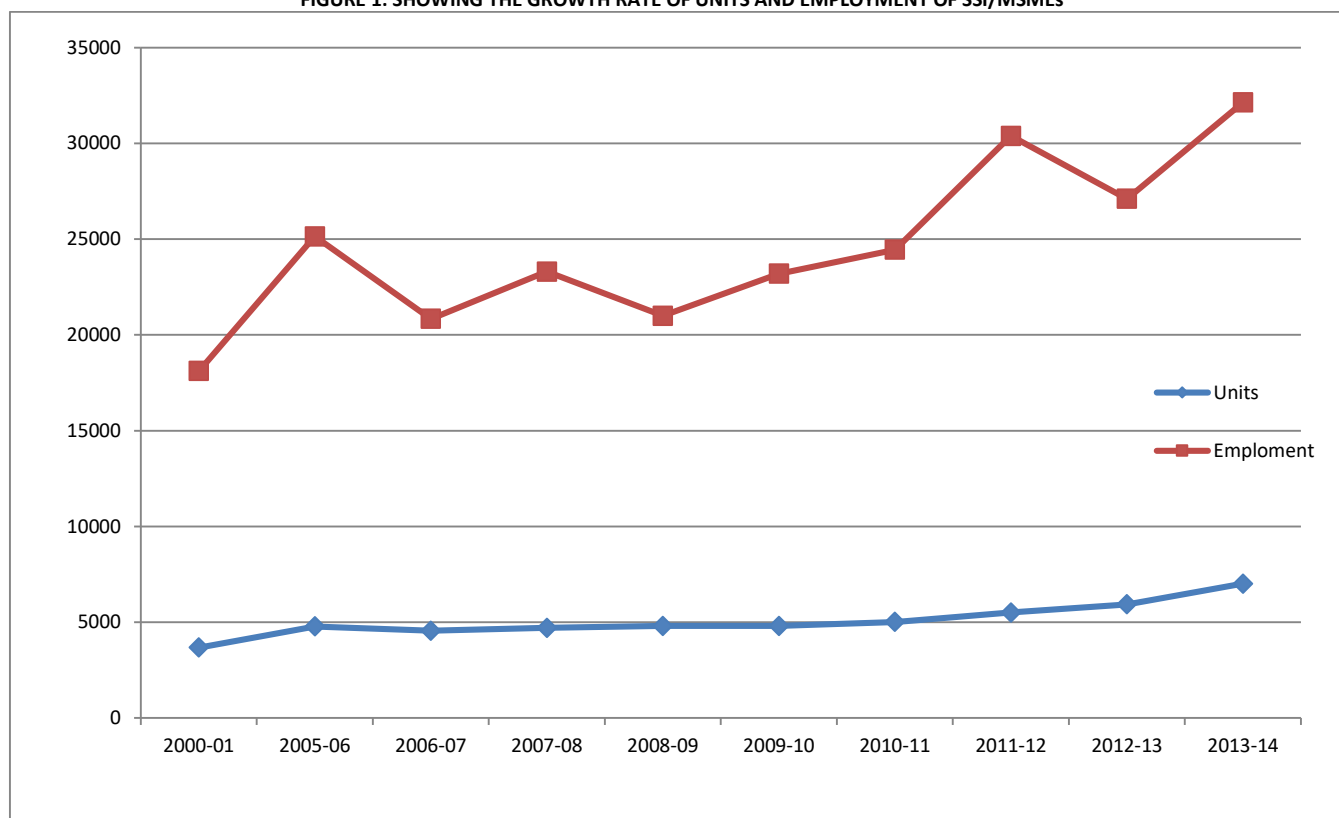
Source: Economic survey 2014-15 Govt. of Odisha.

The above plotted graph clearly shows that increase in number of Units of SSI always followed by an increase in the employment generation.

TABLE 2: SHOWING COMPOUND AVERAGE GROWTH RATE OF SSI/MSMEs

Year	No. of Units	Investment (lakh)	No. of Employment
2000-01	3676	15318	18115
2006-07	4556	27114	20839
2007-08	4710	29551	23301
2013-14	7009	66944	32136
Compound Average Growth Rate (CAGR)			
2000-01 to 2006-07	3.11%	8.50%	2.02%
2007-08 to 2013-14	5.84%	12.39%	4.70%

a.   Source: Economic survey 2014-15 Govt. of Odisha.
b.   Source: Annual report 2014-15 of MSMEs Govt. of Odisha.

The above table shows the present study of 2000-01 to 2013-14 compound average growth rate of SSI/MSMEs in Odisha over the course seven years 2000-01 to 2006-07 the number of units growth rate 3.11 per cent and the investment and employment growth rates are 8.50 per cent and 2.02 per cent respectively. The period of next seven years (2007-08 to 2013-14) the compound average growth rate increase of nearly two times over the previous seven years i.e. 2000-01 to 2006-07.

Figure 2 SSI units carry their business in different forms of organization. The popular forms of organization are proprietor or HUF, partnership, private and co-operative business in SSI. Showing types of organization of SSI/MSMEs in Odisha Result shows that 92% of the enterprises in the small scale industries sector were proprietor or HUF industries. About 4% of the industries were run by partnership and 3% of the industries were run by private company. The rest were run by co-operative or others.

FIGURE 2: SHOWING TYPES OF ORGANIZATION OF SSI/MSMEs IN ODISHA
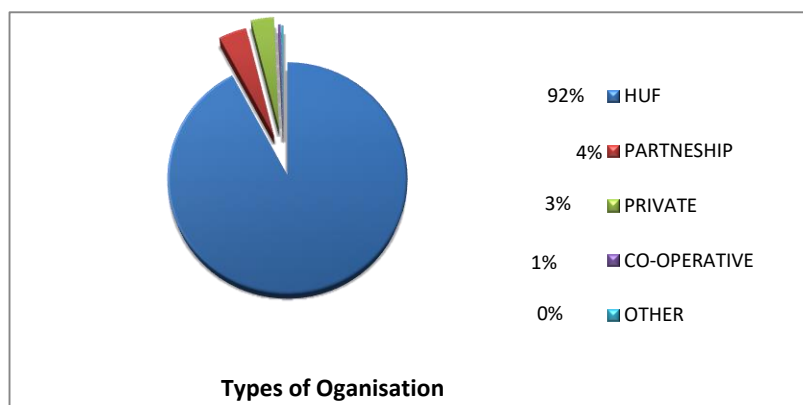
Source:india.gov.in/check-details-registered-small-scale-industries-odisha

FIGURE 3: SOURCES OF POWER USES IN SSI/MSMEs

	no need Power	Coil	Oil	LPG	Non-Conventional Energe	Tradional Energy/fire wood
■ units	1783	475	376	115	16	334
■ Investment in P&L (LAKHS)	810	1284	503	101	43	201
■ Employment	8019	7176	1352	579	118	2590
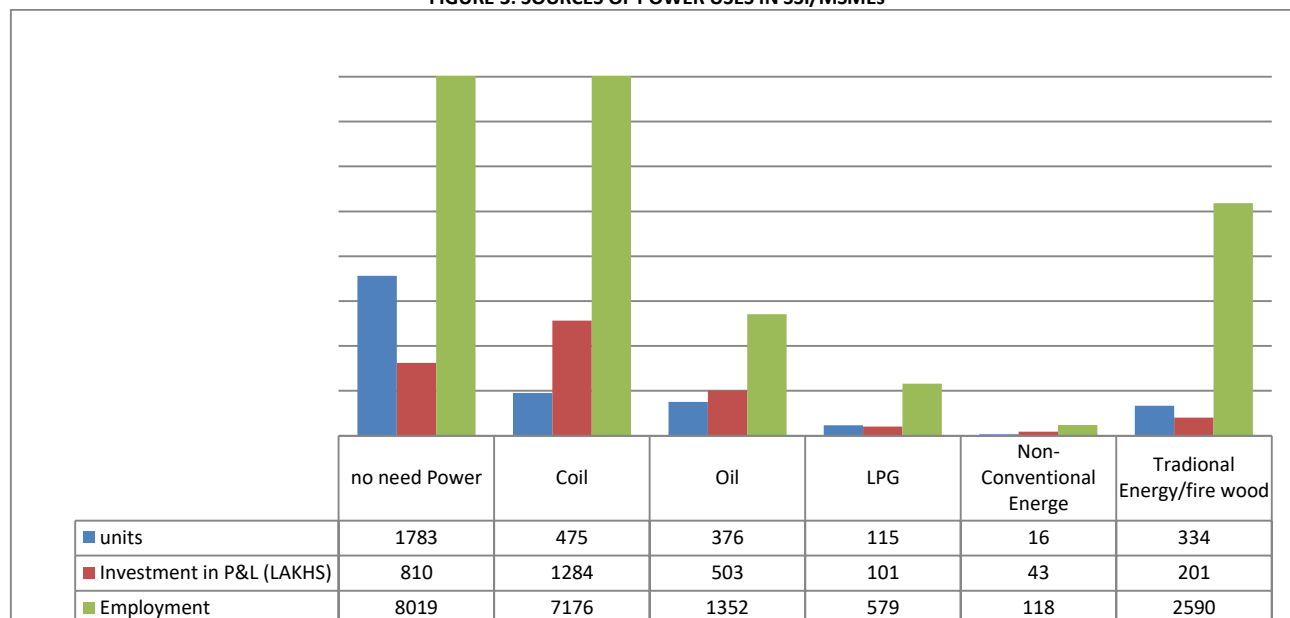
Source:india.gov.in/check-details-registered-small-scale-industries-odisha

CONCLUSION

The present study revealed that there is a growth of number of Small Scale Industry units. The growth of these sectors enhances production units, generate employment and increase the capital investment of the state. SSI sector has made significant contributions to employment generation and also to develop rural industrialization. This sector is ideally suited to build on the strength of our traditional skills and knowledge by the use of technology. It is very good and healthy sign towards progress and prosperity of Odisha.

ACKNOWLEDGEMENT

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A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICE ASSESSMENT ABOUT BIO –MEDICAL WASTE MANAGEMENT AMONG HEALTHCARE PERSONNEL

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ABSTRACT

Medical care is vital for our life and health, but the waste generated from medical activities represents a real problem of living nature and human world. Improper management of waste generated in health care facilities causes a direct impact on community, the health care workers and on environment every day. Relatively large amount of potentially infectious and hazardous waste is generated in the health care hospitals and facilities around the world. Indiscriminate disposal of bio medical waste and exposure to such waste possess serious threat to environment and to human health that requires specific treatment and management prior to its final disposal. Hence, this article made an attempt to assess knowledge, attitude and performance of healthcare personnel with respect to biomedical waste management is most important as they will be in direct contact with it. It found that every staff of hospital who ever involved in bio medical waste management has good knowledge about biomedical waste

KEYWORDS
BMW (Bio medical waste), health care personnel, OOP (out of pocket).

INTRODUCTION

A hospital produces many types of waste material. Housekeeping activity generates considerable amount of trash, and the visitors and others bring with them food and other materials which must in some way be disposed off. In addition to the waste that is produced in all residential buildings, hospitals generate pathological waste—blood soaked dressings, carcasses and similar waste. These waste materials must be suitably disposed of immediately lest they putrefy, emit foul smells, act as a source of infection and disease, and become a public health hazard. While in developing countries most of the public health problems are due to industrialisation, in developing countries many of the public health problems are related to defective sewage and waste disposal.

Many of our hospitals neither have a satisfactory waste disposal system nor a waste management and disposal policy. The disposal of waste is exclusively entrusted to the junior most staff from the housekeeping department without any supervision, and even pathological wastes are observed to be disposed off in the available open ground around hospitals with scant regard to aesthetic and hygiene considerations. Hospitals are prone to create health hazards for the public at large and also for healthcare workers with unscientific disposal of biomedical waste. Management of biomedical waste assumes great significance where countless poverty stricken rag pickers expose themselves to disease and death while eking out a living out of sifting and sorting of such waste. Among all the hospital waste, the 'sharps' i.e. needles, scalpels, blades, etc. are the most dangerous culprits, mainly because of their propensity to cause accidental pricks and cuts thereby providing direct entry of pathogenic organisms into the blood stream. "Waste" can be defined as any discarded, unwanted residual matter arising from the hospital or activities related to the hospital. "Disposal" covers the total process of collecting, handling, packing, storage, transportation and final treatment of wastes.

VOLUME

Rapid mushrooming of hospitals and nursing homes has resulted in unprecedented amount of biomedical waste being generated. In Indian cities, the quantity of refuse varied from 0.48 to 0.06 kg per capita per day with total compostable matter varying from 30 to 40 per cent. The quantum of domestic waste in advanced countries is six to ten times more. So far as hospitals in advanced countries are concerned, the average refuge in hospitals in Denmark and West Germany is 3 kg per bed per day and in USA up to 14 kg per bed per day. The quantum and type of waste reflects the life-style of the society, and this must be borne in mind in the planning of waste disposal in hospital. On an average, the volume of total solid waste in hospitals in India is estimated to range between 1 kg and 3 kg per day on a per bed basis. It is estimated that about 0.5 kg out of this consists of food waste. In a study carried out in the family wing of a large hospital, the composition of waste was bandages, gauge and cotton wool waste 34.1 per cent, coal ash 31.6 percent, foliage 13.5 per cent, food waste 11.5 per cent and glass, bottles, etc. 1.8 per cent.

TYPES OF WASTE

In general, hospital waste can be classified into two major groups. The first group comprises of mainly solid or semisolid waste, and the second group mainly liquid waste.

TABLE 1

Option	Waste Category	Treatment & Disposal
Category No. I	**Human Anatomical Waste** (human tissues, organs, body parts)	Incineration /deep burial
Category No. 2	**Animal Waste** (animal tissues, organs, body parts carcasses, bleeding parts, fluid, blood and experimental animals used in research, waste generated by veterinary hospitals colleges, discharge from hospitals, animal)	Incineration /deep burial
Category No. 3	**Microbiology & Biotechnology Waste** (wastes from laboratory cultures, stocks or specimens of micro-organisms live or attenuated vaccines, human and animal cell culture used in research and infectious agents from research and industrial laboratories, wastes from production of 48iological, toxins, dishes and devices used for transfer of cultures)	local autoclaving / micro-waving / incineration
Category No. 4	**Waste sharps** (needles, syringes, scalpels, blades, glass, etc. that may cause puncture and cuts. This includes both used and unused sharps)	disinfection (chemical treatment) auto-claving / micro- waving and mutilation/ shredding
Category No. 5	**Discarded Medicines and Cytotoxic drugs** (wastes comprising of outdated, contaminated and discarded medicines)	Incineration /destruct ion and drugs disposal in secured landfills.
Category No. 6	**Solid Waste** (Items contaminated with blood, and body fluids including cotton dressings, soiled plaster casts, lines, beddings, other material contaminated with blood)	Incineration /autoclaving / micro-waving
Category No. 7	**Solid Waste** (wastes generated from disposable items other than the waste sharps such as catheters, intravenous sets etc).	disinfection by chemical treatment/autoclaving/micro-waving and mutilation/
Category No. 8	**Liquid Waste** (waste generated from laboratory and washing, cleaning, house-keeping and disinfecting activities)	disinfection by chemical treatment and discharge into drains.
Category No. 9	**Incineration Ash** (ash from incineration of any bio-medical waste)	disposal in municipal landfill
Category No. I0	Chemical Waste (Chemicals used in production of biological, chemicals used in disinfection, as insecticides, etc.)	Chemical treatment and discharge into drains for liquids and secured landfill for solids.

COLOUR CODING AND TYPE OF CONTAINER FOR DISPOSAL OF BMW

TABLE 2

Colour Coding	Type of container to be used	Waste Category Number
YELLOW	Non Chlorinated plastic bags	Category 1,2,5,6
RED	Non Chlorinated plastic bags/puncture proof container for sharps	Category 3,4,7
BLUE	Non Chlorinated plastic bags container	Category 8
BLACK	Non Chlorinated plastic bags container	Municipal Waste

CHARACTERISTICS OF A GOOD WASTE DISPOSAL SYSTEM

Incidents of inappropriate hospital waste disposal and the fear of HIV and AIDS have drawn medical attention to hospital waste management practices. There are conflicting views among the medical fraternity regarding hospital waste management but there is now a dire need to sensitise health administrators, especially in view of the Biomedical Waste (Management and Handling) Rules, 1998 promulgated by the Ministry of Environment and Forests, Govt. of India. Any good waste disposal system should be planned for:

i. Good appearance
i. Safety
iii. Pest control
iv. Odour control, and
v. Public health safety.

The system should also be sanitary, economical and convenient. During the planning stage, attention should be given to the routes by which garbage and infected material are to be removed. In principle, firstly, the garbage and infected material should be removed from its point of origin by a direct (and shortest) route. In large multistoried buildings, a conveniently placed special lift only for garbage will be necessary. Secondly, the movement of dirty and infected materials should be restricted to the minimum. Thirdly, handling and transportation of the waste within the hospital premises should also be minimised.

REVIEW OF LITERATURE

Rajesh K Chudasama, Matib Rangoonwala, Ankit Sheth, SKC Misra, A M Kadri, Umed V Patel made a study on Biomedical Waste Management: A study of knowledge, attitude and practice among health care personnel at tertiary care hospital in Rajkot. They found that Only 44.3% of sample participants only received training for bio medical waste management and Informed that HIV (74.47%) and Hepatitis B (56.03%) were the main infectious diseases transmitted by the bio medical waste.

Malini A and Bala Eshwar made a study on Knowledge, Attitude and Practice of Biomedical waste management among health care personnel in a tertiary care hospital in Puducherry. They found that <50% of nursing staff and <25% of MPWs (multi purpose workers) had the knowledge of colour coding and segregation. There was also poor knowledge regarding disposal of sharps among technicians and MPWs. It also brought to our notice that only 50% of the doctors (residents) and nursing staff and 26% of the laboratory technicians have undergone training in Biomedical Waste management.

Ostwal.K, Jadhav.A, More.S, Shah.P, Shaikh.N made a study on Knowledge, attitude and practice assessment of biomedical waste management in tertiary care hospital. They found that Doctors were having good knowledge followed by nurses followed by sanitary staff. *It was improved after training* programme of Bio-medical Waste management.

Gyan P sInGh, PratIbha GuPta, reema KumarI, sneh Lata Verma made a study on Knowledge, Attitude and Practices Regarding Biomedical Waste Management among Healthcare Personnel in Lucknow, India.They found that 83.3% of medical and dental doctors and students had knowledge about waste management plan and its authorization. Majorities of the medical doctors (83.3%), paramedics (80%) and students (66.7%) had knowledge about place of waste disposal. On practice level, most of the healthcare personnel were using autoclave and lesser number of personnel were using dry heat sterilization.

Imaad Mohammed Ismail*, Annarao G. Kulkarni, Suchith V. Kamble, Sagar A. Borker, Rekha R and Amruth M made a study on Knowledge, attitude and practice about bio-medical waste management among personnel of a tertiary health care institute in Dakshina Kannada, Karnataka. They found that knowledge regarding colour coding and risks of handling bio-medical waste was poor across all the 4 groups (doctors, nurses, lab technicians, class IV workers) especially among class-IV waste handlers. Majority of the study participants had never undergone any training on bio-medical waste management and there was a felt need for the same.

OBJECTIVES
1. To determine Knowledge levels among healthcare personnel about biomedical waste management.
2. To determine Attitude levels among healthcare personnel about biomedical waste management.
3. To determine practise levels among healthcare personnel about biomedical waste management.
4. Impact of knowledge levels on practise among healthcare personnel about biomedical waste management.
5. Impact of attitude levels on practise among healthcare personnel about biomedical waste management.

HYPOTHESIS
Hypothesis 1: knowledge levels of staff has less impact on their practice of biomedical waste management.
Hypothesis 2: attitude of staff has less impact on their practice of biomedical waste management.

RESEARCH METHODOLOGY
With the help of Random Sampling method, 150 samples will be collected from NTR government general hospital to do survey on healthcare personnel of hospital on doctors, nurses, housekeeping staff. Survey is done with help of predefined questionnaire.

RESULTS AND DISCUSSION
Going deeper into analysis to satisfy the objectives of study, regression analysis is done for testing the hypothesis,
HYPOTHESIS 1

TABLE 1: MODEL SUMMARYᵇ

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.407ᵃ	.166	.106	.49273	.166	2.765	10	139	.004

Predictors: (Constant), proposed, rules, Safe Transport, responsibility, store, regulated, Disposal Policy, described, Legislation, Separate Permit b. Dependent Variable: practice.

In the above table R is the dependent variable, R square is the coefficient of determination (level of impact on dependent variable by independent variable) It indicates R square value is 0.166 which means 16.6% knowledge on bio medical waste has impact on its practices.

Knowledge has less impact on practice levels, some unexpected knowledge variable is not covered which also have impact on bio medical waste practices. Significant difference is 0.004 which is less than 0.5. In such case it is acceptable that knowledge has impact on practice.
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TABLE 2: COEFFICIENTSᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.815	.216		13.040	.000
	Regulated	-.034	.033	-.094	-1.045	.298
	Rules	.026	.031	.068	.824	.411
	Described	-.062	.033	-.168	-1.847	.067
	Store	.025	.036	.060	.704	.483
	SafeTransport	.098	.033	.259	2.950	.004
	DisposalPolicy	.024	.037	.061	.641	.523
	Resposbility	-.023	.043	-.043	-.530	.597
	SeperatePermit	.070	.037	.213	1.864	.064
	Legislation	-.099	.044	-.257	-2.250	.026
	Proposed	.025	.035	.073	.737	.463

a. Dependent Variable: practise

From the above table, Coefficient of variation for this study is 2.815 and with significant value 0.00. Knowledge on bio medical waste is regulated by variable has negative impact on practice of bio medical waste management with an insignificant value of 0.298, knowledge on biomedical rules were amendment has less positive impact with insignificant value 0.411, knowledge on statement describing biomedical waste has negative impact with insignificant value 0.67, knowledge on waste should be disposed before certain period has less positive impact with insignificant value 0.483, knowledge on safe transport of biomedical waste is regulated by has positive impact with some significant value 0.04 (<0.05), knowledge about any biomedical waste policy in their hospital has less positive impact with insignificant value 0.523, knowledge about who is responsible for handling biomedical waste in hospital has negative impact with insignificant value 0.597, knowledge about requirement of separate permit for biomedical waste transportation has positive impact with insignificant value 0.64, knowledge to have bio-medical waste generation and legislation has less negative impact with significant value 0.26, knowledge about first proposed biomedical waste rules has less positive impact with insignificant value on 0.463 on practice of biomedical waste management. So on an overall 16.6% knowledge has positive impact on practices.

TABLE 3: ANOVAᵇ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.713	10	.671	2.765	.004ᵃ
	Residual	33.747	139	.243		
	Total	40.460	149			

a. Predictors: (Constant), proposed, rules, Safe Transport, responsibility, store, regulated, Disposal Policy, described, Legislation, Separate Permit
b. Dependent Variable: practice

From the above table it is clear that hypothesis 1 that is "knowledge of staff has less impact on their practice level" is satisfied because significant difference is 0.004 which is less than 0.05.

also some variable which have impact on staff practice levels are not covered.

HYPOTHESIS 2

TABLE 4: MODEL SUMMARY[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.378[a]	.143	.081	.49957	.143	2.312	10	139	.015

a. Predictors: (Constant), complaint, Extra Burden, Issue, Financial Burden, labelling, Teamwork, Voluntary Programme, Knowledge, Sterilised, Treatment Plant
b. Dependent Variable: practice

From the above table, it is clear that 14.3% staff attitude has impact on their practice levels and significant difference is 0.15 which is less than 0.5 that means more or less it has impact on their practice, clearly shown in figure and also some unexpected variables which also have impact on practice of biomedical waste management were not covered.

TABLE 5: COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.911	.190		15.298	.000
	Knowledge	.044	.039	.129	1.115	.267
	Teamwork	-.035	.041	-.095	-.857	.393
	ExtraBurden	.112	.045	.241	2.520	.013
	Sterilised	-.023	.042	-.066	-.553	.581
	Labeling	-.046	.037	-.120	-1.228	.222
	Issue	.056	.037	.167	1.513	.133
	TreatmentPlant	.056	.046	.161	1.224	.223
	VoluntaryProg	-.045	.040	-.142	-1.143	.255
	FinancialBurden	-.098	.038	-.244	-2.580	.011
	Complaint	-.007	.049	-.018	-.139	.890

From the above table it is clear that coefficient of variation should be 2.911 with significant value 0.00. Attitude of staff about knowing generation and legislation of biomedical waste management has less positive impact on practice with insignificant value 0.267, attitude about bio medical waste handling is a teamwork or not has negative impact on practise with insignificant value 0.393, attitude of staff about biomedical waste management is extra burden of work has positive impact on practice with significant value 0.013 (<0.05), attitude of staff on compulsory sterilising waste before disposing it has negative impact on practice with insignificant value 0.581, attitude of staff on labelling of biomedical waste containers is for clinical significance has negative impact on practice with in significant value 0.222, attitude of staff on safe management of biomedical waste has less positive impact with insignificant value0.133, attitude of staff whether to have a separate treatment plant for biomedical waste has less positive impact with insignificant difference 0.223. Attitude of staff on participation of volunteer pro-grammes on biomedical waste has negative impact on practise with insignificant value 0.255, attitude of staff whether biomedical waste management is financial burden to hospital has negative impact on practice with significant value 0.011 (<0.05), attitude of staff whether when they need to complaint on any organization to pollution control board on not following biomedical rules has negative impact on practice with insignificant value 0.890. This shows more or less 14.3% of staff attitude has impact on their practice.

TABLE 6: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.770	10	.577	2.312	.015[a]
	Residual	34.690	139	.250		
	Total	40.460	149			

a. Predictors: (Constant), complaint, Extra Burden, Issue, Financial Burden, labelling, Teamwork, Voluntary Programme, Knowledge, Sterilised, Treatment Plant
b. Dependent Variable: practice

From the above table it is clear that hypothesis 2 that is "Attitude of staff has impact on their practice levels" is satisfied as significant value is less than 0.05 it is 0.015 and also some un expected variables which have impact on practice are not considered.

FINDINGS
- From this research it is found that practice level of respondents is good compared to knowledge levels of respondents in government general hospital Vijayawada.
- And also found knowledge levels of doctors and nurses are high compared to housekeeping and laboratory staff.
- When comparing practice level among staff doctors of NTR GGH has less practice level compared to housekeeping and nursing staff.
- Knowledge levels of staff has less impact on their practices of handling biomedical waste.
- Attitude levels of staff has less impact on their practices of handling biomedical waste.
- Maximum staff has positive attitude on biomedical waste management but they were actually not practicing them.
- Doctors have poor knowledge about colour coding system of biomedical waste which is one of the important factor where doctors failed.
- In NTR government general hospital biomedical waste is segregated by outsource company who takes care of disposing biomedical waste.

SUGGESTIONS
- Training should be provided to staff by hospital administration.
- All containers having different coloured plastic bags should be located at the point of generation of waste i.e. near diagnostic services areas so that waste can be easily segregated
- It should be ensured that waste bags are filled upto only three fourth capacity, tied securely and removed from the site of the generation regularly and timely
- Certain categories of waste, which may need pre-treatment (decontamination / disinfection) at the site of generation such as plastic and sharp materials, etc., should be removed from the site of generation only after treatment
- Housekeeping staff collects waste in closed container by wearing personal protection equipment
- No untreated BMW should be stored beyond 48 hours
- Waste routes should be designated and separate time should be earmarked for BMW to reduce chances of its mixing with general waste
- Dedicated wheeled trolleys are used and they should be cleaned and disinfected in case of any spillage. Trolleys should not have any sharp edges and should be easy to clean.
- Special team should be administering the practices of biomedical waste.
- BMW shall be transported only in vehicles authorized by competent authority as specified by government
- Create awareness among staff about safe a management of biomedical waste.
- There should be a biomedical waste policy to be implemented in hospital.

CONCLUSION

Hence this study concludes that every staff of hospital who are involved in bio medical waste management should possess good knowledge about biomedical waste legislation, positive attitude toward biomedical waste handling, and should follow right way of practice. But actually staff are lacking with good knowledge levels and positive attitude which leads to right practice, so by proper training programmes, hospital should create awareness among its staff.

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DIFFUSION OF PERCEIVED RISK: A KEY TO SUCCESS

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ABSTRACT

In the competitive world perceived risk of the consumers is very important consideration by the organizations. Customers are not brand loyal today because of easy and bulk availability of different brands. But this availability has made the consumer confused. They feel uncertainty of product's performance. Such uncertainty, confusion anxiety is termed as perceived risk. Diffusion of perceived risk of consumer may become the key for success of a company. Company which is able to build confidence in consumers about its product(s) will establish its brand and once the brand is established the company can reap the benefits. Companies are doing number of efforts in this regard. The paper in hand considers the types of perceived risks and suggests the way to reduce those to keep the customer intact.

KEYWORDS
perceived risk, financial risk, product risk, time risk, diffusion.

INTRODUCTION
Every one as consumer faces a dilemma of uncertainty at the time of purchase of a product especially when the product is new and costly. The fear, anxiety, danger etc. associated to the outcome of the product is generally termed as perceived risk. In developing countries, like India, consumers are more conservative as they are left with low amount, after their household expenditure, at their disposal. Before making any non-routine purchase they seek opinions, experiences and suggestions from other who have used the same product. For instance, if a person wants to purchase a mobile phone, LED TV, CAR etc. he will contact the opinion leaders, reference groups and many others for getting their first-hand experience about the working of the product to be purchased. Perceived risk by the consumers is a sort of headache for the companies because companies have spent considerable funds on production and promotion of the product. Companies cannot afford the hesitation of the consumers in this regard. In today's competitive business environment companies are providing warranties, free trial facilities, money back guaranties etc. to reduce the perceived risk in the minds of prospective customers.

TYPES OF PERCEIVED RISKS
Following are normally considered as the types of perceived risks:

- **Financial risk:** Every one before spending feels the discharge of monetary resources. Environment of the prospective consumers measures the degree of financial risk being perceived by them. For instance, in developed countries where the people are having comfortable source of finances, they perceive less financial risk. Whereas in underdeveloped or developing countries the people are having low residual income after purchases for households they perceive high financial risk.
- **Functional risk:** This is the type of risk which a prospective consumer perceives in relation to the functioning of the product to be purchased. Again a consumer perceives this type of risk generally with the product which is new in the market. A conservative consumer, even for a low priced product, is always cautious in purchasing a new product. For instance, a housewife normally does not dare to purchase a newly introduced detergent powder with a fear of harming her hands until she is convinced by some opinion leaders or reference groups.
- **Physical risk:** Consumer of any type has a reservation about the potential physical risk involved in the use of a particular product. For instance, unsafe electrical appliances etc.
- **Social risk:** When a person feels that by purchasing a particular type of product will reduce his status in society, this type of risk is a social risk. For instance, a person with high income normally prefers to purchase a costly branded product to keep his status in society even his utility may be fulfilled by a non-branded local product.
- **Time risk:** in today's speedy life, time is considered as an important factor. Everyone needs timely delivery, quick repairs and after sales services. Consumers prefer the purchase the established products as they fear if the newly introduced product does not fulfill their demand they will have to waste time in replacement.
- **Psychological risk:** everybody needs psychological satisfaction from the product. People purchase those products which enhance their psychological satisfaction. They do not take the risk of purchasing those products which in turn may pose a feeling of guilt. For instance, the instant mix type is not generally welcomed by housewives in eastern countries as they feel that this will lead to show their less interest towards their wards which otherwise they could have provided by preparing the product themselves.

SUGGESTIONS TO REDUCE THESE PERCEIVED RISKS
As everyone is confronted with one or all of the above said perceived risks at the time of purchase companies must formulate the strategies so as to encounter these and make the consumers confident to purchase their product. Following suggestions may be considered in this regard:

- **Surety of performance:** The Company must create an environment in which the consumer feels that this product will surely perform. The seller should try to convince the prospective customer by explaining the detailed features of the product. Many companies are now providing free trial offers, free samples, test drives and similar to create confidence in the minds of consumers.
- **Competitive pricing:** Companies will gain the confidence of the consumer if they are able to convince the prospects that they are being given product at competitive price. So the companies may give more warranties than their competitors, free extended warranties, free accessories etc.
- **Safe designing:** Consumer will purchase the product of those companies which ensures the following of safety standards. Safe designing and safety measures associated with the product enhance the confidence of consumers in company's product.
- **Socially acceptable products:** Company must try its best to make its product socially acceptable. For this companies are getting their products endorsed by celebrities and respected persons. They may also get the help of opinion leaders.
- **Feel good factor:** The Company must provide a product which creates image of the consumer in his circle. The product must include such exclusive features that a consumer feels proud of being owner of that product. This gives psychological satisfaction to the customer. For instance, Maruti's slogan which considers consumer as king.
- **Creative and educating advertisements:** The concerns must concentrate on the presentation of creative and educating advertisements. Creative ideas compel the audience to spare time for viewing, reading and/or listening.
- **Feedback and settling of grievances in less time:** In order to make the consumer satisfied, their value of time be understood. For this the company may provide pickup and drop services in case of trouble or routine service due. The consumer may be contacted regularly in order to get feedback regarding the working and grievances of the product and service provided by the dealers so that the timely solution may be provided. If the company takes immediate

action on the complaints or feedbacks of the consumers it will create a good image of the company in the mind of consumers and they will purchase the other products of company without hesitation rather they will recommend that to others in their circle. This will bind the customers to the company.

CONCLUSION

In today's global business environment companies are facing number of challenges like speedy technological development, customer's tastes and preferences, brand consciousness, quality and durability of products and many more. Because of availability of numerous products consumers are confused which in turn increases their perceived risk. Once the company is able to make its brand acceptable it can launch any new product easily with lesser perceived risk. No doubt many a companies are doing efforts, as discussed above, to win the consumer's confidence still it is a continuous exercise in the era of prevailing cut throat competition as the competitor is always ready to defeat. So companies must always be ready to implement new strategies, without delay, to diffuse the perceived risk and to retain and attain the consumers.

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THE ROLE OF BANCASSURANCE IN DIGITAL ERA

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ABSTRACT
Bancassurance means selling insurance product through banks. The insurance company will get advantage when their market share increases. There are more than 92,114 bank branches in India. Insurance penetration was 2.71 per cent in 2001 and 3.3 per cent in 2014. Insurance density increased from US$11.5 in 2001 to US$55 in 2014. Globally, insurance penetration and density were 3.4 per cent and US$368 respectively for the life segment. The Indian insurance market is a huge business opportunity waiting to be harnessed. India currently accounts for less than 1.5 per cent of the world's total insurance premiums and about 2 per cent of the world's life insurance premiums despite being the second most populous nation. The country is the fifteenth largest insurance market in the world in terms of premium volume, and has the potential to grow exponentially in the coming years. Even there are a good number of people have insured, but whether the insurance they have taken is sufficient to meet their objective. A person normally takes insurance when they are having dependents. The life of the earning member will be very crucial for the family. In this situation, people will think about buying a life insurance product for protecting their family. The policy will help to cover the financial damages caused due to the death of the insured. The critical question needs to be answered at this point of time whether the insurance value is sufficient enough to cover the risk due to the death of the individual. The paper is trying to analyze the possibilities of bancassurance person to sell the life insurance products during the time of cashless and digitalized economy based on income replace method or income contribution method, so that the family members will be sufficiently protected. The intension of digitalization is that to reduce the tax avoidance, to fight against black money and fake notes etc. The banks have the information and the same institution is suggesting the insurance products to the person, then the customer will be getting financial advice without sharing this information to a third party. This is the main advantage of bancassurance channel where other channel doesn't have the same opportunity when the economy is moving towards the digitalization.

KEYWORDS
bancassurance, insurance.

BACKGROUND
Bancassurance means selling insurance product through banks. Insurance company and banks will have an agreement between them to sell the products of the insurance company through different branches of a bank. The present law enables a bank to tie up with more than one insurance company to sell the insurance products through their branch networks. Bancassurance setup makes both firms to increase their revenue. The bank will get more fee based income from insurance companies for selling the insurance products. The insurance company will get advantage when their market share increases. There are more than 92,114 bank branches in India. Insurance penetration, which is premium volume as a ratio of GDP, was 2.71 per cent in 2001 and 3.3 per cent in 2014. Insurance density, which is measured as the ratio of premium to population, increased from US$11.5 in 2001 to US$55 in 2014. Globally, insurance penetration and density were 3.4 per cent and US$368 respectively for the life segment. The Indian insurance market is a huge business opportunity waiting to be harnessed. India currently accounts for less than 1.5 per cent of the world's total insurance premiums and about 2 per cent of the world's life insurance premiums despite being the second most populous nation. The country is the fifteenth largest insurance market in the world in terms of premium volume, and has the potential to grow exponentially in the coming years. So there is a big gap between the number of people insured and doesn't insured. Even there are some people insured then there is another thing need to be considered is whether the insurance they have taken is sufficient to meet their objective. Why a person should take life insurance? A person normally takes insurance when they are having dependents. The life of the person concerned is very crucial for the defendant members. The life insurance products will help to solve this issue.

Let's look into life of a typical human being. After completing their studies, they will engage in some economic activity. It can be a business, or working somewhere to meet their expenses. Till then all expense might have taken by their parents. But after a few years the parents might retire and they will become dependent of the person concerned. Next event in their life would be marriage. If the spouse is not working, then the person will be having one more dependent. As time passes, they will be living in a family set up where old aged parents, two or three kids and spouse. Now the life of the earning member will be very crucial. In this situation the people will think about buying life insurance products for protecting the family. The nature of insurance products is like the people will not buy the product. The sales managers need to sell it. Insurance has been sold through different channels. Agent is the dominating channel. But now a day, the insurance companies are using all channels to reach the customer. At present, the government of India trying makes a cashless economy where all the transactions will be done through banks on digital platforms like mobile banking, internet banking etc.

LIFE INSURANCE
Life insurance is a contract between an insurance policy holder and an insurer, where the insurer promises to pay a designated beneficiary a sum of money in exchange for a premium, upon the death of an insured person. Depending on the contract, other events such as terminal illness or critical illness can also trigger payment. In return the person who takes the insurance policy pays certain some of money called premium in particular time interval or a lum sum amount. There are different policies available in the market offered by 23 private life insurance companies and one public life insurance company called Life Insurance corporation of India. The policy will help the individual to cover the financial damages caused due to his or her death to the family. The critical question needs to be answered at this point of time whether the insurance value is sufficient enough to cover the risk due to the death of the individual. How to determine this amount? Who decides this amount? Whether the insurance agent or sales manager aware about such amount or simply they are selling the insurance products. Here the relevance of bancassurance comes into play. First of all, the person who sells the insurance products should understand the amount of insurance required to cover the financial damaged caused to the family due to the death of the person. Technically it is called economic value of human life.

ECONOMIC VALUE OF HUMAN LIFE

The human life value calculation helps to assess the financial loss to the family would incur if an earning member were to die today. The calculation provides a rough estimate of the human life value, which can factor into how much insurance cover needed in each case. Computation of Human life value requires a detailed analysis of many factors.

Some of them are;

- Annual Income of the person
- Balance of active earning period till retirement
- Personal expenses
- Inflation
- Future growth in salary

METHODS OF HUMAN LIFE VALUE COMPUTATION

- **INCOME REPLACEMENT VALUE**

Human value computation is based on the current annual income. Say for example the annual income is Rs. 3,00,000 and the age is 38 years. Assuming the retirement age as 60 years, then the balance years of service is 22 years (60-38=22 years). The insurance value would be Rs. 66,00,000 (22*3,00,000=66,00,000)

- **INCOME CONTRIBUTION METHOD**

Here is another method for calculating Human life value as the present value of all future income including other fringe benefits less personal expenses, life insurance premium and taxes. For example, Mr.X, aged 36, earning a gross income of Rs. 3,00,000 today, will retire at the age of 60. His personal expenses and Income tax come together at Rs. 69,300 p.a. Rate of interest is 8.5 per cent. The cost of living is expected to rise by 6.5 per cent every year.

Age of person	=	36 years
Retirement age	=	60 years
Years to retirement	=	24 years
Annual gross income	=	Rs. 3,00,000
Personal expense and income tax	=	Rs. 69,300
Net disposable income	=	Rs. 2,30,700 (3,00,000-69,300=2,30,700)
Inflation	=	6.5 per cent
Rate of discounting	=	8.5 per cent

There for rate of return = 1.8879 per cent [{(1.085)/(1.065)-1)}*100]

Net present value is Rs. 45 lakh

If Mr. X does not return home today, his family will lose his earnings, whereas if they have Rs. 45 lakhs deposited earnings 8.5 per cent interest, then his family is sure to get Rs. 2,30,700 increased by 6.5 per cent expected inflation every year for next 24 years, at the end of which this amount will be nil.

There for Mr. X's Human life Value = 45 lakh

Normally, when the Human Life Value concept is used, the amount arrived at is much more than the prospect would have normally thought of. The bancassurance person, therefore, must necessarily suggest a package, which covers this amount at an affordable premium.

THE ROLE OF BANCASSURANCE

At time since Direct Deposit become popular, there is huge potential for bancassurance people to intervene in between and easily sell the insurance products. Direct deposit is the practice of transferring money electronically rather than giving someone a paper check or currency. The employer transfers the payroll money into its bank account of the employee. There is a need for insurance for all individuals. Identifying those needs and then convincing the customer to buy the insurance products have vested with the insurance sales people. The critical analysis of the features of the life insurance sales channel always say, the bancassurance channel got advantages because the insurance need to be sold to an individual based on his or her insurance needs rather than simply selling it. How the type and need of insurance can be identified? There are two methods of determining the value of insurance needed to be taken to protect the family members from the uncertainty. In the above two methods, the information regarding the person's earnings and the contribution to the family are the key information to decide the need of insurance of the individual. In income replacement method, if the sales managers of insurance could get the information that how much he earns, then he can deliver an insurance product to him based on the actual requirement of insurance which is capable enough to protect the risk exposure of the family members on the premature death of the earning member. Insuring a person's life to protect the interest of the family members will be a considerable relief to the dependents. The distribution channels used in life insurance industry other than bancassurance channel don't have the information like the banker has. In era of digitalization and cashless economy, the spending habits of a person also can be tracked. The bank will have the information regarding his income from the employer or from the business he/she runs. So there is an easy way in front of the bancassurance person to determine the insurance need of the individual based on the income replacement method. On the other side, the insurance need can be calculated based on the contribution he made to the family. An initial understanding about the contribution to his or her family can be easily assessed in the digitalization period. Total income he/ she earn and the bank balance will come down based on his spending. So the banker can easily identify where their money has been going in digitalization era. He uses his debit card or credit card to purchase the items or for making the payment. This approximate assessment will help the bancassurance person to measure how much money he spends for personal use and to maintain the family. Here one ethical question will come, the secrecy and privacy of the individual. But the intension of digitalization is that to reduce the tax avoidance, to fight against black money and fake notes etc. The banks have the information and the same institution is suggesting the insurance products to the person, then the customer will be getting financial advice without sharing this information to a third party. This is the main advantage of bancassurance channel where other channel doesn't have the same opportunity when India is migrating to a complete digitalized economy.

CONCLUSION

It is concluded that Bancassurance means selling insurance product through banks. The insurance company will get advantage when their market share increases. There are more than 92,114 bank branches in India. Insurance penetration was 2.71 per cent in 2001 and 3.3 per cent in 2014. Insurance density increased from US$11.5 in 2001 to US$55 in 2014. Globally, insurance penetration and density were 3.4 per cent and US$368 respectively for the life segment. The Indian insurance market is a huge business opportunity waiting to be harnessed. India currently accounts for less than 1.5 per cent of the world's total insurance premiums and about 2 per cent of the world's life insurance premiums despite being the second most populous nation. The country is the fifteenth largest insurance market in the world in terms of premium volume, and has the potential to grow exponentially in the coming years. Even there are a good number of people have insured, but whether the insurance they have taken is sufficient to meet their objective. A person normally takes insurance when they are having dependents. The life of the earning member will be very crucial for the family. In this situation, people will think about buying a life insurance product for protecting their family. The policy will help to cover the financial damages caused due to the death of the insured. The critical question needs to be answered at this point of time whether the insurance value is sufficient enough to cover the risk due to the death of the individual. The paper is trying to analyze the possibilities of bancassurance person to sell the life insurance products during the time of cashless and digitalized economy based on income replace method or income contribution method, so that the family members will be sufficiently protected. The intension of digitalization is that to reduce the tax avoidance, to fight against black money and fake notes etc. The banks have the information and the same institution is suggesting the insurance products to the person, then the customer will be getting financial advice without sharing this information to a third party. This is the main advantage of bancassurance channel where other channel doesn't have the same opportunity when the economy is moving towards the digitalization.

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VALUATION OF HERO MOTOCORP LTD. AND BAJAJ AUTO LTD.: AN ANALYTICAL PERSPECTIVE

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ABSTRACT

This research paper focuses on an analytical valuation perspective of Hero Motocorp Ltd. (HMCL) and Bajaj Auto Ltd. (BAL). HMCL is the no. one motor bike maker in India and BAL takes place second position. The companies were valued on the basis of 9 financial parameters. In the present era of Liberalization, Privatization and Globalization, the Market has become globally competitive; hence the survival of an enterprise depends upon the efficiency and accuracy, it is necessary to evaluate the financial performance of sampled units to know where these companies stand in the market and how these companies can improve further in the future by knowing their shortcomings.

KEYWORDS

HMCL, BAL, parameters, ratios.

INTRODUCTION

It is a basic fact that managers who focus on building shareholder value will create healthier companies that who do not. Healthier companies will in turn, lead to stronger economies, higher living standard and more career and business opportunities. It the objective in corporate finance is the maximization of firm's value, then the relationship between financial decisions, corporate strategy and firm value has to be delineated. The value of a firm can be directly related to decisions that it makes, on which projects it takes, on how it finances them and on its dividend policy.

APPROACHES TO VALUATION

Basically there are two approaches to valuation. The first and most fundamental approach is discounted cash flow valuation, which extends the present value principles used to analyze projects to value a firm. The value of a firm is determined by four factors: Its capacity to generate cash flow from assets in place, the expected growth rate of these cash flow, the length of time it will take for the firm to reach stable growth rate and cost of capital.
The second way of valuing a firm or is equity is based on how the market is valuing similar or comparable firms. This is called relative valuation.

ROLE OF VALUATION

Valuation is useful in a wide range of tasks. The role it plays however is different in different arenas. Valuation is the central focus in fundamental analysis. The underlying theme in fundamental analysis is that true value of firm can be related to its financial characteristics-its growth prospects, risk profile and cash flow.
Some analysts use discounted cash flow models to value firms, while others use multiple such as the price/earnings and book value ratios. Thus valuation plays a key role in many areas of finance in corporate finance, in merger & acquisition and in portfolio management.
1. **Corporate Finance:** - It the objective in corporate finance is the maximization of firm's value, then the relationship between financial decisions, corporate strategy and firm value has to be delineated. The value of a firm can be directly related to decisions that it makes, on which projects it takes, on how it finances them and on its dividend policy.
2. **Merger & Acquisition:** - It plays a central in acquisition analysis. The bidding firm or industry has to decide on a fair value for the target firm before making a bid and the target firm has to determine reasonable value for itself before deciding to accept or reject the offer.
3. **Portfolio Management:** - The role that valuation plays in portfolio management is determined in larger part by the investment philosophy of the investor. Valuation plays a minimal role in portfolio management for a passive investor, whereas it plays a larger role for an active investor. Even among the active investor, the nature and role of valuation are different for different types of active investment.

METHODOLOGY

The data set for the study was collected from the CMIE Prowess database. Two companies, HMCL and BAL have been taken into study for a period of 2006 to 2015 from automobile sector. The companies were valued on the basis of 9 financial parameters.
The following parameters were utilized for the study:
1. Average Growth Rate
2. Sales
3. Market Capitalization
4. Research & Development
5. Cash Flows
6. Shareholder Wealth
7. Ratio Analysis
8. Profitability Analysis
9. Market Value Analysis
➢ The values of market capitalization & sales represent the valuation dimension from the perspective of the stock market performance and operating performance.
➢ The central focus is on cash flow because they represent the actual economic benefits generated by the assets.
➢ The study also uses the liquidity, profitability, efficiency and solvency ratios to examine the top value creators.
➢ Liquidity ratios measure the firm's ability to meet current obligations.
➢ Profitability ratios measure overall performance and effectiveness of the firm.

- Efficiency ratios or Activity ratios are employed to evaluate the efficiency, with which the firm manages and utilizes its assets.
- Leverage ratios are helpful in understanding the long-term financial position of the firm.

RESULTS AND INTERPRETATION

1. VALUATION ON THE BASIS OF AVERAGE GROWTH RATE OF SALES

Sales figures for the last 10 years from 2006 to 2015 were taken for the analysis. First the growth rate for each year was calculated and the average of the growth rate for all years was taken.

TABLE 1: HIGHER GROWTH RATE COMPANY

Average Growth Rate (2006-2015)		
Rank	Company	Growth Rate (%)
1	HMCL	4.2
2	BAL	2.2

Source of Data: CMIE Prowess database

It is observed that HMCL is having the higher growth rate as compared to BAL. The growth rate of HMCL is 4.2% in comparison to the 2.2% of BAL.

2. VALUATION ON THE BASIS OF SALES

The methodology involved finding out the cumulative sales for both the companies to determine the top company in terms of sales for the past 10 years.

TABLE 2 (i): TOP COMPANY IN TERMS OF CUMULATIVE SALES

Cumulative Sales (2006-2015)		
Rank	Company	Total Cumulative Sales (In Crore)
1	HMCL	17662.42
2	BAL	15776.12

Source of Data: CMIE Prowess database

The sales of HMCL is more than the sales of next best its competitor BAL.

TABLE 2 (ii): RANKING BASED ON SALES

Position based on sales (2015)		
Rank	Company	Total Sales (In Crore)
1	HMCL	27585.30
2	BAL	21569.72

Source of Data: CMIE Prowess database

When the sales exclusively for the year 2015 is taken, HMCL leads in the case of higher sales.

3. VALUATION BASED ON AVERAGE MARKET CAPITALIZATION

The following table gives a position of both the companies ranked on the basis of market capitalization.

TABLE 3: AVERAGE MARKET CAPITALIZATION-VALUATION

Market Capitalization (2006-2015)		
Rank	Company	Average Market Capitalization (In Crore)
1	HMCL	1.58
2	BAL	4.16

Source of Data: CMIE Prowess database

From the above table it can be seen that BAL has the higher market capitalization as compared to HMCL.

4. VALUATION BASED ON RESEARCH & DEVELOPMENT EXPENDITURE

The following table gives the ranking of the Average R&D expenditure of HMCL and BAL for the last 10 years (2006-2015):

TABLE 4: R&D TRENDS

Average R&D Expenditure (2006-2015)		
Rank	Company	R&D Expenditures (In Crore)
2	HMCL	0.42
1	BAL	1.23

Source of Data: CMIE Prowess database

From the above table we can see that there is a big difference between the R&D expenditure of HMCL and BAL. Very less attention has been paid by the HMCL in the last 10 years over the R&D expenditure.

5. VALUATION BASED ON CASH FLOWS

The following table gives a position of both the companies that have topped in the operational cash flows.

TABLE 5: CASH FLOW VALUATION

Average cash flow (2006-2015)		
Rank	Company	Average Cash Flows (In Crore)
1	HMCL	8.01
2	BAL	47.86

Source of Data: CMIE Prowess database

From the above table we can see that BAL has higher cash flows followed by HMCL. Figure Rs. 8.01 Crs represents the cash flow position of HMCL whereas the figure Rs. 47.86 Crs represents the cash flow position of BAL.

6. VALUATION BASED ON SHAREHOLDERS WEALTH

The following table gives a position of both the companies that have topped in the shareholders wealth.

TABLE 6: SHAREHOLDERS WEALTH VALUATION

Shareholders Wealth (2006-2015)		
Rank	Company	Shareholders Wealth (In Crore)
2	HMCL	3912.47
1	BAL	5692.37

Source of Data: CMIE Prowess database

From the above table we can see that BAL has higher shareholders wealth followed by HMCL. HMCL's shareholder wealth was Rs. 3912.47 Crs whereas BAL's shareholder wealth was Rs. 5692.37 Crs.

7. VALUATION BASED ON GENERAL RATIO ANALYSIS

The ratios used were categorized into liquidity, profitability, efficiency and leverage ratios. The ratios were calculated for a period of 10 years from 2006 to 2015 on an average basis. The companies were ranked on the basis of each ratio type; points were given to the companies in each ratio type

TABLE 7.1: RATIO ANALYSIS-LIQUIDITY AND PROFITABILITY (2006-2015)

Rank	Company	Liquidity Score	Rank	Company	Profitability Score
2	HMCL	0.98	2	HMCL	44.18
1	BAL	1.55	1	BAL	10.19

Source of Data: CMIE Prowess database

TABLE-7 2: RATIO ANALYSIS-EFFICIENCY AND LEVERAGE (2006-2015)

Rank	Company	Efficiency Score	Rank	Company	Leverage Score
1	HMCL	103.05	2	HMCL	13.28
2	BAL	45.17	1	BAL	8.04

Source of Data: CMIE Prowess database

TABLE 7.3: RATIO ANALYSIS-MARKET VALUE (2006-2015)

Rank	Company	Market Value Score	Rank
1	HMCL	42.08	2
2	BAL	42.73	1

Source of Data: CMIE Prowess database

TABLE 7.4: RANKING OF COMPANIES ON THE BASIS OF RATIO ANALYSIS POINTS (2006-2015)

Average Ratio Analysis Ranking (2006-2015)		
Rank	Company	Total Points
1	HMCL	8
2	BAL	7

Source of Data: CMIE Prowess database

HMCL leads as it got 8 points in comparison to the 7 points of BAL. In the case of Liquidity Analysis BAL has got 2 point as compared to the 1 point of HMCL.

8. VALUATION BASED ON PROFITABILITY

The three ratios of ROI, ROE and ROA were taken as indicators of profitability. All the three ratios were given equal weightage in arriving at a single figure called profitability score that will signify the profitability of the company.

TABLE 8: VALUATION IN TERMS OF PROFITABILITY

Value based on Average Profitability (2006-2015)		
Rank	Company	Profitability Score
1	HMCL	44.18
2	BAL	10.19

Source of Data: CMIE Prowess database

From the above table we can see that HMCL leads the list in terms of profitability followed by BAL. HMCL Profitability Score was 44.18 in the comparison of 10.19 score of BAL.

9. VALUATION BASED ON MARKET VALUE RATIOS

The three ratios of EPS, P/E Ratio and BVPS were taken as indicators of market valuation. All the three ratios were given equal weight age in arriving at a single figure called market score that will signify the market valuation of the company.

TABLE 9: VALUATION IN TERMS OF MARKET VALUE RATIOS

Value based on Average Market Valuation (2006-2015)		
Rank	Company	Market Value Score
1	HMCL	42.08
2	BAL	42.73

Source of Data: CMIE Prowess database

From the above table we can see that BAL leads the list in terms of market valuation. HMCL market value score was 42.08 in the comparison of 42.73 of BAL.

Let's take the hypothesis that sales growth is not positively related to the value of firm.

TABLE 10: ANNOVA TABLE AND SALES GROWTH

Source of Variation	Sum of Square	Degree of freedom	Mean Square
Between Sample	43454444.2	1	43454444
Within Sample	591724147.5	18	32873564

For the given value of V1-1 and V2-18, the F=4.41 and the calculated value of F (1.321) is less than this value, so our hypothesis is accepted, and therefore, we conclude that sales growth is not positively related to the value of a firm.

Let's take the hypothesis that profitability is not positively related to the value of firm.

TABLE 11: ANNOVA TABLE AND PROFITABILITY

Source of Variation	Sum of Square	Degree of freedom	Mean Square
Between Sample	5674.51	1	5674.501
Within Sample	2303.16	18	127.95

For the given value of V1-1 and V2-18, the F=4.41 and the calculated value of F (44.35) is greater than this value, so our hypothesis is rejected, and therefore, we conclude that profitability is positively to the value of a firm.

Let's take the hypothesis that Leverage is not positively related to the value of firm.

TABLE 12: ANNOVA TABLE AND LEVERAGE

Source of Variation	Sum of Square	Degree of freedom	Mean Square
Between Sample	140.97	1	140.97
Within Sample	2019.69	18	112.21

For the given value of V1-1 and V2-18, the F=4.41 and the calculated value of F (1.26) is less than this value, so our hypothesis is accepted, and therefore, we conclude that Leverage is not positively related to the value of a firm.

Let's take the hypothesis that market value are not positively related to the value of firm.

TABLE 13: ANNOVA TABLE AND MARKET VALUE RATIOS

Source of Variation	Sum of Square	Degree of freedom	Mean Square
Between Sample	18.22	1	18.22
Within Sample	1005.98	18	55.89

For the given value of V1-1 and V2-18, the F=4.41 and the calculated value of F (0.33) is less than this value, so our hypothesis is rejected, and therefore, we conclude that market value is not positively related to the value of a firm.

POINTS BASED ON RANKING

TABLE 14

Particulars	Points HMCL	BAL
Others Parameters	8	10
Liquidity Analysis	1	2
Profitability Analysis (sales)	2	1
Efficiency Analysis	2	1
Leverage Analysis	2	1
Market Valuation (old ratios)	1	2
Total Points	**16**	**17**

CONCLUSION AND IMPLICATIONS

1. The HMCL (4.2) has the highest average sales growth rate as compared to BAL (2.2%).
2. The most valuable company in terms of average market capitalization was BAL in comparison to HMCL. The contribution of BAL was Rs. 4.16 crore whereas HMCL's share was Rs. 1.58 crore in market capitalization.
3. On the basis of Ratio Analysis, BAL has got 7 points in comparison to the 8 Points of HMCL. BAL has got 2 for liquidity, 1 for profitability, 1 for leverage and 1 for efficiency analysis, and 2 for market value, whereas HMCL has got 8 points, 2 for efficiency, 1 for liquidity. 2 for profitability and 2 for leverage analysis and 1 for market value
4. In terms of profitability HMCL was the most profitable company. HMCL's share was 44.18 whereas BAL's share was only 10.19.
5. From the perspective of stock market wealth creation, it can be stated that HMCL was the most valuable company during the period 2006 to 2015.
6. In terms of cash flows, which represent the actual economics benefits generated by the assets, BAL was the largest value maximizers. HMCL's cash flow was Rs. 3912.47 crore in comparison to the Rs. 5692.37 crore of BAL's.
7. In terms of market value HMCL score was more than the BAL, it was 42.08 whereas BAL was 36.32.

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PRADHAN MANTRI JAN DHAN YOJANA - AN EXPLORATORY STUDY OF BANKS PARTICIPATION IN FINANCIAL INCLUSION IN INDORE DISTRICT

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ABSTRACT
The study finds out that PMJDY and other schemes like APY, PMJJBY, PMSBY are superior financial inclusion program because it had focus on individual security as well as socioeconomic welfare. Overall, the PMJDY is a big step towards financial inclusion. The provision of basic accounts with linked insurance coverage, debit card facilities, overdraft facility, zero account facilities etc., to the poor households' welfare, economic activity, stability, and the ability to absorb shocks. The PMJDY scheme can meet the challenges, improving banking infrastructure (bank branches, ATMs, good and reliable BCs). The mission of the PMJDY is to eradicate poverty through the financial inclusion program. It concludes that, the performance of the Public sector banks is good as compared to the Regional rural banks and Private sector banks to carry PMJDY schemes so RBI should make it mandatory for all types of banks to participate in such socioeconomic welfare schemes for betterment of society. Banking is not only money making business but also to build financially healthy, sound and secured society.

KEYWORDS
Pradhan Mantri Jan Dhan Yojana, financial inclusion, individual security, socioeconomic welfare district.

INTRODUCTION
In last few decades the banking industry has shown tremendous growth in business volume and has reach to masses by launching numerous financial products and schemes. Despite making significant improvements in all the areas relating to financial viability, profitability and competitiveness, there are concerns that banks have not been able to penetrate vast segment of the population and especially to the deprived sections of the society, to avail the necessary banking services. Internationally also efforts are being made to study the causes of financial exclusion and designing strategies to ensure financial inclusion reach to the poor and untouched segment. The reasons and problems of financial inclusion reach to society may vary from country to country and hence the strategy could vary but all-out efforts are being made to reach poor and needy segment of the society. Financial inclusion can uplift the financial condition and standards of the life of the poor and the disadvantaged.

"Financial Inclusion is delivery of banking services at an affordable cost to the vast sections of disadvantaged and low income groups. The main focus of financial inclusion in India is to promote sustainable development and generating employment in rural areas for the rural population." The Committee on Financial Inclusion (Chairman: Dr. C. Rangarajan, 2008)

CURRENT STATUS - INDIA
After six decades of independence, poverty and financial exclusion continue to dominate socioeconomic and political discourse in India, in spite of adopting various measures of financial inclusion. Though economy has shown impressive growth during post liberalization era of 1991, it is yet to make impact to all sections of the society. According to 2011 census, only 58.7% of the households have access to banking services. Recently World Bank released statistics, which highlights the progress made by India on the financial inclusion front, and also the challenges ahead. It is big challenge in catching up with the rest of the world in universalizing banking access, reveals global financial figures released recently by the World Bank.

To bank the unbanked the government had launched the high-profile financial inclusion program, **"Pradhan Mantri Jan Dhan Yojana"**, aimed at ensuring that all households must have a bank account. To provide security in society Government launched 2 Insurance schemes "Pradhan Mantri Jeevan Jyoti Bima Yojana" and "Pradhan Mantri Suraksha Bima Yojana" and a scheme of security for retired people "Atal Pension Yojna".

PRADHAN MANTRI JAN-DHAN YOJANA (PMJDY)
"Pradhan Mantri JAN DHAN YOJANA, A National Mission on Financial Inclusion". This National Mission on Financial Inclusion is launched with an ambitious objective of covering all households in the country with banking facilities and to have a bank account for each household. It has been emphasized by the Honorable PM that this is important for including people left-out into the mainstream of the financial system. The Pradhan Mantri Jan-Dhan Yojana (phase 1) is launched on 28 August, 2014, across the nation simultaneously. This will enable them to come out of the grip of moneylenders, manage to keep away from financial crises caused by emergent needs, and most importantly, benefit from a range of Governmental Schemes and various financial products.

Pradhan Mantri Jan-Dhan Yojana (PMJDY) is ensuring access to various financial services like availability of basic savings bank account, access to need based credit, remittances facility, insurance and pension to the excluded sections i.e. weaker sections & low income groups. This deep penetration at affordable cost is possible only with effective use of technology. As a part of PMJDY Government further launched Atal Pension Yojna, Pradhan Mantri Jeevan Jyoti Bima Yojana and Pradhan Mantri Suraksha Bima Yojana.

ATAL PENSION YOJANA (APY)
For every contribution made to the APY pension fund, The Central Government would also contribute 50% of the total contribution or Rs. 1,000 per annum, whichever is lower, to each eligible subscriber account, for a period of 5 years. The minimum age of joining APY is 18 years and maximum age is 40 years. The age of exit and start of pension would be 60 years. Therefore, minimum period of contribution by the subscriber under APY would be 20 years or more. Aadhaar card would be the primary KYC document for identification of beneficiaries, spouse and nominees to avoid pension rights and entitlement related disputes in the long-term.

PRADHAN MANTRI JEEVAN JYOTI BIMA YOJANA (PMJJBY)
PMJJBY is available to people between 18 and 50 years of age with bank accounts. It has an annual premium of Rs.330 excluding service tax, which is above 14% of the premium. The amount will be automatically debited from the account. In case of death due to any cause, the payment to the nominee will be Rs.2 lakh.

PRADHAN MANTRI SURAKSHA BIMA YOJANA (PMSBY)

PMSBY is available to people between 18 and 70 years of age with bank accounts. It has an annual premium of Rs.12 excluding service tax, which is about 14% of the premium. The amount will be automatically debited from the account. In case of accidental death or full disability, the payment to the nominee will be Rs.2 lakh and in case of partial Permanent disability Rs.1 lakh. Full disability has been defined as loss of use in both eyes, hands or feet. Partial Permanent disability has been defined as loss of use in one eye, hand or foot.

These schemes will be linked to the bank accounts opened under the Pradhan Mantri Jan Dhan Yojana scheme. Most of these account had zero balance initially. The government aims to reduce the number of such zero balance accounts by using these and other related schemes. (Source: Pradhanmantri Jan Dhan Yojana, Department of Financial services, Ministry of Finance, GOI)

LITERATURE REVIEW

The Rangrajan committee (Government of India (2008), "**Report of the Committee (Chairman: C. Rangarajan) on the Financial Inclusion**", **January 2008**) suggested that the financial inclusion should include access to main stream financial products such as bank accounts, credit, remittances and payment services, financial advisory services and insurances facilities. The main focus of financial inclusion in India is on promoting sustainable development and generating employment in rural areas for the rural population.

"**Taking Banking Services to the Common Man: Financial Inclusion**", Commemorative Lecture by Shri V.Leeladhar, Deputy Governor, RBI, Fedbank Hormis Memorial Foundation, Ernakulum, December 2, 2005. Banks would have to evolve specific strategies to expand the outreach of their services in order to promote financial inclusion. One of the ways in which this can be achieved in a Cost-effective manner is through forging linkages with micro finance institutions and local communities. Banks should give wide publicity of no frills account. Banks need to redesign their business strategies to incorporate specific plans to promote Financial Inclusion of low income group treating it both a business opportunity well as a corporate social responsibility.

An empirical study of **Sendhilvelan. M and Karthikeyan.K (2006)** revealed to ensure Financial Inclusion of all segments of the population, in both rural and urban areas banks should give wide publicity to the facility of "no frills" account.

Oya Pinar Ardic et al (2011) explained that using the financial access database by CGAP and the World Bank group, this paper counts the number of unbanked adults around the world, analyses the state of access to deposit and loan services as well as the extent of retail networks, and discusses the state of financial inclusion mandates around the world. The findings indicate that there is yet much to be done in the financial inclusion arena. Fifty-six percent of adults in the world do not have access to formal financial services.

According to Dr. K.C. Chakrabarty, Deputy Governor, Reserve Bank of India, said that financial Inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at an affordable cost in a fair and transparent manner by mainstream institutional players.

Dr. Anupama Sharma, & Ms. Sumita Kukreja has concluded in their study that Financial Inclusion has not yielded the desired results and there is long road ahead but no doubt it is playing a significant role and is working on the positive side.

Nitin Kumar, (2013) stated that the objective of paper is to examine status of financial inclusion in India and study its determinants. He applied Panel fixed effects and dynamic panel generalized methods of moments (GMM) methodologies to study determinants of financial inclusion. Further, Kendall's index of rank concordance has been derived to test for convergence of states in achieving financial inclusion.

The findings of the study revealed the importance of a region's socioeconomic and environmental setup in shaping banking habit of masses. Using test for convergence it was found that regions tend to maintain their respective level of banking activity, with no support for closing gap.

OBJECTIVES OF THE STUDY

1. To study the current status of Financial Inclusion schemes of Government such as PMJDY, APY, PMJJBY, PMSBY in Indore District.
2. To analyze the role of the Banks and initiatives taken by them with respect to these schemes.
3. To compare the efforts of public sector and private sector banks in promoting government schemes of financial inclusion.

RESEARCH METHODOLOGY

The study is undertaken in Indore district. It is intended to assess the awareness about the financial inclusion schemes of Govt such as PMJDY, APY, PMJJBY, PMSBY. The study further explores the reach of the scheme to its end beneficiaries.

DATA COLLECTION

Data is collected from secondary sources.

1. Secondary data is collected from Bank officials & authorities.
2. Official websites of selected Banks.

SAMPLE SIZE

Convenience sampling method was applied. Data was collected from 44 Banks of Indore district, out of which 28 are Nationalized banks, 11 private banks, 4 co-operative banks and 1 regional rural bank (RRB).

TIME PERIOD

Data is collected for the financial year 2014-15.

DATA ANALYSIS

Suitable statistical methods are used for analysis such as Correlation, T-test etc.

1. Correlation between villages allotted by RBI & application forms for various schemes submitted by the customers.
2. T-test

ANALYSIS AND INTERPRETATION

ANALYSIS OF ACCOUNTS OPENED IN THE SCHEMES APY, PMJJBY, PMSBY IN VARIOUS BANKS

Table no. 1 shows that for this study 44 Banks were analyzed. On an average more than 10,000 forms were received by each bank for several schemes. A comparative analysis shows that the maximum number of forms were received for "Pradhan Mantri Suraksha Beema Yojana" while the minimum forms were received for "Atal Pension Yojna". This shows the popularity of PMSBY over other two schemes.

TABLE 1: DESCRIPTIVE STATISTICS OF "FINANCIAL INCLUSION SCHEMES" PROMOTED BY BANKS IN INDORE

		No. of Village allotted	Atal Pension Yojana	Pradhan Mantri Jeevan Jyoti Beema Yojana	Pradhan Mantri S Beema Yojana	Total
N	Valid	44	44	44	44	44
	Missing	0	0	0	0	0
Mean		12.48	82.50	3291.09	7279.16	10653
Percentiles	25	0.00	0.00	74.00	159.75	236
	50	0.00	9.00	1062.50	2236.50	3669.00
	75	1.00	75.75	3654.75	7475.50	11810.00

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CORRELATION OF NO. OF VILLAGES ALLOTTED BY RBI TO VARIOUS BANKS AND NO. OF ACCOUNTS OPENED BY THEM IN THE SCHEMES APY, PMJJBY, PMSBY

RBI, in order to promote the government schemes of financial inclusion, assigns specific villages to some banks with the task to promote them. In Indore district, out of 44 banks included in the sample, only 13 Banks were allotted specific villages and rest 31 Banks were not allotted any villages to open the accounts of the schemes such as APY, PMJJBY, PMSBY (Table 3). But these 31 banks still promoted the schemes for some extent. Further objective of the study was to explore whether there is any difference between Financial Inclusion practices of banks on the basis of allotment by RBI. A correlation was calculated between number of villages allotted and number of accounts opened in various schemes. It is observed that there is a positive correlation between number of villages allotted by RBI and no. of forms filled to open the accounts in the schemes by Banks. In APY the correlation is 0.724. In PMJJBY it is 0.767 and in PMSBY it is 0.745. (Table 2)

TABLE 2: CORRELATION BETWEEN ALLOTMENT BY RBI AND BANKS RESPONSE TO SCHEMES

		Atal Pension Yojana	Pradhan Mantri Jeevan Jyoti Beema Yojana	Pradhan Mantri S Beema Yojana	Total
No. of Village allotted	Pearson Correlation	.724**	.767**	.745**	.754**
	Sig. (1-tailed)	.000	.000	.000	.000

**. Correlation is significant at the 0.01 level (1-tailed)

GRAPH 1
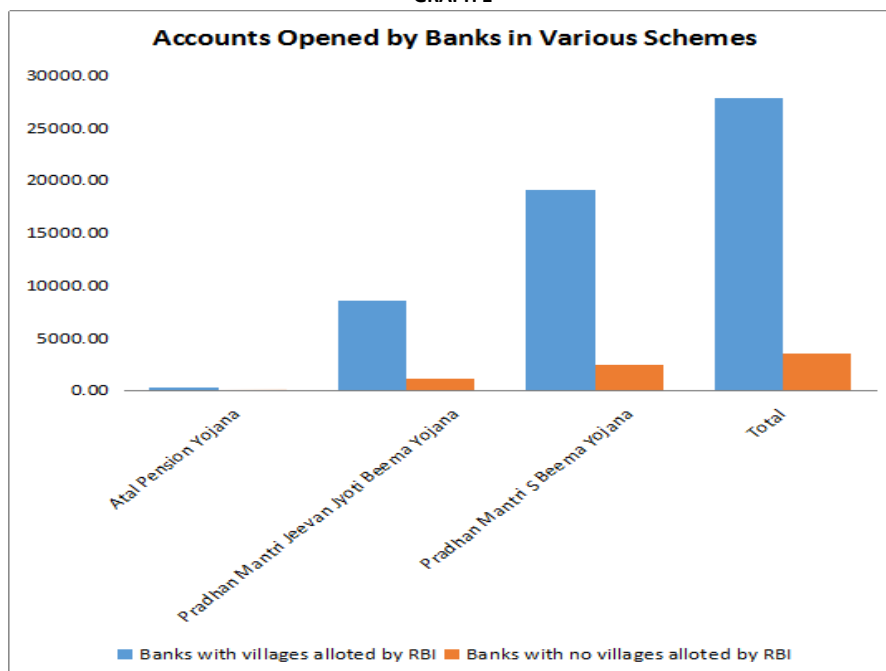
From the above graph it was observed that the banks which were not allotted villages lagged behind in promoting these schemes and thereby they contributed less towards financial inclusion.

COMPARATIVE STATUS OF FINANCIAL INCLUSION AMONG BANKS WITH ALLOTTED AND NOT ALLOTTED VILLAGES

Table 3 shows the difference in financial inclusion status for each scheme between the two categories of banks mentioned above.

TABLE 3: COMPARATIVE STATUS OF FINANCIAL INCLUSION AMONG BANKS WITH ALLOTTED VILLAGES AND OTHERWISE

Allotment of Villages		N	Mean	Std. Deviation	Std. Error Mean
Atal Pension Yojana	Banks with allotted villages	13	233.54	355.30	98.54
	Banks with no allotted villages	31	19.16	40.03	7.19
Pradhan Mantri Jeevan Jyoti Beema Yojana	Banks with allotted villages	13	8493.31	10221.42	2834.91
	Banks with no allotted villages	31	1109.52	1898.19	340.92
Pradhan Mantri Suraksha Beema Yojana	Banks with allotted villages	13	19017.92	23291.60	6459.93
	Banks with no allotted villages	31	2356.45	3660.01	657.36
Total	Banks with allotted villages	13	27744.77	33717.79	9351.63
	Banks with no allotted villages	31	3485.13	5546.12	996.11

It shows that mean of banks with allotted villages are much better than banks with no allotted village. People are more interested in insurance schemes like, PMJJBY and PMSBY than Pension scheme APY.

COMPARATIVE PERFORMANCE OF PUBLIC SECTOR AND PRIVATE SECTOR BANKS IN FINANCIAL INCLUSION

The study further, tried to explore the difference between efforts made by public sector banks and private sector. There were 28 Public sector Banks and 16 Private sector Banks in the sample. A t-test was applied for comparing mean accounts opened by banks in several schemes. Table 4 shows the results of t-test. Out of the three schemes compared, there was a significant difference observed for mean values of two schemes PMJJBY and PMSBY. The public sector banks differed from private sector banks in promoting these two schemes. While APY was equally promoted by both type of banks.

TABLE 4: T-TEST FOR COMPARING MEAN FINANCIAL INCLUSION BY PUBLIC SECTOR AND PRIVATE SECTOR BANKS

		Levene's Test for Equality of Variances		T -test		
		F	Sig.	t	df	Sig. (2-tailed)
Atal Pension Yojana	Equal variances assumed	4.029	.051	1.375	42	.176
	Equal variances not assumed			1.791	30.312	.083
Pradhan Mantri Jeevan Jyoti Beema Yojana	Equal variances assumed	3.619	.064	1.509	42	.139
	Equal variances not assumed			1.911	34.565	**.064** **
Pradhan Mantri Suraksha Beema Yojana	Equal variances assumed	3.921	.054	1.533	42	.133
	Equal variances not assumed			1.966	32.732	**.050***
Total	Equal variances assumed	3.719	.061	1.530	42	.134
	Equal variances not assumed			1.956	33.215	**.050***

The performance of Public sector Banks in the above schemes is much better than performance of Private sector Banks. As RBI allotted large number of villages to public sector banks than very few or no allotment of villages to private sector banks. Private sector Banks have no peer pressure from RBI to run these societal beneficiary schemes. Though the share of private sector Bank's is 21% in banking industry, it has share in PMJDY and other Insurance scheme is only 3.14%. The study found that the role of public sector banks is much more significant in addressing the issue of financial inclusion.

FIG. 2

Comparative Participation of Public and Private Banks in PMJDY
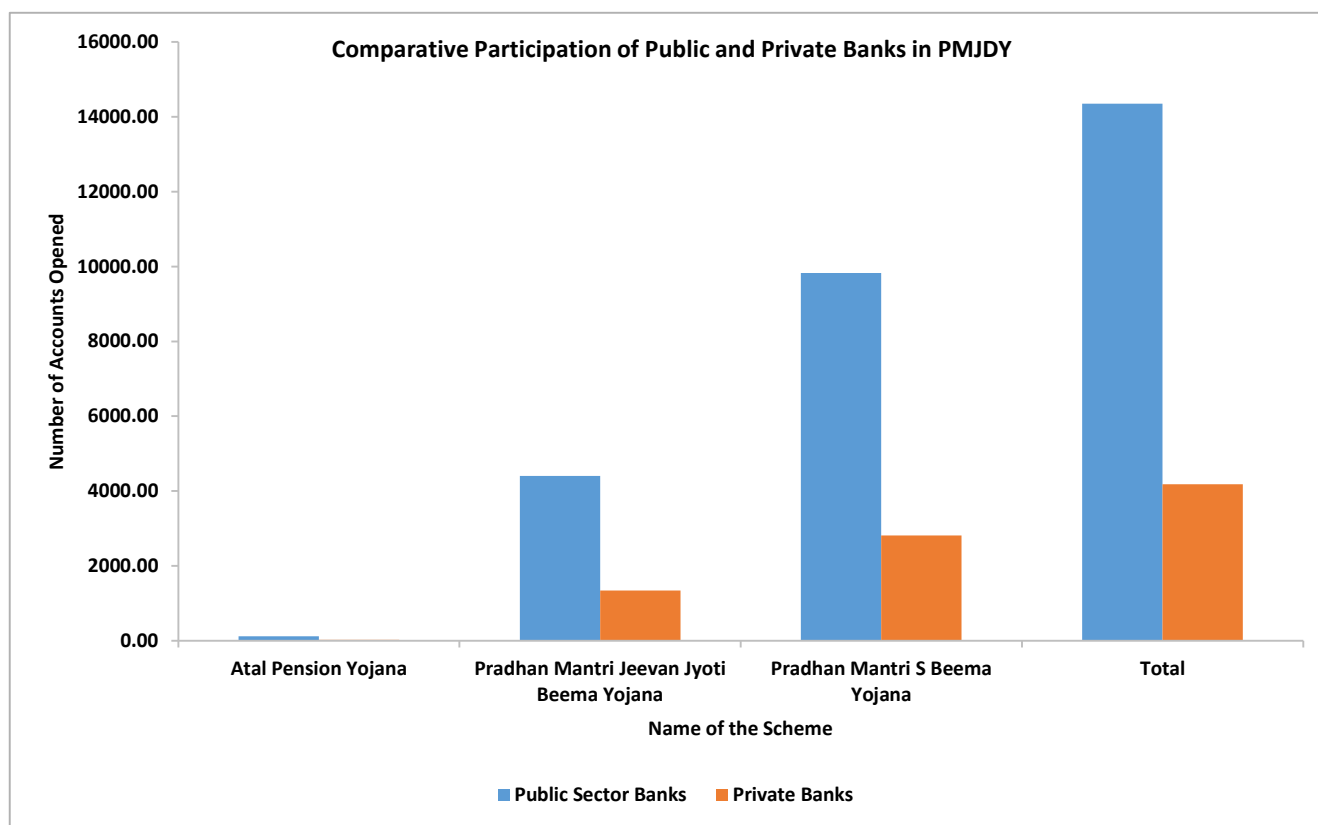
CONCLUSIONS

The PMJDY and other schemes like APY, PMJJBY, PMSBY are superior financial inclusion program because it had focus on individual security as well as socioeconomic welfare. Overall, the PMJDY is a big step towards financial inclusion. The provision of basic accounts with linked insurance coverage, debit card facilities, overdraft facility, zero account facilities etc., to the poor households' welfare, economic activity, stability, and the ability to absorb shocks. The PMJDY scheme can meet the challenges, improving banking infrastructure (bank branches, ATMs, good and reliable BCs). The mission of the PMJDY is to eradicate poverty through the financial inclusion program. It concludes that, the performance of the Public sector banks is good as compared to the Regional rural banks and Private sector banks to carry PMJDY schemes so RBI should make it mandatory for all types of banks to participate in such socioeconomic welfare schemes for betterment of society. Banking is not only money making business but also to build financially healthy, sound and secured society.

SUGGESTIONS

There is a need of more powerful communications between RBI and banks. Private sector banks should also be allotted targets for such schemes. More frequent and close monitoring is needed for target achievement of banks. Banks should provide simple and clear guidelines of the scheme so that illiterate or low educated people can understand the schemes. Business correspondents should be armed with suitable technology which would help in taking the banks to the doorsteps of rural household.

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IMPACT OF BANKING SOFTWARE PRODUCT OF INFOSYS AMONG BANK EMPLOYEES WITH SPECIAL REFERENCE TO CHENNAI

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ABSTRACT

Finacle universal banking products are designed to address the core banking, e-banking, Islamic banking, treasury, wealth management and CRM requirements of retail, corporate and universal banks. It was developed by Infosys, and is one of the major players in the arena of core banking in Indian and Asian banking domains. Social and development banking is emerging as an exciting landscape, rich with prospective business representing enormous potential for global banks. With pressure building up to continually explore new growth avenues, progressive banks are viewing under-banked rural areas, credit for agriculture and small-scale industry related business with avid interest. In this study descriptive research design was used, which is concerned with describing the characters of a particular individual or a group. The researcher used both primary and secondary data. Primary data was collected with the help of structured questionnaire based on the objective of the study. The secondary data was collected from company records, magazines, Books, Journals, websites and other related articles. In this study the questionnaire is tool for data collection. The sample for the study consist of bank employees at various levels working in various nationalised bank in Chennai where Infosys product is utilized for core banking, e-banking, wealth management and CRM. The sample size is 100. The researcher made use of non probability convenience sampling technique by one major city (Chennai) and met the respondents for collection of information who are conveniently available to provide it. The result of the study is applicable only to INFOSYS product. It is found that 100% of the respondents feel that this application is helpful in maintaining customer records and transaction for future use. 99% of the employees feel that this software product provides shortcuts to navigate from one screen to another. 100% of the respondents agree that finacle application have options to calculate interest, EMI, deposit value. 100% of the respondents feel that finacle software applications include options to maintain speed clearing. It is found that 100% employees feel that the finacle software provides application like maintenance of inward cheques and return cheques. The banking software solution must enhance multi tasking facility by providing multi screen or window for different option to response customer immediately. e.g. A/c balance can be made to open as separate window to provide user about their a/c truncation and also manage other transaction.

KEYWORDS

banking software product, e-banking.

INTRODUCTION

I nfosys have understood the importance of technology in bringing customized solutions to the banking sector. For many years, they have been committed to pioneering advanced technologies. they ensure that their technology is flexible and robust by using industry best practices as a foundation, and they constantly looking for new ways to improve the banking solutions for the convenience of banking employees and their customers. Today, they have implement best solutions using the latest technologies available in the IT market.

Finacle from Infosys partners with banks to power-up their innovation agenda, enabling them to differentiate their products and service, enhance customer experience and achieve greater operational efficiency. This proven and effective framework for multi-disciplinary change, enables banks to shift their strategic and operational priorities. Finacle solutions address the core banking, e-banking, Islamic banking, treasury, wealth management and CRM requirements of retail, corporate and universal banks worldwide. Several powerful and differentiating features make Finacle one of the most comprehensive, flexible and scalable universal banking solution in its class. These solutions when associated with Finacle services, empower banks to maximize their opportunities for growth, while minimizing the risks that come with large-scale business transformation. Finacle is the chosen solution in over 140 banks across 73 countries. Finacle is implemented across countries like the US, UK, UAE, Mainland China, Taiwan, Hong Kong, Saudi Arabia, Maldives, Mauritius, Nepal, Nigeria, Indonesia, Singapore, Uganda, Sri Lanka, Tanzania, Zimbabwe, Thailand, Philippines, Jamaica, Cayman Islands and India.

BANKING SYSTEMS SOFTWARE

It enables the management, monitoring and control of transactions for financial institutions and banks. Private Banks and mutual fund administrators as well as other wealth management firms utilize Banking Systems applications to provide front office services as well as back office functions such as customer account tracking, credit approval, financial accounting and information system integration. Banking Systems software is related to Financial Risk Management software, Investment Management software, Loan Origination software and Loan Servicing software.

Some of the major challenges faced by the finance and banking industry today include global economic conditions, new technology trends for financial services, and innovative business processes and services. The finance and banking industry represents a vital economic sector for every country. This industry is generally a reliable thermometer of regional and global economic conditions, due to the fact that it manages a major part of all financial transactions.

General activities in the finance and banking sector include managing negotiable and financial instruments: savings accounts, investments, bonds, money market accounts, stocks, and derivatives. These activities are core to the economic sector in every country.

Besides the general challenges faced by the finance and banking industry, there are specific challenges that companies in this sector must confront in order to offer new services to users, and to improve the quality of existing services. Some of these specific challenges include

- Meeting all national, regional, and global regulatory standards for finance and banking services, as well as adapting to these regulatory frameworks within improved service models;
- Pursuing customer service improvement, with options like electronic banking and call center services for banking;
- Increasing the number and variety of currently offered financial and banking services;
- Improving proficiency and service productivity to increase the organization's return on investment (ROI) for financial services; and
- Improving security schemes to mitigate financial risks and exposure.

Companies in the finance and banking space need specific software solutions to successfully address the challenges of a fierce competitive industry. Since this industry is based on bringing financial services to customers, customer care is one of the most important considerations when selecting systems designed for this industry. Customer relation management (CRM) systems with special features for financial and insurance institutions can enable them to efficiently address all customer care issues, and also renew and improve all service models.

SOFTWARE PRODUCTS AND BENEFITS TO BUSINESS
➢ To Protect from unauthorized and fraudulent users
➢ To support multilingual, multicurrency and global operations
➢ To ensure efficient data warehousing to support management in decision making
➢ To Handle high volume of transactions from various channels such as ATM, Internet and telecommunication devices
➢ To leverage risk management, business continuity and disaster recovery
➢ To meet stringent government regulations and norms

NEED FOR THE STUDY
Main purpose of this project is to study the impact and customer satisfaction regarding the Banking Product of Infosys to identify customer's attitude towards the company's software design and to find how Infosys Banking Product can meet banking sector expectations in long run.

SCOPE OF THE STUDY
This study is exclusively to be conducted for various bank employees utilizing Infosys banking product who are dispersed in different areas of Chennai as organizational customers. The study will help in identifying the expectations of the bank employees towards the products and would end up in giving suggestions and strengthening the company's services towards bank.

PROBLEM IDENTIFICATION
It is found that the banking system is improving faster nowadays and many private banks has grown in India. Since competition is also existing in banking sector the bankers are trying to improve the facilities by adopting modern technology in banking money transaction in order to improve the quality of work among the bank employees and customer satisfaction. Top IT companies in the world have introduced many banking software Solutions for core banking and for other banking purposes which has many advantages and disadvantages.

Mostly banking operations has improved a lot due to implementation of modern computers and software technology which helps the banks to function effectively without error. Of course the security protection is a challenging issue for the bankers. Management of technology in banking security is a major issue to be tackled then and then in developing countries like India. The bank employees must be given modern training and infrastructure of banks has to improve in suburban areas and rural places in India. Security in banking software operation is a challenging issue in banking management and wide technology updating is required in all areas of banking to protect the operation and improve customer loyalty and satisfaction.

OBJECTIVES OF THE STUDY
1. To identify the bank employees at various level attitude towards Banking Product of Infosys.
2. To find out the effectiveness of service rendered by banks to its Customers through this Product.
3. To obtain suggestions to fulfill further requirement to improve Customer relations.

METHODOLOGY
RESEARCH DESIGN
In this study the Project Student used descriptive research design, which is concerned with describing the characters of a particular individual or a group. **Sampling unit:** The sample for the study consist of bank employees at various levels working in various bank in Chennai where Infosys product is utilized for core banking, e-banking wealth management and CRM.
Sample Size is 100.
Sampling Procedure The student used non probability **convenience sampling technique** and met the respondents (bank employees in Chennai) for collection of information based on the title

LIMITATIONS
1. The study is limited to employees working in banks in Chennai city
2. The period of study is short
3. The study is knowing the perception of bank employees towards Infosys software product only
4. Since technology changes drastically, and Infosys brings new concepts very often these findings may be valid for a certain time period only (1-2 years)

ANALYSIS AND INTERPRETATION

TABLE 1: NAME OF THE BANK EMPLOYED

S.No.	Bank Employed	No. of respondent	Percentage (%)
1.	Indian bank	20	20
2.	Indian Overseas Bank	20	20
3.	Canara Bank	20	20
4.	Karnataka Bank	20	20
5.	State Bank of India	20	20
Total		100	100

TABLE 2: GENDER

S.No.	Gender	No. of respondent	Percentage (%)
1.	Male	60	60
2.	Female	40	40
Total		100	100

TABLE 3: QUALIFICATION

S.No.	Qualification	No. of respondent	Percentage (%)
1.	Under graduate	64	64
2.	Post graduate	36	36
Total		100	100

TABLE 4: DESCRIPTION OF BANK EMPLOYEES

S.No.	Designation	No. of respondent	Percentage (%)
1.	Branch manager	5	5
2.	Asst. Manager	5	5
3.	Bank officer	15	15
4.	Clerks	75	75
Total		100	100

TABLE 5: WORK EXPERIENCE IN BANK

S.No.	Experience in years	No. of respondent	Percentage (%)
1.	1- 5	40	40
2.	6 -10	28	28
3.	11-15	12	12
4.	Above 15 years	20	20
Total		100	100

TABLE 6: FINACLE SOFTWARE IS TIME-SAVING FOR THE EMPLOYEES

S.No.	Options	No. of respondent	Percentage (%)
1.	Yes	96	96
2.	No	4	4
Total		**100**	**100**

TABLE 7: APPLICATION AVAILABLE IN FINACLE PRODUCT

S.No.	Application	No. of respondent	Percentage (%)
1.	Transaction maintenance	3	3
2.	Salary transaction	0	0
3.	Inward /outward clearing zone	0	0
4.	Bill collection	0	0
5.	Office A/c maintenance	4	4
6.	National electronic fund transfer (NEFT)	1	1
7.	Real time gross settlement	0	0
8.	Loan and advances	0	0
9.	Deposit opening & renewal	0	0
10.	Printing of statements	0	0
11.	All the above	92	92
12.	None of these	0	0
Total		100	100

TABLE 8: APPLICATION USEFUL TO KNOW OTHER BRANCH TRANSACTION & CUSTOMER DATA

S. No.	Options	No. of respondent	Percentage(%)
1.	Yes	100	100
2.	No	0	0
Total		100	100

TABLE 9: DOES THIS APPLICATION HAVE FACILITY TO STOP PAYMENT OR REVERSAL OF ANY WRONG TRANSACTION?

S.No.	Options	No. of respondent	Percentage
1.	Yes	100	100
2.	No	0	0
3.	No idea	0	0
Total		100	100

TABLE 10: DOES THIS APPLICATION HELP TO SEARCH PREVIOUS RECORD TRANSACTION?

S.No.	Options	No. of respondent	Percentage
1.	Yes	99	99
2.	No	0	0
3.	No idea	1	1
Total		100	100

TABLE 11: DOES THIS APPLICATION HAVE BANKING SYSTEMS FOR CUSTOMERS?

S.No.	Options	No. of respondent	Percentage
1.	Yes	100	100
2.	No	0	0
Total		100	100

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TABLE 12: OPTIONS AVAILABLE FOR IMMEDIATE TRANSFER BETWEEN TWO DIFFERENCE BANK

S.No.	Options	No. of respondent	Percentage (%)
1.	Real time gross settlement	0	0
2.	National Electronic fund transfer	0	0
3.	Both	100	100
Total		100	100

TABLE 13: DOES THE APPLICATION IS HELPFUL IN MAINTAINING CUSTOMER RECORDS & TRANSACTIONS FOR FUTURE USE?

S.No.	Options	No. of respondent	Percentage (%)
1.	Yes	100	100
2.	No	0	0
Total		100	100

TABLE 14: DOES FINACLE HAVE SHORTCUTS TO NAVIGATE FROM ONE SCREEN TO ANOTHER LIKE Ctrl+E, shift-F3, F4,F10?

S.No.	Options	No. of respondent	Percentage (%)
1.	Yes	99	99
2.	No	0	0
3.	No idea	1	1
Total		100	100

TABLE 15: DOES THE FINACLE APPLICATION HAVE OPTION TO CALCULATE INTEREST RATE, EMI, DEPOSIT VALUE?

S.No.	Options	No. of respondent	Percentage (%)
1.	Yes	100	100
2.	No	0	0
3.	No idea	0	0
Total		100	100

TABLE 16: DOES THE APPLICATION HAVE OPTION TO MAINTAIN SPEED CLEARING?

S.No.	Options	No. of respondent	Percentage
1.	Yes	100	100
2.	No	0	0
Total		100	100

TABLE 17: DOES THE APPLICATION HAVE MAINTENANCE OF INWARD CHEQUES AND RETURN CHARGES?

S.No.	Options	No. of respondent	Percentage (%)
1.	Yes	100	100
2.	No	0	0
Total		100	100

TABLE 18: DOES THE APPLICATION HAVE FEATURES TO DEBIT COMMISSION CHARGES FOR CERTAIN TRANSACTION?

S.No.	Options	No. of respondent	Percentage (%)
1.	Yes	100	100
2.	No	0	0
Total		100	100

TABLE 19: DOES THE EFFECTIVE TRAINING PROVIDED TO LEARN FINACLE SOFTWARE OPERATION?

S.No.	Comments	No. of respondent	Percentage (%)
1.	Yes	84	84
2.	No	9	9
3.	No idea	7	7
Total		100	100

TABLE 20: DO YOU REQUIRE MORE TRAINING TO UPDATE YOUR SKILL AND KNOWLEDGE TOWARDS BANKING SOFTWARE?

S.No.	Comments	No. of respondent	Percentage (%)
1.	Yes	20	20
2.	No	80	80
3.	No idea	0	0
Total		100	100

TABLE 21: WHAT METHOD OF TRAINING PROVIDED TO LEARN FINACLE SOFTWARE?

S.No.	Method	No. of respondent	Percentage (%)
1.	On the job training	100	100
2.	Off the job training	0	0
3.	Other methods	0	0
Total		100	100

TABLE 22: WHO PROVIDES TRAINING TO EMPLOYEES?

S.No.	Training	No. of respondent	Percentage (%)
1.	Infosys company	0	0
2.	Training agencies	0	0
3.	Top bank officials from head office	100	100
Total		100	100

FINDINGS

❖ It is found that 20% of the respondents are taken from each Bank. Five Nationalised bank taken for study are Indian Bank, IOB, Canara Bank, Karnataka and SBI. 60% of the respondents were male employees and 40% of the respondents were female employees.

❖ It is found that 64% of the respondents were under graduates while 36% of the respondents were post graduates.

❖ It is found that 5% of the respondents were branch Manager, 5% of the respondents were assistant managers, 15% of the respondents were Bank officers and majority of the respondents (75%) were clerks who constitute the major proportion in a nationlised banks.

❖ It is found that majority (40%) of the respondents are having experience of 1-5 years, 28% of the respondents are having experience of 6-10 years. 12% of the respondents are having experience of 11-15 years. 20% of the respondents are having experience of above 15 years.

❖ It is found that almost all the bank employees (96%) feel that the finacle software product of Infosys is time saving for employees.

❖ Almost all the bank employees (92%) feel that various application are provided by finacle software product like transaction maintenance, salary transaction, inward/outward clearing zone, Bill collection, office A/c maintenance, National electronic fund transfer, real time gross settlement, loan & advance, deposit opening & renewal.

❖ 100% respondents agree that finacle banking software product of Infosys is very useful to know other branch transaction and customer data's. 100% of the respondents feel that these applications have facility to stop payment or reversal of any wrong transaction. 99% of the respondents feel that finacle software product helps to search previous record transaction.

❖ 100% of the employees (respondent) feel that this application has provision for Banking system for customers. It is found that 100% of the employees agree that both applications like RTGS & NEFT are available through this finacle software product for immediate transfer between the different banks.

❖ It is found that 100% of the respondents feel that this application is helpful in maintaining customer records and transaction for future use.

❖ 99% of the employees feel that this software product provides shortcuts to navigate from one screen to another. 100% of the respondents agree that finacle application have options to calculate interest, EMI, deposit value.

❖ 100% of the respondents feel that finacle software applications include options to maintain speed clearing. It is found that 100% employees feel that the finacle software provides application like maintenance of inward cheques and return cheques.

❖ 100% of the respondents agree that finacle software product have special application features to debit commission or charges for certain transaction.

❖ 100% of the respondents agree that this software application have categories to show account balance like fund in clearing, system reverse amount, overdue liabilities, sanction limit, clear balance, power to draw, effective avail balance.

❖ Majority of the respondents (84%) feel that they are provided effective training to learn finacle software operation. Very few respondent (9%) feel that they are not provided effective training. 7% respondents do not have any idea about effective training provided to them.

❖ It is found that 20% of the respondent feel that more training is required to update their skill and knowledge towards banking software product especially finacle. 80% of the respondents do not seek more training.

❖ 100% of the respondents agree that on the job training was provided to them. The employees were given training in their respective banks where they are employed. They feel it as the most comfortable and easy method of learning.

❖ 100% of the respondents agree that training was provided to employees by the top ranked bank officials from Head office.

SUGGESTIONS

Applications which can be improved in terms of customer satisfaction

• Enhance multi tasking facility by providing multi screen or window for different option to response customer immediately.

Eg: A/c balance can be made to open as separate window to provide user about their a/c truncation and also manage other transaction.

Applications which can be improved for staff

• Member's ability to register for training classes online.

• Provide online help feature to know instantly about the options.

• Enhance saving option to avoid repetition of work in terms of interruption

Eg: While opening an a/c if there is an interruption, there can be facility to save to continue the task later

Proper off the job and on the job training must be organised for employees at regular intervals through proper trainers from the corporate side or training agencies in order to make them to manage the software applications with ease and satisfaction. The software solutions must be up-graded in such a way that provides more security for the customers in money transaction etc.

CONCLUSION

Infosys Technologies Ltd. (Infosys) and nationalized bank in India had successfully implemented Finacle universal banking solution. Infosys has implemented Finacle core banking, treasury and consumer e-banking solutions across Indian banks. most of the nationalized banks now operates its entire banking operations on Finacle support over millions of Indian customers.

nationalized bank management decided to take a technology-led transformation route to make the bank more agile, flexible, and scalable to achieve its business objectives. The nationalized bank in all parts of India in 2005 decided to move to Finacle and the core banking replacement project and the work was successfully completed in eleven months. Advanced core banking technology is vital to achieving our business growth objectives and improve customer service. Finacle was selected by banks for its global leadership, committed investment in research and development in core banking and unmatched delivery track record. Finacle has provided higher scalability and flexibility to service their diversified retail, institutional and corporate clientele. the new back office platform in nationalized banks provides greater agility by consolidating disparate systems and reduced turnaround times, enables innovation to launch new offerings, and empowers staff to radically improve our customer service.

According to Haragopal Mangipudi, **Global Head - Finacle, Infosys Technologies Ltd,** "We are delighted to power success at National Bank in India in their journey of technology-led business transformation. We are committed to partnering the bank in achieving its business objectives and establishing new standards of excellence in the banking industry. The resounding success of this initiative will go a long way among National Bank gaining leadership in Indian region. South Asia has been a core growth engine for Finacle and we continue our focus to bring business relevant offerings and services to banks in Indian region." Leveraging Finacle, the bank has been able to seamlessly integrate its services across channels and provide innovative products to customers with faster turn-around time and reduced total cost of ownership. Centralization of all back-office functions on the platform has ensured more control over business processes and significant improvement in branch productivity. The centralized platform across the bank enabled by Finacle provides a unified customer view which has resulted in significant improvement in service levels and customer experience.

Further, Finacle treasury solution has enabled the introduction of more sophisticated products and instruments for the bank's treasury operations. The application has improved monitoring and control by effectively segregating front, middle and back office operations and tracking transaction dealer profitability. Finacle has a global footprint across 65 countries and has been acknowledged to be among the leaders in the core banking solution space by top analysts. Finacle has also been recognized through industry awards for its innovation and implementation capabilities, the most notable ones being The Banker Technology Award, The Asian Banker IT Implementation Award and The Banking Technology Judge's Special Award for "Innovative Use of IT".

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A STUDY OF NON PERFORMING ASSETS IN INDIAN PUBLIC SECTOR BANKS

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ABSTRACT

Banking sector plays a vital role in the economic development of a nation. The Indian banking sector has played a significant role in achieving the socio-economic objectives through deposit mobilization, mass branch networking, priority sector lending etc. But in the post liberalization era the Indian banking sector has been facing the reduced productivity, deteriorated asset quality and efficiency and increased cost structure. Among these short comings, the erosion of asset quality is considered as the biggest threat for the development of a sound and efficient banking sector. The deteriorated asset quality affects the profitability, intermediation costs, liquidity, income generating capacity and overall functioning of banks. The reduction in asset quality results in accumulation of nonperforming assets (NPAs). Today the Indian banking sector is facing a serious problem of NPAs. The NPAs in public sector banks have been growing constantly year by year. To improve the efficiency and profitability of banks the NPAs need to be reduced and controlled. This paper highlights the causes for increasing NPAs, impact of NPAs on banks and the magnitude of NPAs in the Indian public sector banks.

KEYWORDS

public sector banks, NPAs, Gross NPAs and Net NPAs.

INTRODUCTION

A well developed financial system enables the efficient allocation of resources to various priority sectors like agriculture, SSIs, infrastructure development, micro credit, venture capital, housing loan etc. The banking sector being the part of the financial system plays a vital role in the economic development of a nation. The Indian banking sector has played a commendable role in achieving the socio-economic objectives. But in recent years, the rising level of NPAs is causing sleepless nights to the government and the banks. NPAs beyond a certain level are a cause of concern.

Lending is one of the primary functions of banks. Granting of credit especially to priority sector is generally encouraged because it results in the economic growth. However, lending is always associated with the credit risk which arises from the failure of borrowers. The non recovery of loans along with the interest results in creating bad loans which affects the profitability of banks.

CONCEPT OF NON PERFORMING ASSET

NPA refers to non-performing assets and the lenders consider it as those assets that are not fetching benefits to them. The word is not new to the bankers. It is regular but disguised loan asset. An asset becomes nonperforming when it ceases to generate income for the bank. Prior to 31st March, 2004 a nonperforming asset was defined as a credit facility in respect of which the interest or installment of principal has remained past due for a specified period of time which was four quarters. Due to the improvements in payment and settlement system, recovery climate, up gradation of technology in the banking system, etc., it has been decided to dispense with past due concept, with effect from March 31st 2004.

Accordingly, as from the date, a non-performing asset is an advance where:

- Interest and / or installment of principal remain overdue for a period of more than 90 days in respect of term loans,
- The account remains out of order for a period or more than 90 days, in respect of an overdraft or cash credit,
- The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- Interest and /or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose,
- Any amount to be received remains overdue for a period of more than 90 days.

NPA CLASSIFICATION

NPA have been classified into following four types:

1**. Standard Assets**: A standard asset is a performing asset. Standard assets generate continuous income and repayments as and when they fall due. Such assets carry a normal risk and are not NPA in the real sense.

2. **Sub-Standard Assets**: All those assets (loans and advances) which are considered as non-performing for a period of 12 months

3. **Doubtful Assets**: All those assets which are considered as non-performing for period of more than 12 months

4. **Loss Assets**: All those assets which cannot be recovered. These assets are identified by the Central Bank or by the Auditors.

TYPES OF NPA

GROSS 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 nonstandard assets like as sub-standard, doubtful, and loss assets. It can be calculated with the help of following ratio:

Gross NPAs Ratio = Gross NPAs / Gross Advances

NET NPA

Net NPAs are those type of NPAs in which the bank has deducted the provision. 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 banks have to make certain provisions against the NPAs according to the central bank guidelines.

It can be calculated by following:

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

NEED FOR THE STUDY

A well built and functioning banking sector is significant for economy. The failure of the banking sector may have an unfavourable effect on other related sectors. A banker shall be very cautious in lending because banker is not lending money out of his own capital. A major portion of the money lent comes from the deposits accepted from the public and government share. At present the rising level of NPAs in the public sector banks is a matter of serious economic concern. Hence, there is a need for the study of NPAs in public sector banks.

OBJECTIVES OF THE STUDY

The objectives of this study are:
1. To study the concept of NPAs.
2. To examine the causes and impact of NPAs on banks.
3. To highlight the NPA status of public sector banks during the last decade and
4. To suggest measures to avoid the future NPAs

RESEARCH METHODOLOGY

RESEARCH DESIGN

The research design used to carry out this study is descriptive research because it deals with statistical data and the main aim of the study is to describe the causes for the growing NPAs and its impact on the banking sector.

SOURCES OF DATA

The data collected is secondary in nature. The sources of data for the study include the newspapers, journals, magazines, published and unpublished research papers, reports of RBI and related web sites.

STATUS OF NPAS OF PUBLIC SECTOR BANKS

The status of NPAs of public sector banks in India in the last decade as on 31st March is as follows:

TABLE 1

Years	Total amount of NPAs (Amount in Rs billion)	Percentage change in NPAs
2007	383.05	-----
2008	396.00	3.38
2009	440.32	11.19
2010	572.93	30.12
2011	710.80	24.06
2012	1124.89	58.26
2013	1558.90	38.58
2014	2184.33	40.12
2015	2670.00	22.23
2016	4760.00	70.25

Source: RBI Report on "Trend and progress of Banking in India"

CAUSES OF NPA

The various causes of NPAs are:
1. The target oriented approach of the banks in lending is deteriorating the qualitative aspect of lending and wilful defaults.
2. Ineffective supervision of loan accounts.
3. Lack of technical and managerial expertise on the part of borrowers.
4. Directed loan system under which banks are required to supply 40 percent of their credit to priority sectors.
5. Lack of strict prudential norms.
6. The legal impediments and time consuming nature of asset disposal proposal.
7. Manipulation of debtors using political influence.
8. Postponement of problem in order to show higher earnings.
9. Inability of the corporate sector to raise capital through the issue of equity or other debt instruments from the capital market.
10. Limited liability provisions come in the way of recovery of loans by auctioning personal property.
11. Recession world over has been impacting consumer and business demand and this has been causing losses to the industry. Due to the recession, repayment of some loans has become uncertain.

IMPACT OF NPA ON THE BANKS

The NPAs causes the following impact on the banks:
1. The NPAs reduces the profitability of the banks.
2. It affects the capital adequacy ratio of the banks.
3. It affects the return on assets.
4. Decreased profit leads to lack of adequate cash in hand requiring banks to borrow money even for a shortest period of time. This not only affects the liquidity position of the bank but also results in additional cost to the bank.
5. Now a days, banks are employing special persons to deal with the recovery of loans and handle NPAs. This results in additional cost to the bank.
6. The NPAs of a bank creates a negative impact in the minds of the people resulting in the loss of goodwill and brand image.

SUGGESTIONS

The following suggestions are offered to reduce and avoid future NPAs:
1. The first and the foremost measure to be taken by the bank is to study the credibility of the customers before granting credit.
2. The banks should prepare a loan recovery policy, create special recovery cells and fix targets of recovery in a time bound manner.
3. The banks must make special efforts to recover the written off accounts as these are impacting the income of the banks.
4. The government should quickly implement the bankruptcy law and initiate action for recovery of bad loans.
5. The individuals, partnership firms and companies which have failed to repay the loans should be declared bankrupt and their assets must be attached and auctioned to recover loans.
6. The government should stipulate a condition that public sector banks in order to be eligible to get the support from bank recapitalization fund should first initiate action to recover bad loans.
7. The RBI should allow the declaration of the names of the big the willful defaulters.
8. Lastly, the banks, centre and enforcement agencies should take stern action regarding the recovery of loans.

CONCLUSION

In view of the rising NPAs in the public sector banks and the RBIs financial stability report which states that under the baseline scenario, the GNPA ratio for public sector banks may go up to 10.1 per cent by march 2017, it is very much essential to bring these banks out of the crisis and to take economy forward on the path

of faster economic growth. The centre, courts and enforcement agencies should take stern action regarding the recovery of loans. A promising step has been taken recently by the RBI which has submitted the list of defaulters of above Rs. 500 crore to the Supreme Court in a sealed cover.

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DEMONETISATION: ANALYSIS OF ITS CURRENT KEY EFFECTS ON THE INDIAN ECONOMY

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ABSTRACT

In his address to nation on 8th November, 2016, prime minister of India Sh. Narendera Modi suddenly announced the demonetization of high denomination currency notes of Rs500 and Rs 1000. Whole economy got panicked on this sudden move of the government. All the economy felt immediate effects. Some sectors of economy started growing at very fast rate whereas some suffered a considerable loss. This research paper tried to analyze the effects of demonetization on the key sectors of the economy. It was found the digital payment companies, banks etc. got benefitted from demonetization, whereas some sectors such as reality, MSME got a considerable downfall.

KEYWORDS
demonetisation, sectors, economy, key effects.

1. INTRODUCTION
Demonetization is a very crucial step in the working of an economy. Government of India demonetized the high denomination currency notes of Rs 500 and Rs 1000 by issuing a notification in the official gazette. The logic behind such move was to wash out the black money and reduce the terrorism. The government was of the view that black money was held mainly in cash consisting of high denomination currency notes. Further government also argued that terrorists were getting their funding using fake Indian high denomination currency. So that it was a smart move to stop the terrorism.

2. IMPORTANCE OF THE STUDY
Indian economy has become the fifth largest economy of the world recently leaving Great Britain behind. India is cash based economy and demonetization was a very big shock for our economy as most of the transaction in India is done through cash. In pre-demonetization period there were 1,650 crores of Rs 500 denomination and 670 crores Rs 1,000 denomination notes in the economy. So the was a very big move to remove such a huge amount of currency nearly 86 percent in value, from the country. Soon Indian economy started facing its effects on a large scale. This study was important from the viewpoint of the scope of its effects of nearly all sectors of the economy. Indian economy is a traditional economy and is on the path of digitization but a lot more distance has to be covered towards this.

3. OBJECTIVES OF THE STUDY
The objectives of the study were to analyze immediate effect of demonetization on the economy especially on:
1.   Digital payment services sector,
2.   Service sector,
3.   Banking sector,
4.   Reality sector,
5.   GDP growth rate,
6.   MSMEs sector,
7.   Large scale industries,
8.   And price level.

4. RESEARCH METHODOLOGY
For the purpose of above study newspapers, websites and news channel were used as sources of data. Further discussions on the various news channels were used as a guide for above study. After collection of data a analysis was done to study the impacts of the demonetization. An empirical research was conducted using comparative data analysis.

5. RESULTS AND DISCUSSIONS
5.1   EFFECT ON DIGITAL PAYMENT FIRMS
Soon after the demonetization Ola money saw a record increase in recharge to the tune of 1500%. Further the digital payment giant Paytm also got 400% increase in its transaction.[1] Further paytm company is planning to hire 10,000 agents to expand its business. So is can be said that effcet of demonetization on the digital payment sector was good and has given a boost to the sector.

5.2   EFFECT ON REALITY SECTOR
Soon after demonetization, experts made forecast that prices of property will decline by approximately 25% to 30% by the first quarter of the 2017 because 50% of the transaction are done in cash currently.[2]

Further as per research done by Propequity Research based upon the data collected across the top 42 cities of India has forecasted that reality business will fall nearly by 30% from Rs 39,55,044 crore to Rs 31,52,170 crore. [3]

But there is a hope for the reality sector to come out of recession as banks are under pressure to cut the lending rates. It will reduce the home loan cost that can give a boost to the above sector in future. But as of now the immediate effect on the economy is that it has faced a downfall to the tune of 30%.

5.3   EFFECT ON BANKING SECTOR
As demonetization was largely involved with the banking sector, this sector has gone through a complete change. Deposits in Jan Dhan accounts in 5 north Indian states were increased from 4364.03 crores on 9/11/2016 to 7022.26 crores on 23/11/2016.[4] There was a sharp increase in the deposits in Jandhan accouns between this period.

TABLE 1: DEPOSITS IN JANDHAN ACCOUNTS (amount in crores)

State	Total deposits (9/11/2016)	Total deposits (23/11/2016)	Total deposits (30/11/2016)
Haryana	1685.77	2830.27	2870.46
Chandigarh	71.76	102.39	103.53
Punjab	1737.15	2673.88	2729.53
Himachal Pardesh	340.23	510.24	515.12
Jammu & Kashmir	529.12	912.48	910.39
Total	4364.03	7022.26	7129.03

Source: Prime minister Jan dhan yojna.

Fearing a misuse of Jandhan accounts, government issued some strict guidelines regarding use of Jandhan accounts. After those guidelines, Deposits in Jandhan account declined sharply and only 100 crore was submitted in such account between the period between 23/11/2016 to 30/11/2016.

As per latest data released from the RBI, bank credit has fallen to the tune of Rs 61,000 crores in last 15 days. Further a good effect was that Rs 66,000 crores was received during such period. Banks have received Rs 4.03 trillion in accounts which as of 9/12/2016 has crossed Rs 12 trillion.[5]

So that it can be said that the effect of demonetization has brought cheers to the banking sector along with sharp rise in deposits and availability of large funds for lending. It is expected that banks may cut the lending rates. It has also helped in recovery against defaulters accounts.

5.4   EFFECT ON GDP GROWTH RATE

As per data released by the rating agency ICRA, it has been forecasted that growth rate of GDP will be reduced by 40 basis points to 7.5%.[6] CRISIL rating agency has also forecasted a slowdown in growth rate to 6.9% in financial year 2016-17.[7] Further an international rating agency, S & P has estimated a lower GDP growth rate Of 6.9% from 7.9% estimated earlier.[8] Also as per RBI, GDP growth rate will be 7.1% as against the last estimate of 7.9%.[9]

So that taking the data released by various rating agencies as basis, the conclusion is drawn that GDP growth rate of economy is definitely going to reduce by approximately 1% due to the effect of demonetization.

5.5   EFFECT ON MSMEs SECTOR

Micro, small and medium industries play a vital role in the Indian economy. It generates a large part of GDP and provides employment to a large population. MSMEs were much affected by the demonetization as a large number of industries in this segment are organized and mainly follow the traditional cash basis transaction method.

Soon after the demonetization, retail trade came down significantly from Rs 14,000 crore per day to Rs 3,500 crore per day.[10] Further a data collected over 200 cities reveal that 90% of the small traders have witnessed decline in their trade.[11] The acute shortage of currency has forced the MSME industries in Punjab to stop payment of their staff. [12]

So that, it has been seen that MSMEs has been largely effected by such move because of following of cash basis system and due to status of non-organized.

5.6   EFFECT ON SERVICE SECTOR

Note ban has also hit the service sector of the economy. As per data released by Nikkei India Service Purchasing Manager Index which tracks service sector companies on monthly basis, has recorded a slump sale in service sector companies. This index has come to 46.7 points in November 2016 as against 54.5 in October 2016 and 50.1 points in the November 2015.[13]

It is a clear indication that service sector too has been effected from the demonetization.

5.7   EFFECT ON LARGE SCALE INDUSTRIES

As a consequence of demonetization, in Ludhiana industrial area production of Bicycle, hosiery, hand tools and auto components industry has been reduced by 50%. Recently, Seth cycle industries, Ludhiana laid off its 700 daily wage workers. [14]

Further Bicycle industries' sale has been reduced by 30% as consumers are facing shortage of cash.[15] It is clear from the above facts that organized and large scale industries are effected from the demonetization move.

5.8   EFFECT ON PRICE LEVEL

Demonetization has thrown the consumers out of the market due to lack of funds in hands resulting in fall in demand. Inflation rate has been recorded 3.63% in November 2016 post demonetization.[16]

Further wholesale price index has been reduced to 3.15% in November due to the demonetization.[17] So that, there has been considerable reduction in price level post demonetization.

6.   CONCLUSION

From all above study the conclusion can be drawn that, demonetization has widely effected the Indian economy and nearly all sectors of the economy. Its effects on the Digital payment services and banking sector have proved to be good. But at the same time, it has slowed down the GDP growth rate and growth of many other industries. The reason behind the slowdown was wide presence of unorganized and cash based business and lack of availability of digital payment methods.

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A STUDY ON FACTORS AFFECTING BRAND LOYALTY OF FMCG USERS

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ABSTRACT

Product features (Fragrance / Skin care / Germ fight features / Colour) is one of the most important factors that affect brand loyalty. Brand loyalty is determined by several distinct psychological processes of the consumers and entails multivariate measurements. The relationship between the availability of the bath soap and the extent of brand loyalty was also found to be significant. Brand loyalty of bath soap users of LUX in Patia area of Bhubaneshwar city is moderately high. 63% of the consumers are brand loyal. On the contrary only 9% of the consumers are switchers and the rest of the users are loyal among few brands. 75% of the customers are influenced by the brand name and perceived brand image of the bath soap. Brand loyalty also depends on the influence of family members. 62.96% of the consumers were found to be influenced by the family members in buying their bath soap brands. The effect of sales promotion varied among different brand loyal groups. Hardcore brand loyals are very less interested in sales promotion while softcore brand loyals and switchers are very much interested. Interestingly price and advertisements have no significant effect on the extent of brand loyalty.

KEYWORDS

brand loyalty, brand switchers, price, advertisement, psychological process, sales promotion, bath soaps, price sensitive, brand name, product availability, customer loyalty.

INTRODUCTION

The success of a firm depends largely on its capability to attract consumers' towards its brands. In particular, it is critical for the survival of a company to retain its current customers, and to make them loyal to the brand. To a large extent, the success of most businesses depends on their ability to create and maintain customer loyalty. In the first place, selling to brand loyal customers is far less costly than converting new customers. In addition, brand loyalty provides firms with tremendous competitive weapons. Brand loyal consumers are less price-sensitive. A strong consumer franchise gives manufacturers leverage with retailers. And, loyalty reduces the sensitivity of consumers to marketplace offerings, which gives the firm time to respond to competitive moves. In general, brand loyalty is a reflection of brand equity, which for many businesses is the largest single asset. Brand equity reflects the value added to a product that results from brand knowledge. A loyal customer franchise is the most important source of competitive advantage.

Irrespective of income level and status people use bath soap. The frequency of bath soap might vary due to the individual hygiene practice. Many brands of bath soaps are available in the market of many different prices. People buy bath soap according to their own capabilities. In the same price range there are also many brands. So, all the time people have to make purchase decision among many brands. At the time of making purchasing decision, people might consider various factors. People might buy same brand repeatedly. They can switch among few brands or they can switch in lots of brands.

This research is meant to find out the brand loyalty level of bath soap user. The research also tries to find out the factors that affect brand loyalty of bath soap users in PATIA AREA of Bhubaneshwar.

The results of this study will provide the local companies the most important factors effecting brand loyalty of such products and will help them understand their target markets better and carry out specific market research and promotional activities aimed at them. Philip Kotler, again, defines four patterns of behaviour:

Hardcore Loyals	-	who buy the brand all the time.
Softcore Loyals	-	loyal to two or three brands.
Shifting Loyalty	-	moving from one brand to another.
Switchers	-	with no loyalty (possibly 'deal-prone', constantly looking for bargains or 'vanity prone', looking for something different).

OBJECTIVES

1. To find out the status of brand loyalty of bath soap users in Bhubaneshwar.
2. To find out the factors that affect brand loyalty of bath soap users in PATIA AREA of Bhubaneshwar.

SCOPE

Basically the study covers loyalty levels of the customers in relation to bathsoap LUX of Hindustan Unilever Limited which belongs to FMCG category.

LITERATURE REVIEW

Brand loyalty, in marketing, consists of a consumer's commitment to repurchase or otherwise continue using the brand and can be demonstrated by repeated buying of a product or service or other positive behaviours such as word of mouth advocacy (Dick and Kunal, 1994). Brand loyalty is more than simple repurchasing, however. Customers may repurchase a brand due to situational constraints (such as vendor lock-in), a lack of viable alternatives, or out of convenience (Jones et al., 2002). Such loyalty is referred to as "spurious loyalty". True brand loyalty exists when customers have a high relative attitude toward the brand which is then exhibited through repurchase behaviour (Reichheld and Earl, 1990), (Reichheld, 1993).

It has been suggested that loyalty includes some degree of pre-dispositional commitment toward a brand. Brand loyalty is viewed as multidimensional construct. It is determined by several distinct psychological processes and it entails multivariate measurements. Customers' Perceived value, Brand trust, Customers' satisfaction, repeat purchase behaviour and Commitment are found to be the key influencing factors of brand loyalty. Commitment and Repeated purchase behaviour are considered as necessary conditions for brand loyalty followed by Perceived value, satisfaction and brand trust (Punniyamoorthy and Prasanna, 2007).

RESEARCH METHODOLOGY

The primary source of data for the research was the shoppers buying in Patia area of Bhubaneshwar. A questionnaire survey was conducted to collect the empirical data in order to statistically test the hypotheses. The questionnaire contained all together 10 questions. Any respondent has to answer highest 8 questions. First 8 questions are for hardcore brand loyals. If anybody is softcore brand loyal then she or he has to answer question no 9 instead of question no 8. Similarly question 10 will be answered instead of 8 for brand switchers. The survey method was convenience survey.

SAMPLE SIZE

Observation technique was also used by standing beside local stores. When users come to the store to buy bath soap, what they ask for and what criterion they focus on. A total of 108 respondents were surveyed for this purpose using a non-probability sampling technique. The respondents were chosen on the basis of accessibility and convenience.

PERIOD OF STUDY

The period of study undertaken at some retail shops of Patia, Bhubaneshwar, was around 1 month and samples were taken on two days of the week preferably Saturday and Sunday.

METHOD OF ANALYSIS

Descriptive statistics and chi square analysis is used.

HYPOTHESIS OF THE STUDY

H1: Product features of bath soap do not affect brand loyalty.
H2: Sales promotional activities do not affect brand loyalty.
H3: Advertisements do not affect brand loyalty.
H4: Family influence does not affect buying decision of bath soap.
H5: Availability of bath soaps does not affect brand loyalty.
H6: Price does not affect brand loyalty.
H7: Brand name of bath soaps affects brand loyalty.

ANALYSIS OF THE DATA

The distribution of sample respondents based on their demographic factors is shown in the following. The distribution of sample respondents based on their demographic factors is shown in the following table.

TABLE 1: DEMOGRAPHIC VARIABLES

VARIABLES	NUMBER OF RESPONDENTS	PERCENTAGE
GENDER		
Female	76	70
Male	32	30
TOTAL	**108**	**100**
AGE DISTRIBUTION		
Below 18 years	4	4
18 to 25 years	12	11
25 to 35 years	44	41
35 to 45 years	38	35
45 years and above	10	9
TOTAL	**108**	**100**
MARITAL STATUS		
Married	76	70
Not Married	32	30
TOTAL	**108**	**100**
INCOME DISTRIBUTION		
Less than Rs. 10,000	12	11
Rs. 10,000 to 20,000	22	20
Rs. 20,000 to 30,000	48	44
Rs. 30,000 to 50,000	14	13
Rs. 50,000 to 80,000	8	7
More than Rs. 80,000	4	4
TOTAL	**108**	**100**
BRAND LOYALTY LEVEL		
Hardcore Brand Loyal	68	63
Softcore Brand Loyal	30	28
Switcher	10	9
TOTAL	**108**	**100**

Source: collected and compiled data.

Majority of the sample are female. Majority of the respondents are from the age of 25 years to 35 years. Majority of the respondents are married. Majority of the respondents are married. Majority of the bath soap users are hardcore brand loyal (63%) and switchers are the minority with 9%.

TABLE 2: DISTRIBUTION OF THE RESPONDENTS TOWARDS BRAND LOYALTY FACTORS

FACTORS	SELECTED	NOT SELECTED
PRICE		
Hardcore Brand Loyal	12	56
Softcore Brand Loyal	12	18
Switcher	4	6
Didn't influenced	28	80
PRODUCTS		
Hardcore Brand Loyal	66	2
Softcore Brand Loyal	24	6
Switcher	6	4
Didn't influenced	96	12
FAMILY INFLUENCE		
Hardcore Brand Loyal	52	16
Softcore Brand Loyal	12	18
Switcher	4	6
Didn't influenced	68	40
PRODUCT AVAILABILITY		
Hardcore Brand Loyal	28	40
Softcore Brand Loyal	30	0
Switcher	10	0
Didn't influenced	68	40
SALES PROMOTION		
Hardcore Brand Loyal	4	64
Softcore Brand Loyal	20	10
Switcher	10	0
Didn't influenced	34	74
ADVERTISEMENT		
Hardcore Brand Loyal	22	46
Softcore Brand Loyal	14	16
Switcher	0	10
Didn't influenced	36	72

Source: collected and compiled data.

Majority of the hardcore brand loyal of bath soap users are not price sensitive. Majority of the bath soap users are product feature sensitive. In the case of hardcore brand loyals, family influence is very high. All the bath soap users are really affected by the availability of the bath soaps in local stores. The distribution of the selection of sales promotion (price off / extra offer) as a factor of brand loyalty of bath soap users are shown in the above table. On the other hand, two-third softcore brand loyals are influenced by sales promotion. And among 34 hardcore brand loyals, only 2 are interested in sales promotion. The distribution of the selection of advertisements as a factor of brand loyalty of bath soap users are shown in the above table.

TABLE 3: HYPOTHESES TESTING

HYPOTHESES	CALCULATED CHI SQUARE VALUE	DEGREES OF FREEDOM	RESULT
Product features of bath soap do not affect brand loyalty	7.722	2	Rejected
Sales promotion activities do not affect brand loyalty	29.820	2	Rejected
Advertisements do not affect brand loyalty	3.714	2	Accepted
Family influence do not affect buying decision of bath soap	7.182	2	Rejected
Availability of bath soaps does not affect brand loyalty	18.615	2	Rejected
Price does not affect brand loyalty	3.276	2	Accepted
Brand name of bath soaps affects brand loyalty	17.689	2	Rejected

Source: collected and compiled data.

TESTING OF THE HYPOTHESIS

Hypothesis is tested using Chi-square test of independence. According to the survey, switchers are less interested in advertisements. The hypothesis testing was done using chi-square distribution. The level of significance used here is .05.

FINDINGS

From the tests of hypotheses it is seen that among seven null hypotheses five are rejected and two are not. It means among seven estimated factors, brand loyalty has dependency with five of them. The factors that affect brand loyalty are 1). Product features, 2). Sales promotion, 3). Availability, 4). Family influence and 5). Brand name. The factors that do not affect brand loyalty are 1). Advertisement and 2). Price.

CONCLUSION

It will definitely give brand loyalty researchers an indication of the status of brand loyalty of bath soap users in Bhubaneshwar. They can use this research for other fast moving consumer goods to find out the factors that affect brand loyalty. Marketers place a huge importance in determining the factors that affect brand loyalty of bath soap. The results of this study will provide the local companies to understand their target markets better and carry out specific market research and promotional activities aimed at them. Future research can be done on the following topics as a continuation of this work. Direct and indirect influence of factors affecting brand loyalty of bath soaps in Bhubaneshwar is conducted here; the scope of the research can be extended to national or international level. Five factors affecting brand loyalty of bath soap users have been identified. This research can be extended to find out more socio-economic factors in the case of brand loyalty of bath soap users. This research can be extended to broad fast moving consumer goods category.

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PORTFOLIO MANAGEMENT: A DECISION MAKING TOOL IN THE HANDS OF INVESTORS

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ABSTRACT
All investments are linked to risk and returns. Any investor, who wants to invest in any securities like shares, debenture, bonds etc, must have a good knowledge about investment market. Investing in securities not only requires a good deal of knowledge but also requires analytical skills to deal with it. Investing in financial securities provides a way to the investors to earn a good amount of money. But on the other hand it is full of risks. The challenge with the investors is not limited to choosing the right security but is also linked with the correct selection of the securities from a particular category of securities. The investors instead of investing their savings in a single security should invest in group of securities. This group of securities is called as portfolio. By creating portfolios risks can be reduced without sacrificing the returns. This technique is referred as portfolio management, which help the investors in maximizing their expected returns and provides them with better chances of success in choosing a right investment strategy.

KEYWORDS
portfolio management, investor's tools.

INTRODUCTION
Today's financial markets are full of complexities. Besides these complexities, investment always attracts the people from all walks of life to invest in different securities. But the investors are not aware of the fact that investment is considered as an art and science because it makes use of certain rules and also require a good deal of analytical knowledge and skills. Only with the help of sufficient knowledge and required skills the optimum risk and return relationship can be achieved. The investor always aims at constructing optimum portfolio which can enhance their returns on investment. But the construction of portfolio is not a layman's job. It is based on rational investment decision making followed with analytical knowledge. Because of this reason the investors can take the help of portfolio managers who can do this task for them. Portfolio managers are experienced people in making an optimum portfolio as they are continuously involved in reviewing and revisions of the securities in the portfolio. These managers are also having a good deal of knowledge about the investment markets. Besides this the construction of portfolio is always dependent on the financial goals and needs of the investor's.

Portfolio management is the combination of two key words: portfolio and management: Portfolio refers to a group of different financial securities or assets. Management is a process of planning, organizing and coordinating the business activities in accordance with the predefined business objectives Thus Portfolio management consists of all those processes which are involved in creation, maintenance and evaluation of a portfolio. It is a systematic way of keeping one's investment in an efficient manner by reducing the risks and enhancing the returns. The foundation of portfolio management is always linked to the goals and objectives of the investors. In order to reach these goals investors diversifies their portfolio by allocating the funds among different types of securities. Portfolio management enables the portfolio managers to provide good, reliable and easy investment solutions to their clients/investors.

CONSTRUCTION OF THE PORTFOLIO
Following steps are considered at the time of constructing the portfolio:

1. IDENTIFICATION OF OBJECTIVES AND CONSTRAINTS
The foremost step under portfolio management is to find out the aims and objectives of the investors. For one investor the main aim can be maximizing the returns with minimum risk, but for the other it may be capital appreciation. Thus utmost care should be taken at the time of identifying investor's investment objectives. The analysis of this data gives an idea about the types of securities and asset classes to be selected for making portfolio.

2. SELECTION OF ASSET MIX
Selection of the assets that are to be included in the portfolio is considered as one of the critical steps. The portfolio may be the combination of different types of asset classes like equities, preference shares, bonds, debentures etc. The percentage of each mix in the portfolio is dependent upon the risk tolerance and investment limits of the investors.

3. FORMULATION OF PORTFOLIO STRATEGY
The formulation of portfolio strategy is linked with the income and capital appreciation for a given level of risk tolerance. This strategy must have a correlation with the expectations of capital markets and individual industry and market as a whole.

4. SECURITY ANALYSIS
Security analysis is a process of analyzing the securities in relation to their prices, risks, returns etc. This analysis is done by the investors. Only after analyzing these securities, the investors will finalize the securities to invest in.

5. PORTFOLIO EXECUTION
The next step is the execution of the portfolio which includes buying and selling of the securities in the markets. The success of this step always depends upon the innovation and judgment of the person constructing the portfolio

6. PORTFOLIO REVISION
The next important step is revision of the portfolio. This includes adding new securities in the portfolio and deleting the old ones, or keeping both old and new securities. It also includes shifting from one stock to another or shifting from equities to bond or vice versa. But all these things are dependent upon the conditions of the market.

7. PORTFOLIO EVALUATION
It is the duty of the portfolio manager to evaluate the performance of the portfolio in order to find out its strengths and weaknesses. Portfolio evaluation is treated as a feedback tool which helps in continuously improving the quality of the portfolio this step is considered as a last step in portfolio management process

PORTFOLIO MANAGEMENT SERVICES
1. Active Portfolio Management services
The active portfolio management services enable the portfolio manager to buy and sell securities continuously in order to maximize the profits for their clients
2. Passive Portfolio Management services
Under passive portfolio management services, the portfolio manager only deals with the fixed portfolio which is designed as per the current market scenario.

3. Discretionary Portfolio Management services

The portfolio manager has given the full discretion by the client/investor to take any type of investment decisions on his/her behalf. Those investors who have less knowledge about the securities market, they hire the professional services of the portfolio managers who will construct a good portfolio for them keeping in mind their financial objectives and constraints.

4. Non Discretionary Portfolio Management services

Non discretionary portfolio management services states that the portfolio manager is only entrusted with the job of guiding the investor or client relating to different investment decisions. But the right to take final decisions only lies with the client

TRADITIONAL VS MODERN APPROACH OF INVESTMENT

Traditional investment approach is comprehensive approaches which emphasize investments in one single security after making risk- return analysis of that particular security. Under traditional approach investors were concerned with maximizing the returns by reducing the risk factor. The usual method of calculating the returns is to find out the dividends on each individual security, their price earnings ratio and the estimation of the market conditions. But on the other hand modern portfolio approach focus on investing in more than one security in order to diversify the risks and to maximize the returns. This approach is called as Modern portfolio theory (MPT) or portfolio theory. This approach was introduced by Harry Markowitz in his paper "Portfolio Selection," which appeared in the 1952 in Journal of Finance. After 38 years of his publication he shared a Nobel Prize with Merton Miller and William Sharpe for his modern theory on portfolio selection. Markowitz used the technique of Statistical analysis for the measurement of risk and the tool of mathematical programming for the selection of assets in the portfolio. In this way he generated number of portfolio within the given amount of money taking into consideration the risk and return preferences of investors. Besides this Markowitz also determines three important variables (returns, standard deviation and coefficient of correlation) for efficient set of portfolio. According to him a portfolio is said to be efficient if it is expected to yield the highest possible return for the lowest level of risk**.** This model is also called as Full Covariance model. Based on his scientific research, Markowitz has laid down certain guidelines for diversification which are as follows:

- All the investments have different types of risk characteristics
- Markowitz diversification should always involve a proper number of securities which are neither not too less or nor too high
- The securities in the given portfolio have no correlation or have negative correlation
- In order to make choice of companies, securities or assets, only those are selected whose returns are not related to each other.

ASSUMPTIONS OF MARKOWITZ PORTFOLIO THEORY

1. Investors are rational and they always behave in the manner so as to maximize their utility with a given level of income
2. Investors are free to access any type of fair and correct information on return and risk
3. The markets are efficient and absorb the information quickly and perfectly
4. Investors are risk averse and they always try to minimize their risk and maximize their returns.
5. Investors decision is based on Expected return, Standard deviation or Variance of these returns from their mean
6. Investors prefer higher returns for the given level of risk and they can reduce the risk by adding more investments to their portfolio.

PORTFOLIO RETURN

Markowitz emphasize that investors are always interested in maximizing the expected returns from the portfolio. So as per traditional approach by investing in single security, investors assume that they can increase their returns. But in real world all the market conditions are full of uncertainties. Because of these uncertainties Markowitz gave the concept of diversification of securities. It is always considered that holding more than one security is always beneficial rather than putting all the eggs in the same basket. Thus through diversification investors can reduce their risks and maximize their returns. Moreover the securities should be correlated to each other so that maximum returns can be achieved. For calculating returns on the portfolio Markowitz has given the following formula:

$ER_p = wE(Rx)+(1-w)E(Ry)$

Where ER_P = the expected return of the portfolio, w= the proportion of the portfolio's value invested in security x, E (Rx) = the expected return of security x, 1-w= the proportion of the portfolio's value invested in security y, E (Ry) = the expected return of security y

PORTFOLIO RISK

When investors invest in one security the risk is more and this risk is measured by standard deviation. But if investment is done in more than one security the element of risk is reduced. In this case it is essential to compute covariance for the securities. If the rate of return from two securities is moving in the same direction, then covariance of securities is considered to be positive. If rate of returns from the securities are independent then covariance is considered as zero. If rate of return is moving in the opposite direction, the covariance is considered as negative.

$\sigma p = \sqrt{X_1^2\sigma_1^2 + X_2^2\sigma_2^2 + 2 X_1 X_2(r_{12}\sigma_1\sigma_2)}$

Where σp = std. deviation of portfolio, X_1 = proportion of stock X_1, X_2 = proportion of stock X_2, σ_1 = std. deviation of stock X_1, σ_2 = std. deviation of stock X_2, r_{12} = correlation coefficient of both stocks

COEFFICIENT OF CORRELATION

The coefficient of correlation is a statistical measure used to find out the similarity and dissimilarity between two or more securities. If correlation coefficient is near to 1 then it is considered as perfect positive correlation between the securities. If correlation coefficient is - 1 then it is considered as perfect negative correlation between the securities. If correlation coefficient is 0 then it is considered that no linear relationship exists between the securities. It is calculated by using the following formula:

$$r_{ij} = \frac{COV_{ij}}{\sigma_i \sigma_j}$$

Where r_{ij} = the correlation coefficient of returns, σ_i = the standard deviation of R_{it}, σ_j = the standard deviation of R_{jt}

MARKOWITZ EFFICIENT FRONTIER

Markowitz efficient frontier aims at maximizing the returns for given amount of risk. As per Markowitz for determining the efficient portfolio all portfolios are plotted in risk return relationship. Different portfolios are constructed from the available securities and all possible combinations of risk and return are determined after analyzing the expected rate of return and the volatility of each investment. Markowitz named this risk reward equation as "Efficient Frontier". Efficient frontier helps the investor in selecting a suitable portfolio out of given set of portfolios. Markowitz theory says that if more than one portfolio is located on the efficient frontier, then investor can select that portfolio depending upon investors risk and return requirements. The efficient frontier diagram given below depicts the expected risk and return relationship between different portfolios. All the dots are treated as different portfolios. The line represents the efficient frontier where all investors can get the maximum returns with lowest possible risks. All the portfolios lying below the efficient frontier are not good because the returns would be lower for the given risk. Only those portfolios which are lying on the efficient frontier line are considered as efficient portfolios. The efficient frontier line always begins with the lower expected risks and returns then it moves upward to higher expected risks and returns. Thus on the basis of efficient portfolio line, the investors can select the appropriate portfolio on the basis of their financial requirements.

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FIG. 1
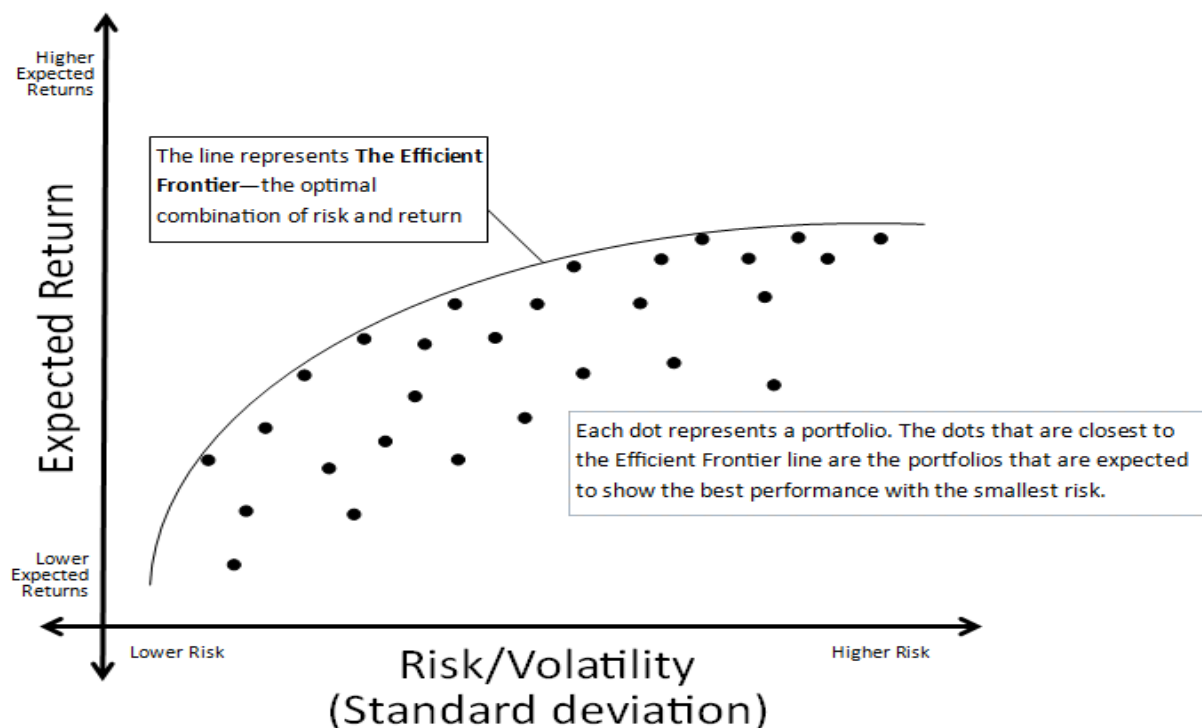
PROBLEMS WITH MARKOWITZ THEORY
- The assumption of Markowitz theory that investors are always acting rationally is wrong because of which it was criticized by many behavioral economists.
- The theory is based on certain mathematical calculations on expected values. These calculations are based on past performance for the purpose of measuring correlations between risk and return. But experienced investors do not always consider past performance as appropriate measure for calculating the future performance.
- As the number of investments increases, this model becomes more cumbersome.

SHARPE –SINGLE INDEX MODEL
To overcome the limitations of Markowitz model William Sharpe gave a model by simplifying the mathematical calculations given by Markowitz. His model is known as Sharpe's ratio or Sharpe index or reward to variability ratio. This ratio is basically used to evaluate the performance of a fund. Sharpe emphasize that the investors are only concerned about the total risk of the fund. So with the help of this ratio funds can be evaluated on the basis of reward per unit of total risk. This model also aims at evaluating the portfolios performance against a series of securities indices. One main advantage of this ratio is that it is directly calculated from any observed series of returns. Sharpe assumed that return of a security is always related to a single market index because of which it is fully risky. Sharpe classified the risks as systematic risk, unsystematic risk and total risk.

SYSTEMATIC RISK
Systematic risk relates to the economic conditions, political situations and sociological changes that affect the entire security market. The systematic risk principle states that the reward for bearing risk depends only on the systematic risk of an investment. The Beta coefficient (β) measures the relative systematic risk of an asset. If Beta > 1.0 it represents more systematic risk than average. If Beta < 1.0 it represents less systematic risk than average. The assets with larger betas have greater systematic risk and can earn greater expected returns. It is calculated as follows:
 Systematic risk = Beta coefficient + variance of market index

UNSYSTEMATIC RISK
Unsystematic risk relates to some unique factors of a firm or an industry like managerial inefficiency, technological change in production process, labor problems, etc. This risk is also known as unique risk and asset-specific risk. Unsystematic risk is calculates as follows:
Unsystematic risk = Total variance – Systematic risk
Unsystematic risk is classified as
1) **Business Risk**
Business risk arises from the inability of a firm to maintain its competitive edge, growth and stability in the earning. Business risk is further divided into two parts.
- Internal business Risk arises because of fluctuations in sales, Research and development, Change in fixed cost, Personnel management etc.
- External Business Risk arises because of those conditions which are beyond companies control like Social & Regulatory factors, Political Risk, Business Cycle etc.
2) **Financial Risk**
When the company is having insufficient funds to meet its financial requirements then financial risk arises. The risk arises when companies use more of debt securities for raising finance.

TOTAL RISK
It is an overall financial loss presented by a particular course of action like a measurement of the total risk for a business could involve summing up the various types of risk that it faces in its operations that have a non-zero probability of causing a loss within a given time frame.

ASSUMPTIONS OF SHARPE MODEL
- All investors have homogeneous expectations.
- For estimating risk return, holding period is same for all the securities.

- The change in price movements of a security is dependent upon the general and economic business environment.
- The relationship between the securities occurs only through their individual influences along with some indices of business and economic activity.

Sharpe's model can easily identify the relationship between each pair of securities by comparing each security to the market index and this relationship is used to estimate the return on the stock. The mean return is calculated as:

$R_i = a_i + b_i R_m + e_i$

Where

R_i = expected return on security i

a_i = alpha coefficient

b_i = beta coefficient

R_m = the rate of return of market index

e_i = error term

BETA FACTOR

Beta measures the degree of change in prices of stocks to the changes in overall stock market. Beta is a measure of the volatility or systematic risk of a security or a portfolio in comparison to the market as a whole. It is used in the capital asset pricing model (CAPM), which calculates the expected return of an asset based on its beta and expected market returns. Beta is also known as the beta coefficient. A beta of 1 indicates that the security's price moves with the market whereas a beta of less than 1 means that the security is less volatile than the market. A beta of greater than 1 indicates that the security's price is more volatile than the market.

SHARPE'S OPTIMAL PORTFOLIO

Sharpe's model has provided a way of selecting appropriate securities in a portfolio. The selection of any security is related to excess return beta ratio. Ranking of the securities are done on the basis of their excess return to beta. If the Sharpe Ratio (SR) is higher than fund will provide superior risk adjusted performance and if SR is lower it will give unfavorable performance. This is calculated as:

$$SR = \frac{R_i - R_f}{\beta_i}$$

Where

R_i - the expected return on stock i

R_f - the return on a riskless asset

β_i – the expected change in rate of return on stock I associated with one unit change in market return

CONCLUSION

Portfolio consists of different securities which are combined together in order to get the advantage of diversification by increasing the returns and reducing the risks. Portfolio management is considered as one of the leading strategy as it increases the confidence of investors to invest in diversified set of securities. It is all about finding the strengths, weaknesses, opportunities and threats about different securities so that a good amount of trade off can be achieved between risks and returns. It also requires regular and systematic analysis and judgment of the market conditions. Thus, the key to effective portfolio lies in gaining good knowledge and then practices it by creating and investing in your own portfolio. To be successful in investing one should understand the investment philosophy first and then make it consistent with the individual goals and preferences.

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PERFORMANCE EVALUATION OF STATE BANK OF INDIA AND ITS ASSOCIATE BANKS THROUGH CAMEL ANALYSIS

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ABSTRACT

The economic development of any country depend on healthy financial system of that country. The real factors of an economy such as industrial growth, growth and modernization of agriculture, expansion of agriculture, development of domestic and international trade etc. all are depending upon the financial system of a country. A healthy banking system is the major component of a healthy financial system and performance of banking in any economy is an effective measure to and indicator of performance of economy as a whole of that country. Banking system plays a bedrock for economic, social and industrial growth of an economy. The studies of McKinnon (1973) and Shaw (1973) emphasized the role of financial system in economic growth and according to them there is a strong correlation between economic growth and financial system of a country. Banks as a financial institution played very important role in capital formation in the economy and transfer of resources from saving groups to deficit groups which may use the financial resources for production of goods or services. That is why evaluation of financial performance of banking sector is an effect measure and indicator to check the soundness of economic activities of an economy. There is a substantial improvement over the earlier supervisory system of banking sector in terms of recovery, management efficiency, assets quality, earning quality and internal control system to regulate the level of risk and financial viability of commercial banks. The regulators have augmented bank supervision by using CAMEL (Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity) rating criterion to assess and evaluate the performance and financial soundness of the activities of the bank. In India RBI recommended two supervisory rating models named as CAMEL (Capital Adequacy, Assets Quality, Management, Earning,Liquidity) and CACS (Capital Adequacy, Assets Quality, Compliance, Systems and Controls) for rating of Indian commercial Banks and Foreign Banks operating in India. Here our study is based on analysis of the performance of State Bank of India and its associate'sbanks using CAMEL model.

KEYWORDS

CAMEL, Banking, SBI, CACS, economic growth, financial system.

STATE BANK OF INDIA- A BRIEF INTRODUCTION

State Bank of India (SBI) is an Indian multinational, public sector banking and financial services company. It is a government-owned corporation with its headquarters in Mumbai, Maharashtra. As of 2014-15, it has more than 14000 branches, including 191 foreign offices spread across 36 countries, making it the largest banking and financial services company in India by wealth. 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" in British India, Bank of Calcutta and Bank of Bombay, to form the Imperial Bank of India, which in turn became the State Bank of India.Government of India owned the Imperial Bank of India in 1955, with Reserve Bank of India (India's Central Bank) taking a 60% stake, and renamed it the State Bank of India. In 2008, the government took over the stake held by the Reserve Bank of India.

SBI now has five associate banks, down from the eight that it originally acquired in 1959. All use the State Bank of India logo, which is a blue circle, and all use the "State Bank of" name, followed by the regional headquarters' name:

- State Bank of Mysore (SBM) (founded 1913)
- State Bank of Patiala (SBP) (founded 1917)
- State Bank of Hyderabad (SBH) (founded 1941)
- State Bank of Travancore (SBT) (founded 1945)
- State Bank of Bikaner & Jaipur (SBBJ) (founded 1963)

The State Bank of India and all its associate banks are identified by the same blue *keyhole* logo. There has been a proposal to merge all the associate banks into SBI to create a "mega bank" and streamline the group's operations.

SBI has been ranked 260th in the Fortune Global 500 rankings of the world's biggest corporations for the year 2015. It has a market share among Indian commercial banks of about 20% in deposits and loans.

Apart from its five associate banks, SBI also has the following non-banking subsidiaries:

- SBI Capital Markets Ltd
- SBI Funds Management Pvt Ltd
- SBI Factors & Commercial Services Pvt Ltd
- SBI Cards & Payments Services Pvt Ltd. (SBICPSL)
- SBI DFHI Ltd
- SBI Life Insurance Company Limited
- SBI General Insurance.

REVIEW OF LITERATURE

The financial performance of the banking sector has been evaluated on many times in different time period on the basis of different tested methods. Many researchers, academicians and policy makers have come up with investigated studies till date. Some of these studies' summaries are here:

Said and Saucier in their research title **"Liquidity, Solvency and Efficiency? An empirical analysis of Japanese Bank's distress (2003) "studied** the performance of the Japanese Bank. It evaluated the liquidity, solvency and efficiency using the CAMEL Model. The data sample for the study was taken from the year 1993 to 1998. It concluded the capital adequacy, assets and management quality, earning ability and liquidity positions of the banks.

Prasuna (2004) in his research title **"Performance Snapshot 2003-04, in Chartered Financial Analyst, Volume 10"** evaluated the performance of 65 Indian banks with the help of CAMEL Model. The study was conducted for the period 2003- 2004. The concluding analysis of the study enlightened the tough competition in the market, which benefited the consumers as it shoots up their bargaining power as well as created an urge for better service quality and innovation.

Sarkar (2005) in his analysis title **"CAMEL Rating system in the context of Islamic Banking"**, which was published in Journal of Islamic Economics and Finance, Volume 1, examined the regulation and supervision of Islamic banks by central bank in Bangladesh. The study enabled the regulators and supervisors to get a Sariah benchmark to facilitate the supervision and inspection of Islamic banks and financial institutions from Islamic outlook.

Siva and Natarajan (2011) in their research paper "CAMEL rating scanning of SBI Groups" which was published in the Journal of Banking Financial Services and Insurance, Volume 1, inspected the applicability of CAMEL and it's thereupon impact on overall performance of SBI Group. It helped bank to diagnose its financial health and examined an alarming note to take preventive steps for its sustainability.

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Chaudhary and Singh (2012) in their study **"Impact of reforms on the Asset Quality in the Indian Banks"** which was published in International Journal of Multidisciplinary, Volume 5(2), analyzed the retrospective impact of financial reforms on soundness on Indian banking through its impact on its asset quality. It mainly identified the key players as risk management, NPA levels, effective cost management and financial inclusion.

Alabede James (2012) in his analysis **"The intervening effects of global financial condition on the determinants of Banks performance – Evidences from Nigeria"** concluded that asset quality and market performance are significant determinants of Nigerian Banks performance and his study suggested to reduce non-performing assets and introducing the policy to encourage fair competition among the banks.

OBJECTIVES OF THE STUDY

The main objective of this study is to analyse the overall financial position and performance of State Bank of India and its Associates Banks using CAMEL model. However, the other objectives of this study is to determine;

1. Capital Adequacy Ratios and how efficient capital ratios are maintained by the bank.
2. Asset Quality and its management in each bank.
3. Managerial efficiency of banks and productivity of employees.
4. Quality of earnings of SBI and its associate banks
5. Liquidity performance of each banks.

RESEARCH METHODOLOGY

RESEARCH DESIGN

CAMEL is a ratio based model used to evaluate the performance of bank with the help of different criteria viz. Capital Adequacy, Asset Quality, Earning efficiency, Management Quality and Liquidity.

This study is a detailed research study based on analytical research design. Out of total 27 public sector banks (19+6 SBI & its group) only SBI and its associate banks has been selected for study. We all know SBI and its group has dominant position in banking industry in India with largest market share and wealth. SBI now has five associate banks,

1. State Bank of Mysore;
2. State Bank of Patiala;
3. State Bank of Hyderabad;
4. State Bank of Travancore;
5. State Bank of Bikaner & Jaipur.

DATA COLLECTION AND ANALYSIS

Sampling: As stated SBI and its five associates Banks has been selected for the purpose of the study. The data for the period 2012-13 to 2014-15 (three years) has been collected for sample banks.

Data Collection: Only secondary source of data collection has been used viz. annual report of the banks, Statistics published by RBI and Moneycontrol.com etc.

Data Analysis: Seventeen financial Ratios has been used to assess the performance of the banks in last three years.

CAMEL ANALYSIS- AN INTRODUCTION

Camels rating is a supervisory rating system originally developed in the United States of America in 1979 as a uniform financial institution rating system following a recommendation by a United States Federal Reserve to classify a bank's overall condition. Now days It's applied to every bank across the world to assess the financial position and analysis of performance. The ratings in CAMEL are assigned based on a ratio analysis of the financial statements. The bank's condition that are assessed through CAMEL are;

✓ **" C " for Capital adequacy**

✓ **"A"for Assets Quality**

✓ **"M"for Management Capability**

✓ **"E " for Earnings Ability**

✓ **"L" for Liquidity**

CAMEL Ratings are given from 1 (best) to 5 (worst) in each of the above categories.

TABLE 1

Rating 1	Indicates strong performance and risk management practices that consistently provide for safe and sound operations. Management clearly identifies all risks and employs compensating factors mitigating concerns.
Rating 2	Reflects satisfactory performance and risk management practices that consistently provide for safe and sound operations. Management identifies most risks and compensates accordingly.
Rating 3	Represents performance that is flawed to some degree and is of supervisory concern. Risk management practices may be less than satisfactory level of union's size, complexity, and risk profile.
Rating 4	Refers to poor performance that is of serious supervisory concern. Risk management practices are generally unacceptable relative to the bank or credit union's size, complexity and risk profile. Key performance measures are likely to be negative. Such performance, if left unchecked, would be expected to lead to conditions that could threaten the viability of the bank
Rating 5	Considered unsatisfactory performance that is critically deficient and in need of immediate remedial attention.

C.A.M.E.L. ANALYSIS

1. CAPITAL ADEQUACY

For analyzing the financial health of a banking system, capital adequacy is one of the prominent indicators. Banks generally focuses to conserve and protect stakeholder's confidence and prevent itself from the state of bankruptcy. It reflects bank's loss bearing capacity to its capital at future date. Capital base of financial institutions like banks facilitates customers in forming their risk perception about the bank. Capital Adequacy is very useful to conserve and to protect stakeholder's confidence and prevent the bank from bankruptcy.

1.1 Capital Adequacy Ratio (CAR)

The level of losses arising from operational losses that a bank can take up is ensured by this ratio. If The CAR ratio shows a higher node, it indicates bank's strength as well as protection of investors' interests. According to RBI norms banks need to maintain 9% capital adequacy ratio.

CAR= (Tier- I +Tier- II Capital)/Risk Weighted Assets

The heads under Tier-I capital includes shareholder's equity, perpetual non- cumulative preference shares, disclosed reserves and innovative capital instruments whereas Tier-II capital includes undisclosed reserves, revaluation reserves of fixed assets and long term holding of equity securities, general provisions/general loan loss reserves, hybrid debt capital instruments and subordinated debt.

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TABLE 1

Sl.No.	Banks	Capital Adequacy Ratio (%)				
		2013	2014	2015	Average	Rank
1	SBI	12.92	12.96	12.00	12.62	1
2	SBBJ	12.16	11.55	11.57	11.76	4
3	SBP	10.37	10.38	12.06	10.93	6
4	SBH	12.36	12.52	12.00	12.29	2
5	SBM	11.79	11.50	12.02	11.77	3
6	SBT	11.70	11.52	11.63	11.61	5

On the basis of group average of all the three years, SBI is at top position with highest CAR (12.62%) followed by State bank of Hyderabad (12.29%). State bank of Patiala scored last position among the all six banks and that is due to poor performance in maintaining CAR in 2012-13 and 2013-14. However, bank shows improvement in the year 2014-15 (12.06%).

1.2 Debt-Equity Ratio

This ratio represents the leverage of a bank ie the proportion of debt capital and equity capital in capital structure. This ratio is a proportional relationship between total borrowings (long term only or sometime long term plus short term borrowings) with shareholder's net worth.

Debt Equity Ratio = Total Long Term Borrowings/ Shareholders Net Worth.

Higher ratio indicates high leverage and high risk or lesser protection to the depositors and creditors and vice-versa. Long term borrowings of a bank may include borrowings from Reserve Bank of India, Loan from other banks and financial institutions and NBFCs, debt acquisition from issue of various debt instruments and borrowings and refinance from outsides of India etc. On the other hand, net worth includes subscribed and paid up share capital, share premium, statutory reserves, balance of profit transferred from P&L statement to balance sheet and other revenue and capital reserves.

TABLE 2

Sl.No.	Banks	Debt-Equity Ratio (times)				
		2013	2014	2015	Average	Rank
1	SBI	1.71	1.55	1.59	1.62	5
2	SBBJ	1.24	1.26	1.27	1.26	3
3	SBP	1.65	2.0	1.49	1.71	6
4	SBH	0.71	0.76	0.89	0.79	1
5	SBM	0.90	1.20	1.15	1.08	2
6	SBT	2.02	1.50	0.72	1.41	4

In the above table total long term debt and gross net worth of particular bank for each year is taken for computation of ratios. In the above table it is seen that State Bank of Hyderabad is the best performer with least leverage followed by State Bank of Mysore. State Bank of Patiala and State Bank of India is on sixth and fifth position due to maintenance of high leverage during the study period. Higher leverage ratio indicates the less protection of creditors and depositors fund and vice-versa.

1.3 Advances to Assets

This ratio shows relationship between the total advances to total assets. Total advances include bills discounted, cash credit, term loan, overdrafts etc. This ratio shows the proportion of total assets disbursed as advances to clients. It reflects bank's aggressiveness in lending which indicates better profitability. Higher ratio is preferred as it indicates higher profitability to the bank.

TABLE 3

Sl.No.	Banks	Advance to Total Assets (%)				
		2013	2014	2015	Average	Rank
1	SBI	66.76	67.50	63.48	65.91	5
2	SBBJ	66.83	70.61	67.98	68.47	1
3	SBP	67.98	66.54	67.38	67.30	2
4	SBH	66.03	67.61	67.99	67.21	3
5	SBM	66.83	66.89	65.47	66.39	4
6	SBT	66.43	65.92	65.08	65.81	6

From the above table it is clear that State Bank of Bikaner and Jaipur is on top position with highest average of 68.75 % followed by State bank of Patiala with 67.30%. State Bank of Travancore and State Bank of India both have low score due to low ratio compare to other sample banks. After a critical study of ledger, it is found that this low rank is due to low investment by banks in government securities. Every public sector bank invests a major portion of their fund in government securities. This will be clear from next table.

1.4 Government securities to Total Investment

This ratio reflects the risk involved in a bank's investment. It is calculated by dividing the amount invested in government securities by total investment. Since government securities are risk-free, higher the proportion of government securities in total investment, lower will be the risk involved in a bank's investment and vice versa.

TABLE 4

Sl.No.	Banks	Investment in Government securities to Total Investment (%)				
		2013	2014	2015	Average	Rank
1	SBI	76.74	77.37	76.29	76.80	6
2	SBBJ	87.72	93.11	91.84	90.89	2
3	SBP	92.84	96.93	88.29	92.69	1
4	SBH	93.47	92.98	85.10	90.52	3
5	SBM	86.20	82.86	81.62	83.56	5
6	SBT	85.81	84.18	83.88	84.62	4

In the above table, it is clear that a major portion of banks investments are in government securities and related sectors. Here State Bank of Patiala on the top position with highest average of 92.69 followed by State Bank of Bikaner and Jaipur with 90.89. SBI scores lowest as compares to other five associates banks SBI has lowest investment in Govt. securities. A high score here indicates low risk investment and which boost the confidence of creditors and customers.

1.5 Composite Capital Adequacy

On the basis of group average of all the four ratios of Capital Adequacy as expressed in the table 05, State Bank Hyderabad is at top most position with group average of 2.25, followed by State Bank of Bikaner and Jaipur with group average of 2.50. State Bank of Travancore is the poor performer and got lowest rank. The reason behind poor performance in capital adequacy and advance to total assets. The State bank of India achieved fifthposition only and this due to low score in advance to assets ratio and low investment in government securities (risk free) out of its total investment.

TABLE 5

Bank	Capital Adequacy Ratio		Debt Equity Ratio		Advances to Total Assets		Government Securities to Total Investment		Group Rank (Low rank represents good performance)	
	%	Rank	Times	Rank	%	Rank	%	Rank	Average	Rank
SBI	12.62	1	1.62	5	65.91	5	76.80	6	4.25	5
SBBJ	11.76	4	1.26	3	68.47	1	90.89	2	2.5	2
SBP	10.93	6	1.71	6	67.30	2	92.69	1	3.75	4
SBH	12.29	2	0.79	1	67.21	3	90.52	3	2.25	1
SBM	11.77	3	1.08	2	66.39	4	83.56	5	2.80	3
SBT	11.61	5	1.41	4	65.81	6	84.62	4	4.75	6

2. ASSET QUALITY

The quality of assets is an important parameter to examine the degree of financial strength. The foremost objective to measure the assets quality is to ascertain the composition of non-performing assets (NPAs) as a percentage of the total assets.

The following are the important ratios to measure the asset quality of banks;

a. Net NPA to Net Advance
b. Total Investment to Total Assets
c. Net NPA to Total Assets

2.1. Net NPAs to Net Advances

It is the most standard measure to judge the assets quality, measuring the net nonperforming assets as a percentage of net advances. Net NPAs = Gross NPAs - Net of provisions on NPA. A low score here indicates better performance.

TABLE 6

Sl.No.	Banks	Net NPA to Net Advance (%)				
		2013	2014	2015	Average	Rank
1	SBI	2.10	2.57	2.12	2.26	2
2	SBBJ	2.27	2.76	2.54	2.52	4
3	SBP	1.62	3.17	3.88	2.89	6
4	SBH	1.61	3.12	2.24	2.32	3
5	SBM	2.69	3.29	2.16	2.71	5
6	SBT	1.46	2.78	2.05	2.09	1

In table 06, State Bank of Travancore is on top position with least average of 2.09. State Bank of Patiala scored lowest due to highest percentage of 2.89. However, the performance of other banks is close to highest and lowest score.

2.2 Total investment to total Asset

This ratio indicates the extent of deployment of assets in investment as against advances. This ratio is used as a tool to measure the percentage of total assets locked up in investments.

TABLE 7

Sl.No.	Banks	Total Investment to Total Asset (%)				
		2013	2014	2015	Average	Rank
1	SBI	22.40	22.24	27.18	23.94	3
2	SBBJ	23.42	19.53	21.96	21.64	1
3	SBP	22.07	21.54	22.72	22.11	2
4	SBH	24.96	24.22	23.62	24.26	4
5	SBM	24.95	25.94	25.87	25.58	5
6	SBT	26.80	26.54	25.24	26.19	6

In the above table State Bank of Bikaner & Jaipur got the highest rank due to lowest average score followed by State bank of Patiala. This indicates the policy of these high score banks to reduce risk of non- performing assets. On the other hands State Bank of Travancore and State Bank of Mysore has high average compare to other banks and so they score low. These indicates high average banks generally focused on high revenue with high deployment of assets as advances.

2.3 Net NPA to Total Asset

This ratio reflects the efficiency of bank in assessing the credit risk and recovering the debts. In this ratio, the Net NPAs are measured as a percentage of Total Assets. The lower the ratio reflects, the better is the quality of advances.

TABLE 8

Sl.No.	Banks	Net NPA to Total Asset (%)				
		2013	2014	2015	Average	Rank
1	SBI	1.40	1.73	1.34	1.49	2
2	SBBJ	1.51	1.94	1.73	1.72	4
3	SBP	1.10	2.10	2.60	1.93	6
4	SBH	1.06	2.10	1.52	1.56	3
5	SBM	1.80	2.20	1.41	1.80	5
6	SBT	0.97	1.83	1.32	1.37	1

Here in this table State Bank of Travancore score at top due to low average followed by State Bank of India and State Bank of Hyderabad. State Bank of Patiala has scored last due to poor efficiency of bank in the year 2013-14 and 2014-15. Similarly, State bank of Mysore scored second last due to poor performance in the year 2013-14.

2.4 Composite Asset Quality

TABLE 9

Bank	Net NPA to Net Advance		Total investment to Total Asset		Net NPA to Total Asset		Group Rank (Low rank represents good performance)	
	%	Rank	Times	Rank	%	Rank	Average	Rank
SBI	2.26	2	23.94	3	1.49	2	2.33	1
SBBJ	2.52	4	21.64	1	1.72	4	3.00	3
SBP	2.89	6	22.11	2	1.93	6	4.67	5
SBH	2.32	3	24.26	4	1.56	3	3.33	4
SBM	2.71	5	25.58	5	1.80	5	5.00	6
SBT	2.09	1	26.19	6	1.37	1	2.67	2

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On the basis of composite asset quality State Bank of India is the best performer with least average and high score followed by state bank of Travancore and state bank of Bikaner and Jaipur. The poor performer in composite asset quality is State bank of Mysore due to high score in all the three averages and State Bank of Patiala due to poor efficiency in management of Net NPA.

3. MANAGEMENT EFFICIENCY

Management efficiency is another essential component of the CAMEL model that guarantee the growth and survival of a bank. Management efficiency means adherence with set norms, ability to plan and respond to changing environment, leadership and administrative capability of the bank. In management efficiency test involves subjective analysis to measure the efficiency and effectiveness of management. The followings are three major ratios that is uses to evaluate the management efficiency of banking business;

3.1 Total Advances to Total deposit

This ratio evaluates the efficiency and capability of the bank's management in applying the deposits (including receivables) available excluding other funds viz. equity capital, etc. into rich earning advances.

TABLE 10

Sl.No.	Banks	Total Advances to Total Deposits (%)				
		2013	2014	2015	Average	Rank
1	SBI	86.94	86.76	82.42	85.37	1
2	SBBJ	79.78	86.86	82.56	83.07	3
3	SBP	83.22	84.68	84.83	84.24	2
4	SBH	79.29	80.04	80.70	80.01	4
5	SBM	78.87	80.38	78.75	79.33	5
6	SBT	79.74	77.69	75.45	77.62	6

In the above table State Bank of India rank at top position with highest proportion of advances to deposits followed by State bank of Patiala and State bank of Bikaner and Jaipur. State Bank of Travancore has low score due to low proportion. A high ratio average indicates possibility of high earnings.

3.2 Business Per Employee

This ratio reveals the efficiency of manpower of bank. In another word we can say that this ratio measures the productivity of employee's f a bank. Higher the ratio, the better is for bank. Business per employee is measures through the following equations;

Business per employee = (Total Deposits + Total Advances)/Total Number of employee

TABLE 11

Sl.No.	Banks	Business Per Employee (Rs in Crore)				
		2013	2014	2015	Average	Rank
1	SBI	9.44	10.64	12.34	10.81	4
2	SBBJ	9.00	9.77	11.00	9.92	6
3	SBP	11.34	11.13	11.90	11.46	3
4	SBH	13.87	13.14	15.16	14.06	1
5	SBM	9.55	10.37	11.71	10.54	5
6	SBT	12.59	11.56	12.22	12.12	2

Here in the above table, State Bank of Hyderabad is top performer in case of employee productivity followed by State Bank of Travancore and Sate bank of Patiala. This is due to high amount of business per employee i n all the three years. State Bank of India performance was good in the year 2014-15 but below average in the previous financial years, State bank of Bikaner positioned last due to low productivity of employees which also indicates poor performance compare to other banks.

3.3 Per Employee Profit

It is calculated by dividing the profit after tax earned by the bank with the total number of employees. The higher the ratio, higher is the efficiency of the management and vice versa. This ratio indicates profit earned per employee.

TABLE 12

Sl.No.	Banks	Net Profit Per Employee (Rs lakh)				
		2013	2014	2015	Average	Rank
1	SBI	6.45	4.85	6.02	5.77	3
2	SBBJ	5.91	5.62	6.00	5.84	2
3	SBP	4.62	3.00	2.00	3.21	6
4	SBH	8.29	6.10	8.29	7.56	1
5	SBM	4.00	2.00	4.00	3.33	4
6	SBT	5.06	2.20	2.55	3.27	5

The net profit per employee is highest in State Bank of Hyderabad followed by State Bank of Bikaner and Jaipur and State Bank of India. The profit per employee is highest for State Bank of Hyderabad compare to all other banks in 2012-13 & 2014-15. State Bank of India has scored third position due to below average performance in the year 2013-14. State Bank of Patiala scored last position due to poor performance in 2014-15 & 2013-14 compare to other banks.

3.4 Composite Management Efficiency Ratio

TABLE 13

Bank	Total Advances to Total Deposits		Business Per Employee		Net Profit Per Employee		Group Rank (Low rank represents good performance)	
	%	Rank	Times	Rank	Times	Rank	Average	Rank
SBI	85.37	1	10.81	4	5.77	3	2.67	2
SBBJ	83.07	3	9.92	6	5.84	2	3.67	3.5
SBP	84.24	2	11.46	3	3.21	6	3.67	3.5
SBH	80.01	4	14.06	1	7.56	1	2.00	1
SBM	79.33	5	10.54	5	3.33	4	4.67	6
SBT	77.62	6	12.12	2	3.27	5	4.33	5

State Bank of Hyderabad is at top position due to best performance in employee productivity and per employee profitability followed by State Bank of India which performed best in deployment of total advances against deposits as well as per employee profit earning ability. State bank of Mysore showed poor performance in all the three ratios followed by State bank of Travancore whose performance is also satisfactory compare to other four banks.

4. EARNINGS QUALITY

Earning quality means the profit earnings ability and efficiency to maintain consistency in earnings. This criteria primarily determines banks profitability and its growth in future earnings. The following ratio explain the quality of income generation.

4.1 Net Profit to Total Assets

This ratio is the interrelationship between annual net profit and total assets employed in that particular years. The ratio reflects the return on assets or efficiency in utilisation of assets. A higher ratio shows better earning and efficient utilisation of assets employed.

TABLE 14

Sl.No.	Banks	Net Profit to Total Assets				
		2013	2014	2015	Average	Rank
1	SBI	0.86	0.60	0.64	0.70	3
2	SBBJ	0.85	0.81	0.76	0.81	2
3	SBP	0.61	0.39	0.31	0.44	5
4	SBH	0.92	0.72	0.85	0.83	1
5	SBM	0.61	0.37	0.51	0.49	4
6	SBT	0.60	0.29	0.32	0.40	6

Here in table 14, it is seen that State Bank of Hyderabad has top position due to high ratio followed by State Bank of Bikaner and Jaipur. This reflects has high capability in utilisation of total assets compare to other banks. State Bank of Travancore and State Bank of Patiala with low average is at bottom position. State bank of Mysore also indicates its inefficiency in return on assets management.

4.2 Interest Income to Total Income

Interest is major source of revenue for banking industry. This interest income includes interest or discount on advance and bills, incomes on investments, interest on balances with RBI and inter-bank funds etc. However, a bank can earn incomes from other sources in addition to interest income viz. incomes from financial lease, commission, brokerage, exchanges, revaluations of assets and incomes by ways of dividends etc. A high ratio indicates capability of a bank to generate high incomes from interest.

TABLE 15

Sl.No.	Banks	Interest Income to Total Income				
		2013	2014	2015	Average	Rank
1	SBI	88.18	88.02	87.09	87.76	6
2	SBBJ	91.17	90.31	90.67	90.72	4
3	SBP	92.65	92.10	91.13	91.96	1
4	SBH	92.73	93.20	85.60	90.51	5
5	SBM	90.92	91.69	90.04	90.88	3
6	SBT	92.96	91.93	90.41	91.77	2

In the study period State bank of Patiala scored highest followed by State Bank of Travancore and State bank of Mysore. However, all the banks performance was good and near to each-others performance.

4.3 Net Interest Margin to Total Assets

Net interest margin is the difference between interest earned and interest expended. The higher of this ratio indicates that the good earnings given by its assets.

TABLE 16

Sl.No.	Banks	Net Interest Income to Total Assets Ratio				
		2013	2014	2015	Average	Rank
1	SBI	2.83	2.75	2.69	2.76	3
2	SBBJ	2.98	3.10	2.88	2.99	1
3	SBP	2.26	2.27	2.23	2.25	5
4	SBH	2.88	2.81	2.84	2.84	2
5	SBM	2.74	2.60	2.63	2.65	4
6	SBT	2.10	2.26	2.16	2.17	6

Here Sate Bank of Bikaner and Jaipur is at top position due to highest average among all six banks followed by State Bank of Hyderabad and State Bank of India. State Bank of Travancore is at bottom due to worse performance among the sample banks.

4.4 Composite Earning Quality

TABLE 17

Bank	Net Profit to Total Assets		Interest Income to Total Income		Net Interest Income to Total Assets		Group Rank (low rank represents good performance)	
	Times	Rank	%	Rank	%	Rank	Average	Rank
SBI	0.70	3	87.76	6	2.76	3	4.00	5
SBBJ	0.81	2	90.72	4	2.99	1	2.33	1
SBP	0.44	5	91.96	1	2.25	5	3.67	3.5
SBH	0.83	1	90.51	5	2.84	2	2.67	2
SBM	0.49	4	90.88	3	2.65	4	3.67	3.5
SBT	0.40	6	91.77	2	2.17	6	4.67	6

On the basis of group performance State Bank of Bikaner and Jaipur is at top position followed by State Bank of Hyderabad. State Bank of Patiala and State bank of Mysore. State Bank of Travancore is at bottom position among sample banks due to worse performance assets utilisation and assets management

5. LIQUIDITY

Risk of liquidity can have an effect on the image of bank. Liquidity is a crucial aspect which reflects bank's ability to meet its financial obligations. An adequate liquidity position means a situation, where organization can obtain sufficient liquid funds, either by increasing liabilities or by converting its assets quickly into cash.

5.1 Liquid Asset to Total Asset

This ratio measures the overall liquidity position of the bank. The liquid assets include cash in hand, money at call and short notice, balance with Reserve bank of India and balance with banks (India and Abroad). Total assets have been taken into consideration to measure the proportion of total liquid assets out of total assets. Higher the ratio indicates ability of bank to meet its financial obligations. This helps to improve the image of banks among creditors and customers.

TABLE 18

Sl.No.	Banks	Liquid Asset to Total Asset				
		2013	2014	2015	Average	Rank
1	SBI	7.33	7.39	8.53	7.75	1
2	SBBJ	7.37	7.71	7.76	7.61	2
3	SBP	3.75	7.32	4.56	5.21	4
4	SBH	5.73	4.87	4.80	5.13	5
5	SBM	5.21	3.98	5.36	4.85	6
6	SBT	4.69	5.37	5.69	5.25	3

Here in the above table, State bank of India has highest liquidity and thus it scored first followed by State Bank of Bikaner and Jaipur. State Bank of Mysore scored at bottom due to low average liquidity.

5.2 Liquid Asset to Total Deposits

This ratio measures the liquidity available to the depositors of a bank. It is calculated by dividing the liquid assets with total deposits. Here total deposit is the sum of all demand deposits and long term fixed deposits. A high ratio indicates good security on client's deposits.

TABLE 19

Sl.No.	Banks	Liquid Asset to Total Deposit (%)				
		2013	2014	2015	Average	Rank
1	SBI	9.55	9.51	11.08	10.04	1
2	SBBJ	8.79	9.48	9.42	9.23	2
3	SBP	4.59	9.31	5.74	6.54	3
4	SBH	6.88	5.76	5.69	6.11	5
5	SBM	6.15	4.78	6.44	5.79	6
6	SBT	5.63	6.33	6.60	6.18	4

Here in the above table, State Bank of India has highest average followed by State bank of Bikaner and Jaipur. State Bank of Mysore ranked lowest position due to its lowest average of the study period.

5.3 Liquid Asset to Demand Deposits

This ratio reflects the ability of a bank to meet the demand from depositors during a year. Banks provides higher liquidity to depositors by investing funds in highly liquid forms. A high ratio indicates a higher liquidity for depositors. This ratio is calculated by dividing the liquid assets with total demand deposits.

TABLE 20

Sl.No.	Banks	Liquid Asset to Demand Deposit (%)				
		2013	2014	2015	Average	Rank
1	SBI	101.89	117.06	140.37	119.77	3
2	SBBJ	143.0	169.60	189.54	167.38	2
3	SBP	103.12	112.80	100.50	105.47	5
4	SBH	81.73	68.24	60.61	70.19	6
5	SBM	122.68	87.29	114.81	108.26	4
6	SBT	179.88	204.33	209.89	198.03	1

State Bank of Travancore, has highest average compare to other banks followed by State Bank of Bikaner and Jaipur. State Bank of Hyderabad scored lowest with least ratio.

5.4 Investment in Approved Government Securities to Total Assets

This ratio indicates the relationship between total funds invested in G-Sec to total assets. Approved securities include investments made in the state associated/owned bodies like electricity corporations, housing development corporations, Regional Rural Banks and corporation bond and other approved government securities. This ratio measures the risk involve in the assets. A higher ratio indicates low risk in the assets and in the favour of clients.

TABLE 21

Sl.No.	Banks	Government Securities to Total Asset (%)				
		2013	2014	2015	Average	Rank
1	SBI	0.171	0.172	0.184	0.176	6
2	SBBJ	0.205	0.182	0.202	0.196	5
3	SBP	0.205	0.208	0.201	0.204	4
4	SBH	0.233	0.225	0.201	0.220	2
5	SBM	0.215	0.215	0.211	0.214	3
6	SBT	0.230	0.223	0.212	0.221	1

In the table, State Bank of Travancore has highest proportion of investment in approved securities which indicates low risk followed by State Bank of Hyderabad and State bank of Mysore. State Bank of India and State Bank of Bikaner and Jaipur has least average compare to other banks.

5.5 Composite Liquidity

On the basis of group averages of four ratios of liquidity as expressed in table, SBIis at the top position with group average of 1.50, followed by SBBJ with average of(2.50). SBM scored the last position with 6.0 rank due to its poor performance in Liquid Assets to Total Assets, Liquid Assets to Total Deposits and Liquid Assets to Demand Deposits ratios.

TABLE 22

Bank	Liquid Asset to Total Asset		Liquid Asset to Total Deposits		Liquid Asset to Demand Deposit		Govt Securities to Total Asset		Group Rank	
	%	Rank	Times	Rank	%	Rank	%	Rank	Average	Rank
SBI	7.75	1	10.04	1	119.77	3	0.176	6	2.75	2.5
SBBJ	7.61	2	9.23	2	167.38	2	0.196	5	2.75	2.5
SBP	5.21	4	6.54	3	105.47	5	0.204	4	4.00	4
SBH	5.13	5	6.11	5	70.19	6	0.220	2	4.50	5
SBM	4.85	6	5.79	6	108.26	4	0.214	3	4.75	6
SBT	5.25	3	6.18	4	198.03	1	0.221	1	2.25	1

6. COMPOSITE RANKING OF STATE BANK OF INDIA AND ITS ASSOCIATE BANKS

In order to assess the overall performance of State Bank Group, the composite rating and results are presented in the following table;

TABLE 23: COMPOSITE RANKING (OVERALL PERFORMANCE)

Banks	C	A	M	E	L	Average	Rank (lower average, good performance)
SBI	4.25	2.33	2.67	4.00	2.75	3.20	3
SBBJ	2.5	3.00	3.67	2.33	2.75	2.85	1
SBP	3.75	4.67	3.67	3.67	4.00	3.95	5
SBH	2.25	3.33	2.00	2.67	4.50	2.95	2
SBM	2.80	5.00	4.67	3.67	4.75	4.18	6
SBT	4.75	2.67	4.33	4.67	2.25	3.73	4

It is clear from the above table 23 that State Bank of Bikaner and Jaipur is ranked at top position with low average (2.85) followed by State Bank of Hyderabad (2.95) and State bank of India (3.20). State Bank of Mysore was at bottom position among all the six banks.

CONCLUSION

The current study on six banks has been conducted to examine economic sustainability and performance of State Bank of India and its five Associates Banks using CAMEL Model during the period 2012-13 to 2014-15 (three years). The study reveals that;

▪ State Bank of Hyderabad is at top position in terms of Capital Adequacy.
▪ State Bank of India was at top position in terms of Asset Quality.
▪ In context of Management Efficiency, State Bank of Hyderabad is at top position.
▪ In the terms of Earnings Quality, State Bank of Bikaner and Jaipur at first position.
▪ State Bank of Travancore is rated first in case of Liquidity position.
▪ Composite Performance shows that State Bank of Bikaner and Jaipur is ranked first among all six sample banks followed by State Bank of Hyderabad and State Bank of India. State Bank of Mysore is at bottom position in CAMEL ranking.

LIMITATIONS OF THE STUDY

● Here study covers only three financial years from 2012-13 to 2014-15.
● The sample of only SBI and its associate banks has been taken for analysis.
● The audited data for most of the banks for the year 2016 was not available, so 2016 cannot taken into consideration.
● The data is collected exclusively from the financial statements of each banks for different years.

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FACTOR AFFECTING QUALITY OF WORK LIFE IN PUBLIC & PRIVATE SECTOR BANKS IN LUCKNOW

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ABSTRACT
The world today has become more competitive due to big organizations, globalization and ever changing technology. Therefore, managing an organization has become more complex than even before. At this stage, QWL has emerged as one of the most important aspect of job that ensures long term association of the employees with the organization. Banking industry in India is one of the largest contributors to the service sector and in turn to the economic development of the country. This has necessitated the researcher to find the factors affecting quality of work life in Lucknow. In total, 300 employees were selected for the purpose of the study, 150 each from the public and private sector banks. The factor analysis was used for the purpose of analysis by the researcher. This study reveals that Working environment and Work life space dimension, Opportunities for individual growth and Career development dimensions, Social integration in the workplace dimension, Adequate and fair compensation dimension, Social relevance of the worker's life and Working conditions dimension are the factors which most significantly affect the quality of work life of employees and hence, the effective functioning of the banking industry.

KEYWORDS
public and private banks, quality of work life.

INTRODUCTION
The world today has become more competitive due to big organizations, globalization and ever changing technology. Therefore, managing an organization has become more complex than even before. It has become difficult to retain well developed and qualified human resource. At this stage, QWL has emerged as one of the most important aspect of job that ensures long term association of the employees with the organization. "QWL is a philosophy, a set of principles, which holds that people are the most important resource in the organization as they are trustworthy, responsible and capable of making valuable contribution and they should be treated with dignity and respect" (Straw & Heckscher, 1984). QWL seeks to create an environment in which the employees feel satisfied, work co-operatively and make positive contribution in the achievement of organizational objectives (Sadique, 2003). According to J. Llyod Suttle, "QWL is the degree to which members of a work organization are able to satisfy their important personal needs through their experiences in the organization". Hence, an attempt has been made by the researcher to study the effect of QWL on the employees of banking sector in the light of current realities.

REVIEW OF LITERATURE
QUALITY OF WORK LIFE
The term QWL has different meaning to different researchers. A few researches conducted by the eminent researchers in the field of QWL are as follows-

Ayesha Tabassum, Tasnuva Rahman and Kursia Jahan in their study entitled, "A Comparative Analysis of Quality of Work Life among the Employees of Local Private and Foreign Commercial Banks in Bangladesh" found that the significant difference exists between the local private and foreign commercial bank's employees perception over QWL and in the following factors of QWL; adequate and fair compensation, work and total life space, opportunity to develop human capacities, flexible work schedule and job assignment, and employee relations.

Md. Mostafizur Rahman, Md. Rostam Ali & Md. Farijul Islam in their research study entitled, "A Study on Quality of Work Life among Workers with Special Reference to State Owned Commercial Banks in the Northern Region of Bangladesh" found that there is a strong need of suitable working environment and a little existence of social recognition and integration and the rest of the dimensions are moderately present. The study has also revealed that compensation and other remuneration and career opportunity and growth are highly correlated with work life that causes a lower level of satisfaction of employees' comparison to private commercial banks' employees.

Barkha Gupta in her research paper entitled, "A Comparative study of Quality of Work Life in Nationalized and Private Banks" found that Quality of work life in Nationalized and Private Banks" employees differ. The QWL is significantly higher in case of Nationalized Banks employees than Private Banks employees.

Manisha Singhai and Nupoor Garg in their research paper entitled, "Quality of work life in select service sector: A Comparative Study" concluded that faculty members of management institutes perceive better QWL in comparison to bank employees. It also points out that female employees perceive better QWL in comparison to male employees. The aim of the paper was to explore perception of QWL of management faculty members, bank employees, female and male employees.

Namrata Sandhu and Rahul Prabhakar in their research paper entitled, "Factors Influencing the Quality of Work Life in the Indian Banking Industry – An Empirical Study" revealed five factors, which significantly influence the quality of work life: remuneration, opportunities for personal growth, supportive leadership and structures, work environment and work-life balance. It is therefore suggested that when attempting to draft retention programs for employees working in the Indian banking industry, these five factors must be kept in mind.

IMPORTANCE OF THE STUDY
An employee spends almost one-third of his entire life in the workplace. Therefore, his job should yield him a sense of satisfaction, pride, recognition and security. This satisfaction is particularly relevant for the service sector, which is largely dependent on the employee-customer relationship. Banking industry in India is one of the largest contributors to the service sector and in turn to the economic development of the country. If an employee is dissatisfied with his Quality of work life, then he may not be able to proper contribution to the success of an organization. Keeping this fact in mind, this study was undertaken to study the factors affecting quality of work life in Public and Private sector banks.

STATEMENT OF THE PROBLEM
Banking industry has undergone a sea change since liberalization. Now, banking industry offers a wide range of financial products and services. Therefore, banking personnel face huge pressure in timely delivering these services. Due to these reasons, banking hours have been increased. It has an adverse effect on the mental and physical well-being of the employees of the employees, which results in lower Quality of Work Life. Therefore, importance of QWL is being felt in the banking sector because on the one hand, it increases the productivity of the organization and on the other hand, it increases the satisfaction level of employees (Gabon, 1984). This has necessitated the researcher to find the factors affecting quality of work life in banking sector employees with respect to ten dimensions of QWL, which are Adequate and fair compensation, working conditions, Immediate opportunity to use and develop one's capacity, Opportunity for continued growth and security, Social integration in the work organization, Constitutionalism in the work organization, Work and total life space, and Social relevance of work life.

OBJECTIVES OF THE STUDY

To find out the factors affecting quality of work life in public sector and private sector banks in Lucknow.

RESEARCH METHODOLOGY

The research has descriptive cross-sectional research design. The universe of the study is all the employees working in public and private sector banks in luck now. The researcher has used convenience sampling. The sample size for the study was 300, 150 each from public sector and private sector banks. For the present study, standardized questionnaire-cum-scale developed by Luciana Ad Silva Mitosis, Bruno Pedro so, Antonio Carlos De Francisco and Luis Alberto Pilate (2008) was the one chosen for measuring quality of work life, its reliability and validity already been tested. Data was collected from both primary and secondary sources. The items in this was assessed using Likert's seven-point scale ranging from strongly agree (point 1) to strongly disagree (point 2). Factor analysis was used for the method of data collection.

DATA ANALYSIS AND INTERPRETATION

FACTOR ANALYSIS ON QUALITY OF WORK LIFE DIMENSIONS

Factor analysis is a multivariate statistical technique used for data reduction to condense and simplify the set of large number of variables to smaller number of variables called factors. This technique is helpful in examining the underlying patterns or relationships for a large number of variables and to determine whether the information can be condensed or summarized into a smaller set of factors of components (Hair et al., 2009).

VALIDITY TEST FOR CARRYING OUT FACTOR ANALYSIS

Before performing the factor analysis, the Kaiser-Meyer-Olkin (KMO) test was performed as an index to test the appropriateness of adequacy of sample for factor analysis. Generally, the KMO should measure between 0.5 and 1.0 for the sample size to be adequate. To test whether the correlation matrix was not an identity matrix, the Bartlett's Test of Sphericity was conducted.

TABLE 1: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	6575.169
	df	561
	Sig.	.000

The adequacy of the data was evaluated on the basis of the results of Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy and Bartlett's test of Sphericity (homogeneity of variance). The KMO measure of sampling adequacy is .914, which is much higher than the commonly accepted limit of 0.60. Thus, it is confirmed that the sample size was adequate to apply factor analysis on the data. Similarly, Bartlett's test of Sphericity is significant (p<0.001), indicating significant correlation exists between the variables to proceed with the analysis. The Bartlett's test statistic is approximately distributed and it may be accepted when it is significant at p<0.05.

EXTRACTION COMMUNALITIES

The extraction communalities are useful as these are obtained using the extracted factors. Extraction communalities for a variable give the total amount of variance in that variable, explained by all the factors. The higher the value of communality for a particular variable after extraction, higher is its amount of variance explained by the extracted factors. In table below, the rows indicate the various components taken care of to examine the factor analysis of the study. There are 34 variables under various factors comes into act. Fourth column denotes that what will be the total weight of each of the components if there is only one component. The fifth column denotes that in presence of all the components what will be the weight of all the components individually. Further, table shows the mean and SD scores of 34 variables independently.

TABLE 2: COMMUNALITIES

Factors	Statements	Variables	Initial	Extraction	Mean	S.D.
Adequate and fair compensation	How satisfied are you with your salary (remuneration)?	Salary	1.000	.810	4.483	1.6650
	How satisfied are you with your salary, if you compare it with your colleagues' salary?	Colleague's salary	1.000	.707	4.176	1.6333
	How satisfied are you with the salary, considering the work you are doing?	Salary for work	1.000	.712	4.016	1.7222
	How satisfied are you with the extra benefits (provident fund, medical insurance, etc.) that your company offers to you?	Extra benefits	1.000	.583	4.686	1.5864
Working conditions	How satisfied are you with your quantity of working hours?	Working hours	1.000	.682	4.576	1.6753
	According to your workload (quantity of work), how do you feel?	workload	1.000	.671	4.270	1.6080
	According to the use of technology in your tasks, how do you feel?	Use of technology	1.000	.548	5.313	1.2808
	How satisfied are you with the salubrity level (healthy work conditions) in your workplace?	Healthy work conditions	1.000	.652	4.973	1.4139
	How satisfied are you with the security equipments, individual and collective protection provided by your company?	Individual security	1.000	.650	5.033	1.3208
Immediate opportunity to use and develop one's capacity	Are you satisfied with the autonomy (opportunity to take decisions) that you have at your work?	Autonomy	1.000	.569	4.786	1.3762
	Are you satisfied with the importance of the task/work/activity that you do.	Importance of task	1.000	.593	5.390	1.1114
	Regarding the polyvalence (possibility to performance several tasks and works) at work, how do you feel?	Polyvalence of task	1.000	.591	4.9867	1.27485
	How satisfied are you with your performance evaluation (awareness of how good or bad have been your performance at work)?	Performance evaluation	1.000	.673	4.946	1.4802
	Regarding possibilities conferred (work responsibility given to you), how do you feel?	Work responsibility	1.000	.646	5.340	1.1842
Opportunity for continued growth and security	How satisfied are you with your opportunity of professional growth?	Professional growth	1.000	.651	4.880	1.5032
	How satisfied are you with the trainings you participate?	Trainings	1.000	.671	4.813	1.5142
	Regarding the situations and the frequency that occur the resigning at your work, how do you feel?	Frequency of resigning	1.000	.409	4.450	1.2673
	How satisfied are you with the process used to determine promotions (merit/performance/experience/examination)?	Promotion process	1.000	.639	4.600	1.7918
Social integration in the work organization	Regarding the discrimination (social, racial, religious, sexual, etc.) in your work, how do you feel?	Discrimination	1.000	.518	5.203	1.5372
	Regarding your relationship with your colleagues and bosses at work, how do you feel?	Relationship with boss and colleagues	1.000	.816	5.443	1.2295
	Regarding your team's and colleagues' commitment to work, how do you feel?	Team's commitment	1.000	.694	5.316	1.2307
	How satisfied are you with the appreciation of your ideas and initiative at work?	Appreciation for initiatives	1.000	.704	4.936	1.4467
Constitutionalism in the work organization	How satisfied are you with the company for regarding the workers' rights?	Worker's rights	1.000	.578	4.616	1.5354
	How satisfied are you with your freedom of expression (opportunity to give opinions) at work?	Freedom of expression	1.000	.657	4.573	1.6755
	How satisfied are you with the norms and rules at your work?	Rules and norms	1.000	.626	5.033	1.3055
	Regarding the respect to your individuality (individual characteristics and particularities) at work, how do you feel?	Respect to individuality	1.000	.569	5.120	1.3360
Work and total life space	How satisfied are you with the work influence on your family life routine?	Work life space	1.000	.775	4.253	1.7548
	How satisfied are you with the work influence on your possibilities of leisure?	Leisure time	1.000	.755	4.170	1.6134
	How satisfied are you with your schedule of work and rest?	Work and rest schedule	1.000	.795	4.163	1.7455
Social relevance of work life	Regarding the proud of performing your work, how do you feel?	Proud of work	1.000	.692	5.570	1.1206
	Are you satisfied with the image this company have to society?	Image of company	1.000	.753	5.553	1.2486
	How satisfied are you with the contribution to the society that the company have?	Company contribution to society	1.000	.773	5.430	1.3105
	How satisfied are you with the services and the quality of products that the company makes?	Products and services of company	1.000	.752	5.450	1.3140
	How satisfied are you with the human resource politic (the way that the company treats the workers) that the company has?	Human resource policy	1.000	.591	4.500	1.6791

VARIANCE ANALYSIS

The table below summarizes the total variance explained by the FA solution and gives an indication about the number of useful factors. This table has three parts. The first part, titled *Initial Eigen values* gives the variance explained by all the possible factors. There are a total of 34 factors, which is same as the number of variables entered into the FA. The first column under *initial Eigen values* gives the Eigen values for all the possible factors in a decreasing order. This is followed by the variance as a percentage of all the variance and cumulative variance. From this table, it can be seen that the cumulative value of the first seven attributes become approximately 66% of variance. That means the seven factors are so powerful to overpower the rest of the factors. It can be observed only the factors with Eigen values greater than 1 were considered significant and all the factors with Eigen values less than 1 were considered insignificant and discarded.

TABLE 3: TOTAL VARIANCE EXPLAINED

Factor	Initial Eigen Values			Extraction Sums of Squared			Rotation Sums of Squared loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.555	39.867	39.867	13.555	39.867	39.867	5.268	15.495	15.495
2	2.005	5.897	45.764	2.005	5.897	45.764	3.583	10.537	26.032
3	1.677	4.932	50.696	1.677	4.932	50.696	3.081	9.060	35.092
4	1.543	4.539	55.235	1.543	4.539	55.235	2.977	8.757	43.850
5	1.470	4.324	59.560	1.470	4.324	59.560	2.934	8.628	52.478
6	1.192	3.507	63.067	1.192	3.507	63.067	2.741	8.061	60.538
7	1.062	3.125	66.191	1.062	3.125	66.191	1.922	5.653	66.191

FACTOR LOADINGS

Table below shows the factor loadings which have been used to measure the correlation between variables and the factors. A loading close to 1 indicates strong correlation between a variable and the factor, while a loading close to zero indicates weak correlation. The factors are rotated with the used of Varimax with Kaiser Normalization rotation method and Principal Component Analysis (PCA) method for factor extraction. Only those factors whose are greater than.40 are used for interpretation purpose.

TABLE 4: ROTATED COMPONENT MATRIX

Variables	Factor						
	1	2	3	4	5	6	7
Salary				.808			
Colleague's salary				.762			
Salary for work				.747			
Extra benefits				.590			
Working hours	.649						
workload	.605						
Use of technology						.638	
Healthy work conditions						.672	
Individual security						.719	
Autonomy						.513	
Importance of task		.624					
Polyvalence of task		.575					
Performance evaluation		.667					
Work responsibility		.725					
Professional growth		.514					
Trainings							.775
Frequency of resigning							
Promotion process							
Discrimination			.628				
Relationship with boss and colleagues			.805				
Team's commitment			.740				
Appreciation for initiatives			.654				
Worker's rights	.563						
Freedom of expression	.603						
Rules and norms	.621						
Respect to individuality							
Work life space	.799						
Leisure time	.719						
Work and rest schedule	.803						
Proud of work							
Image of company					.769		
Company contribution to society					.783		
Products and services of company					.793		
Human resource policy							

FACTORS OF QUALITY OF WORK LIFE

The factor analysis contains 34 statements encompassed with eight dimensions which explained for 66% of total variance. Only six factors with internal consistency greater than 0.6 (significant) have been taken and the rest factors have been removed. The newly constructed factors have been renamed as-

Factor 1- Working environment and Work life space dimensions (8 items)

Factor 2- Opportunities for individual growth and Career development dimensions (5 items)

Factor 3- Social integration in the workplace dimension (4 items)

Factor 4- Adequate and fair compensation dimension (4 items)

Factor 5- Social relevance of the worker's life (3 items)

Factor 6- Working conditions dimension (4 items)

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TABLE 5: SUMMARY OF FACTORS OF QUALITY OF WORK LIFE

Factors	Variables	Loadings	Eigen value	% of Variance	Cumulative % of Variance	Cronbach's alpha
Working environment and Work life space dimensions	Working hours	.649	13.555	15.495	15.495	.914
	Workload	.605				
	Worker's rights	.563				
	Freedom of expression	.603				
	Rules and norms	.621				
	Work life space	.799				
	Leisure time	.719				
	Work and rest schedule	.803				
Opportunities for individual growth and Career development dimensions	Importance of task	.624	2.005	10.537	26.032	.828
	Polyvalence of task	.575				
	Performance evaluation	.667				
	Work responsibility	.725				
	Professional growth	.514				
Social integration in the workplace dimension	Discrimination	.628	1.677	9.060	35.092	.813
	Relationship with boss and colleagues	.805				
	Team's commitment	.740				
	Appreciation for initiatives	.654				
Adequate and fair compensation dimension	Salary	.808	1.543	8.757	43.850	.834
	Colleague's salary	.762				
	Salary for work	.747				
	Extra benefits	.590				
Social relevance of the worker's life	Image of company	.769	1.470	8.628	52.478	.849
	Company contribution to society	.783				
	Products and services of company	.793				
Working conditions dimension	Use of technology	.638	1.192	8.061	60.538	.784
	Healthy working conditions	.672				
	Individual security	.719				
	Autonomy	.513				

Factor 1-Working environment and Work life space dimension - Working environment and Work life space dimension is the first and most important factor on which eight statements are loaded and it explains 15.50% of variance with Eigen value of 13.56. The eight variables loaded on the current factor shows that working environment and work life balance plays an important role in improving quality of work life. Ensuring that en employee has adequate leisure time, proper schedule of work and rest and opportunities to spend quality time with family will definitely improve quality of work life. Also, bank employees in India seek flexibility of working hours, less and balanced workload, freedom of expression, moderate rules and norms and consideration of worker's rights. Ensuring that the working environment provides these to the employees will significantly raise employee morale and will help in improving job satisfaction.

Factor 2-Opportunities for individual growth and Career development dimensions- Opportunities for individual growth and Career development dimensions are the second highest factor loading in quality of work life loaded with five statements and it explains 10.54% of variance with the Eigen value of 2.00. As there is intense competition in banking industry, therefore providing adequate growth and career development opportunities will help in retaining and motivating employees. The variables loaded on this factor clearly indicate that employees consider importance of task and activity, possibilities of performing several tasks, amount of work responsibility given, fair appraisal of their performance, and opportunities for professional growth as an important variables influencing quality of work life. Therefore, employers should provide their employees with opportunities to advance in their careers, for example, supporting for higher studies and skill development programs.

Factor 3-Social integration in the workplace dimension- Social integration in the workplace dimension also have rigorous impact on QWL which are loaded with four statements and explains 9.06% of variance with the Eigen value 1.68. It shows that a deep understanding and a good inter-personal relationship between the management and the employees and also among other employees create a sense of belongingness and commitment with the organization, which would increase the productivity and profitability of the organization. Also, treating the employees with dignity and equality and appreciating their ideas and initiatives will definitely help in improving quality of work life.

Factor 4-Adequate and fair compensation dimension- Adequate and fair compensation dimension is the fourth factor loaded with four items and explains 8.76% of variance with the Eigen value of 1.543. Employees expect that their salary should be fixed on the basis of work done and responsibilities undertaken. They also believe that their salaries should be at par with their colleague's salary. Extra benefits and perks such as retirement benefits, medical insurance, provident fund, etc, provided to them should be reasonable in order to be satisfied with the job.

Factor 5-Social relevance of the worker's life- Social relevance of the worker's life is the fifth important dimension loaded with three statements and explains 8.63% of variance with the Eigen value 1.470. It shows that image of the company, company's contribution to society and products and services offered by the company helps in boosting the morale of employees and as such improves the quality of work life of employees.

Factor 6-Working conditions dimension- Working conditions dimension is the sixth and last dimension loaded with three items and explains 8.061% of variance with the Eigen value of 1.192. It clearly shows that providing safe and healthy working conditions, advanced means of technology and individual and collective security and protection will help in improving the quality of work life of employees.

It to be noted that only 27 statements have been finally selected keeping in view the reliability coefficient of the scale.

LIMITATIONS OF THE STUDY

1. The research was conducted in Public and Private sector banks of Lucknow. As a result, this research might not represent an accurate picture of the banking industry at the national level.
2. Some biasness is bound to creep in on the part of the respondents.
3. It might also be possible that certain respondents have given incorrect information due to disinterest or shortage of time.
4. Quality of work life is quite a wide concept and the researcher has incorporated only a few relevant dimensions for the research study.
5. The various dimensions of Quality of work life included in the research might be perceived differently by the bank employees. Therefore, chances of data inaccuracies on account of misinterpretation on the part of employees may exist.

CONCLUSIONS

The current study is related to the public and private sector banks operating in Lucknow. This study reveals that Working environment and Work life space dimension, Opportunities for individual growth and Career development dimensions, Social integration in the workplace dimension, Adequate and fair compensation dimension, Social relevance of the worker's life and Working conditions dimension are the factors which most significantly affect the quality of work life of employees and hence, the effective functioning of the banking industry. Therefore, in order to be successful, while making retention programmes for the employees, these factors of quality of work life must be planned thoroughly. The attitudes and aspirations of employees must be examined carefully and closely before launching any programme. Thus, a congenial work environment must be created, which inspires the employees to work effectively for achieving the organization's objectives and in turn raises the employees' morale.

SUGGESTIONS FOR IMPROVING QWL

- Salaries to the employees must be given, considering the work they are doing.
- Employees must be given enough freedom to make important decisions.
- The workload must be divided equally among the employees, so that they do not feel over stressed.
- Management should create an environment of job security among the employees. Stable job environments should be created and the employees must be provided with an opportunity of horizontal as well as vertical growth. There should be scope for promotion and transfers as well.

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